Appendix A

CalEEMod Outputs

Wilmington Ave over Compton Creek Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

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
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

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.	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
Mit.	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
% Reduced	—	—	—	—	—	—	40%	31%	—	—	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
Mit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
Mit.	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
Mit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

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
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.63	0.79	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.63	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.19	0.33	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

2.3. Construction Emissions by Year, Mitigated

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
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.34	0.75	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.56	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.17	0.31	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

3. Construction Emissions Details

3.1. Demolition (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
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	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
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	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
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	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.2. Demolition (2026) - Mitigated

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	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
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	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
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	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
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	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.3. Site Preparation (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.4. Site Preparation (2026) - Mitigated

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	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.5. Site Preparation (2027) - 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	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

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	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	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. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

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	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	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. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.10. Grading (2026) - Mitigated

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	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.11. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

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	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

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	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

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	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.18. Grading (2026) - Mitigated

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	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.19. Grading (2027) - 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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9

Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. 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	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

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	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
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	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

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	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
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	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
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	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - 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	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
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	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
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	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
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	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

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	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
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	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
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	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
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	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638

Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - 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	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135
Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
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

3.26. Paving (2027) - Mitigated

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	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135

Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
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

4. Operations Emissions Details

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

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 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	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 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT

Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT
Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	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)

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)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills).
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Wilmington Ave over Compton Creek - LST Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek - LST
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

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
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

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.	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
Mit.	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
% Reduced	—	—	—	—	—	—	61%	41%	—	60%	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	1.24	12.3	14.9	0.03	0.39	0.53	0.70	0.36	0.06	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
Mit.	1.49	1.24	12.3	14.9	0.03	0.39	0.21	0.40	0.36	0.02	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
% Reduced	—	—	—	—	—	—	61%	42%	—	61%	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
Mit.	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
Mit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

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
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.53	0.70	0.38	0.06	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.53	0.70	0.32	0.06	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.03	0.17	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	0.01	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

2.3. Construction Emissions by Year, Mitigated

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
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.21	0.42	0.38	0.02	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.21	0.37	0.32	0.02	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.01	0.15	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	< 0.005	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

3. Construction Emissions Details

3.1. Demolition (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
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	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
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	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.2. Demolition (2026) - Mitigated

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	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
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	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
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	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.3. Site Preparation (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.4. Site Preparation (2026) - Mitigated

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	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.5. Site Preparation (2027) - 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	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

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	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	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. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

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	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	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. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.10. Grading (2026) - Mitigated

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	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.11. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

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	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

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	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

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	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09

Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7

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	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.18. Grading (2026) - Mitigated

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	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7
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	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.19. Grading (2027) - 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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
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	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

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	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. 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	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

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	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
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	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

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	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
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	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
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	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - 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	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
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	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
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	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
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	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

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	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
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	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
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	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
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	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7

Hauling	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - 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	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2027) - Mitigated

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	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26

Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	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

4.10. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

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 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	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 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT

Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT
Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	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)

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)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills). Assumed trip length of 0.19 miles for LST.
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Appendix B

Natural Environment Study (Minimal Impacts)

Natural Environment Study

(Minimal Impacts)

Wilmington Avenue Bridge Replacement Over Compton Creek Project

City of Compton, California

District No. 7

Federal Project No.: BRLS-5953(615)

May 2020

STATE OF CALIFORNIA
Department of Transportation

LOS ANGELES COUNTY
Department of Public Works

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Summary

This Natural Environment Study-Minimal Impacts report was prepared for Los Angeles County Department of Public Works for the proposed Wilmington Avenue Bridge over Compton Creek Project (proposed project), located within the City of Compton in southern Los Angeles County. Specifically, the proposed project would be located along the Wilmington Avenue right-of-way (ROW) where it crosses over Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Los Angeles County Department of Public Works is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek. A Biological Study Area (BSA), encompassing 45.08 acres, was established around the impact area for the propose project to document existing conditions and determine the potential for project-related impacts to occur.

The BSA is largely developed or disturbed in nature with existing residential and commercial developments, ROWs, as well as a concrete-lined flood control channel (i.e., Compton Creek). The BSA does not contain suitable habitat for any federal or state listed plant or wildlife species. However, the BSA is centered on Compton Creek, a major tributary to the Los Angeles River, which likely contains jurisdictional waters of the U.S. and State. Although temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project, these impacts are considered less than significant.

No special-status plant or wildlife species were detected within the BSA during the biological resource survey conducted on August 1, 2019. Based on the review of current state and federal databases, including the California Natural Diversity Database and U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation System, no special-status plant or wildlife species have a moderate or higher potential to occur in the BSA. In addition, the BSA is not located within any USFWS-designated critical habitat or a designated wildlife movement corridor. The BSA also does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans.

The BSA does contain the underside of the bridge and ornamental vegetation that could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act and California Fish and Game Code. As such, avoidance and minimization measures would be required to minimize impacts to migratory birds if construction activities take place during the general avian nesting season from February 1st through September 1st.

1. Introduction

This Natural Environment Study-Minimal Impacts (NES-MI) report has been prepared for the Wilmington Avenue Bridge over Compton Creek Project (proposed project). The Los Angeles County Department of Public Works (LADPW) is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek.

1.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

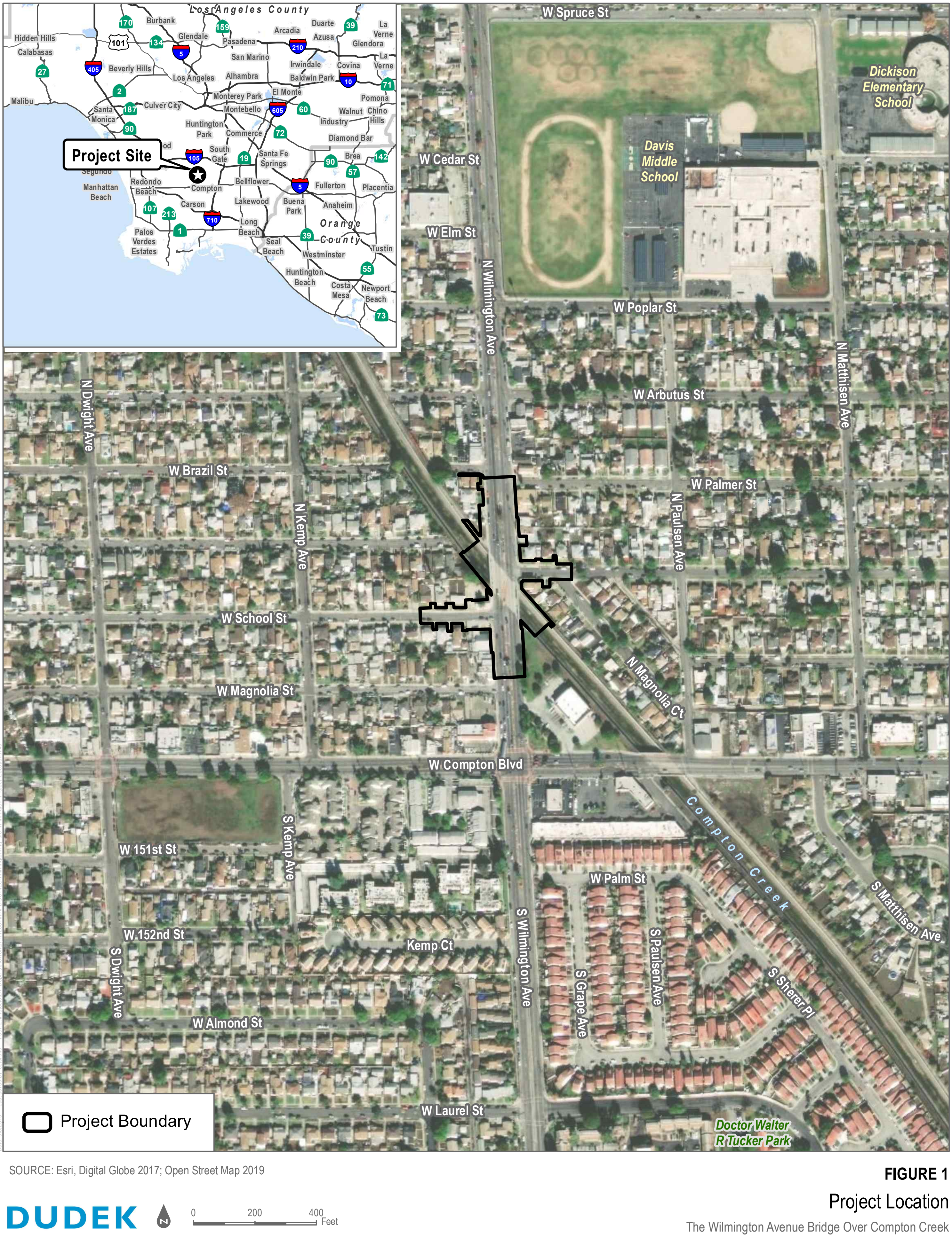
1.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3 Project Description

The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (Figure 1). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-ways (ROWs), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.



Date: 9/5/2019 - Last saved by: cstarbird - Path: Z:\Projects\LA_DeptPublicWorks\j1112504\MAPDOC\NES\Wilmington\Fig_bio_Wilmington_Project_Location.mxd

SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

FIGURE 1

Project Location

The Wilmington Avenue Bridge Over Compton Creek

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade of the channel, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers,

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier construction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

The construction of the bridge superstructure would involve the installation of precast/pre-stressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7:00am to 3:30pm.

2. Study Methods

2.1 Regulatory Requirements

The following federal, state, and local regulations provide legal coverage for biological resources that could potentially occur in the BSA.

2.1.1 Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species and by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, preventing extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). Under FESA, it is unlawful to take any listed species; “take” is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. 1531 et seq.). FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act, Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into waters of the United States. The term “wetlands” (a subset of waters) is defined in Title 33, Section 328.3(b), of the Code of Federal Regulations as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark, as defined in Title 33, Section 328.3(e), of the Code of Federal Regulations. Pursuant to Section 10 of the Rivers and Harbors Act of 1899, ACOE regulates any potential obstruction or alteration of any navigable water of the United States.

Migratory Bird Treaty Act

The MBTA was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others (16 U.S.C. 703–712). Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects more than 800 species. Two species of eagles that are native to the United States—bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*)—were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d) to prevent these species from becoming extinct.

2.1.2 State

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the take of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game [CFG] Code, Section 86). CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy" (CFG Code, Section 2053).

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease" (CFG Code, Section 2050 et seq.). CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species" (California Fish and Game Code, Section 2050 et seq.). A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list" (CFG Code, Section 2050 et seq.). CESA does not list invertebrate species.

California Fish and Game Code, Sections 3503, 3511, 3513, 4700, 5050, and 5515

Section 2081(b) and (c) of the CFG Code authorizes take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. A Section 2081(b) permit may not authorize the take of “fully protected” species, nest and eggs of birds, any birds in the orders Falconiformes or Strigiformes, migratory nongame bird as designated in the federal Migratory Bird Treaty Act (CFG Code, Sections 3505, 3511, 4700, 5050, and 5515). If a project is planned in an area where a fully protected species or a specified bird occurs, an applicant must design the project to avoid take.

California Fish and Game Code, Sections 1600–1602

Pursuant to Section 1602 of the CFG Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. A streambed alteration agreement is required for impacts to jurisdictional wetlands in accordance with Section 1602 of the CFG Code.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project’s potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

Special-Status Plants and Wildlife

The CEQA Guidelines define endangered animals or plants as species or subspecies whose “survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors” (14 CCR 15380(b)(1)). A rare animal or plant is defined in CEQA Guidelines, Section 15380(b)(2), as a species that, although not currently threatened with extinction, exists “in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the federal Endangered Species Act” (14 CCR 15380(b)(2)). Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines, Section 15380(c).

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR 15000 et seq.) are referred to as “special-status plant species” in this report and include endangered or threatened plant species recognized in the context of CESA and

FESA (CDFW 2019ba) and plant species with a CRPR 1 through 4 (CNPS 2019). Species with CRPR 3 or 4 may, but generally do not, qualify for protection under this provision. Species with CRPR 3 and 4 are those that require more information to determine status and plants of limited distribution. Thus, CRPR 3 and 4 plant species are not analyzed further.

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), are referred to as “special-status wildlife species” and, as used in this report, include (1) endangered or threatened wildlife species recognized in the context of CESA and FESA (CDFW 2019b); (2) California Species of Special Concern (SSC) and Watch List species as designated by CDFW (2019c); (3) mammals and birds that are fully protected species as described in the CFG Code, Sections 4700 and 3511; and (4) Birds of Conservation Concern as designated by USFWS (2008).

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as “natural communities of special concern” and, as used in this report, include communities identified as high priority for inventory in the California Natural Community List (CDFW 2018b) by a state rarity ranking of S1, S2, or S3.

2.2 Studies Required

A Biological Study Area (BSA) consisting of the proposed project impact area and a 500-foot buffer (Figure 2) was created to determine the biological resources within and near the proposed project that could potentially be affected by project implementation. Data regarding biological and jurisdictional resources present within the BSA was obtained through a review of pertinent literature and field reconnaissance, and impacts to these resources were analyzed pursuant to relevant regulatory requirements, described in detail below.

A literature search was conducted to determine what biological resources have previously been mapped in the project vicinity and provided a focus for the field effort. The biological resources observed during the field survey were mapped and noted to establish the baseline conditions of the BSA.

2.2.1 Literature Search

The following data sources were reviewed to assist with biological assessment efforts:

- USFWS Critical Habitat Mapper (USFWS 2019a);
- USFWS Information Planning and Conservation (IPaC) System (USFWS 2019b);
- National Marine Fisheries Service (NMFS) Species List (NMFS 2016);
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB; CDFW 2019d); and

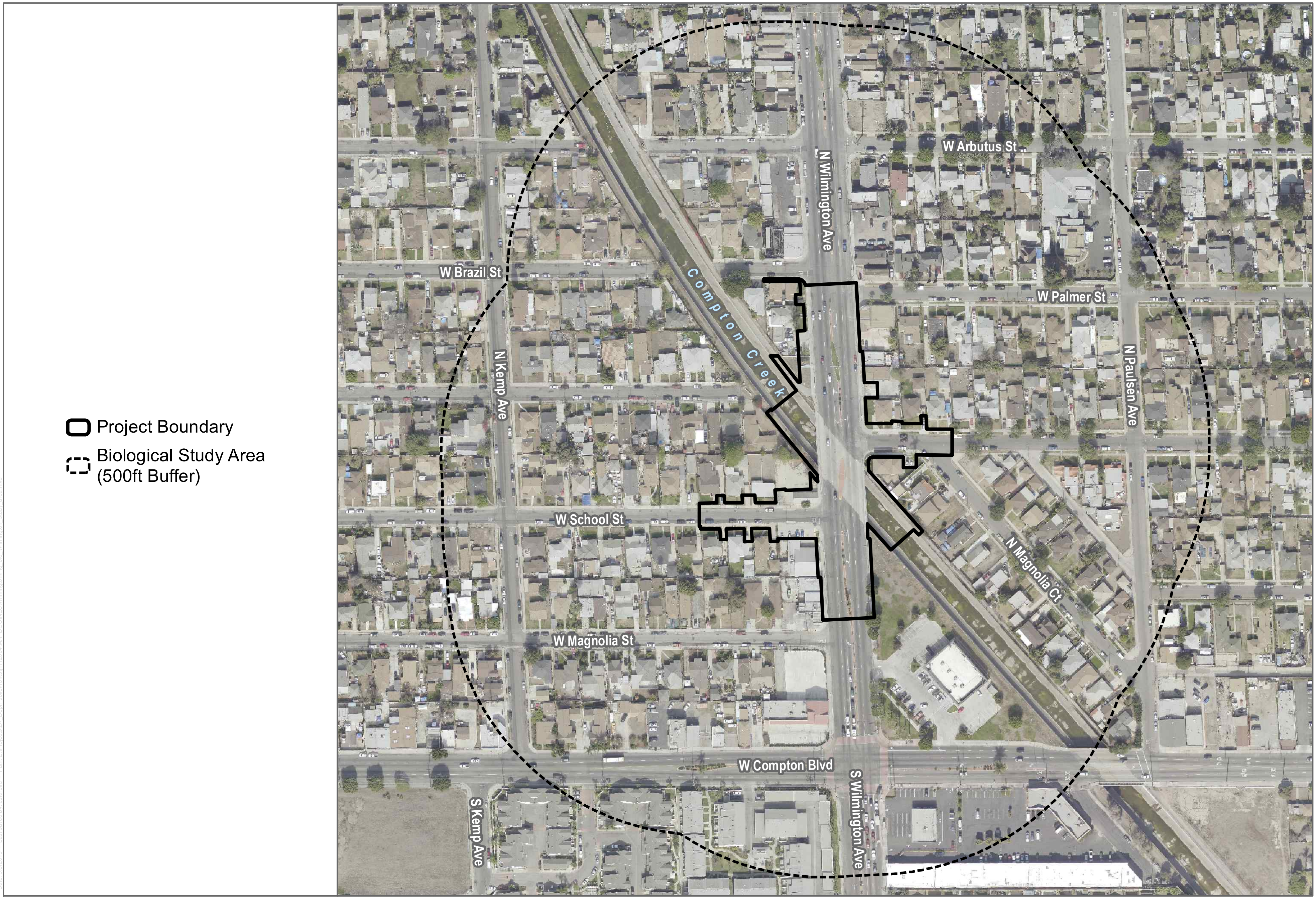
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019).

2.2.2 Field Review

Dudek biologist Tracy Park conducted a field survey of the project site and surrounding BSA under the supervision of senior biologist Michael Cady. The biological reconnaissance-level survey included the mapping of the vegetation communities and land covers present within the BSA, mapping of potential jurisdictional wetlands or waters, identification of invasive plants, and an evaluation of the potential for special-status species to occur in the BSA.

Survey Methods

All plant and wildlife species observed during the field survey by sight, calls, tracks, scat, or other signs were recorded. Binoculars (10x42 magnification) were used to aid in the identification of wildlife. Typically, vegetation communities are mapped following *A Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009). However due to the heavy urban development occurring throughout the BSA, no natural vegetation communities were observed, so communities and land cover types were mapped according to their dominant characteristics. Plant species were identified to species, including invasive plants. The California Invasive Plant Council (Cal-IPC) maintains the Cal-IPC Inventory, which presents the best available knowledge of invasive plant experts in California and species categorization is based on an assessment of ecological impacts (Cal-IPC 2019).



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SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

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FIGURE 2

Biological Study Area

The Wilmington Avenue Bridge Over Compton Creek

The potential for special-status plant and wildlife species to occur with the BSA was evaluated based on the vegetation communities and soils available, if present. Where applicable, Dudek used the CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018a).

Personnel Survey Dates

Dudek biologist Tracy Park conducted a biological reconnaissance-level field survey of the BSA for Wilmington Avenue Bridge over Compton Creek on August 1, 2019 (Table 1).

Table 1: Biological Reconnaissance-Level Survey

Date	Hours	Personnel	Focus	Conditions
8/1/2019	1205-1235	TP	General biological reconnaissance level survey, vegetation mapping, resources mapping, habitat assessment	80-81°F, 0% cc, 2-5 mph wind

TP = Tracy Park; °F = degrees Fahrenheit; cc = cloud cover; mph = miles per hour

Ms. Park has over three years' experience as a field technician and biologist conducting biological surveys throughout Southern California. Her experience includes conducting various wildlife and botanical surveys, habitat assessments, vegetation mapping, and wetland delineations, as well as reporting for projects requiring CEQA compliance. She has conducted focused protocol surveys for a variety sensitive plant and wildlife species.

Michael Cady is the supervising biologist for this project. He has over 15 years' professional experience as a biologist specializing in technical surveys and reporting in support of projects requiring CEQA/NEPA compliance. His field experience includes conducting rare plant surveys, general flora and fauna surveys, oak and general tree surveys, vegetation mapping, and nesting bird surveys. Additionally, he has conducted protocol surveys and habitat assessments for a variety of special-status wildlife species. He holds a current California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit, as well as a CDFW State-Listed Plant Voucher Collection Permit.

Agency Coordination and Professional Contacts

No agency coordination has occurred to date.

Limitations That May Influence Results

Limitations of the survey include seasonal constraints, a diurnal bias, the absence of focused protocol surveys, and the biologist was not able to go within the Compton Creek channel to check the underside of the bridge. The survey was completed to assess habitat and the potential for special-status species to occur within the BSA. Focused rare plant surveys were not conducted for the proposed project. In addition, the list of plant species observed within the BSA includes those species observed during general biological reconnaissance survey conducted in August, when many botanical resources would have been limited. Therefore, this list is not comprehensive and does not include plant species that may have been present but were not blooming at the time of the survey. No wildlife trapping was conducted for small mammals, reptiles, and amphibians. Based on the diurnal nature of the survey, most wildlife species observed were birds. Most urban-adapted mammals are nocturnal and would not be observed during the survey.

3. Results: Environmental Setting

3.1 Description of the Existing Biological and Physical Conditions

The proposed project involves the replacement of the existing Wilmington Avenue Bridge over Compton Creek in the City of Compton, Los Angeles County (Figure 1). The impact area for the replacement project would include the existing bridge deck, abutment walls, and concrete channel bottom, as well as the roadway approach to the north and south (Figure 1). Appendix A contains representative photographs of the BSA.

3.1.1 Physical Conditions

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the BSA supports two soil types/mapping units which are described below: Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes; and Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes (USDA NRCS 2019).

The project site and surrounding BSA occurs within the Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes, soil-mapping unit. This mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Biscailuz and Hueneme soil series, both of which are somewhat poorly drained fine to coarse loams or loam sands formed from discontinuous human-transported materials over mixed alluvium (USDA NRCS 2017). The bridge site and much of the surrounding BSA occurs within this soil-mapping unit.

The Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes, soil-mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Windfetch and Centinela soil series, both of which are well drained loams formed in human-transported material overlying alluvium from marine or mixed rock sources (USDA NRCS 2017). This soil-mapping unit occurs along the southwestern extent of the BSA.

Topography within the BSA is generally flat with elevations on site ranging from 59 to 81 feet above mean sea level, gently sloping in the southerly direction (Google 2019), and vegetation is limited to ornamental or ruderal vegetation associated with surrounding urban development.

The area surrounding the existing bridge is largely developed or disturbed in nature with existing land uses comprised of residential and commercial, the existing ROWs, as well as a concrete-lined flood control channel.

The project site occurs within the Los Angeles River Watershed (USGS HUC 8: 18070105) and crosses over Compton Creek (USGS HUC 12: 180701050402) (USGS 2019).

3.1.2 Biological Conditions in the Study Area

Vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers comprised of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek (Figure 3). The vegetation communities and land covers identified within the BSA are discussed in further detail below. The BSA is generally situated in a heavily urbanized setting with vegetation limited to ornamental plantings or ruderal vegetation. One plant species was found in the BSA that is rated as “Moderate” by Cal-IPC (2019): shortpod mustard (*Hirschfeldia incana*). Species rated as “Moderate” have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2019).

Prominent features within the BSA include major thoroughfares such as Compton Boulevard and Wilmington Avenue; Compton Creek, a north-south trending channelized watercourse; and the Compton Creek bike path, which runs adjacent to the Compton Creek channel. The Los Angeles River is located approximately 2.82 miles east of the BSA.

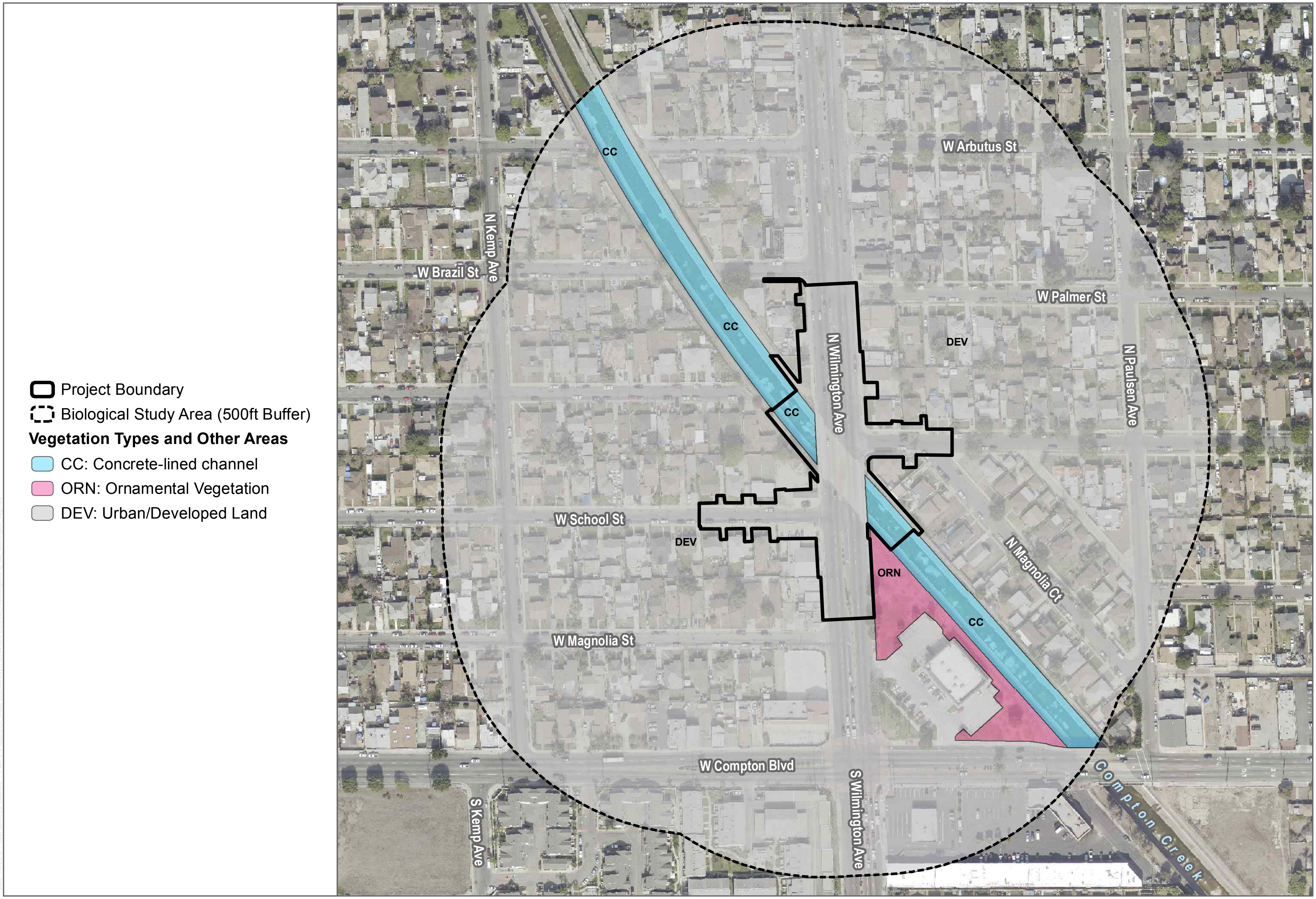
3.1.3 Habitat Connectivity

The BSA is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. On a local level, urban-adapted wildlife, such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the below grade Compton Creek Channel to move within the urban environment and as a source of water.

3.1.4 Regional Species and Habitats and Natural Communities of Concern

Special-Status Plants

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; CNPS 2019) or included within the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b) (Appendix B). Eleven of these species are federal- and/or State-listed as endangered or threatened species; however, none of these species are listed in the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b). Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the BSA. Additionally, these species are not expected to occur within the BSA due to extirpation of nearby occurrences, lack of known populations within five miles of the BSA, or absence during the field survey. All thirty-eight special-status plant species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 2.



SOURCE: LAR-IAC 2014; Open Street Map 2019

DUDEK

0 125 250 Feet

FIGURE 3

Biological Resources

The Wilmington Avenue Bridge Over Compton Creek

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
aphanisma	*Aphanisma blitoides*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/0–1000	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
marsh sandwort	*Arenaria paludicola*	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/5–560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Braunton's milk-vetch	*Astragalus brauntonii*	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers/perennial herb/Jan–Aug/10–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Ventura marsh milk-vetch	*Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/perennial herb/(June)Aug–Oct/0–115	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coastal dunes milk-vetch	*Astragalus tener* var. *titi*	FE/SE/1B.1	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic); often vernally mesic areas/annual herb/Mar–May/0–165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Coulter's saltbush	*Atriplex coulteri*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/5–1510	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
South Coast saltscale	*Atriplex pacifica*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Parish's brittlescale	*Atriplex parishii*	None/None/ 1B.1	Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June–Oct/80–6235	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Davidson's saltscale	*Atriplex serenana* var. *davidsonii*	None/None/ 1B.2	Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr–Oct/30–655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nevin's barberry	*Berberis nevinii*	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar–June/225–2705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
intermediate mariposa lily	*Calochortus weedii* var. *intermedius*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; rocky, calcareous/perennial bulbiferous herb/May–July/340–2805	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
lucky morning-glory	*Calystegia felix*	None/None/ 1B.1	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial); Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline/annual rhizomatous herb/Mar–Sep/95–705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern tarplant	*Centromadia parryi* ssp. *australis*	None/None/ 1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/0–1575	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
smooth tarplant	*Centromadia pungens* ssp. *laevis*	None/None/ 1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Peruvian dodder	*Cuscuta obtusiflora* var. *glandulosa*	None/None/ 2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/45–920	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
many-stemmed dudleya	*Dudleya multicaulis*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr–July/45–2590	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diego button-celery	*Eryngium aristulatum* var. *parishii*	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/annual / perennial herb/Apr–June/65–2035	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Los Angeles sunflower	*Helianthus nuttallii* ssp. *parishii*	None/None/ 1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb/Aug–Oct/30–5005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mesa horkelia	*Horkelia cuneata* var. *puberula*	None/None/ 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/225–2655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
decumbent goldenbush	*Isocoma menziesii* var. *decumbens*	None/None/ 1B.2	Chaparral, Coastal scrub (sandy, often in disturbed areas)/perennial shrub/Apr–Nov/30–445	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Coulter's goldfields	*Lasthenia glabrata* ssp. *coulteri*	None/None/ 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/0–4005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mud nama	*Nama stenocarpa*	None/None/ 2B.2	Marshes and swamps (lake margins, riverbanks)/annual / perennial herb/Jan–July/15–1640	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Gambel's water cress	*Nasturtium gambelii*	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/15–1085	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
spreading navarretia	*Navarretia fossalis*	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/95–2150	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
prostrate vernal pool navarretia	*Navarretia prostrata*	None/None/ 1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/5–3970	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coast woolly-heads	*Nemacaulis denudata* var. *denudata*	None/None/ 1B.2	Coastal dunes/annual herb/Apr–Sep/0–330	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California Orcutt grass	*Orcuttia californica*	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/45–2165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Lyon's pentachaeta	*Pentachaeta lyonii*	FE/SE/1B.1	Chaparral (openings), Coastal scrub, Valley and foothill grassland; rocky, clay/annual herb/(Feb)Mar–Aug/95–2265	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Brand's star phacelia	*Phacelia stellaris*	None/None/ 1B.1	Coastal dunes, Coastal scrub/annual herb/Mar–June/0–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
white rabbit-tobacco	*Pseudognaphalium leucocephalum*	None/None/ 2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug–Nov(Dec)/0–6890	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nuttall's scrub oak	*Quercus dumosa*	None/None/ 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr(May–Aug)/45–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Parish's gooseberry	*Ribes divaricatum* var. *parishii*	None/None/ 1A	Riparian woodland/perennial deciduous shrub/Feb–Apr/210–985	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern mountains skullcap	*Scutellaria bolanderi* ssp. *austromontana*	None/None/ 1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; mesic/perennial rhizomatous herb/June–Aug/1390–6560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt spring checkerbloom	*Sidalcea neomexicana*	None/None/ 2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5020	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
estuary seablite	*Suaeda esteroa*	None/None/ 1B.2	Marshes and swamps (coastal salt)/perennial herb/(May)July–Oct(Jan)/0–15	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
San Bernardino aster	*Symphyotrichum defoliatum*	None/None/ 1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/5–6695	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Greata's aster	*Symphyotrichum greatae*	None/None/ 1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; mesic/perennial rhizomatous herb/June–Oct/980–6595	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2 Key:

Status: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST)

California Rare Plant Rank (CRPR):
1A: Plants presumed extirpated in California and either rare or extinct elsewhere
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Ranks:
1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
2 Moderately threatened in California (20% to 80% of occurrences threatened/moderate degree and immediacy of threat)
3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Special-Status Wildlife

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; USFWS 2019a, NMFS 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species, including one species from the USFWS IPaC Trust Resource List (USFWS 2019b): federally threatened coastal California gnatcatcher (*Polioptila californica californica*). Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur. All forty-seven special-status wildlife species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 3.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Invertebrates					
Busck's gallmoth	*Carolella busckana*	None/None	Coastal scrub dunes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western tidal-flat tiger beetle	*Cicindela gabbii*	None/None	Inhabits estuaries and mudflats along the coast of Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
sandy beach tiger beetle	*Cicindela hirticollis gravida*	None/None	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western beach tiger beetle	*Cicindela latesignata latesignata*	None/None	Mudflats and beaches in coastal Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
senile tiger beetle	*Cicindela senilis frosti*	None/None	Inhabits marine shoreline, from Central California coast south to saltmarshes of San Diego; also found at Lake Elsinore	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Oblivious tiger beetle	*Cicindela latesignata obliviosa*	None/None	Inhabited the Southern California coastline, from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years. The oblivious tiger beetle (*C. l. obliviosa*) is no longer the accepted name for this species (ITIS 2016).	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Palos Verdes blue butterfly	*Glaucopsyche lygdamus palosverdesensis*	FE/None	Cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Riverside fairy shrimp	*Streptocephalus woottoni*	FE/None	Vernal pools, non-vegetated ephemeral pools	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mimic tryonia (=California brackishwater snail)	*Tryonia imitator*	None/None	Inhabits coastal lagoons, estuaries, and saltmarshes, from Sonoma County south to San Diego County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Fish					
Mohave tui chub	Siphateles bicolor mohavensis	FE/FP, SE	Lacustrine ponds or pools; 4 feet min water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; Ruppia maritima preferred for egg attachment and thermal refuge in summer months	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Amphibians					
western spadefoot	*Spea hammondii*	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Reptiles					
western pond turtle	*Actinemys marmorata*	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern California legless lizard	*Anniella stebbinsi*	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California glossy snake	*Arizona elegans occidentalis*	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diegan tiger whiptail	*Aspidoscelis tigris stejnegeri*	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
green sea turtle	*Chelonia mydas*	FT/None	Shallow waters of lagoons, bays, estuaries, mangroves, eelgrass, and seaweed beds	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Blainville's horned lizard	*Phrynosoma blainvillii*	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Birds					
tricolored blackbird	*Agelaius tricolor* (nesting colony)	BCC/SSC, SCE	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
burrowing owl	*Athene cunicularia* (burrow sites & some wintering sites)	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
ferruginous hawk	*Buteo regalis* (wintering)	BCC/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Swainson's hawk	*Buteo swainsoni* (nesting)	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
wrentit	*Chamaea fasciata*	BCC/None	A common, characteristic resident of California chaparral habitat. Also frequents shrub understory of coniferous habitats from the coast to lower regions of mountains throughout cismontane California	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
western yellow-billed cuckoo	*Coccyzus americanus occidentalis* (nesting)	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
yellow rail	*Coturnicops noveboracensis*	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
southwestern willow flycatcher	*Empidonax traillii extimus* (nesting)	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
saltmarsh common yellowthroat	*Geothlypis trichas sinuosa*	BCC/SSC	Nests in woody swamp, brackish marsh, and freshwater marsh.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
song sparrow	*Melospiza melodia*	BCC/None	Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
Belding's savannah sparrow	*Passerculus sandwichensis beldingi*	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
California brown pelican	*Pelecanus occidentalis californicus* (nesting colonies & communal roosts)	FDL/FP, SDL	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Nuttall’s woodpecker	*Picoides nuttallii*	BCC/None	Nest located mostly in riparian habitat in dead (occasionally live) trunk or limb of willow, sycamore, cottonwood, or alder; rarely in oak. Forages mostly in oak and riparian deciduous habitats.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
coastal California gnatcatcher	*Polioptila californica californica*	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
			at less than 1,000 feet above mean sea level		
bank swallow	*Riparia riparia* (nesting)	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
rufous hummingbird	*Selasphorus rufus*	BCC/None	A common migrant and uncommon summer resident of California. Breeding areas north of California in coniferous forests.	A	Not expected to occur. Suitable associated nesting, habitat is not present in the BSA. The species may forage in the area as a transient.
Allen’s hummingbird	*Selasphorus sasin*	BCC/None	Often attaches nest to more than one lateral support on eucalyptus, juniper, willow, other trees, vines, shrubs, or ferns.	HP	Low potential to occur. Marginal nesting habitat within ornamental vegetation is present in the BSA.
California least tern	*Sternula antillarum browni* (nesting colony)	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
least Bell's vireo	*Vireo bellii pusillus* (nesting)	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Mammals					
pallid bat	*Antrozous pallidus*	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	HP	Low potential to occur. The species is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					from the Los Angeles Basin. Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
western mastiff bat	*Eumops perotis californicus*	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
silver-haired bat	*Lasionycteris noctivagans*	None/None	Old-growth forest, maternity roosts in trees, large snags 50 feet aboveground; hibernates in hollow trees, rock crevices, buildings, mines, caves, and under sloughing bark; forages in or near coniferous or mixed deciduous forest, stream or river drainages	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
hoary bat	*Lasiurus cinereus*	None/None	Forest, woodland riparian, and wetland habitats; also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges (Erickson et al. 2002). The species may forage over the area during the night.
western yellow bat	*Lasiurus xanthinus*	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					(Erickson et al. 2002). The species may forage over the area during the night.
south coast marsh vole	*Microtus californicus stephensi*	None/SSC	Tidal marshes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
pocketed free-tailed bat	*Nyctinomops femorosaccus*	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	HP	Not expected to occur. The species has not been recorded using bridges for roosting in California and the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
big free-tailed bat	*Nyctinomops macrotis*	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE/SSC	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
American badger	*Taxidea taxus*	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3 Key:

Status:

Federal Endangered (FE), Federal Threatened (FT), Federal Delisted (FDL), Birds of Conservation Concern (BCC) (USFWS 2008) / State Endangered (SE), State Threatened (ST), State Candidate Endangered (SCE), State Delisted (SDL), State Fully Protected (FP), CDFW Species of Special Concern (SSC), CDFW Watch List

Habitat Present / Absent:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present.

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as "natural communities of special concern" and, as used in this report, include communities identified as high priority for inventory in the *California Natural Community List* (CDFW 2019e) by a state rarity ranking of S1, S2, or S3.

Four natural communities of special concern are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos): California walnut woodland, southern coastal salt marsh, southern sycamore alder riparian woodland, and walnut forest (CDFW 2019a; Table 4). None of these natural communities of special concern overlap with the BSA for the project.

Table 4: Natural Communities of Special Concern Known to Occur surrounding the BSA.

Natural Community Name	Status Global/State Rank	Habitat Present/Absent
California Walnut Woodland	G2/S2.1	Absent
Southern Coastal Salt Marsh	G2/S2.1	Absent
Southern Sycamore Alder Riparian Woodland	G4/S4	Absent
Walnut Forest	G1/S1.1	Absent

Table 4 Key:

Status:

Global/State Rank –

G1 or S1: Critically Imperiled, at very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
G2 or S2: Imperiled, at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, sever threats, or other factors.
G4 or S4: Apparently Secure, at fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats or other factors.

0.1: Very threatened

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Critical Habitat

Based on a review of the USFWS Critical Habitat viewer, there is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2019a).

Regulatory Waters

The proposed project is centered on Compton Creek (USGS HUC12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019). Compton Creek within the project conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the BSA. Within the BSA, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are typically defined as the channel bottom for ACOE and Regional Water Quality Control Board (RWQCB), and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the BSA contains a clearly defined regulated non-wetland Waters of the U.S. and State.

4. Results: Biological Resources, Discussion of Impacts & Mitigation

4.1 Habitats and Natural Communities of Special Concern

4.1.1 Mapped Vegetation Communities and Land Covers

Three vegetation communities and land covers were identified and mapped within the BSA for the project: ornamental vegetation, concrete-lined channel, and urban/developed. The vegetation communities and land covers within the BSA are listed below in Table 5 along with their acreages, and their spatial coverage depicted on Figure 3. Each individual vegetation community and land cover is described further detail below.

Table 5: Vegetation Communities and Land Cover Types in the BSA.

Vegetation Community/Land Cover	Status Global/State Rank	Acreage within the BSA
Urban/Developed (DEV)	GNR/SNR	42.34
Concrete Channel (CC)	GNR/SNR	2.00
Ornamental (ORN)	GNR/SNR	0.74
	TOTAL	**45.08**

Table 5 Key:
Status:
GNR or SNR: Unranked, global or state rank not yet assessed.

Urban/Developed Land

The urban/developed land mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Holland (1986). Urban/developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported (Holland 1986). Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Holland 1986). Developed areas are generally graded and compacted, sometimes covered with gravel road base or built structures, and have little to no vegetation present. Developed land dominates the majority of the BSA and refers to those areas supporting manmade structures or features including paved/compacted roadways, driveways, parking lots, residences, and commercial or industrial buildings. These areas support limited natural ecological processes, native vegetation, or habitat for wildlife species and thus are not considered sensitive by local, State, and/or federal agencies.

Concrete Channel

The concrete channel mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Oberbauer et al. (2008). Concrete channels are characterized by barren or sparsely vegetated concrete-lined channels. Within the BSA, Compton Creek is mapped as a concrete-lined rectangular channel devoid of vegetation, which extends northwest-southeast across the BSA.

Ornamental Vegetation

The ornamental vegetation mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Jones & Stokes (1993). Ornamental vegetation consists of introduced plantings of exotic species as landscaping elements within features such as greenbelts, parks, and horticultural nurseries (Jones and Stokes 1993). Ornamental vegetation within the BSA includes landscaping within commercial development located to the southeast of the proposed project. Ornamental vegetation is scattered throughout urban development within the BSA; however, these units did not meet the minimum mapping threshold and are therefore included within the urban/developed land mapping unit. Ornamental vegetation is not considered sensitive by local, state, and/or federal agencies.

4.1.2 Survey Results

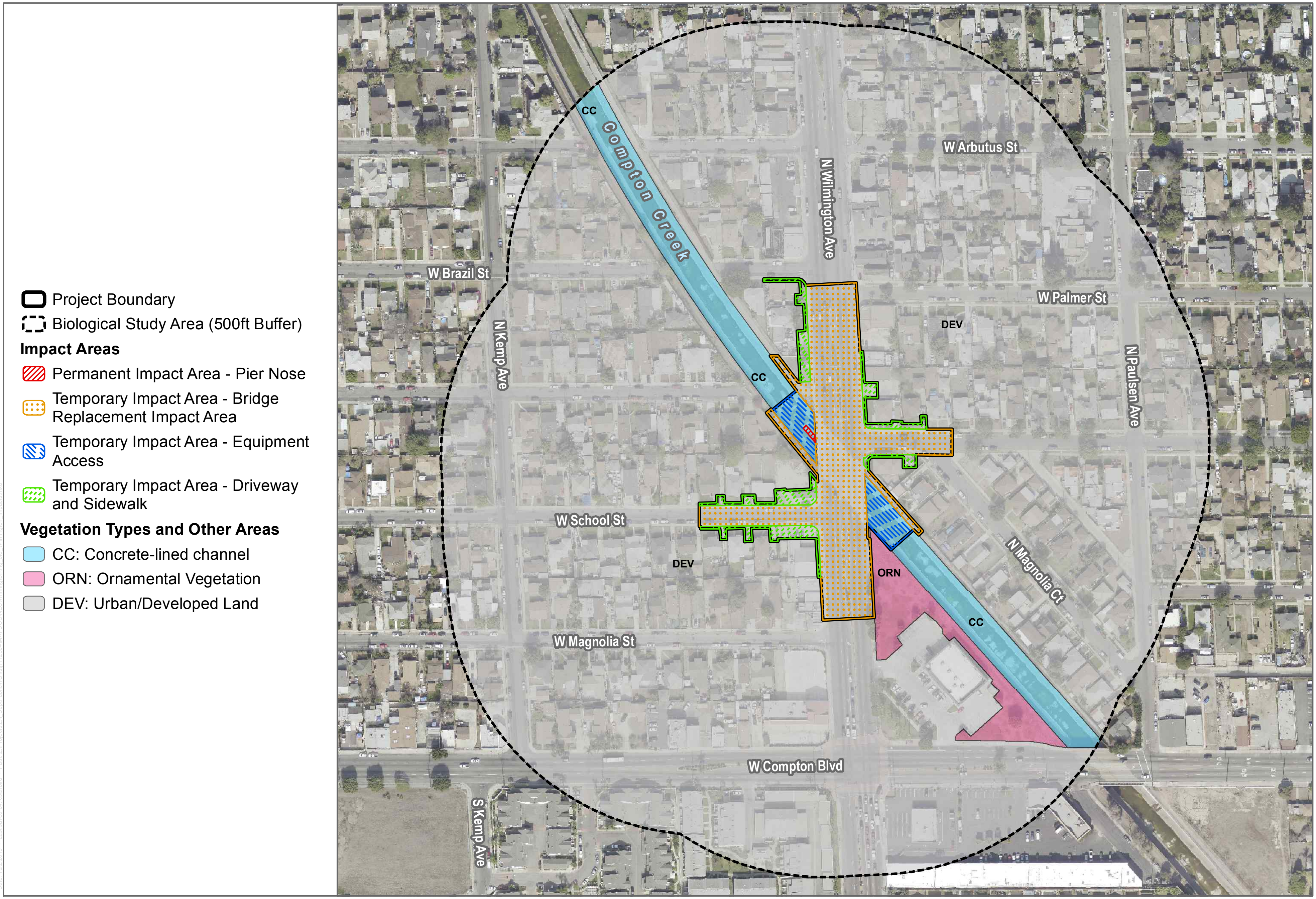
The BSA for the project does not contain any natural communities of special concern.

4.1.3 Project Impacts

Impacts to mapped vegetation communities and land covers associated with the proposed project were quantified by overlaying the proposed impact area with mapped biological resources (Figure 4). Vegetation community/land cover types impacted by the proposed project are urban/developed, concrete channel, and ornamental (Table 6). Urban/developed and ornamental are not habitats and natural communities of special concern. The concrete channel contains the waters of Compton Creek that are likely to be determined Waters of the U.S., Waters of the State, and a CDFW regulated-stream. A formal jurisdictional waters delineation was not conducted; however, the limits of jurisdiction are expected to be delineated along the channel bottom for ACOE and RWQCB, and along the top of the vertical wall of the channel for CDFW, with the horizontal demarcation for each of these jurisdictions being concurrent. The channel is devoid of vegetation within the BSA.

Table 6: Impacts to Vegetation Communities and Land Cover by the Proposed Project

Vegetation Community/Land Cover	Permanent Impacts (acres)	Temporary Impacts (acres)
Urban/Developed (DEV)	0	2.36
Concrete Channel (CC)	0.01	0.48
Ornamental (ORN)	0	0
TOTAL	**0.01**	**2.84**



SOURCE: LAR-IAC 2014; Open Street Map 2019

DUDEK

0 125 250 Feet

FIGURE 4

Project Impacts

The Wilmington Avenue Bridge Over Compton Creek

The new abutments for the proposed bridge would be constructed approximately 15 feet behind the existing abutments, which are outside of the potential jurisdictional limits of Compton Creek. The existing concrete channel wall would be protected in place. The proposed new pier in the middle of the channel would be constructed where the existing bridge pier is located and the proposed footing (including the sloping pier nose) would result in very small increase over the existing footing (0.01 acres). The proposed bridge deck would be constructed where the existing deck is located and would not increase shading of the waters within Compton Creek.

Potential temporary impacts to jurisdictional waters within the concrete channel would result from proposed construction activities. Temporary impacts would include vehicles and equipment within the channel, the generation of concrete debris and sediment due to the demolition of the existing bridge, and the potential introduction of chemical pollutants (fuel, oil, lubricants, paints, release agents, and other construction materials). The release of chemical pollutants can reduce the water quality downstream, especially if water is actively flowing through a project site. Work would be conducted during the dry season (April 15 to October 15); however, based on historical imagery (Google 2019), urban runoff is present in the Compton Creek channel throughout the year.

4.1.4 Avoidance and Minimization Efforts

Work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadways and outside of Compton Creek. During construction, erosion-control measures would be implemented by the contractor as part of their County-certified Storm Water Pollution Prevention Plan (SWPPP) for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include best management practices (BMPs) to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and also include pertinent BMPs from the *Construction Site Best Management Practices (BMPs) Manual* (LADPW 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-storm water BMPs.

4.1.5 Compensatory Mitigation

With implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no compensatory mitigation is required.

4.2 Special Status Plant Species

4.2.1 Survey Results

A total of seventeen plant species were recorded during the field survey. A full list of plant species observed within the proposed project area is provided in Appendix C.

No special-status plant species were detected during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited potential for special-status plant species to occur. Table 2 includes special-status plants that are known to occur in the USGS 7.5-minute South Gate quadrangle and surrounding eight topographic quadrangles (CDFW 2019d; CNPS 2019), as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 2 also analyzes each of these special-status species' potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. There are no special-status plant species with a moderate or high potential to occur within the BSA.

4.2.2 Project Impacts

No special-status plant species were identified within the BSA and no special-status plants, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the extent of developed land and disturbed vegetation within the BSA. Additionally, proposed project activities will primarily occur within existing paved areas (i.e., roadways, bridge decks, concrete channel bottom); therefore, no impacts to potentially occurring special-status plant species are anticipated to occur.

4.2.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status plant species because impacts to special-status plant species are not expected to occur.

4.3 Special Status Wildlife Species

4.3.1 Survey Results

A total of eight wildlife species were recorded during the field survey. A full list of wildlife species observed within the proposed project area is provided in Appendix D.

No special-status wildlife species were observed during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited suitable habitat for special-status wildlife species. Table 3 includes occurrences of special-status wildlife species that have been recorded in the USGS 7.5-minute South Gate quadrangle and surrounding eight quadrangles (CDFW 2019d) as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 3 also analyzes each of these special-status species' potential to occur based on known range and habitat requirements. There are no special-status wildlife species with a moderate or high potential to occur within the BSA.

No bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit; however, it should be noted that specific focused surveys for bats were not conducted. Seven special-status bat species have recorded occurrences in the project vicinity (CDFW 2019d): pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western yellow bat

(*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). All of the species have potential to forage over the project site, but only pallid bat has a potential to roost within the bridge due to the lack of suitable roosting habitat for the other six species. Pallid bat is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records from the Los Angeles Basin (CDFW 2019d, GBIF 2019). Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).

Ornamental vegetation within the BSA and the underside of the bridge deck may provide suitable nesting habitat for a number of common resident and migratory bird species protected under the MBTA and CFG Code Section 3500. Suitable nesting habitat for common, urban-adapted species such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*) occurs within the BSA.

4.3.2 Project Impacts

No special-status wildlife species were identified within the BSA and no special-status wildlife, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the lack of suitable habitat and the extent of developed land and disturbed vegetation within the BSA. Therefore, no impacts to potentially occurring special-status wildlife species are anticipated to occur.

Common bat species that could roost in the bridge Mexican free-tailed bat (*Tadarida brasiliensis*) and California myotis (*Myotis californicus*). Therefore, there may be a potential direct impact to roosting non-special-status bats if project activities commence during the bat maternity roosting period of March through August. However, this potential impact to non-special-status bats would not be considered significant because the bridge and potential roost would not be permanently removed, and therefore would not result in an impact that would cause the greater population of bat species to drop below self-sustaining levels.

Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation scattered throughout the BSA and the underside of the bridge deck could provide suitable habitat for nesting birds protected under MBTA and CFG Code. Nesting birds could be directly impacted by the removal of the existing bridge deck. Nesting birds could also be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 30, the project may directly and indirectly impact nesting birds protected under MBTA and CFG Code.

4.3.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status wildlife species because impacts to special-status wildlife species are not expected to occur.

To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species under the bridge deck and in vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

5. Conclusions & Regulatory Determination

5.1 Federal Endangered Species Act Consultation Summary

The project is primarily located within developed portions of urban areas in southern Los Angeles County (i.e. City of Compton) and will not result in the removal or degradation of any natural communities. The proposed project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the BSA. Additionally, no primary constituent elements for Critical Habitat in the region occur within the BSA.

No direct consultation with NMFS was conducted for this project. However, an official species list was obtained through email from NMFS, and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B.

5.2 Wetlands and Other Waters Coordination Summary

No coordination with any wetland or waters regulatory agencies have been conducted for the proposed project.

A formal jurisdictional waters delineation was not conducted; however, the project would occur over and within the Compton Creek flood control channel that are likely to be Waters of the U.S. and Waters of the State. Approximately 0.49 acres of temporary impacts and approximately 0.01 acres of permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project. Therefore, the proposed project would likely require a Section 404 Permit from ACOE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

5.3 Invasive Species

BMPS that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. No compensatory mitigation is proposed.

5.4 Other

Nesting bird species protected by the MBTA and CFG Code may be directly and indirectly impacted by the project should activities commence during the general nesting season of February 1 through September 30. Nesting season avoidance is proposed in Section 4.3 to reduce any potential impact to nesting birds, and a pre-construction clearance survey should the project occur during the nesting season. Consultation would occur with the appropriate wildlife resource agencies in the event that nesting birds are encountered. Active nests found during the pre-construction clearance survey will be flagged for avoidance and an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur without the consent of the on-site monitor, as long as a nest is still active.

6. References

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APPENDIX A

Site Photographs

APPENDIX A
Site Photographs

Facing west toward eastern side of Wilmington Avenue bridge over Compton Creek.

Facing southeast toward the western side of Wilmington Avenue bridge over Compton Creek.

APPENDIX A
Site Photographs

Facing southeast toward ornamental and disturbed vegetation associated with commercial property located immediately southeast of the proposed project.

Facing northwest toward the Wilmington Avenue bridge deck.

APPENDIX A
Site Photographs

Facing northwest toward bike lane that runs adjacent to Compton Creek.

Facing northwest toward concrete-lined portion of Compton Creek
as viewed from the Wilmington Avenue Bridge.

APPENDIX B

IPaC/NMFS/CNDDB/CNPS/NMFS Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To: January 14, 2020
Consultation Code: 08ECAR00-2019-SLI-0929
Event Code: 08ECAR00-2020-E-01087
Project Name: Wilmington Over Compton Creek Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code:	08ECAR00-2019-SLI-0929
Event Code:	08ECAR00-2020-E-01087
Project Name:	Wilmington Over Compton Creek Project
Project Type:	BRIDGE CONSTRUCTION / MAINTENANCE
Project Description:	Compton, CA

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.89748758694574N118.23773432372053W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NMFS Species List - Intersection of USGS Topographic Quadrangles with NOAA Fisheries ESA Listed Species, Critical Habitat, Essential Fish Habitat, and MMPA Species Data November 2016

X = Present on the Quadrangle		ESA ANADROMOUS FISH (E) = Endangered, (T) = Threatened												ESA ANADROMOUS FISH CRITICAL HABITAT												ESA MARINE INVERTEBRATES		ESA MARINE INVERT. CRITICAL HABITAT	ESA SEA TURTLES				ESA WHALES	ESA PINNIPEDS	ESA PINNIPEDS CRITICAL HABITAT	ESSENTIAL FISH HABITAT					MMPA SPECIES	
		COHO		CHINOOK			STEELHEAD							COHO		CHINOOK			STEELHEAD																	SALMON						
Quad Name	Quad Number	SONCC (T)	CCC (E)	CC (T)	CVSR (T)	SRWR (E)	NC (T)	CCC (T)	SCCC (T)	SC (E)	CCV (T)	Eulachon (T)	Southern DPS Green Sturgeon (T)	SONCC	CCC	CC	CVSR	SRWR	NC	CCC	SCCC	SC	CCV	Eulachon	Southern DPS Green Sturgeon	Black Abalone (E)	White Abalone (E)	Black Abalone	East Pacific Green Sea Turtle (T)	Olive Ridley Sea Turtle (T/E)	Leatherback Sea Turtle (E)	North Pacific Loggerhead Sea Turtle (E)	Whales (see list below)	Guadalupe Fur Seal (T)	Steller Sea Lion	Coho	Chinook	Groundfish	Coastal Pelagic	Highly Migratory Species	MMPA Cetaceans (see "MMPA Species" tab for list)	MMPA Pinnipeds (see "MMPA Species" tab for list)
South Gate	33118-H2									X																																

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR El Monte (3411811) OR Inglewood (3311883) OR South Gate (3311882) OR Whittier (3311881) OR Torrance (3311873) OR Long Beach (3311872) OR Los Alamitos (3311871))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Anniella stebbinsi southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aphanisma blitoides aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Cicindela gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata latesignata western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium aristulatum var. parishii San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Glaucopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Isocoma menziesii var. decumbens decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Perognathus longimembris pacificus Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Siphateles bicolor mohavensis Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 86

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

34 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3411813, 3411812, 3411811, 3311883, 3311882, 3311881, 3311873 3311872 and 3311871;

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	1B.1	S1	G2T1
Astragalus tener var. titi	coastal dunes milk-vetch	Fabaceae	annual herb	Mar-May	1B.1	S1	G2T1
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	1B.2	S1S2	G3
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	1B.1	S1	G1Q
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	1B.2	S1	G4?T1
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
	Los Angeles sunflower	Asteraceae	perennial rhizomatous	Aug-Oct	1A	SH	G5TH

Helianthus nuttallii ssp. parishii			herb				
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	1B.2	S2	G3G5T2T3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Nama stenocarpa	mud nama	Namaceae	annual / perennial herb	Jan-Jul	2B.2	S1S2	G4G5
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	1B.1	S2	G2
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	1B.2	S2	G3G4T2
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	1B.1	S1	G1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	1B.1	S3	G3
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	1B.2	S3	G4T3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul-Oct(Jan)	1B.2	S2	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 19 September 2019].

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Questions and Comments

rareplants@cnps.org

APPENDIX C
Plant Compendium

APPENDIX C
Plant Compendium

EUDICOTS

VASCULAR SPECIES

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed
* *Erigeron bonariensis*—asthmaweed
Heterotheca grandiflora—telegraphweed
* *Lactuca serriola* – prickly lettuce
* *Taraxacum officinale* – common dandelion

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—shortpod mustard

CHENOPODIACEAE - GOOSEFOOT FAMILY

* *Chenopodium album* - lambsquarters

EUPHORBIACEAE—SPURGE FAMILY

* *Euphorbia prostrata* – prostrate sandmat

MALVACEAE - MALLOW FAMILY

* *Malva parviflora* - cheeseweed mallow
* *Malvella leprosa* - alkali mallow

MORACEAE - MULBERRY FAMILY

* *Ficus microcarpa* – Chinese banyan

PASSIFLORACEAE—PASSION FLOWER FAMILY

* *Passiflora caerulea*—bluecrown passionflower

SIMAROUBACEAE—QUASSIA/SIMAROUBA FAMILY

* *Ailanthus alitissima*—tree of heaven

SOLANACEAE—NIGHTSHADE FAMILY

Solanum douglasii—greenspot nightshade

ZYGOPHYLLACEAE - CALTROP FAMILY

* *Tribulus terrestris* – puncturevine

MONOCOTS

VASCULAR SPECIES

POACEAE—GRASS FAMILY

* *Bromus madritensis*—compact brome

* *Cynodon dactylon*—Bermudagrass

* signifies introduced (non-native) species

APPENDIX D
Wildlife Compendium

APPENDIX D
Wildlife Compendium

BIRD

BUSHTITS

AEGITHALIDAE—LONG-TAILED TITS & BUSHTITS

Psaltriparus minimus—bushtit

FINCHES

FRINGILLIDAE—FRINGILLINE & CARDUELINE FINCHES & ALLIES

Haemorhous mexicanus—house finch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe

JAYS, MAGPIES & CROWS

CORVIDAE—CROWS & JAYS

Corvus brachyrhynchos—American crow

PIGEONS & DOVES

COLUMBIDAE—PIGEONS & DOVES

* *Columba livia*—rock pigeon (rock dove)
* *Streptopelia decaocto*—Eurasian collared-dove
Zenaida macroura—mourning dove

TERNS & GULLS

LARIDAE—GULLS, TERNS, & SKIMMERS

Larus occidentalis—western gull

* signifies introduced (non-native) species

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Appendix C

Confidential Records Search Map and Finding of No Adverse Effect

Appendix D

Geotechnical Memorandum

April 29, 2012

TO: Sree Kumar
Design Division

Attention Scott Gregowski

FROM: Greg Kelley RGD for GK
Geotechnical and Materials Engineering Division

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK 53C-0907
COUNTY BRIDGE NO. 2668
GEOTECHNICAL SUBSURFACE EXPLORATION
PROJECT ID RDC0015755 (PCA NO. X220000462)

On November 26, 2012, we were requested to perform a limited geotechnical investigation for Wilmington Avenue Bridge over Compton Creek in the City of Compton. The approximate site location is provided in Figure 1. Our scope of work was to perform subsurface explorations and provide soil testing to determine subsurface conditions.

Subsurface Exploration

To evaluate subsurface conditions at this site, two exploratory borings were drilled on January 28, 2013 and January 31, 2013, and two Cone Penetration Test (CPT) soundings were advanced on January 29, 2013. One boring and one CPT were performed on each side of the bridge. The two borings were drilled with a CME 75 drill rig, using a 6.5-inch-diameter hollow stem auger to depths of 75 feet, each below ground surface (bgs). The two CPT soundings were advanced using a 25-ton truck-mounted CPT rig. The CPT on the south side of the bridge included a seismic shear wave velocity test (SCPT-01) and was advanced to a depth of 74.2 feet bgs. The CPT on the north side of the bridge (CPT-02) was advanced to 67.7 feet bgs. The approximate locations of the borings and CPTs are provided in Figure 2. The logs of borings and soundings are provided in Appendix A.

In-situ Testing

In-situ testing was conducted with the CPT soundings performed by Fugro Consultants. Pore pressure dissipation tests were conducted to determine the approximate depth to ground water. Seismic shear wave velocity measurements were taken to determine the site specific shear wave velocity for the upper 100 feet. The test results for the seismic shear wave velocity measurements are provided in Appendix B.

Laboratory Testing

Selected samples were collected for laboratory analysis to confirm soil classifications made in the field and to provide engineering properties of the existing soils. Soil tests were performed by the Geotechnical and Materials Engineering Division's Materials Laboratory. A summary of laboratory test results is provided in Appendix C.

Subsurface Information

- The soil types encountered during drilling consist predominantly of lean clay and silts in medium stiff to very stiff condition. A layer of very dense well-graded sand was encountered in both borings from depths of 65 feet to 75 feet. Hard silt was found below the layer of well-graded sand in both borings.
- Bedrock was not encountered in the borings or CPTs conducted at the subject site.
- Perched water was encountered at 45 feet bgs in both borings. Two different perched groundwater levels were recorded in the CPTs. CPTs indicated perched water at a depth of 53 in SCPT-01 and 45 feet deep in CPT-02.

The boring logs and soundings provided herein contain observations and interpretations that are valid only for the specific date and location of the borings and soundings. Subsurface conditions may vary between borings and with time.

If you have any questions regarding the reported information or if additional analyses or recommendations are needed, please contact Yonah Halpern or Yoshiya Morisaku at Extension 4925. To provide feedback on our services, please access http://dpw.lacounty.gov/go/gmedsurvey to complete a Customer Service Survey.

Prepared by:

for Yoshiya Morisaku
Yonah Halpern
Principal Civil Engineering Assistant

Prepared by:

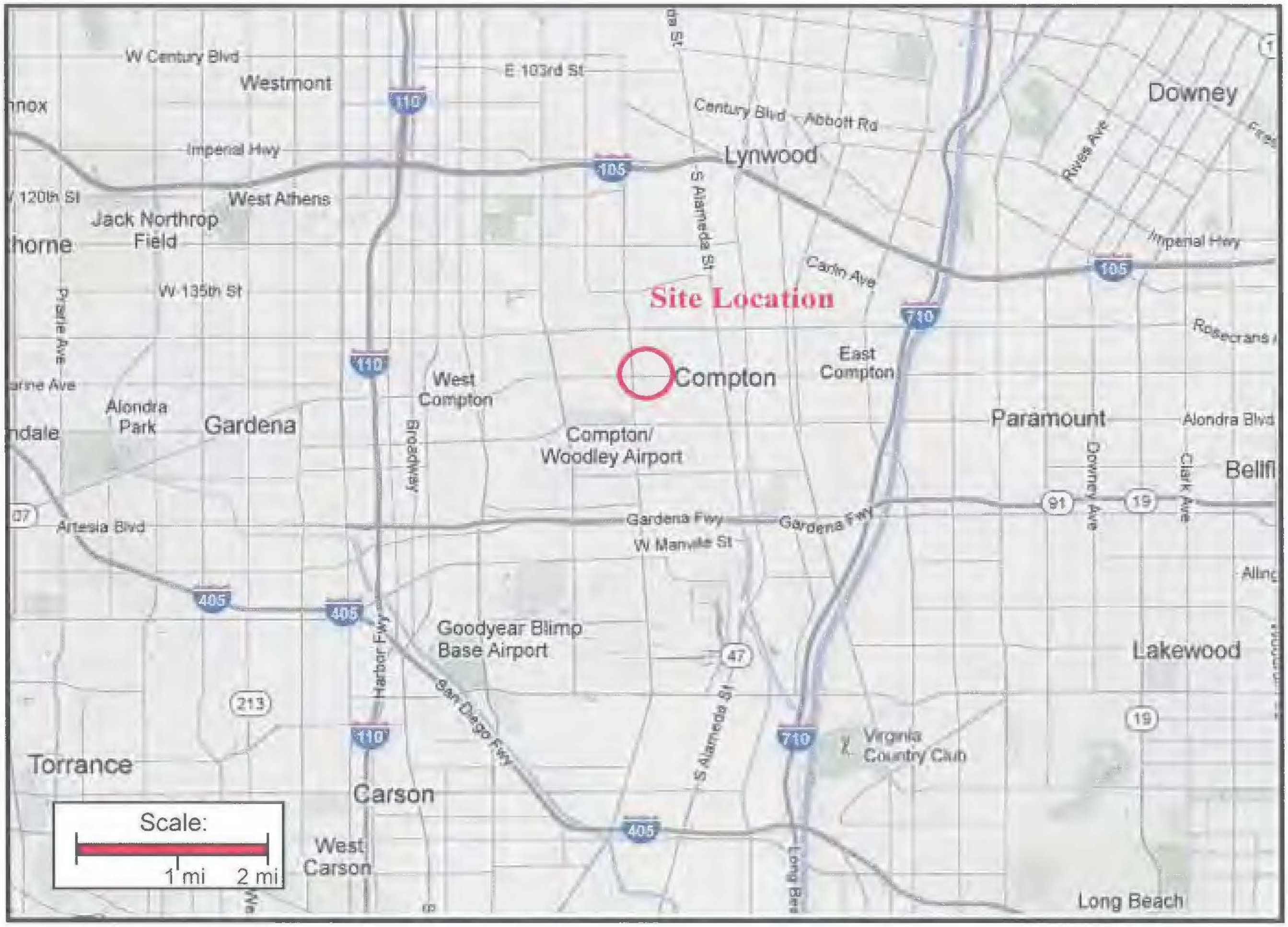
Yoshiya Morisaku
Yoshiya Morisaku
Associated Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
YOSHIYA MORISAKU
No. 67587
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

YM:kw
P:\gmepub\Secretarial\soilsrvw\REPORTS\Wilmington Ave over Compton Creek 53C-0907- Report.docx

Attach.

NORTH



Thomas Guide Page 734 Grid H4

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK SITE LOCATION MAP	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS Geotechnical and Materials Engineering Division		
	DATE: March 2013	PREPARED BY: Megan Yanez	Figure 1

NORTH

Legend:

⊕	Approximate boring locations
▲	Approximate SCPT and CPT locations

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK BORING LOCATION MAP	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS Geotechnical and Materials Engineering Division	
DATE: March 2013	PREPARED BY: Megan Yanez	Figure 2

Attachment A

Boring Logs and Soundings

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 1 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 51.3" W 118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log	DESCRIPTION	LABORATORY TESTING USCS	In-situ γ_d (pcf)	MC (%)	Sieve % Passing No. 4	No. 200	LL	PI	Type of Tests
0					■	4" AC / 12" CMB								
	2B		▨		▨	Sandy Lean Clay medium stiff, moist, brown, trace gravel	CL			95.4	58.4	31	12	CR MD SA
5	1R	⧄		3/3/5	▨	Lean Clay medium stiff to stiff, very moist, brown, trace silt and sand	CL							
10	3T	▯		3/2/3	▨	@10', moist		108.5	16.8					
15	4R	⧄		3/3/4	▨	@15', Lean Clay with Sand, moist		99.5	23.8	95.1	74.0	38	17	DS SA
20	5T	▯		7/12/15	░	Silty Sand medium dense, moist, brown	SM							
25														

LEGEND

- ⧄ California Ring (2.5 in. OD) Sample
- ⊠ California Ring (3 in. OD) Sample
- ▯ SPT (2 in. OD) Sample
- ▨ Bulk Sample
- ➡ Depth to invert
- ▽ Seepage Encountered During Drilling
- ▼ Groundwater Encountered During Drilling
- —— Distinct Contact
- – – – Gradational or Uncertain Contact
- γ_d - Dry Density
- MC - Moisture Content

Types of Tests

CO - Consolidation
CR - Corrosion
DS - Direct Shear
EI - Expansion Index
HY - Hydrometer
MD - Maximum Density
PE - Permeability
SA - Sieve Analysis
SE - Sand Equivalence
TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project:Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 2 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat : N33° 53' 51.3" W118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γd (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
25	6R	⧄		11/19/24	▨	Lean Clay hard, very moist, brown	CL	101.7	24.1	100	95.1	45	19	DS SA
30	7T	▯		6/10/11	▨	@ 30', very stiff		99.4	26.6					
35	8R	⧄		9/15/19	▨									
40	9T	▯		5/8/10	▨									
∇ 45	10R	⧄		13/26/50 (for 5")	▥	Silt with Sand hard, wet, brown perched water observed	ML	102.5	23.8	99.5	74.8			SA
50														

LEGEND

⧄ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
∇ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
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Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907 Project Location: Compton PCA: X220000462 Monitoring Well Installed: Yes [✓ No]	**SOILS LOG OF BORING AND SAMPLING** Los Angeles County Department of Public Works Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 3 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 51.3" W 118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
50	11T	▯		4/5/11		Silt very stiff, wet, brown	ML	95.8	28.3					
55	12R	⧅		15/29/41		Silty Sand dense, wet, grey	SM							
60	13T	▯		7/13/21										
65	14R	⧅		11/37/50 (for 3")		Well-Graded Sand very dense, wet, grey	SW							
70	15T	▯		12/9/22		@ 70', w/traces of silt		114.0	15.0					
75	16R	⧅		13/17/26		Silt hard, moist, dark grey (End of Boring @ 75')	ML							

LEGEND

⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests

CO - Consolidation
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Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2
Date(s) Drilled: 1/30/13
Logged by: Yonah Halpern
Boring Diameter: 6.5 in.
Ground Elevation: N/A ft.
Page 1 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄
Drilled by: JET Driling
Hammer Weight: 140 lbs.
Total Depth: 75 ft.
Depth to Invert: N/A ft.
Long/Lat: N33° 53' 50.5" W118° 14' 15.9"
Drilling Method: Hollow Stem
Equipment: CME 75 Rig
Drop Height: 30 in.
Depth to Groundwater: 45 ft.
Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γd (pcf)	MC (%)	No. 4	No. 200			
0					■	4" AC / 8" CMB								
	1B		▨		▨	Sandy Lean Clay very stiff, moist, dark brown, trace gravel (fill)	CL			97.4	51.3	33	13	CR SA
5	2T	▯		3/5/9	▨			115.4	15.4	98.0	61.0	35	19	SA
10	3R	⧄		8/9/12	▥	Silt very stiff, moist, brown and grey, trace fine-grained sand and clay	ML							
15	4T	▯		5/10/14	▥									
20	5R	⧄		9/18/23	▨	Sandy Lean Clay hard, moist, brown and grey, fine-grained sand	CL	112.9	18.0	91.7	65.1	34	12	DS SA
25														

LEGEND

⧄ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
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Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes / [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 2 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
25	6T	▯		8/10/14	▨	Sandy Lean Clay very stiff, moist, brown and grey, trace fine-grained sand	CL							
30	7R	⧄		7/10/17	▨	@ 30' increased clay content								
35	8T	▯		8/8/13	▨	@ 35' clay, trace fine-grained sand								
40	9R	⧄		8/18/27	░	Sandy Silt dense, very moist, brown, fine-grained sand	ML	106.5	21.8	100.0	50.2			DS SA
▽ 45	10T	▯		6/14/18	░	@ 45' perched water observed								
50	- - -					- - -								

LEGEND

⧄ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
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Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes /[✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 3 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γd (pcf)	MC (%)	No. 4	No. 200			
50	11R	⧅		10/19/24		Silt hard, wet, grey, trace fine-grained sand	ML	90.4	32.3	100.0	97.6	49	19	
55	12T	▯		7/14/16		Silty Sand dense, wet, grey	SM							
60	13R	⧅		14/50 (for 5")		@ 60', increased silt content		96.9 102.1	28.4 24.4					
65	14T	▯		3/5/15		Well-Graded Sand medium dense, wet, grey, coarse sand	SW							
70	15R	⧅		19/38/50 (for 2')		@ 70', very dense								
75	16T	▯		13/17/26		Silty hard, moist, dark grey (End of Boring @ 75')	ML							

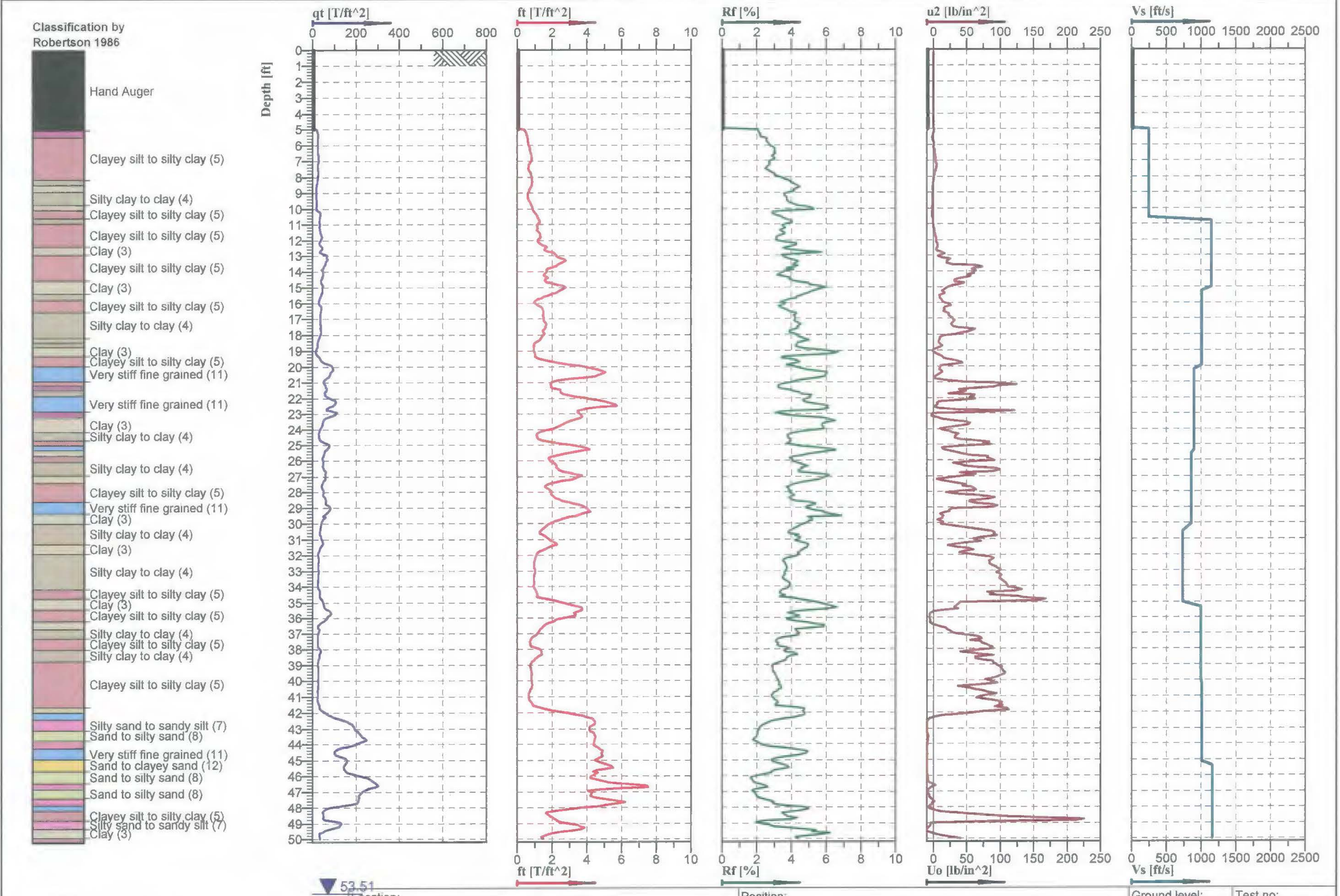
LEGEND

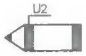
⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
—— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
EI - Expansion Index	SE - Sand Equivalence
HY - Hydrometer	TR - Triaxial

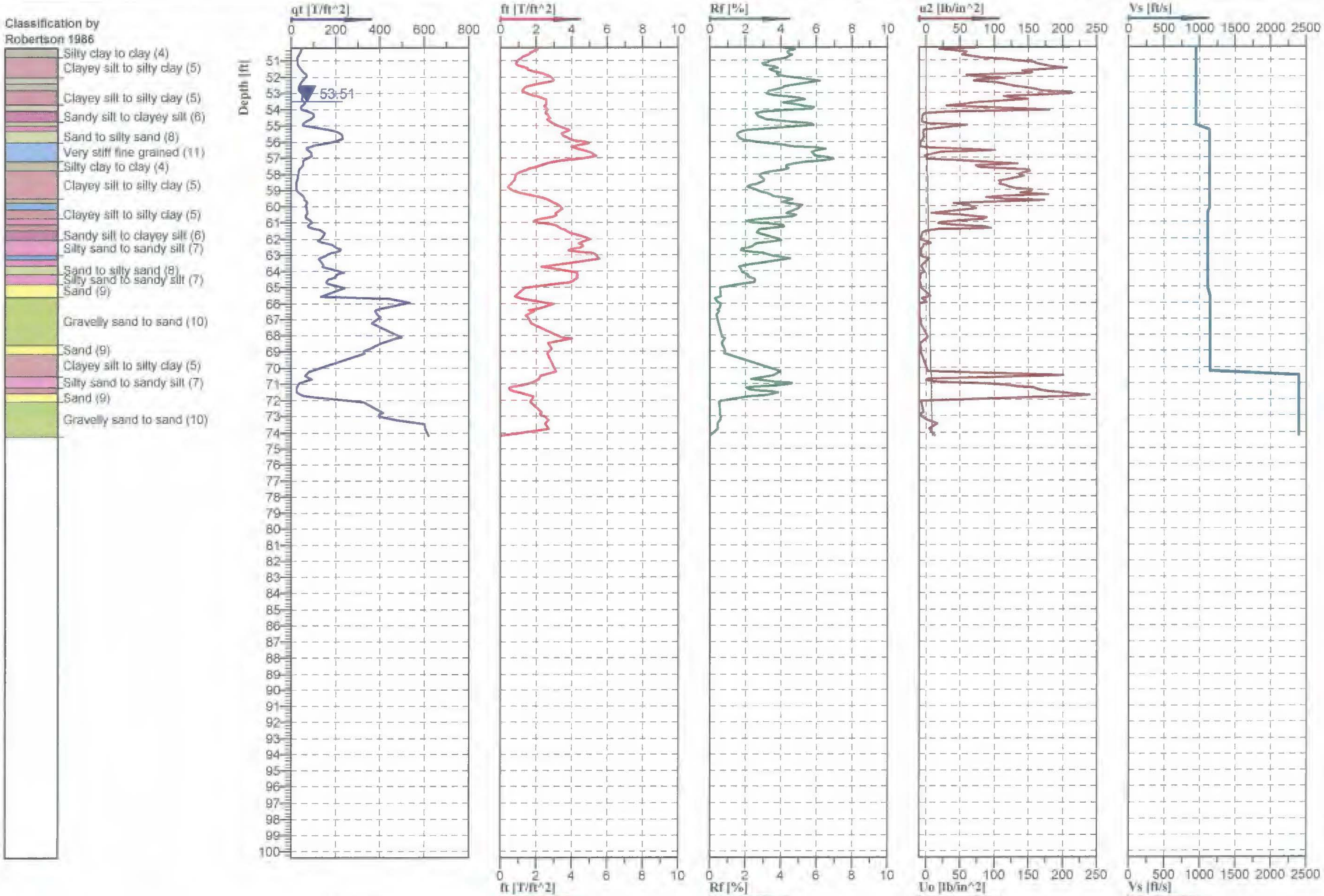
Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.





Cone No. 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

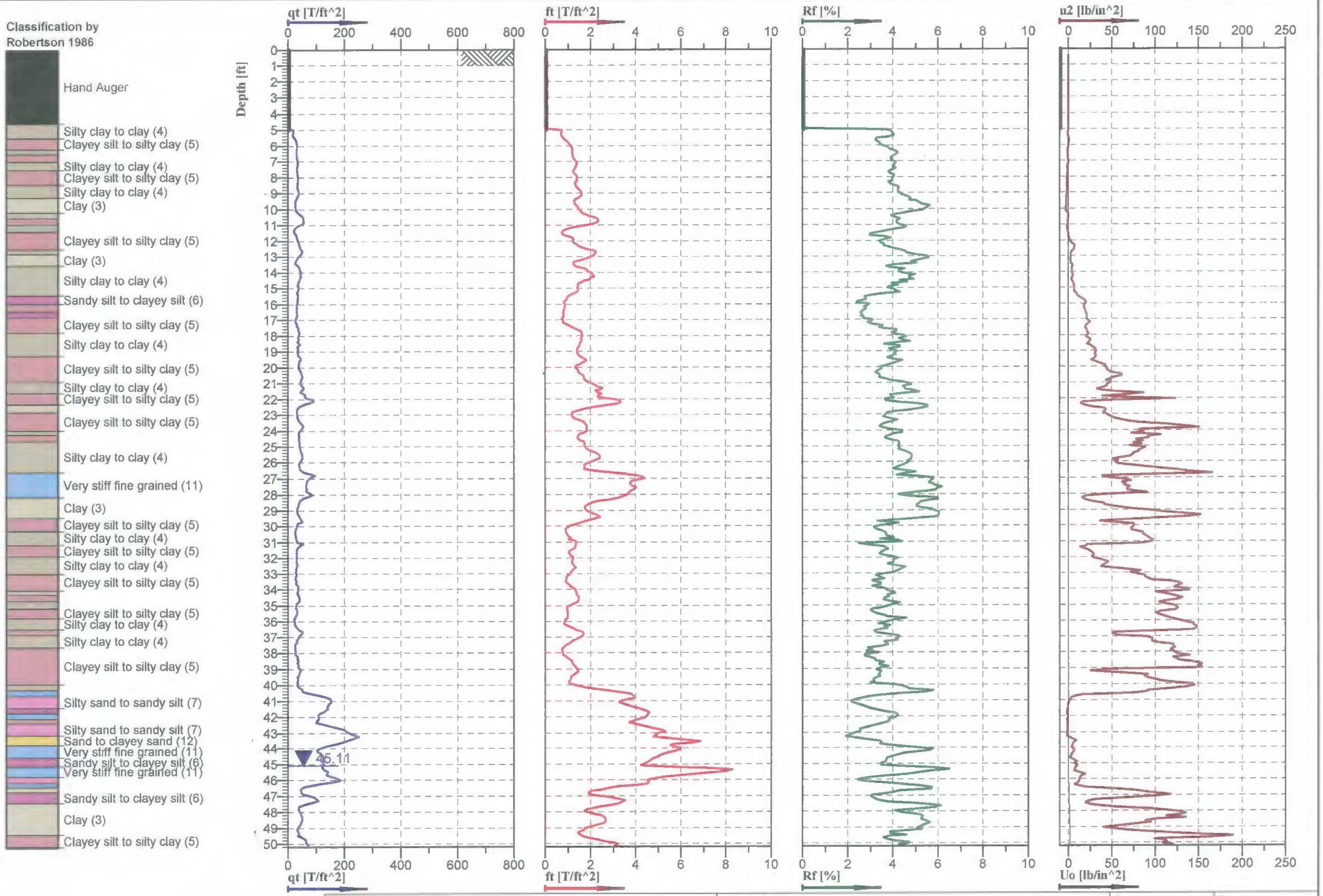
Location: Wilmington Bridge
Position:
Ground level:
Test no: SCPT-01
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge SCPT
Page: 1/2
Fig:
File: CA29J1301C.csv

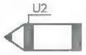


U2

Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge	Position:	Ground level:	Test no: SCPT-01
Project ID: XX220000462	Client: LADPW	Date: 29/Jan/2013	Scale: 1 : 100
Project: Wilmington Bridge SCPT		Page: 2/2	Fig:
		File: CA29J1301C.csv	

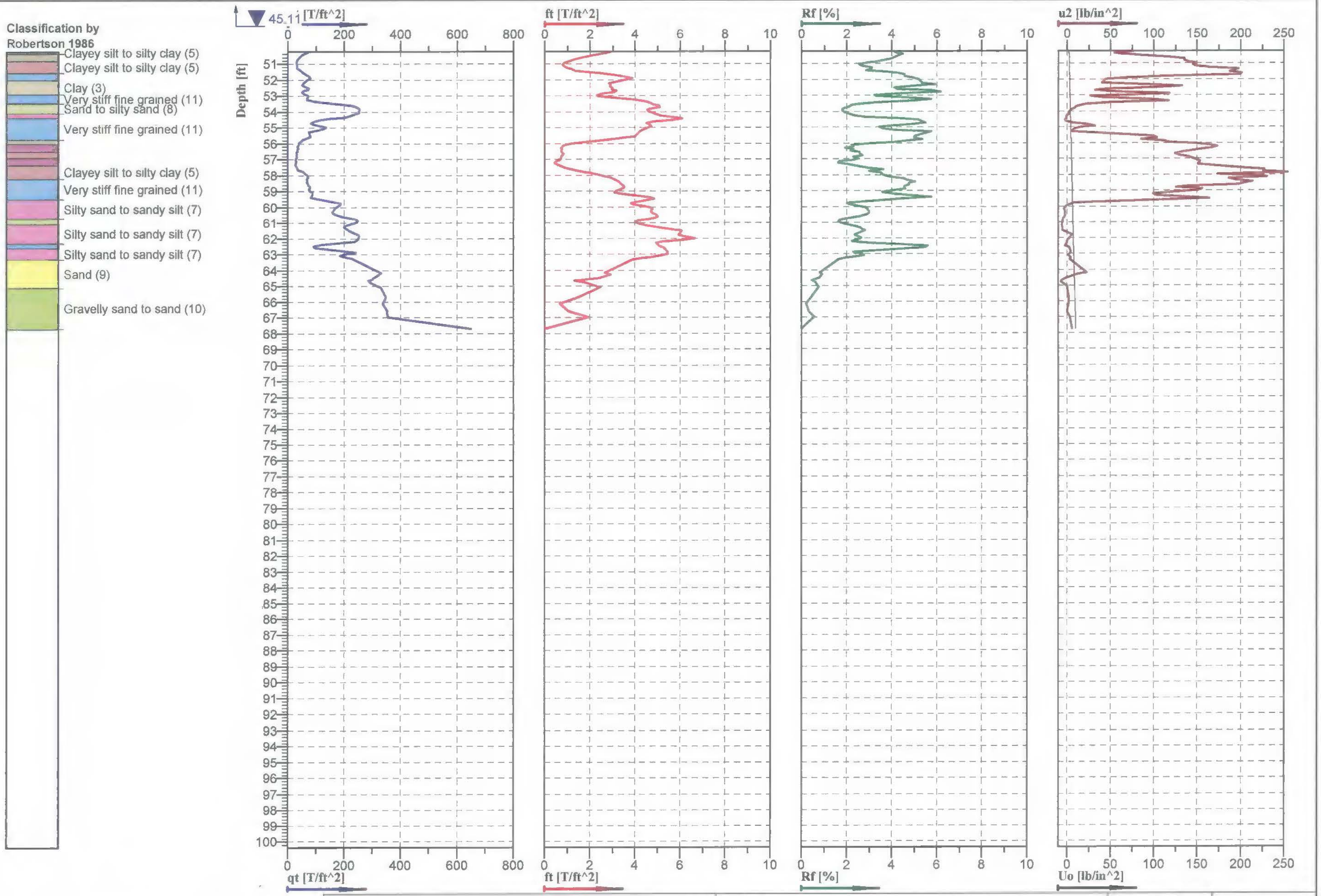




FUGRO

Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge	Position:	Ground level:	Test no: CPT-02
Project ID: XX220000462	Client: LADPW	Date: 29/Jan/2013	Scale: 1 : 100
Project: Wilmington Bridge		Page: 1/2	Fig:
		File: CA29J1302C.cpd	



FUGRO

U2

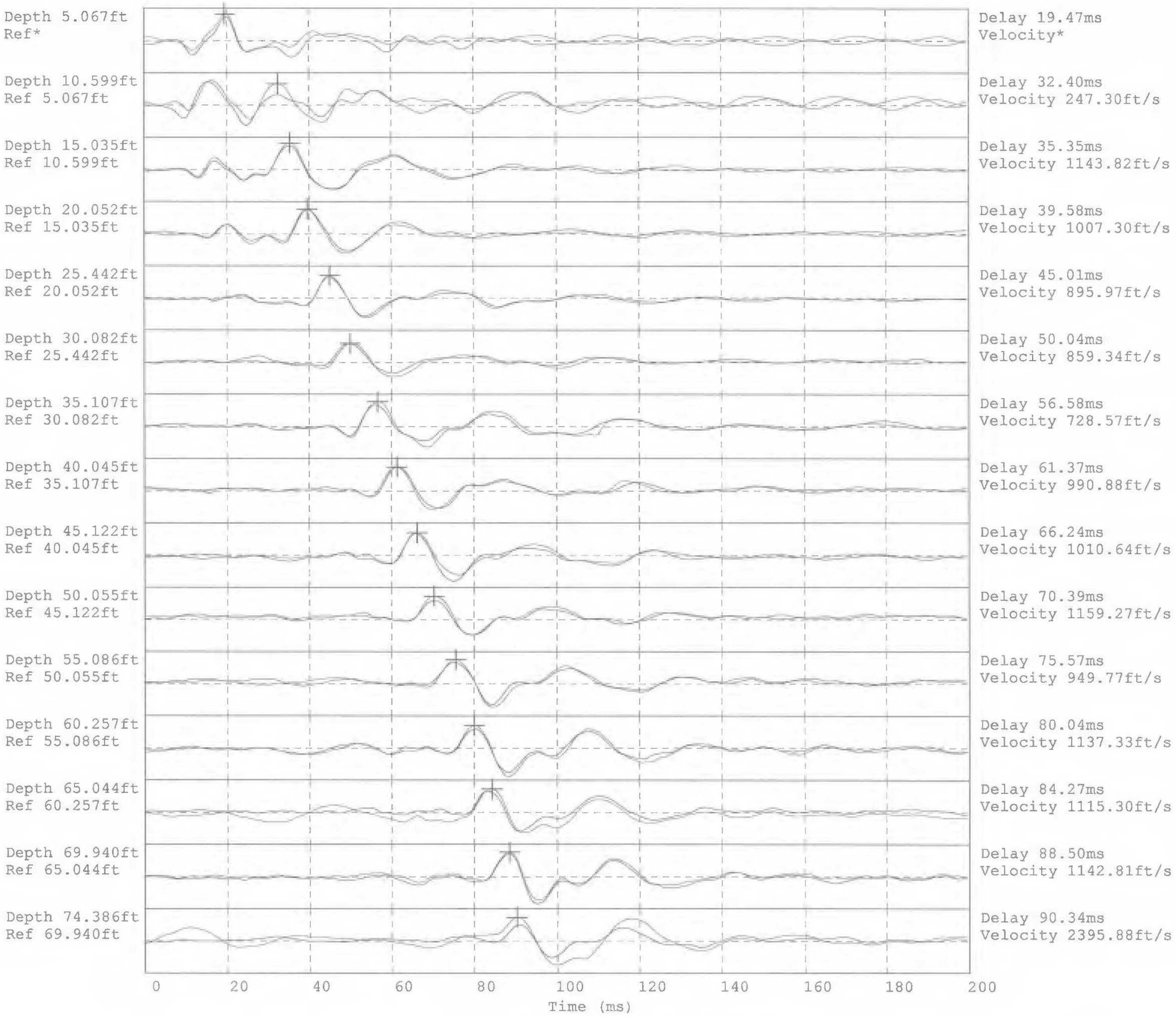
Cone No: 5583:101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge
Position:
Ground level:
Test no: CPT-02
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge
Page: 2/2
Fig:
File: CA29J1302C.cpd

Attachment B

Seismic Shear Wave Velocity

SCPT-01 S-Wave Form
Pr. No. XX220000462



Hammer to Rod String Distance 3.3 (m)
* = Not Determined

Attachment C

Summary of Laboratory Testing

SUMMARY OF LABORATORY TEST RESULTS

Geotechnical Laboratory

PROJECT NAME: Wilmington Ave. Over Compton Creek
TECHNICIAN: JA-HA-EH
PCA: X220000462

ENGINEER: Yonah Halpern
DATE: 03/07/2013
PAGE: 1 OF 1

BORING/ SAMPLE	DEPTH (ft)	UNIFIED SOIL CLASSIFICATION					MOISTURE AND DRY DENSITY				DIRECT SHEAR				CHEMICAL				Permeability (ft/day)
		Class.	ATTERBERG LIMITS		#4 % Pass	#200 % Pass	$\Upsilon\ d_{field}$ pcf	$m.c._{field}$ %	$\Upsilon\ d_{maximum}$ pcf	$m.c._{optimum}$ %	$\phi_{ultimate}$ Degree	$c_{ultimate}$ psf	$\phi_{maximum}$ Degree	$c_{maximum}$ psf	pH	Min. Resistivity (K ohm-cm)	Cl (ppm)	SO_4 (ppm)	
B - S			LL	PI															
B1-2B	2-5	CL	31	12	95.4	58.4			127.0	11.3					7.35	1.6	2	0	
B1-3T	10-11.5						108.5	16.8											
B1-4R	15-16.5	CL	38	17	95.1	74.0	99.5	23.8			25	183	26	183					
B1-6R	25-26.5	CL	45	19	100.0	95.1	101.7	24.1			22	0	27	300					
B1-7T	30-31.5						99.4	26.6											
B1-10R	45-46.5	ML			99.5	74.8	102.5	23.8											
B1-11T	50-51.5						95.8	28.3											
B1-15-T	70-71.5						114.0	15.0											
B2-1B	5-10	CL	33	13	97.4	51.3									7.80	1.8	3	45	
B2-2T	5-6.5	CL	35	19	98.0	61.0	115.4	15.4											
B2-5R	20-21.5	CL	34	12	91.7	65.1	112.9	18.0			23	300	28	776					
B2-9R	40-41.5	ML			100.0	50.2	106.5	21.8			31	10	35	167					
B2-11R	50-51.5	ML	49	19	100.0	97.6	90.4	32.3											
B2-13R	60-61.5	Top rings					96.9	28.4											
B2-13R	60-61.5	Bott.rings					102.1	24.4											

Appendix E

Water Quality Assessment Report

Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek

Wilmington Avenue Bridge over Compton Creek
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Shabnam Sheikh, Caltrans District 7, 100 S. Main Street, Los Angeles, California; (213) 897-0665 Voice, or use the California Relay Service TTY number, 1 (800) 735-2929.

Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek Project
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

STATE OF CALIFORNIA
Department of Transportation

Prepared By: ________________________ Date: 2/3/20
Danielle Thayer, Associate Environmental Planner
(310) 792-2690
El Segundo Office
GPA Consulting

Approved By: ________________________ Date: ____________
Professional Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

Approved By: ________________________ Date: ____________
Management Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

1.1 Executive Summary

The primary purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA), and provide information, to the extent possible, for the National Pollutant Discharge Elimination System (NPDES) permitting. This WQAR includes a discussion of the project, the physical setting of the project study area, and the regulatory framework with respect to water quality. It also provides data on existing water quality, surface water and groundwater resources within the project study area, describes water quality impairments and beneficial uses, identifies potential water quality impacts/benefits associated with the project, and recommends avoidance and/or minimization measures.

The County of Los Angeles, in coordination with the City of Compton, are proposing removal and replacement of the Wilmington Avenue Bridge over Compton Creek. The existing bridge includes two 11-foot-wide travel lanes and has been classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed bridge would be a 163-foot-long, 92-foot-wide, two-span precast pre-stressed concrete box beam structure supported by pile foundation. New bridge abutments would be constructed at approximately 15 feet behind the existing abutments/channel walls, which would be left in place with modifications to provide clearance to accommodate the new bridge superstructure. Pile drilling would be utilized at the abutment and pier locations. Full road closure would be required during project construction.

Compton Creek is a tributary of the Los Angeles River. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez. Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat. The creek has been listed for several pollutants on the Clean Water Act (CWA) 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

Project construction would last approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction activities. Avoidance and minimization measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared to outline appropriate construction Best Management Practices (BMP) that would be implemented to prevent any pollutants from entering the creek within the project area.

The project would not result in substantial permanent changes to the line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions.

Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which include:

- Clean Water Act (CWA) Section 401 Water Quality Certification (Los Angeles Regional Water Quality Control Board (RWQCB))
- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (State Water Resources Control Board (SWRCB), 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (U.S. Army Corps of Engineers (USACE), Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

Table of Contents

List of Figures

1 INTRODUCTION

1.1 Approach to Water Quality Assessment

The purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information for National Pollutant Discharge Elimination System (NPDES) permitting. The document includes a discussion of the proposed project, the general environmental setting of the project area, and the regulatory framework with respect to water quality; it also provides data on surface water and groundwater resources within the project area and the water quality of these waters, describes water quality impairments and beneficial uses, and identifies potential water quality impacts/benefits associated with the proposed project, and recommends avoidance and/or minimization measures for potentially adverse impacts.

As part of this analysis, reviews were conducted of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), the FEMA Flood Insurance Rate Maps for Los Angeles County, Geotechnical Subsurface Exploration data, and hydraulic analysis modeling data. To determine the impacts on water quality, the increase in impervious surface area was calculated, and impacts of the construction activities were also considered.

1.2 No Build Alternative

The No Build Alternative would maintain the existing configuration of the Wilmington Avenue Bridge and would not result in improvements. The proposed project purpose and need would not be met, and operational and safety conditions (structural deficiency) would continue to worsen.

1.3 Build Alternative

1.3.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

1.3.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3.3 Project Description

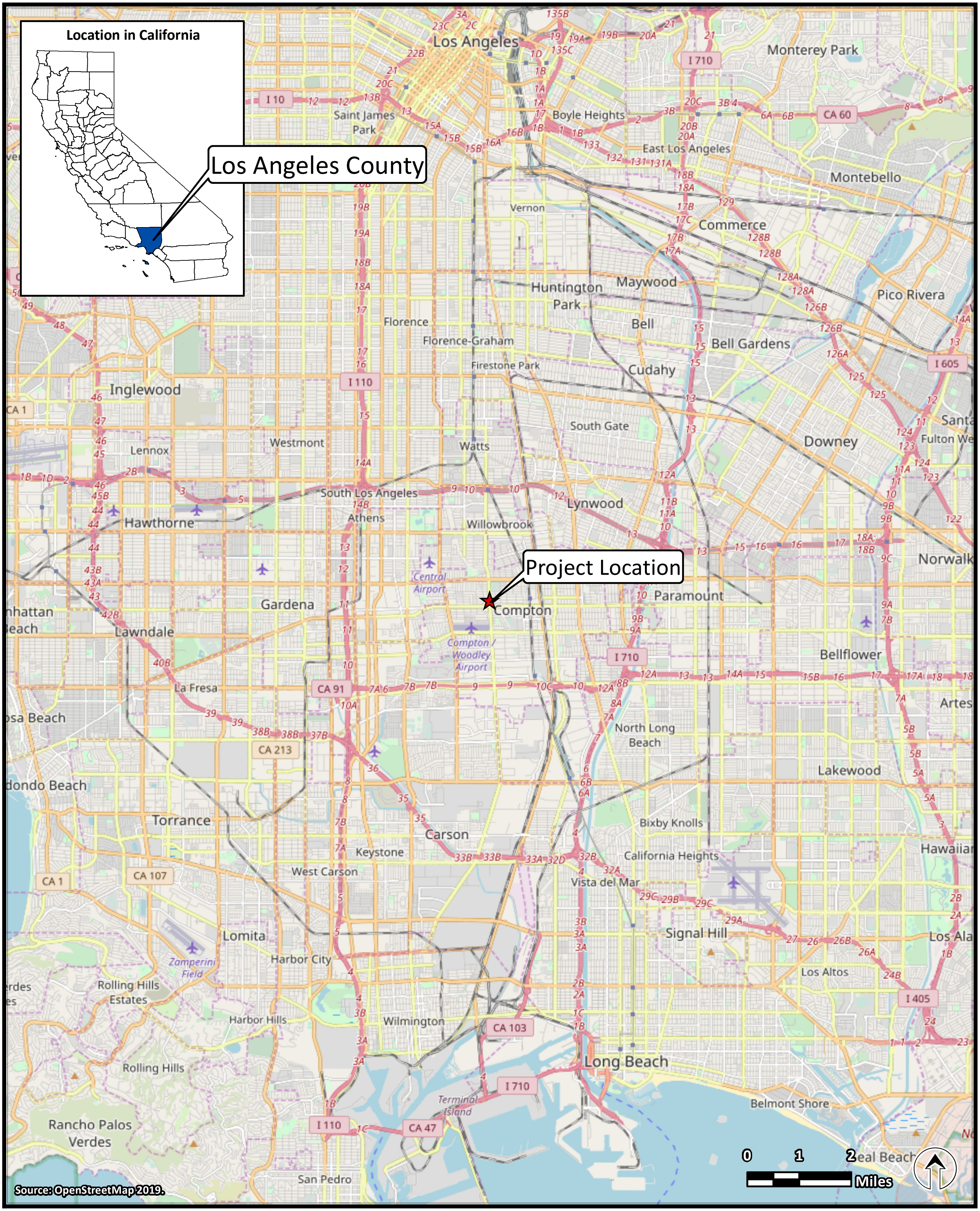
The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (see **Figure 1**, Regional Location Map, and **Figure 2**, Project Location Map). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-way (ROW), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers.

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier reconstruction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.



Public Works
LOS ANGELES COUNTY

FIGURE 1. REGIONAL LOCATION MAP
Wilmington Avenue over Compton Creek

Public Works
LOS ANGELES COUNTY

FIGURE 2. PROJECT LOCATION MAP
Wilmington Avenue over Compton Creek

The construction of the bridge superstructure would involve the installation of precast/prestressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways. Proposed construction activities would include installing CIDH concrete piles using a drill rig, hydraulic crane, concrete truck and concrete pump and installing a reinforced concrete slab using forklifts, loaders, concrete trucks, and a concrete pump.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

1.3.4 Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7 a.m. to 3:30 p.m.

2 REGULATORY SETTING

2.1 Federal Laws and Requirements

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The Federal Environmental Protection Agency delegated to the California State Water Resources Control Board (SWRCB) the implementation and administration of the NPDES program in California. The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the Federal NPDES program and all water quality programs and regulations that cross Regional boundaries. The nine RWQCBs enact, administer and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S, including wetlands. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Individual permits: Standard Individual permit and Letter of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Individual permits. For Standard Individual permit, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA), to the proposed discharge that would have less effects on waters of the U.S., and not have any other significant adverse environmental consequences. Per the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures have been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

2.2 State Laws and Requirements

Porter-Cologne Water Quality Control Act

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of “waste” as defined and this definition is broader than the CWA definition of “pollutant”. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The SWRCB and RWQCBs are responsible for establishing the water quality standards as required by the CWA, and regulating discharges to protect beneficial uses of water bodies. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set standards necessary to protect these uses. Consequently, the water quality standards developed for particular water body segments are based on the designated use and vary depending on such use. Water body segments that fail to meet standards for specific pollutants are included in a Statewide List in accordance with CWA Section 303(d). If a Regional Board determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed. The SWRCB implemented the requirements of CWA Section 303(d) through Los Angeles County’s MS4 Permit, as it includes specific TMDLs for which the County is the named stakeholder.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater.” The SWRCB has identified Los Angeles County as an owner/operator of an MS4 pursuant to federal regulations. The County’s MS4 permit covers all County rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Construction General Permit

The State’s General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ adopted on November 16, 2010) became effective on February 14, 2011 and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) or one acre or greater, and/or smaller sites that are part of a larger common plan of development.

For all projects subject to the CGP, the applicant is required to hire a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP. All Project Registration Documents, including the SWPPP, are required to be uploaded into the SWRCB’s on-line Stormwater Multiple Application and Report Tracking System (SMARTS), at least 30 days prior to construction.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with State water quality standards. The most common federal permit triggering 401 Certification is a CWA Section 404 permit, issued by USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a 404 permit.

In some cases the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may prescribe a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act). WDRs may specify the inclusion of additional project features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.3 Regional and Local Requirements

Basin Plan for the Los Angeles Region

Section 13240 of the Porter-Cologne Water Quality Control Act requires each RWQCB to formulate and adopt water quality control plans, or basin plans, for all areas within the region. Water quality in the project study area is regulated by the Los Angeles RWQCB through the *Water Quality Control Plan* (Los Angeles RWQCB Basin Plan) (California Regional Water Quality Control Board, Los Angeles Region 2014).

The Basin Plan lists the beneficial uses of surface waters and groundwaters in the region. Beneficial uses are uses that may be protected against quality degradation. These uses include and are not limited to domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. The beneficial uses of surface waters and groundwaters in the basin are designated in the water quality control plans.

The Basin Plan also includes water quality objectives, which are the limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Los Angeles Regional Water Quality Control Board Waste Discharge Requirements for Municipal Separate Storm Sewer System

Phase I of the SWRCB’s MS4 program, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. A municipal NPDES stormwater permit was issued to the County of Los Angeles and 84 incorporated cities (with the exception of the City of Long Beach) under Order No. R4-2012-0175, NPDES Permit No. CAS004001 by the Los Angeles RWQCB on November 8, 2012 (Los Angeles Regional Water Quality Control Board 2012).

Los Angeles County Code and Flood Control District Code

The Los Angeles County Code applies to the unincorporated areas that are directly affected by the Build Alternatives. Chapter 21 (Storm Water and Runoff Pollution Control) sets forth standards to regulate the stormwater and non-stormwater discharges to the facilities of the Los Angeles County Flood Control District to protect those facilities, the water quality of the waters in and downstream of those facilities, and the quality of the water that is being stored in underground water-bearing zones (County of Los Angeles 2013).

Los Angeles County General Plan

The *Los Angeles County General Plan* (County’s General Plan) contains the County’s goals related to land use and is designed to serve as the basis for development decisions. The following objective and policy from the County’s General Plan, Conservation and Open Space Element are applicable to the project (County of Los Angeles 1980):

- Objective: To conserve water and protect water quality.
- Policy 5: Encourage the maintenance, management, and improvement of the quality of imported domestic water, groundwater supplies, natural runoff, and ocean water.

The Greater Los Angeles County Integrated Regional Water Management Plan

The Greater Los Angeles County Region Integrated Regional Water Management group finalized the *Greater Los Angeles County Region Integrated Regional Water Management Plan* in 2014. Integrated Regional Water Management Plans are regional plans designed to improve collaboration in water resources management. The first Integrated Regional Water Management Plan for the Greater Los Angeles County Region Integrated Regional Water Management group was published in 2006 following a multiyear effort among water retailers, wastewater agencies, stormwater and flood managers, watershed groups, the business community, tribes, agriculture, and nonprofit stakeholders to improve water resources planning in the Los Angeles Basin. The plan provides a mechanism for: (1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders.

Los Angeles River Master Plan

Compton Creek is a tributary of the Los Angeles River. In July 1991, the Los Angeles County Board of Supervisors directed the County Departments of Public Works, Parks and Recreation, and Regional Planning to coordinate all interested public and private parties in the planning, financing, and implementation efforts of the *Los Angeles River Master Plan* (Los Angeles County Public Works 1996). The master plan identifies ways to enhance and revitalize the publicly owned rights of way along the Los Angeles River and Tujunga Wash.

The Compton Creek Master Plan 2006

The *Compton Creek Master Plan* was developed in 2006 to establish a vision for the future uses and needs of Compton Creek. The plan includes several design concepts for Compton Creek and surrounding land, which includes recreation opportunities, stormwater management, art, safety, and potential events and partnerships.

3 AFFECTED ENVIRONMENT

3.1 General Environmental Setting

3.1.1 Population and Land Use

Land use is an important factor in water quality. Surrounding land uses affect the quality and quantity of stormwater runoff that results from a precipitation event. Urbanized areas typically include greater proportions of impervious surface area, which could result in greater runoff potential and pollutant loads. The project area is in the City of Compton and is surrounded by low density residential, mixed use, and general commercial land uses. The project area includes and is adjacent to an existing transportation corridor, single-family residential homes, automotive and retail businesses, and open vacant land. A paved trail runs along the east side of the creek and is separated from the channel by chain-link fencing.

The project area overlaps with a vacant parcel, approximately one acre in size, and is directly southeast of the Compton Boulevard and Compton Creek intersection. Additionally, there are several parks and open spaces near the project area. Walter R. Tucker Park includes approximately four acres of open space and is 0.2 mile to the south of the project area. A second park, approximately one acre in size, is approximately 0.3 mile to the southwest of the project area. The Davis Middle School property includes a large recreational field that extends approximately 13.1 acres and is 0.3 mile to the north of the project area. Compton High School includes three recreational fields that are 10.3 acres in total, approximately 0.4 mile to the southeast of the project area.

3.1.2 Topography

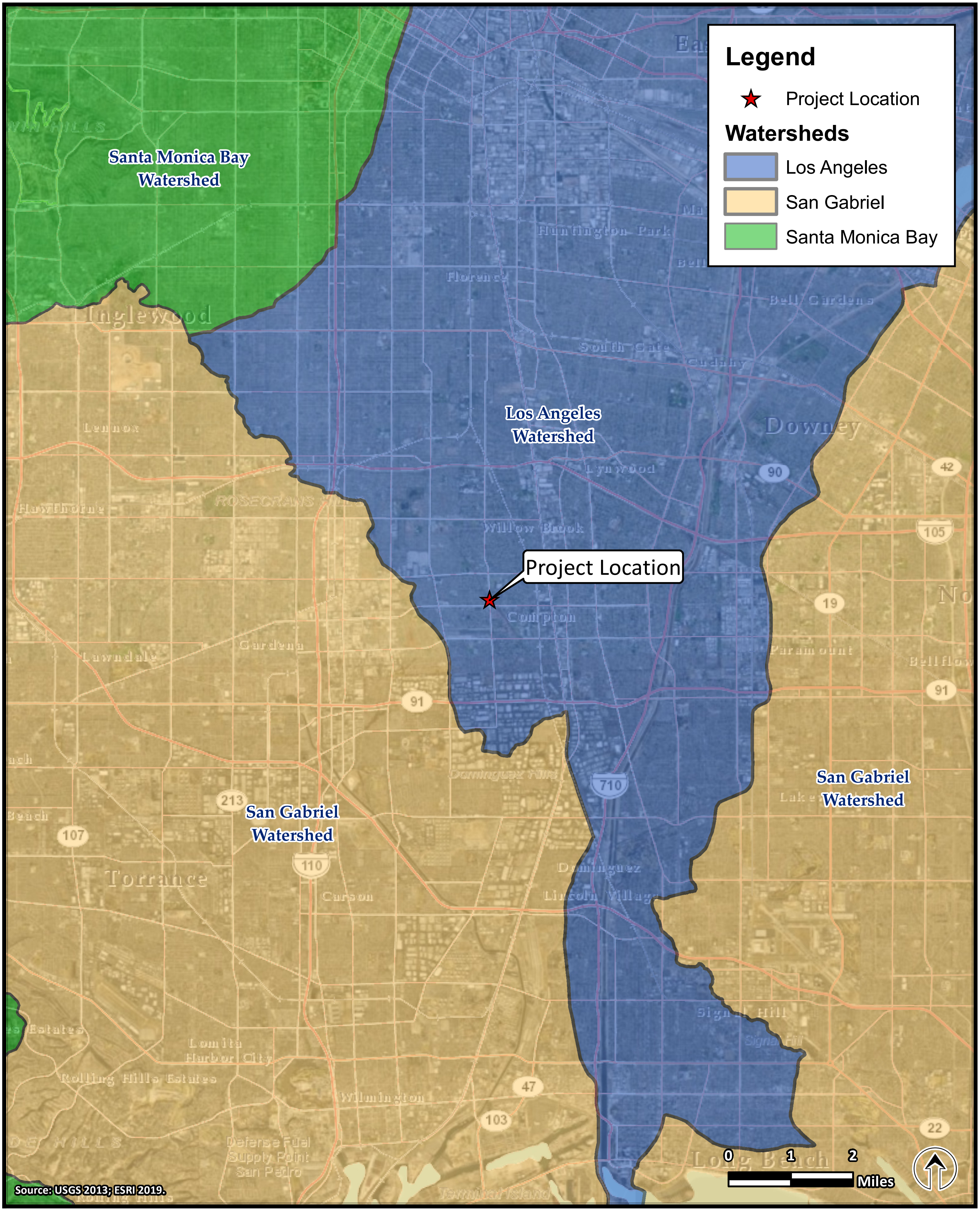
California is divided into 11 geomorphic provinces, which are naturally defined geologic regions that display a distinct landscape or landform. The project area is in the central portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest-trending mountain ranges and valleys following faults branching from the San Andreas Fault (California Geological Survey 2002). The Peninsular Ranges are bound to the east by the Colorado Desert and extend north locally to the Santa Monica Mountains, west into the submarine continental shelf, and south to the California state line.

The topography of the project area and surrounding land uses is mostly flat. Compton Creek is a completely concrete-lined rectangular channel with an approximately 0.1% bottom grade. Areas adjacent to the channel include a slight slope towards the channel.

3.1.3 Hydrology

3.1.3.1 Regional Hydrology

The Los Angeles RWQCB, Region 4, oversees the protection of surface water and groundwater quality in the Los Angeles Region, where the project study area is located (Los Angeles Regional Water Quality Control Board 2014). The Los Angeles Region encompasses 10 Watershed Management Areas, which generally consist of a single large watershed within which exist smaller subwatersheds that are tributary to the main river. The project area is in the Los Angeles River Watershed, as shown on **Figure 3**, Watershed Map.



Source: USGS 2013; ESRI 2019.

FIGURE 3. WATERSHED MAP
Wilmington Avenue over Compton Creek

The Los Angeles River Watershed is one of the largest in the region, at 824 square miles, with almost half of that covered by forest or open space, including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel mountains (California State Water Resources Control Board 2018). The rest of the watershed is intensely urbanized, and the river itself is highly modified, having been lined with concrete along most of its length by the USACE. The project area is in the Compton Creek subwatershed of the Los Angeles River Watershed (California Department of Transportation 2019).

3.1.3.2 Local Hydrology

3.1.3.2.1 Precipitation and Climate

The project area has a subtropical Mediterranean climate, characterized by mild rainy winters and warm dry summers. As moist air from the Pacific Ocean is carried inland, it is forced upward by the mountains, resulting in storms, which are common from November through March.

Precipitation in the project area in the year 2018 was approximately 6.94 inches, as measured by the Hawthorn Municipal Airport weather station (National Oceanic Atmospheric Administration 2018). The project area does not receive snowfall.

3.1.3.2.2 Surface Waters

Compton Creek is a tributary of the Los Angeles River. These waterways are shown on **Figure 4**, Surface Waters Map. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez (University of California Cooperative Extension 2019). The portion of Compton Creek Channel in the project area is owned and operated by the Los Angeles County Flood Control District. The creek has historically received water from surrounding freshwater marshes and willow-cottonwood forest. The creek landscape is now highly urbanized and is mostly channelized within a concrete box. The lower 2.7 miles of creek is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area.

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). The creek is not considered a sediment-sensitive waterbody. The creek has been listed for several pollutants on the CWA 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

The project area is at a high point on Wilmington Avenue, and the surface water runoff generally follows both north and south away from the Prairie Avenue Bridge. The flow heading north is collected by the catch basin located at Wilmington Avenue and Palmer Street, approximately 400 feet north of the bridge. The flow heading south is collected by two catch basins located at Wilmington Avenue and School Street, approximately 100 feet south of the bridge.

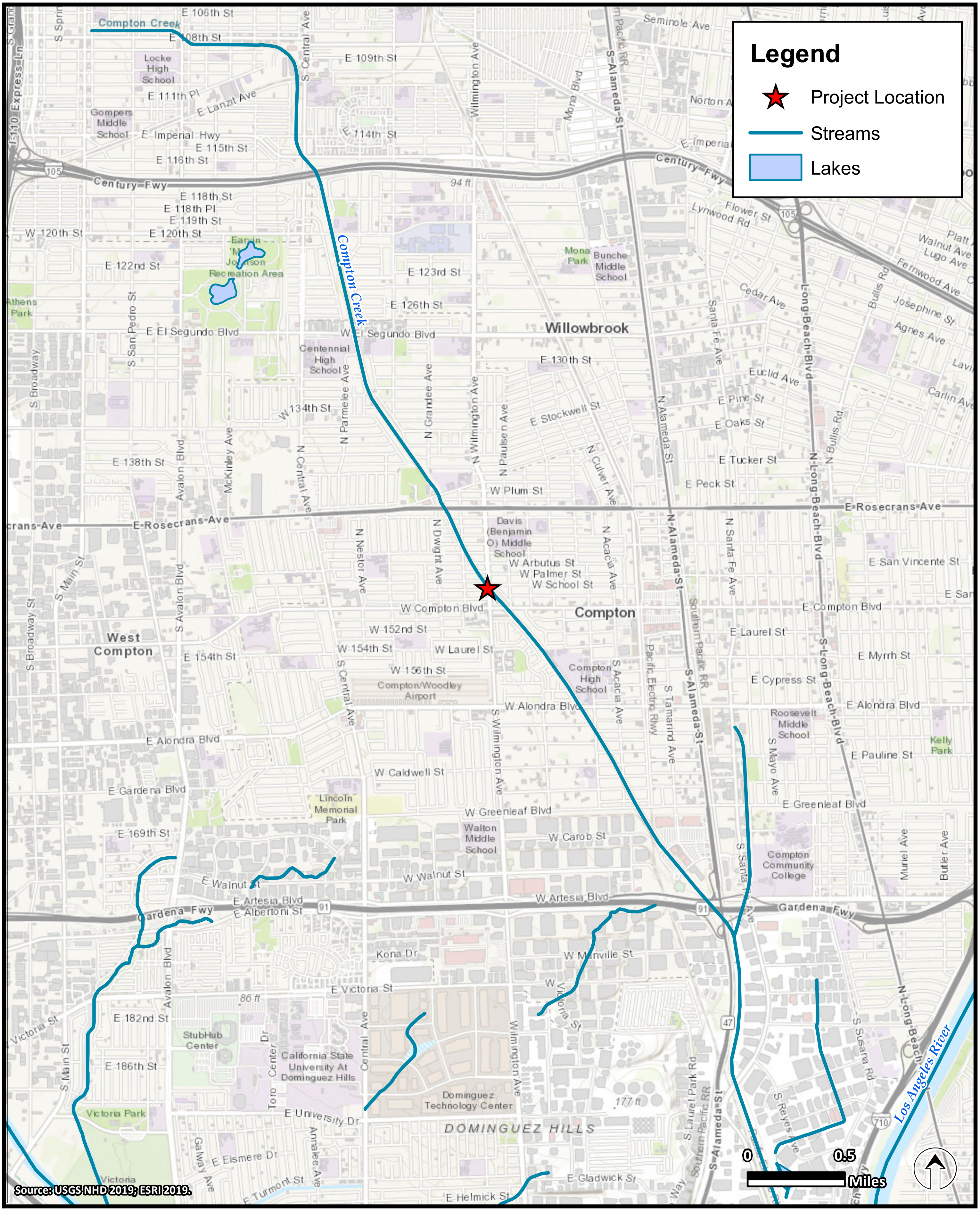


FIGURE 4. SURFACE WATERS MAP
Wilmington Avenue over Compton Creek

3.1.3.2.3 Floodplains

The project area is included in Panel 1815F of the Federal Emergency Management Agency (FEMA) Flood Insurance Risk Map (FIRM) for Los Angeles County, California. The project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain (see **Figure 5**, Flood Hazard Zones Map). Therefore, the project area is not considered to be within a floodplain. The Los Angeles River floodplain is approximately 0.4 mile to the east of the project area.

3.1.3.2.4 Municipal Supply

The City of Compton's water supply is a blend of mostly groundwater from the Central Basin groundwater basin and surface water imported by the Metropolitan Water District of Southern California (MWD). MWD's imported water sources are a blend of State Water Project water from Northern California and water from the Colorado River Aqueduct. The City utilizes eight groundwater wells to pump potable water from a natural underground reservoir. The nearest groundwater well to the project area is well number 870H approximately 0.4 mile to the northeast (Los Angeles County Department of Public Works n.d.). The City also has three imported water connections that help supplement the City's water demands.

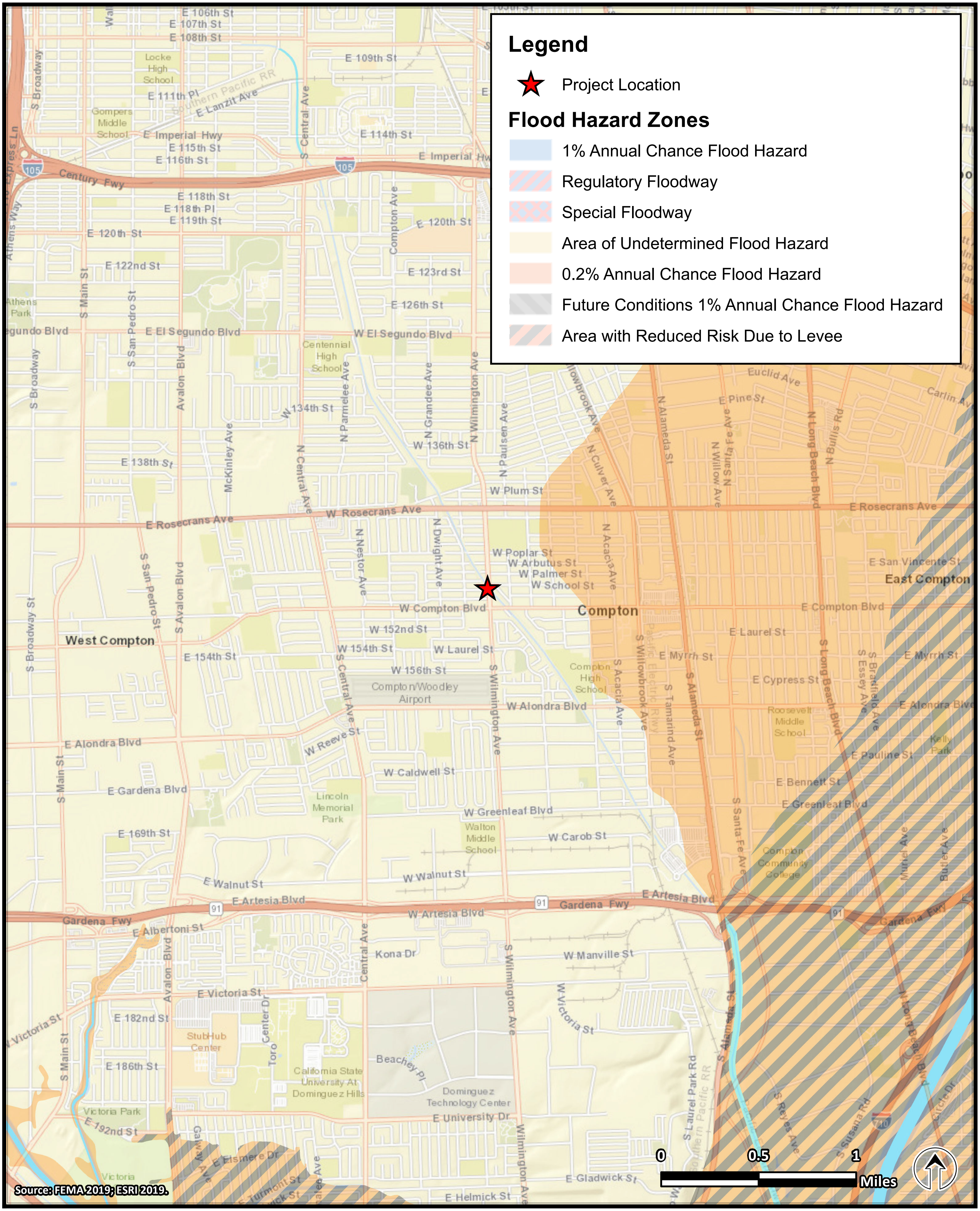
3.1.3.3 Groundwater Hydrology

The classification system for groundwater was developed by the California Department of Water Resources (CDWR), and divides groundwaters into hydrologic regions (HR), basins, and subbasins (California Department of Water Resources 2003a). HRs are areas defined by physical hydrologic features such as watershed boundaries (California Department of Conservation 2010).

The project area is in the South Coast HR, which is bounded by the Pacific Ocean to the west, the crest of the San Jacinto Mountains to the east, the crest of the Transverse Ranges through the San Gabriel and San Bernardino mountains to the north, and the international boundary with the Republic of Mexico to the south. The South Coast HR contains the San Fernando, San Gabriel, Santa Ana River, and Santa Clara River valleys (California Department of Water Resources 2003b). The South Coast HR includes all of Orange County, most of San Diego and Los Angeles Counties, parts of Riverside, San Bernardino, and Ventura Counties, and a small amount of Kern and Santa Barbara Counties.

The South Coast HR has 56 delineated groundwater basins. Twenty-one basins are in subregion 4 (Los Angeles), eight basins in subregion 8 (Santa Ana), and 27 basins in subregion 9 (San Diego) (California Department of Water Resources 2003b). The project area is in the Central Groundwater Subbasin of the South Coast HR. The Central Subbasin extends over approximately 177,000 acres and occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin.

The depth of groundwater in the project area is approximately 45 feet below ground surface (bgs). Surface flows through Whittier Narrows are the major source of replenishment of the groundwater supply in the Central Subbasin. Groundwater also enters from surface and subsurface flow, and percolation of precipitation, stream flow, and imported and recycled water (California Department of Water Resources 2004b). Percolation is limited in some areas because of the number of paved surfaces.



Source: FEMA 2019; ESRI 2019.

Public Works
LOS ANGELES COUNTY

FIGURE 5. FLOOD HAZARD ZONES MAP
Wilmington Avenue over Compton Creek

Water levels have historically varied over a range of about 5 to 25 feet since 1961. Most water wells show levels in 1999 that are in the upper portion of their recent historical range. Beneficial uses for groundwater supply from the Central Subbasin include municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.

3.1.4 Geology/Soils

The project area is within the Los Angeles Basin, which is an actively subsiding basin bound by the Santa Monica and San Gabriel mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south (United States Geological Survey 1965). The project area is on the border of the Southwestern and Central blocks of the Los Angeles Basin. The project area is underlain by Quaternary nonmarine terrace deposits to the west of Compton Creek and Alluvium to the east of the creek (California Department of Conservation 1962). Quaternary rocks include unconsolidated (i.e., loose materials such as clay and sand) and semi consolidated sediments that are formed from alluvium, lake, playa, and terrace deposits and are mostly nonmarine in origin.

The soil-erodibility factor (K) represents: (1) the susceptibility of soil or surface material to erosion, (2) the transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff, although these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high runoff rates and large runoff volumes.

The project area has a K-factor rating of 0.32, which means that underlying soil is medium-textured and yields runoff at a moderate rate. However, the creek is entirely paved with no potential for soil erosion within the channel.

3.1.5 Biological Communities

A *Natural Environment Study Minimal Impacts* (NESMI) was prepared to evaluate potential biological impacts that could occur as a result of the project (Dudek 2019). The following discussion incorporates findings from the NESMI.

The project area is surrounded by urban development and adjacent to a variety of land uses including residential and commercial. The project area also includes a recreational trail. Vegetation communities and land covers found within the project area are entirely non-native and non-natural land covers comprised of urban/developed land, disturbed habitat, ornamental vegetation, as well as concrete-lined channels associated with Compton Creek.

Areas of potential jurisdiction were evaluated according to the USACE, RWQCB, and CDFW criteria as part of the *Natural Environment Study Minimal Impacts* (NESMI) (GPA Consulting 2019). Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are defined as the channel bottom for USACE and RWQCB, and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the project area contains regulated non-wetland Waters of the U.S. and State. Temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the project. Therefore, the project would require a Section 404 Permit from USACE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

3.1.5.1 Aquatic Habitat

The proposed project is centered on Compton Creek (United States Geological Survey [USGS] Hydrologic Unit Code [HUC] 12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019) (United States Geological Survey 2019). Compton Creek within the project area conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the project area. Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction.

3.1.5.1.1 Special Status Species

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) or included within the United States Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) Trust Resource List for the proposed project. Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the project area.

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) (California Department of Fish and Wildlife 2019, United States Fish and Wildlife Service 2019, National Marine Fisheries Service 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species. Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur.

3.1.5.1.2 Stream/Riparian Habitats

Streams are defined in the California Code of Regulations (CCR) (14 CCR Section 1.72) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Under the California Fish and Game Code, the limits of CDFW’s jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Compton Creek Channel is completely lined with concrete in the project area. The lower 2.7 miles of creek, which is outside the project area, is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area. Compton Creek is considered a stream for the purposes of this report per 14 CCR Section 1.72.

3.1.5.1.3 Wetlands

CDFW has jurisdictional authority over waters of the state, including wetlands. In practice, CDFW follows the USFWS definition of wetlands in Cowardin's Classification of Wetlands and Deepwater Habitats of the United States: "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (Cowardin, Carter, Golet, & LaRoe, 1979). The project area does not contain wetlands that meet the USFWS definition of wetlands.

3.1.5.1.4 Fish Passage

An official species list was obtained through email from the National Marine Fisheries Service (NMFS), and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B of the NESMI. One federal endangered/state fully protected and state endangered fish species, the Mohave tui chub (*Siphateles bicolor mohavensis*), is known to occur in areas surrounding the BSA. However, the fish species is not expected to occur in the project area because suitable associated habitat is not present in the BSA. In addition, the project area does not include Essential Fish Habitat (National Marine Fisheries Service 2019). Therefore, the project area does not include fish habitat or support fish passage.

4 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

Impacts to water quality can include temporary and/or long-term effects. Generally, temporary impacts apply to the construction phase of a project. The project would result in a DSA of 1.0 acre or more and is required to obtain coverage under Construction General NPDES Permit Number CAS000002 (CGP) (see Section 5, Avoidance and Minimization Measures).

Long-term impacts are usually caused by addition of net impervious surface area. As discussed below, the project could result in negligible increases in impervious surface area that would be accommodated by existing drainage systems. Therefore, proposed stormwater improvements are not included as part of the project. The project would comply with the *County of Los Angeles Best Management Practices Design Manual* (County of Los Angeles 2010) (see Section 5, Avoidance and Minimization Measures).

4.2 Potential Impacts to Water Quality

As discussed below, with implementation of the proposed minimization measures and BMPs, direct and indirect impacts on water quality would be minimized. In addition, no substantial or adverse changes in the physical/chemical, or biological, or human use characteristics of the aquatic environment are anticipated to result from the project.

4.2.1 Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment

4.2.1.1 Substrate

Project construction would require work within the Compton Creek Channel. Proposed construction activities within the channel include removal and reconstruction of the bridge pier. Hydraulic hammers and backhoe would be utilized to demolish and remove the existing concrete pier. Grading would be required for the foundation supporting the pile cap. A drill rig would be utilized to drill holes for the piles, and manual installation and a crane would be required to install the reinforcement and forms for the piles, pile cap, and pier wall. The project would include cut and fill activity for the construction of the abutment pile caps behind the existing channel walls. Excavation of approximately 10 feet deep along the cap length would be needed to construct the cap, and structural backfill would be needed after the cap is constructed. Concrete would be installed by concrete pump truck behind the existing channel walls. Pier construction would last approximately two months. The project would not result in exposed and erodible soils or substrate.

The project construction area would encompass approximately 1.72 acres. Temporary impacts on substrate could result from construction crews and equipment accessing the creek channels, temporary water diversions and support structures, dewatering activities, excavation of the channel bottom for cap construction, and the use of other heavy equipment within the channel. However, disturbance of substrate in the channel would be localized within relatively small areas directly beneath the bridge pier and footings. Temporary water diversions and support structures would be removed following construction, and disturbed areas would be restored to the extent feasible. The project would not result in any permanent impacts on substrate.

Therefore, the project would temporarily affect the substrate of the waterway during construction; however, the channel is concrete-lined, and these impacts would not adversely affect the beneficial uses of the creek.

Following project construction, no disturbance to the substrate would be required while the project is in operation. Therefore, no substantial changes to the substrate are anticipated.

4.2.1.2 Currents, Circulation or Drainage Patterns

The project would require in-channel work to replace the existing bridge. Project construction would include pile drilling at the pier locations. During construction, temporary water diversion and temporary structures could be required for work within the creek; however, these structures would be removed following construction. Therefore, any changes to circulation or drainage from these structures would be temporary. With implementation of BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control (see avoidance and minimization measure **WQ-3** listed in Section 5, Avoidance and Minimization Measures), project construction would not result in an altered flow rate or an increased volume of flow. In addition, construction of the project would not result in seasonal changes or tidal influences in the channel. The depth of Compton Creek would not change as a result of the project.

The project could result in negligible increases in impervious surface area. All of the other project components (bridge, sidewalks, bike path, new bridge abutments, and a sloping pier nose for the new bridge) are already impervious surfaces (concrete or asphalt). Because any potential change in impervious surface area would be minor, the drainage facilities at the bridge and creek channel would be able to accommodate future stormwater flows following project implementation. The project would not result in any permanent impacts on currents, circulation, or drainage patterns. Therefore, no substantial changes to currents, circulation, or drainage patterns are anticipated to result from the project.

4.2.1.3 Suspended Particulates (Turbidity)

Compton Creek is completely channelized with concrete. Some grassy areas and vegetation are adjacent to the channel walls. Construction activities and vehicle access within the channel would be required during project construction. The existing channel is lined with concrete and is not susceptible to erosion. However, existing pier timber piles would be removed three feet below the finished grade, and new pile caps would be graded in preparation for the new bridge structure. Additionally, project construction would include excavation and reconstruction of existing roadway, sidewalks, and bike path adjacent to the channel.

Removal and reconstruction of the bridge piers and adjacent roadways, sidewalks, and bike paths could result in temporary increases in debris and soil erosion. Therefore, soil disturbance could result in increased turbidity and total suspended solids during project construction. Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, include compliance with the applicable NPDES Permit, SWPPP, and SWRCB CGP, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates in the creek. The contractor would develop a list of BMPs and inspection protocols that would comply with Caltrans standards. The existing roadway and embankment would be restored to match existing stabilized conditions. Therefore, temporary impacts related to suspended particulates would be minimized.

Following project construction, no soil-disturbing or erosive activity would be required while the project is in operation. Therefore, no substantial changes to suspended particulates and turbidity would be anticipated as a result of the project.

4.2.1.4 Oil, Grease and Chemical Pollutants

During construction, use of equipment and materials could result in the release of pollutants into waterbodies, including oil, grease or other chemical pollutants, such as metals and pesticides. Construction equipment would be staged on 200 feet of approach roadway on either side of the bridge. Additionally, project construction would require access and operation of construction equipment within the channel. The project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates, to prevent any pollutants from entering the creek within the project area. Therefore, no substantial changes to levels of oil, grease, and chemical pollutants are anticipated during project construction.

During project operation, oil, grease, and chemical pollutants could be discharged onto roadways as a result of incidental drippings from vehicles and accidental maintenance spills that could be carried into the creek through stormwater runoff. Potential pollutants could include oils, bridge paint, and surface treatments. The project would not result in increased vehicular use of a roadway or expansion of roadway surface area that could result in increased deposition of oil, grease, and other chemical pollutants typically collected on roadways. The project could result in a minor permanent increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Therefore, the project would not result in a substantial increase in discharge of oil, grease, and chemical pollutants into the creek.

4.2.1.5 Temperature, Oxygen, Depletion and Other Parameters

Project construction could result in the generation of trash and debris that have potential to enter the creek, which could affect temperature, oxygen, and other parameters in the creek. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Additionally, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to prevent pollutants from entering the creek during construction.

Following project construction, the project would not generate additional sources of pollution that could affect temperature, oxygen, or other parameters. Therefore, the project would not result in permanent impacts related to these conditions.

4.2.1.6 Flood Control Functions

According to **Figure 4**, Flood Hazard Zones Map, the project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain. The maximum water depth of the channel in the project vicinity ranges from approximately 12.82 to 13.68 feet. During construction, the project would require work within the Compton Creek channel to replace the existing bridge. During project construction, minor, temporary supports could be required within the channel for the removal and reconstruction of the bridge pier; however, the supports would be minor structures that would be completely removed following construction.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. In addition, the proposed bridge structure is similar to the existing structure. Because proposed drainage conditions would be similar to existing conditions, stormwater runoff and creek flows would remain similar to existing flow conditions. Therefore, no substantial changes to the floodplains or flood control functions are anticipated.

4.2.1.7 Storm, Wave and Erosion Buffers

Wetlands may serve as buffer zones, shielding upland areas from wave actions, storm damage and erosion, per 40 CFR § 230.41. Storm, wave, and erosion buffers, including wetlands, are not located in the project area. Therefore, no substantial changes to storm, wave, and erosion buffers are anticipated during project construction or operation.

4.2.1.8 Erosion and Accretion Patterns

Some grassy areas and vegetation are adjacent to the channel walls. Equipment staging, movement of construction vehicles, and construction activity in and adjacent to the channel could result in increased erosion potential; however, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to avoid/minimize erosion during construction. A SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent erosion during project construction.

During project operation, there is no potential for erosion within the project area, as the project includes replacement and reconstruction of existing facilities, including the bridge, roadway, bicycle ramps, and embankments, which are paved and stabilized. Therefore, no substantial changes to erosion and accretion patterns are anticipated as a result of the project.

4.2.1.9 Aquifer Recharge/Groundwater

Groundwater is approximately 45 feet bgs in the project area. Project construction would include excavation to approximately 10 feet deep along the cap length to construct the cab and structural backfill. Therefore, project construction is not anticipated to require dewatering. Construction activity is not anticipated to reach groundwater and would not result in groundwater depletion or contamination.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would include the replacement of the existing bridge, and the reconstruction of existing roadway and bicycle ramps, which are existing impervious surfaces. The project would not affect the infiltration of stormwater or groundwater recharge in the project area. Additionally, the project would not result in additional traffic or an increase in pollutant discharge that could contribute to groundwater contamination. Therefore, the project would not be anticipated to result in substantial changes to aquifer recharge or groundwater conditions.

4.2.1.10 Baseflow

Baseflow is the portion of water in a channel that is the constant stream flow in the absence or stormwater runoff. Year-round low flow in the project area is primarily from urban runoff. Compton Creek is a subwatershed of the Los Angeles River Watershed that drains approximately 42.1 square miles. The project could result in a permanent minor increase in impervious surface area (approximately 0.05 acre), resulting from an access road (currently dirt) on the southwest corner of the bridge that would be reconstructed with a concrete slab. However, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Avoidance and minimization measures **WQ-1** through **WQ-3** would be implemented to avoid and minimize potential impacts on stormwater runoff and water quality as a result of the project. Therefore, the project would not result in substantial changes to baseflow of the creek.

4.2.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment

4.2.2.1 Special Aquatic Sites

According to CFR 40 Part 230, special aquatic sites are geographic areas that have special ecological characteristics, such as productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas, which include wetlands, mudflats, vegetated shallow, coral reefs, and riffle and pool complexes, are generally recognized as areas that substantially influence or positively contribute to the general overall environmental health or vitality of the entire ecosystem of a region. The project area does not include any geographic areas characterized as special aquatic sites. Therefore, the project would not result in impacts on special aquatic sites.

4.2.2.2 Habitat for Fish and Other Aquatic Organisms

The aquatic environment of the project area does not support fish habitat or habitat for other aquatic organisms; therefore, the project would have no impact on habitat for fish and other aquatic organisms.

4.2.2.2.1 Fish Passage (Beneficial Uses)

The aquatic environment of the project area does not support fish passage; therefore, the project would have no impact on fish passage.

4.2.2.3 Wildlife Habitat

The project area is unlikely to contain wildlife or potential wildlife habitat. Project construction would include ground disturbance within the Compton Creek Channel and along the channel banks. Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation within the project area could provide suitable habitat for nesting birds. Nesting birds could be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 1, the project may indirectly impact nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code. However, with implementation of avoidance and minimization measure **WQ-6**, the project would avoid impacts to nesting birds and potential nesting bird habitat. Therefore, the project is not anticipated to result in impacts on wildlife habitat.

4.2.2.3.1 Wildlife Passage (Beneficial Uses)

The project area is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. Therefore, the project is not anticipated to result in impacts on wildlife passage.

4.2.2.4 Endangered or Threatened Species

The project area is located within a developed portion of southern Los Angeles County (i.e. City of Compton) and would not result in the removal or degradation of any natural communities. The project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the project area. Additionally, no primary constituent elements for Critical Habitat in the region occur within the project area. Therefore, the project is not anticipated to result in impacts on endangered or threatened species.

4.2.2.5 Invasive Species

Invasive plants are a subset of nonnative plants that spread into undisturbed ecosystems and generally negatively impact native plants and alter ecosystem processes. One species was found in the project area that is rated as “Moderate” by California Invasive Plant Council (2019): shortpod mustard (*Hirschfeldia incana*). Shortpod mustard is common in the project vicinity in disturbed habitats. General BMPs that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. Therefore, the project is not anticipated to result in impacts related to invasive species.

4.2.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment

4.2.3.1 Existing and Potential Water Supplies; Water Conservation

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). During project construction and operation, minimal water would be required for construction activities. Water would be brought in by truck and would not be sourced from the creek. Project operation would not require water supply. Therefore, the project would not result in a substantial change to existing or potential water supplies.

4.2.3.2 Recreational or Commercial Fisheries

No recreational or commercial fisheries are located within the project area. Therefore, the project would not result in impacts to recreational or commercial fisheries.

4.2.3.3 Other Water Related Recreation

Beneficial uses of Compton Creek include noncontact water recreation and contact water recreation. The noncontact recreational use in the project area includes multipurpose trails used by bicyclists and pedestrians. During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The portion of Compton Creek in the project area does not directly support any contact water recreation. Therefore, the project would not result in a substantial change in water-related recreation opportunities.

4.2.3.4 Aesthetics of the Aquatic Ecosystem

During project construction, construction equipment and activities would be visible in and around the aquatic ecosystems of the project area; however, the aesthetic quality of the aquatic ecosystems would return to similar conditions following project competition. During project operation, the project area would appear similar to existing conditions with regard to color, material, and scale. Infrastructure in the creek would be repurposed and would not be substantially modified. Therefore, the project would not result in substantial changes to the aesthetics of the aquatic ecosystem.

4.2.3.5 Parks, National and Historic Monuments, National Seashores, Wild and Scenic Rivers, Wilderness Areas, etc.

The nearest park, Walter R. Tucker Park, is approximately 0.2 mile south of the project area. The project area includes the Compton Creek Bike Trail along the east side of the creek. The project would include the reconstruction of 1660 feet of sidewalks along Wilmington Avenue and adjacent roadways; and 400 feet of bike path along the Compton Creek channel.

During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project completion (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The project area does not include national and historic monuments, national seashores, wild and scenic rivers, or wilderness areas. Therefore, the project is not anticipated to result in substantial impacts on these resources.

4.2.3.6 Traffic/Transportation Patterns

During construction, full road closures on the Wilmington Avenue Bridge would be required for approximately 300 days, and planned detour routes would be provided on Rosecrans Avenue, Compton Boulevard, and Willowbrook Avenue (see measure **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). Specifically, northbound traffic would be directed east on Compton Boulevard, north on Willowbrook Avenue, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Willowbrook Avenue, west on Compton Boulevard, and south back onto Wilmington Avenue.

During operation, traffic and transportation would improve because the project would address nonstandard features and design deficiencies. Therefore, no substantial traffic or transportation changes are anticipated that would substantially alter water resources or water quality in the project area.

4.2.3.7 Energy Consumption of Generation

Project construction would require a temporary need for energy to operate construction vehicles and equipment. Energy consumption would be minimal. The project would not include adding any lanes on the bridge, and therefore, traffic levels and energy required for vehicle use would not increase in the project area as a result of the project. Additional long-term energy resources would not be required for project operation. Therefore, the project would not result in substantial changes to energy consumption or generation.

4.2.3.8 Navigation

Navigation is not permitted in Compton Creek; therefore, the project would result in no changes to navigation.

4.2.3.9 Safety

Temporary detours and signage would be provided during construction of the project to maintain vehicle and pedestrian safety (see measures **WQ-4** and **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). The existing bridge is classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The project would include replacement of the bridge to comply with structural safety standards. Therefore, existing traffic safety and operations are expected to improve.

4.2.4 Temporary Impacts to Water Quality

4.2.4.1 No Build Alternative

Under the No Build Alternative, no change would result in existing water quality conditions; therefore, this alternative would not result in temporary impacts on water quality.

4.2.4.2 Build Alternative

The project would require construction activity that could result in temporary impacts on water quality. Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which could require additional time to coordinate. The anticipated reviews/permits associated with the improvements would include:

- CWA Section 401 Water Quality Certification (Los Angeles RWQCB)

- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (SWRCB, 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (USACE) (Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

4.2.4.2.1 Physical/Chemical Characteristics

Project construction is anticipated to be completed between January 2021 and May 2022, and would last for approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction operations, such as oil and grease spills or leaks from heavy equipment or vehicle used for construction, trash from workers, construction debris, petroleum products from construction equipment, sanitary wastes from portable toilets, and other chemicals used for construction equipment such as coolants, concrete curing compounds, and concrete waste.

Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Through implementation of avoidance and minimization measures, pollutant discharges would be prevented throughout project construction. Therefore, the project would not be anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.4.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project would require construction within the creek; however, the project is not anticipated to result in impacts on biological resources with implementation of BMPs and avoidance and minimization measure **WQ-6**.

4.2.4.2.3 Human Use Characteristics

Within the project area, existing beneficial uses include noncontact water recreation (California Department of Transportation 2019). During construction, access to the Compton Creek Bike Trail could be temporarily closed in some areas. Detours and signage would be implemented for trail users throughout the duration of construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). Following project completion, full access to the trails would resume. Therefore, the project would result in substantial temporary changes to the human use characteristics of the creek.

4.2.5 Long-term Impacts During Operation and Maintenance

4.2.5.1 No Build Alternative

Under the No Build Alternative, no change would result in existing water quality conditions; therefore, this alternative would not result in temporary impacts on water quality.

4.2.5.2 Build Alternative

4.2.5.2.1 Physical/Chemical Characteristics

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would not result in changes to line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project is not anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.5.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project could result in a permanent net increase to impervious surface area (approximately 0.05 acre). However, changes to net impervious surface area would be minor and would not result in impacts on biological resources. Project operation would not require long-term creek access. Therefore, the project is not anticipated to result in impacts on biological resources.

4.2.5.2.3 Human Use Characteristics

The project would include reconstruction of 400 feet of the Compton Creek Bike Trail in the same place as the existing trail. Soil excavated from roadway and structural excavation would fill portions of the trail at both corners of the bridge on Wilmington Avenue. The alignment and features of the proposed trail would be similar to the existing trail. Following project construction, the trail would function the same as existing conditions. Therefore, the project would not result in substantial long-term changes to the human use characteristics of the creek.

4.3 Impact Assessment Methodology

Impacts that would result from the project have been assessed for the Build Alternative. With the implementation of BMPs and standard measures, direct and indirect impacts on water quality would be minimized.

4.4 Cumulative Impacts

The cumulative setting is considered the Los Angeles watershed. The Los Angeles watershed includes the project area and Compton Creek. Existing and continuing development, as well as flood control measures and structures, contribute to cumulative water quality impacts. The project would include bridge removal and replacement and would not contribute to development in the project area or surrounding vicinity.

During project construction, the project could would result in disturbance of 1.72 acres. The project would have the potential to result in temporary increases to construction-related pollutants and turbidity within Compton Creek and its receiving water bodies. However, with implementation of measures **WQ-1** through **WQ-5**, listed in Section 5, Avoidance and Minimization Measures, the project is not anticipated to contribute to substantial cumulative impacts on water quality.

The project could result in a minor net increase to impervious surface area. The imperviousness of a drainage area contributes to the runoff volume and pollutant loads that a water body receives following a storm event. The minor increase in impervious surface as a result of the project would be considered negligible. Existing drainage systems in the project area would be able to accommodate any minor increases to stormwater runoff. Although minor, the long-term implementation of transportation projects that add to the imperviousness of the Los Angeles Watershed could be considered a cumulatively considerable impact to overall water quality of receiving waters. However, the project would not result in a substantial contribution to cumulative water quality impacts in the Los Angeles watershed.

5 AVOIDANCE AND MINIMIZATION MEASURES

To avoid and/or minimize potential impacts to water quality, the following measures would be implemented:

WQ-1: The project would comply with the applicable RWQCB NPDES Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001), SWPPP, and SWRCB CGP (2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ).

WQ-2: The project would comply with the *County of Los Angeles Best Management Practices Manual*.

WQ-3: The contractor would develop a BMP Inspections and Checklist that follows criteria identified in the *Los Angeles County Department of Public Works Construction Site Best Management Practices Manual*. The checklist would list standard construction BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control. BMPs would be inspected at a minimum of once per week, within 48 hours prior and after a qualifying rain event, and at least 24 hours during extended precipitation events during project construction.

WQ-4: A temporary trail detour would be provided during temporary closures of Compton Creek Bike Trail. Signage would be placed in the project area to notify the public of the temporary detour route.

WQ-5: During construction, temporary detours and signage would be provided to maintain the flow of vehicle traffic.

WQ-6: To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities would avoid the general nesting season of February 1 through September 1. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within the tree proposed for removal, as well as vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If a nesting bird is found, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

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6.2 Preparer Qualifications

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Appendix F

Field Noise Measurement Data

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE
PROJECT # 11125 03 04
SITE ID
SITE ADDRESS
OBSERVER(S) PETE VIJAR
START DATE 5/14/19
END DATE 5/14/19
START TIME
END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F
HUMIDITY 76 % R.H.
WIND [✓ CALM] LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD MPH
DIR. N NE S SE S SW W NW
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3
TYPE 1 2
SERIAL # 1403M004
CALIBRATOR BSWT CA 114
SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL
WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-1

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
7-8	9:16	9:31	75.4	90.2	54.5				

COMMENTS
READING TAKEN AT WESTERN PROPERTY-LINE OF 245 N. MAGNOLIA COUNTY, ALONGSIDE COMPTON CREEK AND WILMINGTON AVE; PRIMARY NOISE SOURCE IS TRAFFIC

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT
DIST. TO RDWY C/L OR [✓ EOP]: 23' FROM WILMINGTON AVE EO
TRAFFIC COUNT DURATION: — MIN SPEED
MIN SPEED

COUNT 1 (OR RDWY 1)

DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS				
MED TRKS				
HVY TRKS				
BUSES				
MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE —

COUNT 2 (OR RDWY 2)

NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4502; 4503; 4504; 4505; 4506; 4507; 4508;
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE **PROJECT #** 11125 03 04
SITE ID
SITE ADDRESS **OBSERVER(S)** PETE VITAR
START DATE 5/14/19 **END DATE** 5/14/19
START TIME **END TIME**

METEOROLOGICAL CONDITIONS
TEMP 64 F **HUMIDITY** 76 % R.H. **WIND** [✓ CALM] LIGHT MODERATE
WINDSPD ___ MPH **DIR.** N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 **TYPE** 1 2 **SERIAL #** M0317004
CALIBRATOR BSWA CA 114 **SERIAL #** 480151
CALIBRATION CHECK PRE-TEST ___ dBA SPL POST-TEST ___ dBA SPL **WINDSCRN** YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-2

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
[illegible]	[illegible]	[illegible]	–	–	–	–	–	–	–
10-11	9:46	10:01	67.1	82.2	49.9				

COMMENTS
READING TAKEN IN FRONT OF 810 W. SCHOOL ST. (RESIDENTIAL); PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE, TO THE EAST; 20' TO END OF PAVEMENT ON SCHOOL ST., 85' TO END OF PAVEMENT ON WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT **DIST. TO RDWY C/L OR [✓ EOP]:** 20' TO SCHOOL ST / 85' TO WILMINGTO
TRAFFIC COUNT DURATION: – MIN SPEED ___ MIN SPEED

	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE		NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	AUTOS						COUNT 2 (OR RDWY 2)				
	MED TRKS										
	HVY TRKS										
	BUSES										
	MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4510; 4511; 4512; 4513; 4514; 4515
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE PROJECT # 11125 03 04
SITE ID
OBSERVER(S) PETE VITAR
SITE ADDRESS
START DATE 5/14/19 END DATE 5/14/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F HUMIDITY 74 % R.H.
WINDSPD MPH DIR. N NE S SE S SW W NW
WIND [✓ CALM] LIGHT MODERATE VARIABLE STEADY GUSTY
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # 140817004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-3

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
12-13	10:08	10:23	60.7	73.9	49.0				

COMMENTS
READING TAKEN IN FRONT OF 810-812 PALMER ST. (RESIDENTIAL), ALONGSIDE COMPTON CREEK; PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR [✓ EOP]: 1' FROM EOP ON PALMER ST
TRAFFIC COUNT DURATION: — MIN SPEED MIN SPEED

	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE		NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	AUTOS						COUNT 2 (OR RDWY 2)				
	MED TRKS										
	HVY TRKS										
	BUSES										
	MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES [✓ DIST. BARKING DOGS] [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN HARD SOFT [✓ MIXED] FLAT OTHER:
PHOTOS 4517; 4518; 4519; 4520; 4521; 4522; 4523;
OTHER COMMENTS / SKETCH

N

Appendix G

Traffic Counts

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
00:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
00:30	0	20	3	0	0	0	0	0	0	0	0	0	0	**23**
00:45	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
01:00	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
01:15	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
01:30	0	21	3	0	0	0	0	0	0	0	0	0	0	**24**
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
02:00	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
02:15	0	10	2	0	1	0	0	0	0	0	0	0	0	**13**
02:30	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:45	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
03:00	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
03:15	0	11	2	0	0	0	0	0	0	0	0	0	0	**13**
03:30	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
03:45	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:15	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
04:30	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
04:45	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
05:00	0	20	4	1	0	0	0	0	0	0	0	0	0	**25**
05:15	0	25	7	0	1	0	0	0	0	0	0	0	0	**33**
05:30	0	22	5	1	0	0	0	0	0	0	0	0	0	**28**
05:45	0	38	9	1	0	0	0	0	0	0	0	0	0	**48**
06:00	0	24	4	0	0	0	0	0	0	0	0	0	0	**28**
06:15	0	49	7	3	0	0	0	0	0	0	0	0	0	**59**
06:30	0	67	9	3	0	0	0	0	0	0	0	0	0	**79**
06:45	0	60	15	2	0	0	0	0	0	0	0	0	0	**77**
07:00	0	99	15	2	0	0	0	0	0	0	0	0	0	**116**
07:15	0	122	15	5	2	0	0	0	0	0	0	0	0	**144**
07:30	0	162	16	6	3	0	0	0	0	0	0	0	0	**187**
07:45	0	216	23	5	2	0	0	0	0	0	0	0	0	**246**
08:00	0	212	24	4	1	0	0	0	0	0	0	0	0	**241**
08:15	0	202	19	3	3	0	0	0	0	0	0	0	0	**227**
08:30	0	127	16	5	1	0	0	0	0	0	0	0	0	**149**
08:45	0	152	17	5	2	0	0	0	0	0	0	0	0	**176**
09:00	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
09:15	0	116	14	4	2	0	0	0	0	0	0	0	0	**136**
09:30	0	97	15	3	1	0	0	0	0	0	0	0	0	**116**
09:45	0	116	16	2	2	0	0	1	0	0	0	0	0	**137**
10:00	0	109	14	1	1	0	0	0	0	0	0	0	0	**125**
10:15	0	135	17	4	2	0	0	1	0	0	0	0	0	**159**
10:30	0	108	13	3	1	0	0	0	1	0	0	0	0	**126**
10:45	0	120	15	1	1	0	0	1	0	0	0	0	0	**138**
11:00	0	125	14	3	3	0	0	0	1	0	0	0	0	**146**
11:15	0	126	16	1	1	0	0	0	0	0	0	0	0	**144**
11:30	0	127	12	4	3	0	0	0	0	0	0	0	0	**146**
11:45	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
12:00 PM	0	130	15	2	3	0	0	0	0	0	0	0	0	**150**
12:15	0	134	22	3	2	1	0	0	0	0	0	0	0	**162**
12:30	0	115	14	2	3	0	0	0	0	0	0	0	0	**134**
12:45	0	136	16	2	2	0	0	0	0	0	0	0	0	**156**
13:00	0	136	14	4	1	0	0	0	0	0	0	0	0	**155**
13:15	0	116	15	1	1	0	0	0	0	0	0	0	0	**133**
13:30	0	131	17	2	2	1	0	0	0	0	0	0	0	**153**
13:45	1	130	17	4	3	0	0	0	0	0	0	0	0	**155**
14:00	0	152	17	4	2	0	0	0	0	0	0	0	0	**175**
14:15	0	177	29	5	1	0	0	0	0	0	0	0	0	**212**
14:30	0	240	35	6	1	0	0	0	0	0	0	0	0	**282**
14:45	0	282	32	5	3	0	0	0	0	0	0	0	0	**322**
15:00	0	228	23	4	3	0	0	0	0	0	0	0	0	**258**
15:15	0	204	30	3	4	0	0	0	0	0	0	0	0	**241**
15:30	0	210	33	6	1	0	0	0	1	0	0	0	0	**251**
15:45	0	271	34	4	3	0	0	0	0	0	0	0	0	**312**
16:00	0	226	29	6	2	0	0	0	0	0	0	0	0	**263**
16:15	0	270	41	5	3	0	0	0	0	0	0	0	0	**319**
16:30	1	249	32	4	2	0	0	0	0	0	0	0	0	**288**
16:45	1	263	39	5	2	0	0	0	0	0	0	0	0	**310**
17:00	0	200	23	3	1	0	0	0	1	0	0	0	0	**228**
17:15	0	291	40	4	1	0	0	0	0	0	0	0	0	**336**
17:30	0	261	26	6	2	0	0	0	0	0	0	0	0	**295**
17:45	0	243	30	3	2	0	0	0	1	0	0	0	0	**279**
18:00	0	223	23	6	1	0	0	0	0	0	0	0	0	**253**
18:15	0	224	28	2	3	0	0	0	0	0	0	0	0	**257**
18:30	0	164	20	4	3	0	0	0	0	0	0	0	0	**191**
18:45	0	152	20	3	1	0	0	0	0	0	0	0	0	**176**
19:00	0	144	18	3	1	0	0	1	0	0	0	0	0	**167**
19:15	0	103	10	2	0	0	0	0	0	0	0	0	0	**115**
19:30	0	117	13	3	1	0	0	0	0	0	0	0	0	**134**
19:45	1	106	12	1	1	0	0	0	0	0	0	0	0	**121**
20:00	0	89	10	2	0	0	0	0	0	0	0	0	0	**101**
20:15	0	99	15	1	1	0	0	0	0	0	0	0	0	**116**
20:30	0	85	11	1	0	0	0	0	0	0	0	0	0	**97**
20:45	0	76	9	2	0	0	0	0	0	0	0	0	0	**87**
21:00	0	71	7	1	0	0	0	0	0	0	0	0	0	**79**
21:15	0	65	6	1	0	0	0	0	0	0	0	0	0	**72**
21:30	0	57	7	2	0	0	0	0	0	0	0	0	0	**66**
21:45	0	56	6	1	0	0	0	0	0	0	0	0	0	**63**
22:00	0	56	7	2	0	0	0	0	0	0	0	0	0	**65**
22:15	0	47	5	1	0	0	0	0	0	0	0	0	0	**53**
22:30	0	48	3	1	0	0	0	0	0	0	0	0	0	**52**
22:45	0	23	3	0	0	0	0	0	0	0	0	0	0	**26**
23:00	0	23	2	1	0	0	0	0	0	0	0	0	0	**26**
23:15	0	27	2	0	0	0	0	0	0	0	0	0	0	**29**
23:30	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:45	0	27	2	0	1	0	0	0	0	0	0	0	0	**30**
Totals	**4**	**10200**	**1282**	**209**	**99**	**2**		**4**	**5**					**11805**
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		07:30	07:30	07:15	07:30	11:30		09:30	10:15					07:30
Volume		792	82	20	9	1		2	2					901
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	17:15	16:00	15:30	14:30	12:00		18:15	17:00					15:45
Volume	2	1018	141	21	11	1		1	2					1182

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1486	⟷	13%	1198	⟷	10%	2318	⟷	20%	6803	⟷	58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
00:15	0	15	0	0	0	0	0	0	0	0	0	0	0	**15**
00:30	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
00:45	0	7	2	0	0	0	0	0	1	0	0	0	0	**10**
01:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
01:15	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
01:30	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
01:45	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:00	0	4	1	0	0	0	0	0	1	0	0	0	0	**6**
02:15	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
02:30	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
02:45	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
03:00	0	10	0	0	0	0	0	0	0	0	0	0	0	**10**
03:15	0	9	2	0	0	0	0	0	1	0	0	0	0	**12**
03:30	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
03:45	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
04:00	0	12	2	0	0	0	0	0	0	0	0	0	0	**14**
04:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
04:30	0	39	6	0	0	0	0	0	0	0	0	0	0	**45**
04:45	0	43	4	1	1	0	0	0	0	0	0	0	0	**49**
05:00	0	38	7	0	0	0	0	0	0	0	0	0	0	**45**
05:15	0	54	11	1	1	0	0	0	0	0	0	0	0	**67**
05:30	0	77	8	1	2	0	0	0	0	0	0	0	0	**88**
05:45	0	90	11	2	1	0	0	0	0	0	0	0	0	**104**
06:00	0	91	13	1	2	1	0	0	0	0	0	0	0	**108**
06:15	1	102	16	2	2	0	0	0	0	0	0	0	0	**123**
06:30	0	145	23	3	1	0	0	0	0	0	0	0	0	**172**
06:45	0	152	19	2	1	0	0	0	0	0	0	0	0	**174**
07:00	1	204	21	3	5	1	0	1	0	0	0	0	0	**236**
07:15	0	172	24	1	3	0	0	0	0	0	0	0	0	**200**
07:30	0	231	27	2	4	0	0	0	0	0	0	0	0	**264**
07:45	0	241	26	3	5	1	0	0	0	0	0	0	0	**276**
08:00	0	234	32	2	4	0	0	0	0	0	0	0	0	**272**
08:15	0	201	30	3	4	0	0	0	0	0	0	0	0	**238**
08:30	0	156	21	2	2	0	0	0	0	0	0	0	0	**181**
08:45	0	135	19	3	1	0	0	0	0	0	0	0	0	**158**
09:00	0	132	17	3	1	0	0	0	0	0	0	0	0	**153**
09:15	0	128	15	2	3	0	0	0	0	0	0	0	0	**148**
09:30	0	122	17	1	3	0	0	0	0	0	0	0	0	**143**
09:45	0	136	14	2	1	0	0	0	0	0	0	0	0	**153**
10:00	0	133	14	1	2	0	0	0	0	0	0	0	0	**150**
10:15	0	149	16	1	1	0	0	0	0	0	0	0	0	**167**
10:30	0	154	22	0	2	0	0	0	0	0	0	0	0	**178**
10:45	0	127	12	0	3	0	0	0	0	0	0	0	0	**142**
11:00	0	155	20	2	4	0	0	0	0	0	0	0	0	**181**
11:15	0	143	21	1	2	0	0	0	0	0	0	0	0	**167**
11:30	0	173	26	3	5	0	0	0	0	0	0	0	0	**207**
11:45	0	159	16	1	1	0	0	0	0	0	0	0	0	**177**
12:00 PM	0	176	17	2	1	0	0	0	0	0	0	0	0	**196**
12:15	0	179	20	2	1	0	0	0	0	0	0	0	0	**202**
12:30	0	158	19	1	2	1	0	0	0	0	0	0	0	**181**
12:45	0	175	22	2	3	0	0	0	0	0	0	0	0	**202**
13:00	0	160	16	2	2	0	0	0	0	0	0	0	0	**180**
13:15	0	148	17	1	2	0	0	0	0	0	0	0	0	**168**
13:30	0	166	23	2	1	0	0	0	0	0	0	0	0	**192**
13:45	0	170	23	2	4	0	0	0	0	0	0	0	0	**199**
14:00	0	157	16	1	2	0	0	0	1	0	0	0	0	**177**
14:15	0	183	32	2	2	0	0	0	0	0	0	0	0	**219**
14:30	0	189	22	3	3	0	0	1	0	0	0	0	0	**218**
14:45	1	201	21	3	3	0	0	0	0	0	0	0	0	**229**
15:00	0	229	22	0	2	0	0	0	0	0	0	0	0	**253**
15:15	0	222	22	3	3	0	0	0	0	0	0	0	0	**250**
15:30	0	180	18	1	2	0	0	0	0	0	0	0	0	**201**
15:45	0	175	16	2	4	0	0	0	0	0	0	0	0	**197**
16:00	0	209	23	3	3	1	0	0	0	0	0	0	0	**239**
16:15	0	184	22	3	4	0	0	0	0	0	0	0	0	**213**
16:30	0	178	22	2	3	0	0	0	0	0	0	0	0	**205**
16:45	0	200	22	1	4	0	0	0	0	0	0	0	0	**227**
17:00	0	186	21	2	3	0	0	0	0	0	0	0	0	**212**
17:15	0	147	13	3	1	0	0	0	0	0	0	0	0	**164**
17:30	0	175	17	1	2	0	0	0	0	0	0	0	0	**195**
17:45	0	147	15	2	3	0	0	0	0	0	0	0	0	**167**
18:00	0	147	19	3	3	0	0	0	0	0	0	0	0	**172**
18:15	0	145	21	1	2	0	0	0	0	0	0	0	0	**169**
18:30	0	128	7	2	1	0	0	0	0	0	0	0	0	**138**
18:45	0	100	14	1	1	0	0	0	0	0	0	0	0	**116**
19:00	0	121	15	1	3	0	0	0	0	0	0	0	0	**140**
19:15	0	116	7	2	1	0	0	0	0	0	0	0	0	**126**
19:30	0	115	13	1	2	0	0	0	0	0	0	0	0	**131**
19:45	0	96	8	1	0	0	0	0	0	0	0	0	0	**105**
20:00	0	105	10	1	0	0	0	0	0	0	0	0	0	**116**
20:15	0	92	6	2	3	0	0	0	0	0	0	0	0	**103**
20:30	0	81	9	1	1	0	0	0	0	0	0	0	0	**92**
20:45	0	92	7	1	0	0	0	0	0	0	0	0	0	**100**
21:00	1	110	13	1	2	0	0	0	0	0	0	0	0	**127**
21:15	0	86	7	2	0	0	0	0	0	0	0	0	0	**95**
21:30	0	64	5	0	3	0	0	0	0	0	0	0	0	**72**
21:45	0	57	7	0	2	0	0	0	0	0	0	0	0	**66**
22:00	0	71	7	0	1	0	0	0	0	0	0	0	0	**79**
22:15	0	52	4	1	0	0	0	0	0	0	0	0	0	**57**
22:30	0	33	3	0	0	0	0	0	0	0	0	0	0	**36**
22:45	0	38	4	1	0	0	0	0	0	0	0	0	0	**43**
23:00	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:15	0	32	2	0	0	0	0	0	0	0	0	0	0	**34**
23:30	0	27	4	0	0	0	0	0	0	0	0	0	0	**31**
23:45	0	22	3	0	1	0	0	0	0	0	0	0	0	**26**
Totals	**4**	**10556**	**1231**	**117**	**153**	**5**		**2**	**4**					**12072**
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:15	07:30	07:30	08:15	07:00	07:00		06:15						07:30
Volume	2	907	115	11	17	2		1	1					1050
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	14:30	14:15	15:45	15:45	12:00		13:45	13:15					14:30
Volume	1	841	97	10	14	1		1	1					950

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1825		15%	1520		13%	1622		13%	7105		59%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
00:15	0	37	2	0	0	0	0	0	0	0	0	0	0	**39**
00:30	0	35	4	0	0	0	0	0	0	0	0	0	0	**39**
00:45	0	26	4	0	0	0	0	0	1	0	0	0	0	**31**
01:00	0	26	2	0	0	0	0	0	0	0	0	0	0	**28**
01:15	0	18	3	0	0	0	0	0	0	0	0	0	0	**21**
01:30	0	31	5	0	0	0	0	0	0	0	0	0	0	**36**
01:45	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
02:00	0	17	2	0	0	0	0	0	1	0	0	0	0	**20**
02:15	0	15	2	0	1	0	0	0	0	0	0	0	0	**18**
02:30	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
02:45	0	15	4	0	1	0	0	0	0	0	0	0	0	**20**
03:00	0	17	1	0	0	0	0	0	0	0	0	0	0	**18**
03:15	0	20	4	0	0	0	0	0	1	0	0	0	0	**25**
03:30	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:45	0	24	3	0	0	0	0	0	0	0	0	0	0	**27**
04:00	0	23	3	0	0	0	0	0	0	0	0	0	0	**26**
04:15	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
04:30	0	52	7	0	0	0	0	0	0	0	0	0	0	**59**
04:45	0	60	6	1	1	0	0	0	0	0	0	0	0	**68**
05:00	0	58	11	1	0	0	0	0	0	0	0	0	0	**70**
05:15	0	79	18	1	2	0	0	0	0	0	0	0	0	**100**
05:30	0	99	13	2	2	0	0	0	0	0	0	0	0	**116**
05:45	0	128	20	3	1	0	0	0	0	0	0	0	0	**152**
06:00	0	115	17	1	2	1	0	0	0	0	0	0	0	**136**
06:15	1	151	23	5	2	0	0	0	0	0	0	0	0	**182**
06:30	0	212	32	6	1	0	0	0	0	0	0	0	0	**251**
06:45	0	212	34	4	1	0	0	0	0	0	0	0	0	**251**
07:00	1	303	36	5	5	1	0	1	0	0	0	0	0	**352**
07:15	0	294	39	6	5	0	0	0	0	0	0	0	0	**344**
07:30	0	393	43	8	7	0	0	0	0	0	0	0	0	**451**
07:45	0	457	49	8	7	1	0	0	0	0	0	0	0	**522**
08:00	0	446	56	6	5	0	0	0	0	0	0	0	0	**513**
08:15	0	403	49	6	7	0	0	0	0	0	0	0	0	**465**
08:30	0	283	37	7	3	0	0	0	0	0	0	0	0	**330**
08:45	0	287	36	8	3	0	0	0	0	0	0	0	0	**334**
09:00	0	257	33	5	2	0	0	0	0	0	0	0	0	**297**
09:15	0	244	29	6	5	0	0	0	0	0	0	0	0	**284**
09:30	0	219	32	4	4	0	0	0	0	0	0	0	0	**259**
09:45	0	252	30	4	3	0	0	1	0	0	0	0	0	**290**
10:00	0	242	28	2	3	0	0	0	0	0	0	0	0	**275**
10:15	0	284	33	5	3	0	0	1	0	0	0	0	0	**326**
10:30	0	262	35	3	3	0	0	0	1	0	0	0	0	**304**
10:45	0	247	27	1	4	0	0	1	0	0	0	0	0	**280**
11:00	0	280	34	5	7	0	0	0	1	0	0	0	0	**327**
11:15	0	269	37	2	3	0	0	0	0	0	0	0	0	**311**
11:30	0	300	38	7	8	0	0	0	0	0	0	0	0	**353**
11:45	0	284	32	3	2	0	0	0	0	0	0	0	0	**321**
12:00 PM	0	306	32	4	4	0	0	0	0	0	0	0	0	**346**
12:15	0	313	42	5	3	1	0	0	0	0	0	0	0	**364**
12:30	0	273	33	3	5	1	0	0	0	0	0	0	0	**315**
12:45	0	311	38	4	5	0	0	0	0	0	0	0	0	**358**
13:00	0	296	30	6	3	0	0	0	0	0	0	0	0	**335**
13:15	0	264	32	2	3	0	0	0	0	0	0	0	0	**301**
13:30	0	297	40	4	3	1	0	0	0	0	0	0	0	**345**
13:45	1	300	40	6	7	0	0	0	0	0	0	0	0	**354**
14:00	0	309	33	5	4	0	0	0	1	0	0	0	0	**352**
14:15	0	360	61	7	3	0	0	0	0	0	0	0	0	**431**
14:30	0	429	57	9	4	0	0	1	0	0	0	0	0	**500**
14:45	1	483	53	8	6	0	0	0	0	0	0	0	0	**551**
15:00	0	457	45	4	5	0	0	0	0	0	0	0	0	**511**
15:15	0	426	52	6	7	0	0	0	0	0	0	0	0	**491**
15:30	0	390	51	7	3	0	0	0	1	0	0	0	0	**452**
15:45	0	446	50	6	7	0	0	0	0	0	0	0	0	**509**
16:00	0	435	52	9	5	1	0	0	0	0	0	0	0	**502**
16:15	0	454	63	8	7	0	0	0	0	0	0	0	0	**532**
16:30	1	427	54	6	5	0	0	0	0	0	0	0	0	**493**
16:45	1	463	61	6	6	0	0	0	0	0	0	0	0	**537**
17:00	0	386	44	5	4	0	0	0	1	0	0	0	0	**440**
17:15	0	438	53	7	2	0	0	0	0	0	0	0	0	**500**
17:30	0	436	43	7	4	0	0	0	0	0	0	0	0	**490**
17:45	0	390	45	5	5	0	0	0	1	0	0	0	0	**446**
18:00	0	370	42	9	4	0	0	0	0	0	0	0	0	**425**
18:15	0	369	49	3	5	0	0	0	0	0	0	0	0	**426**
18:30	0	292	27	6	4	0	0	0	0	0	0	0	0	**329**
18:45	0	252	34	4	2	0	0	0	0	0	0	0	0	**292**
19:00	0	265	33	4	4	0	0	1	0	0	0	0	0	**307**
19:15	0	219	17	4	1	0	0	0	0	0	0	0	0	**241**
19:30	0	232	26	4	3	0	0	0	0	0	0	0	0	**265**
19:45	1	202	20	2	1	0	0	0	0	0	0	0	0	**226**
20:00	0	194	20	3	0	0	0	0	0	0	0	0	0	**217**
20:15	0	191	21	3	4	0	0	0	0	0	0	0	0	**219**
20:30	0	166	20	2	1	0	0	0	0	0	0	0	0	**189**
20:45	0	168	16	3	0	0	0	0	0	0	0	0	0	**187**
21:00	1	181	20	2	2	0	0	0	0	0	0	0	0	**206**
21:15	0	151	13	3	0	0	0	0	0	0	0	0	0	**167**
21:30	0	121	12	2	3	0	0	0	0	0	0	0	0	**138**
21:45	0	113	13	1	2	0	0	0	0	0	0	0	0	**129**
22:00	0	127	14	2	1	0	0	0	0	0	0	0	0	**144**
22:15	0	99	9	2	0	0	0	0	0	0	0	0	0	**110**
22:30	0	81	6	1	0	0	0	0	0	0	0	0	0	**88**
22:45	0	61	7	1	0	0	0	0	0	0	0	0	0	**69**
23:00	0	55	6	1	0	0	0	0	0	0	0	0	0	**62**
23:15	0	59	4	0	0	0	0	0	0	0	0	0	0	**63**
23:30	0	59	8	0	0	0	0	0	0	0	0	0	0	**67**
23:45	0	49	5	0	2	0	0	0	0	0	0	0	0	**56**
Totals	**8**	**20756**	**2513**	**326**	**252**	**7**		**6**	**9**					**23877**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:15	07:30	07:30	07:15	07:30	07:00		09:30	10:15					07:30
Volume	2	1699	197	28	26	2		2	2					1951
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	14:30	16:00	15:30	15:45	12:00		13:45	17:00					16:00
Volume	2	1795	230	30	24	2		1	2					2064

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	3311	⟷	14%	2718	⟷	11%	3940	⟷	17%	13908	⟷	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	80	9	0	0	0	0	0	0	0	0	0	0	89
01:00	0	54	6	0	0	0	0	0	0	0	0	0	0	60
02:00	0	40	7	0	2	0	0	0	0	0	0	0	0	49
03:00	0	40	5	0	0	0	0	0	0	0	0	0	0	45
04:00	0	51	6	0	0	0	0	0	0	0	0	0	0	57
05:00	0	105	25	3	1	0	0	0	0	0	0	0	0	134
06:00	0	200	35	8	0	0	0	0	0	0	0	0	0	243
07:00	0	599	69	18	7	0	0	0	0	0	0	0	0	693
08:00	0	693	76	17	7	0	0	0	0	0	0	0	0	793
09:00	0	454	61	11	6	0	0	1	0	0	0	0	0	533
10:00	0	472	59	9	5	0	0	2	1	0	0	0	0	548
11:00	0	503	58	10	8	0	0	0	1	0	0	0	0	580
12:00 PM	0	515	67	9	10	1	0	0	0	0	0	0	0	602
13:00	1	513	63	11	7	1	0	0	0	0	0	0	0	596
14:00	0	851	113	20	7	0	0	0	0	0	0	0	0	991
15:00	0	913	120	17	11	0	0	0	1	0	0	0	0	1062
16:00	2	1008	141	20	9	0	0	0	0	0	0	0	0	1180
17:00	0	995	119	16	6	0	0	0	2	0	0	0	0	1138
18:00	0	763	91	15	8	0	0	0	0	0	0	0	0	877
19:00	1	470	53	9	3	0	0	1	0	0	0	0	0	537
20:00	0	349	45	6	1	0	0	0	0	0	0	0	0	401
21:00	0	249	26	5	0	0	0	0	0	0	0	0	0	280
22:00	0	174	18	4	0	0	0	0	0	0	0	0	0	196
23:00	0	109	10	1	1	0	0	0	0	0	0	0	0	121
Totals	4	10200	1282	209	99	2		4	5					11805
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		08:00	08:00	07:00	11:00			10:00	10:00					08:00
Volume		693	76	18	8			2	1					793
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	16:00	16:00	14:00	15:00	12:00		19:00	17:00					16:00
Volume	2	1008	141	20	11	1		1	2					1180

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1486	⟷	13%	1198	⟷	10%	2318	⟷	20%	6803	⟷	58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	50	5	0	0	0	0	0	1	0	0	0	0	**56**
01:00	0	38	6	0	0	0	0	0	0	0	0	0	0	**44**
02:00	0	20	3	0	0	0	0	0	1	0	0	0	0	**24**
03:00	0	42	5	0	0	0	0	0	1	0	0	0	0	**48**
04:00	0	116	14	1	1	0	0	0	0	0	0	0	0	**132**
05:00	0	259	37	4	4	0	0	0	0	0	0	0	0	**304**
06:00	1	490	71	8	6	1	0	0	0	0	0	0	0	**577**
07:00	1	848	98	9	17	2	0	1	0	0	0	0	0	**976**
08:00	0	726	102	10	11	0	0	0	0	0	0	0	0	**849**
09:00	0	518	63	8	8	0	0	0	0	0	0	0	0	**597**
10:00	0	563	64	2	8	0	0	0	0	0	0	0	0	**637**
11:00	0	630	83	7	12	0	0	0	0	0	0	0	0	**732**
12:00 PM	0	688	78	7	7	1	0	0	0	0	0	0	0	**781**
13:00	0	644	79	7	9	0	0	0	0	0	0	0	0	**739**
14:00	1	730	91	9	10	0	0	1	1	0	0	0	0	**843**
15:00	0	806	78	6	11	0	0	0	0	0	0	0	0	**901**
16:00	0	771	89	9	14	1	0	0	0	0	0	0	0	**884**
17:00	0	655	66	8	9	0	0	0	0	0	0	0	0	**738**
18:00	0	520	61	7	7	0	0	0	0	0	0	0	0	**595**
19:00	0	448	43	5	6	0	0	0	0	0	0	0	0	**502**
20:00	0	370	32	5	4	0	0	0	0	0	0	0	0	**411**
21:00	1	317	32	3	7	0	0	0	0	0	0	0	0	**360**
22:00	0	194	18	2	1	0	0	0	0	0	0	0	0	**215**
23:00	0	113	13	0	1	0	0	0	0	0	0	0	0	**127**
Totals	**4**	**10556**	**1231**	**117**	**153**	**5**		**2**	**4**					**12072**
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:00	07:00	08:00	08:00	07:00	07:00		07:00						07:00
Volume	1	848	102	10	17	2		1	1					976
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	15:00	14:00	14:00	16:00	12:00		14:00	14:00					15:00
Volume	1	806	91	9	14	1		1	1					901

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1825	↔	15%	1520	↔	13%	1622	↔	13%	7105	↔	59%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	130	14	0	0	0	0	0	1	0	0	0	0	145
01:00	0	92	12	0	0	0	0	0	0	0	0	0	0	104
02:00	0	60	10	0	2	0	0	0	1	0	0	0	0	73
03:00	0	82	10	0	0	0	0	0	1	0	0	0	0	93
04:00	0	167	20	1	1	0	0	0	0	0	0	0	0	189
05:00	0	364	62	7	5	0	0	0	0	0	0	0	0	438
06:00	1	690	106	16	6	1	0	0	0	0	0	0	0	820
07:00	1	1447	167	27	24	2	0	1	0	0	0	0	0	1669
08:00	0	1419	178	27	18	0	0	0	0	0	0	0	0	1642
09:00	0	972	124	19	14	0	0	1	0	0	0	0	0	1130
10:00	0	1035	123	11	13	0	0	2	1	0	0	0	0	1185
11:00	0	1133	141	17	20	0	0	0	1	0	0	0	0	1312
12:00 PM	0	1203	145	16	17	2	0	0	0	0	0	0	0	1383
13:00	1	1157	142	18	16	1	0	0	0	0	0	0	0	1335
14:00	1	1581	204	29	17	0	0	1	1	0	0	0	0	1834
15:00	0	1719	198	23	22	0	0	0	1	0	0	0	0	1963
16:00	2	1779	230	29	23	1	0	0	0	0	0	0	0	2064
17:00	0	1650	185	24	15	0	0	0	2	0	0	0	0	1876
18:00	0	1283	152	22	15	0	0	0	0	0	0	0	0	1472
19:00	1	918	96	14	9	0	0	1	0	0	0	0	0	1039
20:00	0	719	77	11	5	0	0	0	0	0	0	0	0	812
21:00	1	566	58	8	7	0	0	0	0	0	0	0	0	640
22:00	0	368	36	6	1	0	0	0	0	0	0	0	0	411
23:00	0	222	23	1	2	0	0	0	0	0	0	0	0	248
Totals	8	20756	2513	326	252	7		6	9					23877
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:00	07:00	08:00	07:00	07:00	07:00		10:00						07:00
Volume	1	1447	178	27	24	2		2	1					1669
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	16:00	16:00	14:00	16:00	12:00		14:00	17:00					16:00
Volume	2	1779	230	29	23	2		1	2					2064

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	3311	⟷	14%	2718	⟷	11%	3940	⟷	17%	13908	⟷	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TO
00:00	0	0	21		15		36		12:00	0	0	150		196		346
00:15	0	0	24		15		39		12:15	0	0	162		202		364
00:30	0	0	23		16		39		12:30	0	0	134		181		315
00:45	0	0	21	89	10	56	31	145	12:45	0	0	156	602	202	781	358
01:00	0	0	16		12		28		13:00	0	0	155		180		335
01:15	0	0	10		11		21		13:15	0	0	133		168		301
01:30	0	0	24		12		36		13:30	0	0	153		192		345
01:45	0	0	10	60	9	44	19	104	13:45	0	0	155	596	199	739	354
02:00	0	0	14		6		20		14:00	0	0	175		177		352
02:15	0	0	13		5		18		14:15	0	0	212		219		431
02:30	0	0	9		6		15		14:30	0	0	282		218		500
02:45	0	0	13	49	7	24	20	73	14:45	0	0	322	991	229	843	551
03:00	0	0	8		10		18		15:00	0	0	258		253		511
03:15	0	0	13		12		25		15:15	0	0	241		250		491
03:30	0	0	12		11		23		15:30	0	0	251		201		452
03:45	0	0	12	45	15	48	27	93	15:45	0	0	312	1062	197	901	509
04:00	0	0	12		14		26		16:00	0	0	263		239		502
04:15	0	0	12		24		36		16:15	0	0	319		213		532
04:30	0	0	14		45		59		16:30	0	0	288		205		493
04:45	0	0	19	57	49	132	68	189	16:45	0	0	310	1180	227	884	537
05:00	0	0	25		45		70		17:00	0	0	228		212		440
05:15	0	0	33		67		100		17:15	0	0	336		164		500
05:30	0	0	28		88		116		17:30	0	0	295		195		490
05:45	0	0	48	134	104	304	152	438	17:45	0	0	279	1138	167	738	446
06:00	0	0	28		108		136		18:00	0	0	253		172		425
06:15	0	0	59		123		182		18:15	0	0	257		169		426
06:30	0	0	79		172		251		18:30	0	0	191		138		329
06:45	0	0	77	243	174	577	251	820	18:45	0	0	176	877	116	595	292
07:00	0	0	116		236		352		19:00	0	0	167		140		307
07:15	0	0	144		200		344		19:15	0	0	115		126		241
07:30	0	0	187		264		451		19:30	0	0	134		131		265
07:45	0	0	246	693	276	976	522	1669	19:45	0	0	121	537	105	502	226
08:00	0	0	241		272		513		20:00	0	0	101		116		217
08:15	0	0	227		238		465		20:15	0	0	116		103		219
08:30	0	0	149		181		330		20:30	0	0	97		92		189
08:45	0	0	176	793	158	849	334	1642	20:45	0	0	87	401	100	411	187
09:00	0	0	144		153		297		21:00	0	0	79		127		206
09:15	0	0	136		148		284		21:15	0	0	72		95		167
09:30	0	0	116		143		259		21:30	0	0	66		72		138
09:45	0	0	137	533	153	597	290	1130	21:45	0	0	63	280	66	360	129
10:00	0	0	125		150		275		22:00	0	0	65		79		144
10:15	0	0	159		167		326		22:15	0	0	53		57		110
10:30	0	0	126		178		304		22:30	0	0	52		36		88
10:45	0	0	138	548	142	637	280	1185	22:45	0	0	26	196	43	215	69
11:00	0	0	146		181		327		23:00	0	0	26		36		62
11:15	0	0	144		167		311		23:15	0	0	29		34		63
11:30	0	0	146		207		353		23:30	0	0	36		31		67
11:45	0	0	144	580	177	732	321	1312	23:45	0	0	30	121	26	127	56
TOTALS				3824		4976		8800	TOTALS				7981		7096	
SPLIT %				43.5%		56.5%		36.9%	SPLIT %				52.9%		47.1%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

	NB	SB	EB	WB	TOTAL		NB	SB	EB	WB
AM Peak Hour			07:30	07:30	07:30	PM Peak Hour			15:45	14:30
AM Pk Volume			901	1050	1951	PM Pk Volume			1182	950
Pk Hr Factor			0.916	0.951	0.934	Pk Hr Factor			0.926	0.939
7 - 9 Volume	0	0	1486	1825	3311	4 - 6 Volume	0	0	2318	1622
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			16:00	16:00
7 - 9 Pk Volume	0	0	901	1050	1951	4 - 6 Pk Volume	0	0	1180	884
Pk Hr Factor	0.000	0.000	0.916	0.951	0.934	Pk Hr Factor	0.000	0.000	0.925	0.925

Prepared by NDS/ATD

Project #: CA19_5294_001 **City:** Compton

Location: W Compton Blvd Bet. S Matthisen Ave & N **Date:** 5/21/2019

Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Northleg		Southleg			Northleg		Southleg		
	EB	WB	EB	WB		EB	WB	EB	WB	
7:00 AM	1	2	2	0	***5***	0	0	0	0	***0***
7:15 AM	2	3	1	8	***14***	2	0	0	0	***2***
7:30 AM	5	6	5	2	***18***	0	1	2	0	***3***
7:45 AM	3	1	2	4	***10***	0	0	0	0	***0***
8:00 AM	3	2	3	0	***8***	0	0	2	1	***3***
8:15 AM	4	3	4	3	***14***	0	0	0	0	***0***
8:30 AM	0	0	4	3	***7***	0	1	0	1	***2***
8:45 AM	0	0	2	1	***3***	0	1	0	1	***2***
9:00 AM	8	2	1	0	***11***	1	1	1	0	***3***
9:15 AM	0	1	0	0	***1***	1	1	0	1	***3***
9:30 AM	1	0	4	0	***5***	0	0	1	1	***2***
9:45 AM	2	1	1	3	***7***	0	0	2	3	***5***
Totals	***29***	***21***	***29***	***24***	***103***	***4***	***5***	***8***	***8***	***25***
3:00 PM	6	9	0	3	***18***	1	0	1	3	***5***
3:15 PM	0	0	7	4	***11***	1	0	1	1	***3***
3:30 PM	0	1	2	0	***3***	0	1	2	0	***3***
3:45 PM	2	0	1	0	***3***	0	0	0	0	***0***
4:00 PM	1	7	2	4	***14***	0	0	0	0	***0***
4:15 PM	0	1	2	5	***8***	0	3	1	1	***5***
4:30 PM	0	2	0	3	***5***	1	1	0	0	***2***
4:45 PM	1	3	5	*2*	***11***	*2*	*1*	*0*	*1*	***4***
5:00 PM	1	1	1	3	***6***	0	0	0	0	***0***
5:15 PM	1	0	0	0	***1***	0	1	2	1	***4***
5:30 PM	0	0	1	2	***3***	1	1	1	1	***4***
5:45 PM	2	2	1	1	***6***	0	1	0	0	***1***
Totals	***14***	***26***	***22***	***27***	***89***	***6***	***9***	***8***	***8***	***31***
Grand Total	***43***	***47***	***51***	***51***	***192***	***10***	***14***	***16***	***16***	***56***

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	35	3	0	0	0	0	0	0	0	0	0	0	**38**
00:15	0	36	3	0	0	0	0	0	0	0	0	0	0	**39**
00:30	0	29	2	0	0	0	0	0	0	0	0	0	0	**31**
00:45	0	27	3	0	0	0	0	0	0	0	0	0	0	**30**
01:00	0	16	4	0	0	0	0	0	0	0	0	0	0	**20**
01:15	0	26	4	0	0	1	0	0	0	0	0	0	0	**31**
01:30	0	18	1	0	0	0	0	0	0	0	0	0	0	**19**
01:45	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
02:00	0	18	1	0	0	0	0	0	0	0	0	0	0	**19**
02:15	0	16	4	0	0	0	0	0	0	0	0	0	0	**20**
02:30	0	12	1	0	0	0	0	0	0	0	0	0	0	**13**
02:45	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
03:00	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
03:15	0	12	1	0	0	0	0	0	1	0	0	0	0	**14**
03:30	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
03:45	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
04:00	0	11	2	0	1	0	0	0	0	0	0	0	0	**14**
04:15	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
04:30	0	18	3	2	0	0	0	0	0	0	0	0	0	**23**
04:45	0	29	4	0	0	0	0	0	0	0	0	0	0	**33**
05:00	0	35	6	0	0	0	0	0	0	0	0	0	0	**41**
05:15	0	27	9	1	0	0	0	0	0	0	0	0	0	**37**
05:30	0	27	3	1	0	0	0	0	0	0	0	0	0	**31**
05:45	0	39	7	0	0	0	0	0	0	0	0	0	0	**46**
06:00	0	52	7	1	0	0	0	0	0	0	0	0	0	**60**
06:15	0	58	9	2	0	2	0	0	0	0	0	0	0	**71**
06:30	0	65	11	1	1	0	0	0	0	0	0	0	0	**78**
06:45	1	89	16	2	0	0	0	0	0	0	0	0	0	**108**
07:00	0	100	15	2	2	0	0	0	0	0	0	0	0	**119**
07:15	0	111	18	1	1	1	0	0	0	0	0	0	0	**132**
07:30	0	159	19	2	1	1	0	0	0	0	0	0	0	**182**
07:45	0	189	23	1	2	0	0	0	0	0	0	0	0	**215**
08:00	0	144	23	4	1	0	0	0	1	0	0	0	0	**173**
08:15	0	118	26	2	2	0	0	0	0	0	0	0	0	**148**
08:30	0	117	11	2	2	0	0	0	0	0	0	0	0	**132**
08:45	0	121	13	2	1	0	0	0	0	0	0	0	0	**137**
09:00	0	92	15	4	1	0	0	0	0	0	0	0	0	**112**
09:15	0	94	18	1	3	0	0	0	0	0	0	0	0	**116**
09:30	0	93	14	1	1	1	0	0	0	0	0	0	0	**110**
09:45	0	108	12	2	3	0	0	1	0	0	0	0	0	**126**
10:00	0	103	13	3	2	0	0	0	0	0	0	0	0	**121**
10:15	0	95	10	0	0	0	0	0	1	0	0	0	0	**106**
10:30	0	114	14	1	4	1	0	0	0	0	0	0	0	**134**
10:45	0	112	13	2	4	0	0	0	0	0	0	0	0	**131**
11:00	1	114	17	1	2	0	0	0	0	0	0	0	0	**135**
11:15	0	114	17	3	2	0	0	0	0	0	0	0	0	**136**
11:30	0	125	18	1	4	0	0	0	0	0	0	0	0	**148**
11:45	0	127	15	2	1	0	0	0	0	0	0	0	0	**145**
12:00 PM	0	118	13	1	1	0	0	0	0	0	0	0	0	**133**
12:15	0	142	14	4	2	0	0	0	0	0	0	0	0	**162**
12:30	0	144	17	1	1	0	0	0	0	0	0	0	0	**163**
12:45	0	122	23	1	0	0	0	0	0	0	0	0	0	**146**
13:00	0	153	25	1	2	0	0	0	0	0	0	0	0	**181**
13:15	0	109	13	3	0	0	0	0	0	0	0	0	0	**125**
13:30	0	158	19	1	2	1	0	0	0	0	0	0	0	**181**
13:45	0	138	18	1	3	0	0	0	0	0	0	0	0	**160**
14:00	0	156	18	3	2	0	0	0	0	0	0	0	0	**179**
14:15	0	154	30	3	2	0	0	0	0	0	0	0	0	**189**
14:30	0	188	29	2	1	0	0	1	0	0	0	0	0	**221**
14:45	1	192	26	1	3	1	0	0	0	0	0	0	0	**224**
15:00	0	226	26	2	2	0	0	0	0	0	0	0	0	**256**
15:15	0	201	27	3	1	2	0	0	0	0	0	0	0	**234**
15:30	0	177	24	1	2	0	0	0	0	0	0	0	0	**204**
15:45	0	215	35	2	3	0	0	0	0	0	0	0	0	**255**
16:00	0	228	27	3	4	1	0	0	0	0	0	0	0	**263**
16:15	0	210	26	2	2	0	0	0	0	0	0	0	0	**240**
16:30	0	235	30	0	1	0	0	0	0	0	0	0	0	**266**
16:45	0	220	33	1	5	0	0	0	0	0	0	0	0	**259**
17:00	1	227	36	1	0	0	0	0	0	0	0	0	0	**265**
17:15	0	224	33	1	2	0	0	0	0	0	0	0	0	**260**
17:30	0	236	21	2	2	0	0	0	0	0	0	0	0	**261**
17:45	0	194	30	3	1	0	0	0	1	0	0	0	0	**229**
18:00	0	215	23	2	3	0	0	0	0	0	0	0	0	**243**
18:15	0	181	29	2	1	0	0	0	0	0	0	0	0	**213**
18:30	0	166	18	2	2	0	0	0	0	0	0	0	0	**188**
18:45	0	143	18	1	1	0	0	0	0	0	0	0	0	**163**
19:00	1	138	18	1	1	0	0	0	0	0	0	0	0	**159**
19:15	0	141	15	0	0	0	0	0	0	0	0	0	0	**156**
19:30	0	137	14	2	8	0	0	0	0	0	0	0	0	**161**
19:45	0	157	18	2	1	0	0	0	0	0	0	0	0	**178**
20:00	0	111	12	1	3	0	0	0	0	0	0	0	0	**127**
20:15	0	111	15	1	1	0	0	0	0	0	0	0	0	**128**
20:30	0	115	12	2	2	0	0	0	0	0	0	0	0	**131**
20:45	0	113	11	1	1	0	0	0	0	0	0	0	0	**126**
21:00	1	120	14	1	1	0	0	0	0	0	0	0	0	**137**
21:15	0	105	8	1	0	0	0	0	0	0	0	0	0	**114**
21:30	0	92	10	0	0	0	0	0	0	0	0	0	0	**102**
21:45	0	101	8	1	2	0	0	0	0	0	0	0	0	**112**
22:00	0	83	5	0	0	0	0	0	0	0	0	0	0	**88**
22:15	0	71	6	1	0	0	0	0	0	0	0	0	0	**78**
22:30	0	50	9	0	1	0	0	0	0	0	0	0	0	**60**
22:45	0	50	4	0	0	0	0	0	0	0	0	0	0	**54**
23:00	0	45	2	0	0	0	0	0	0	0	0	0	0	**47**
23:15	0	48	4	1	1	0	0	0	0	0	0	0	0	**54**
23:30	0	48	3	0	0	0	0	0	0	0	0	0	0	**51**
23:45	0	41	5	0	1	0	0	0	0	0	0	0	0	**47**
Totals	**6**	**10092**	**1312**	**112**	**115**	**12**		**2**	**4**					**11655**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:30	07:30	08:00	10:30	05:30		09:00	02:30					07:30
Volume	1	610	91	10	12	2		1	1					718
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:45	16:30	13:45	19:30	14:30		13:45	17:00					16:30
Volume	1	907	132	9	13	3		1	1					1050

Directional Peak Periods All Classes	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1238	⟷	11%	1251	⟷	11%	2043	⟷	18%	7123	⟷	61%

Classification Definitions

1	Motorcycles
2	Passenger Cars
3	2-Axle, 4-Tire Single Units
4	Buses
5	2-Axle, 6-Tire Single Units
6	3-Axle Single Units
7	> =4-Axle Single Units
8	<=4-Axle Single Trailers
9	5-Axle Single Trailers
10	>=6-Axle Single Trailers
11	<=5-Axle Multi-Trailers
12	6-Axle Multi-Trailers
13	>=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	27	4	0	0	0	0	0	0	0	0	0	0	**31**
00:15	0	21	4	0	0	0	0	0	0	0	0	0	0	**25**
00:30	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
00:45	0	15	3	0	0	0	0	0	0	0	0	0	0	**18**
01:00	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
01:15	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
01:30	0	18	3	0	0	0	0	0	0	0	0	0	0	**21**
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
02:00	0	16	1	0	1	0	0	0	0	0	0	0	0	**18**
02:15	0	11	2	0	0	0	0	0	0	0	0	0	0	**13**
02:30	0	20	2	0	0	0	0	0	0	0	0	0	0	**22**
02:45	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
03:00	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:15	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:30	0	20	4	0	0	0	0	0	0	0	0	0	0	**24**
03:45	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
04:00	0	19	4	0	0	0	0	0	0	0	0	0	0	**23**
04:15	0	36	7	0	1	0	0	0	0	0	0	0	0	**44**
04:30	0	48	7	0	1	0	0	0	0	0	0	0	0	**56**
04:45	0	62	15	1	2	0	0	1	0	0	0	0	0	**81**
05:00	0	44	6	1	0	0	0	0	0	0	0	0	0	**51**
05:15	0	81	11	0	1	0	0	0	0	0	0	0	0	**93**
05:30	0	103	16	3	2	0	0	0	0	0	0	0	0	**124**
05:45	0	107	17	2	1	1	0	0	0	0	0	0	0	**128**
06:00	0	82	10	1	2	0	0	0	0	0	0	0	0	**95**
06:15	0	97	15	1	1	0	0	0	0	0	0	0	0	**114**
06:30	0	119	20	2	3	0	0	0	1	0	0	0	0	**145**
06:45	0	136	19	3	6	2	0	0	0	0	0	0	0	**166**
07:00	0	137	19	3	6	1	0	1	0	0	0	0	0	**167**
07:15	0	176	29	1	3	1	0	0	0	0	0	0	0	**210**
07:30	0	226	37	1	5	0	1	0	0	0	0	0	0	**270**
07:45	0	243	40	4	8	2	1	0	0	0	0	0	0	**298**
08:00	2	201	40	2	7	1	1	0	0	0	0	0	0	**254**
08:15	0	183	29	4	6	2	0	0	1	0	0	0	0	**225**
08:30	0	141	22	1	2	0	0	0	1	0	0	0	0	**167**
08:45	0	125	19	2	4	0	0	0	0	0	0	0	0	**150**
09:00	0	112	22	1	4	0	0	0	2	0	0	0	0	**141**
09:15	0	92	13	1	6	0	0	0	0	0	0	0	0	**112**
09:30	0	100	15	2	3	0	0	0	0	0	0	0	0	**120**
09:45	0	102	13	2	2	0	0	0	0	0	0	0	0	**119**
10:00	0	97	16	1	3	0	0	0	0	0	0	0	0	**117**
10:15	0	107	21	3	2	1	0	0	0	0	0	0	0	**134**
10:30	0	130	19	1	3	0	0	0	1	0	0	0	0	**154**
10:45	0	92	16	2	2	0	0	0	0	0	0	0	0	**112**
11:00	0	101	15	1	1	0	0	0	0	0	0	0	0	**118**
11:15	0	118	17	1	5	1	0	0	0	0	0	0	0	**142**
11:30	1	116	20	1	1	3	1	0	0	0	0	0	0	**143**
11:45	0	117	18	1	2	1	0	0	0	0	0	0	0	**139**
12:00 PM	0	122	19	4	3	0	0	0	0	0	0	0	0	**148**
12:15	0	116	25	1	3	0	0	0	0	0	0	0	0	**145**
12:30	0	116	20	4	5	1	0	0	0	0	0	0	0	**146**
12:45	0	121	22	3	5	0	0	0	0	0	0	0	0	**151**
13:00	0	138	22	3	4	0	0	0	0	0	0	0	0	**167**
13:15	1	121	16	1	3	0	0	0	1	0	0	0	0	**143**
13:30	0	143	24	1	3	1	0	0	0	0	0	0	0	**172**
13:45	0	132	18	3	4	0	0	0	0	0	0	0	0	**157**
14:00	0	122	19	1	1	0	1	0	1	0	0	0	0	**145**
14:15	0	144	26	4	7	0	0	0	1	0	0	0	0	**182**
14:30	0	157	29	1	3	1	0	0	1	0	0	0	0	**192**
14:45	0	175	23	3	5	0	0	0	0	0	0	0	0	**206**
15:00	1	159	23	2	2	0	0	0	0	0	0	0	0	**187**
15:15	0	145	18	2	3	0	0	0	0	0	0	0	0	**168**
15:30	0	169	23	3	4	1	0	0	0	0	0	0	0	**200**
15:45	0	153	26	2	5	0	0	0	0	0	0	0	0	**186**
16:00	0	144	23	3	3	0	0	0	1	0	0	0	0	**174**
16:15	0	143	18	1	2	0	0	0	0	0	0	0	0	**164**
16:30	0	130	18	1	4	0	0	0	0	0	0	0	0	**153**
16:45	0	138	22	2	8	1	0	0	0	0	0	0	0	**171**
17:00	0	135	20	2	4	0	0	0	0	0	0	0	0	**161**
17:15	2	141	19	1	2	2	1	1	0	0	0	0	0	**169**
17:30	0	141	17	2	0	0	0	0	0	0	0	0	0	**160**
17:45	1	141	19	1	6	1	0	0	0	0	0	0	0	**169**
18:00	0	119	27	1	1	0	0	0	0	0	0	0	0	**148**
18:15	0	147	20	2	2	0	0	0	0	0	0	0	0	**171**
18:30	0	118	21	2	1	0	0	0	0	0	0	0	0	**142**
18:45	0	114	12	1	2	0	0	0	0	0	0	0	0	**129**
19:00	0	133	19	1	3	0	1	0	0	0	0	0	0	**157**
19:15	0	135	12	2	0	0	0	0	0	0	0	0	0	**149**
19:30	0	123	16	1	1	0	0	0	0	0	0	0	0	**141**
19:45	0	96	19	1	0	0	0	0	0	0	0	0	0	**116**
20:00	0	95	13	1	1	0	1	0	1	0	0	0	0	**112**
20:15	0	94	10	2	2	0	0	0	0	0	0	0	0	**108**
20:30	0	87	11	1	2	0	0	0	0	0	0	0	0	**101**
20:45	0	73	11	0	0	0	0	0	0	0	0	0	0	**84**
21:00	0	71	9	1	2	0	0	0	0	0	0	0	0	**83**
21:15	0	72	6	1	2	1	0	0	0	0	0	0	0	**82**
21:30	0	65	10	0	2	0	0	0	0	0	0	0	0	**77**
21:45	0	67	7	1	1	0	0	0	0	0	0	0	0	**76**
22:00	0	57	7	0	2	0	0	0	0	0	0	0	0	**66**
22:15	0	39	3	0	0	0	0	0	0	0	0	0	0	**42**
22:30	0	45	9	0	1	0	0	0	0	0	0	0	0	**55**
22:45	0	36	2	1	0	0	0	0	0	0	0	0	0	**39**
23:00	0	33	3	0	0	0	0	0	1	0	0	0	0	**37**
23:15	0	36	4	0	0	0	0	0	0	0	0	0	0	**40**
23:30	0	30	2	1	0	0	0	0	0	0	0	0	0	**33**
23:45	0	25	3	0	1	0	0	0	0	0	0	0	0	**29**
Totals	**8**	**9178**	**1386**	**120**	**211**	**25**	**8**	**3**	**13**					**10952**
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	07:15	07:30	07:15	07:30	07:30	07:30	07:15	04:00	08:15					07:30
Volume	2	853	146	11	26	5	3	1	4					1047
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	14:45	14:15	12:00	16:15	16:30	13:15	16:30	13:45					14:15
Volume	3	648	101	12	18	3	1	1	3					767

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1741	⟷	16%	1229	⟷	11%	1321	⟷	12%	6661	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	62	7	0	0	0	0	0	0	0	0	0	0	**69**
00:15	0	57	7	0	0	0	0	0	0	0	0	0	0	**64**
00:30	0	49	3	0	0	0	0	0	0	0	0	0	0	**52**
00:45	0	42	6	0	0	0	0	0	0	0	0	0	0	**48**
01:00	0	25	6	0	0	0	0	0	0	0	0	0	0	**31**
01:15	0	37	5	0	0	1	0	0	0	0	0	0	0	**43**
01:30	0	36	4	0	0	0	0	0	0	0	0	0	0	**40**
01:45	0	28	3	0	0	0	0	0	0	0	0	0	0	**31**
02:00	0	34	2	0	1	0	0	0	0	0	0	0	0	**37**
02:15	0	27	6	0	0	0	0	0	0	0	0	0	0	**33**
02:30	0	32	3	0	0	0	0	0	0	0	0	0	0	**35**
02:45	0	26	3	0	0	0	0	0	0	0	0	0	0	**29**
03:00	0	41	3	0	0	0	0	0	0	0	0	0	0	**44**
03:15	0	33	3	0	0	0	0	0	1	0	0	0	0	**37**
03:30	0	30	6	0	0	0	0	0	0	0	0	0	0	**36**
03:45	0	35	2	0	0	0	0	0	0	0	0	0	0	**37**
04:00	0	30	6	0	1	0	0	0	0	0	0	0	0	**37**
04:15	0	57	9	0	1	0	0	0	0	0	0	0	0	**67**
04:30	0	66	10	2	1	0	0	0	0	0	0	0	0	**79**
04:45	0	91	19	1	2	0	0	1	0	0	0	0	0	**114**
05:00	0	79	12	1	0	0	0	0	0	0	0	0	0	**92**
05:15	0	108	20	1	1	0	0	0	0	0	0	0	0	**130**
05:30	0	130	19	4	2	0	0	0	0	0	0	0	0	**155**
05:45	0	146	24	2	1	1	0	0	0	0	0	0	0	**174**
06:00	0	134	17	2	2	0	0	0	0	0	0	0	0	**155**
06:15	0	155	24	3	1	2	0	0	0	0	0	0	0	**185**
06:30	0	184	31	3	4	0	0	0	1	0	0	0	0	**223**
06:45	1	225	35	5	6	2	0	0	0	0	0	0	0	**274**
07:00	0	237	34	5	8	1	0	1	0	0	0	0	0	**286**
07:15	0	287	47	2	4	2	0	0	0	0	0	0	0	**342**
07:30	0	385	56	3	6	1	1	0	0	0	0	0	0	**452**
07:45	0	432	63	5	10	2	1	0	0	0	0	0	0	**513**
08:00	2	345	63	6	8	1	1	0	1	0	0	0	0	**427**
08:15	0	301	55	6	8	2	0	0	1	0	0	0	0	**373**
08:30	0	258	33	3	4	0	0	0	1	0	0	0	0	**299**
08:45	0	246	32	4	5	0	0	0	0	0	0	0	0	**287**
09:00	0	204	37	5	5	0	0	0	2	0	0	0	0	**253**
09:15	0	186	31	2	9	0	0	0	0	0	0	0	0	**228**
09:30	0	193	29	3	4	1	0	0	0	0	0	0	0	**230**
09:45	0	210	25	4	5	0	0	1	0	0	0	0	0	**245**
10:00	0	200	29	4	5	0	0	0	0	0	0	0	0	**238**
10:15	0	202	31	3	2	1	0	0	1	0	0	0	0	**240**
10:30	0	244	33	2	7	1	0	0	1	0	0	0	0	**288**
10:45	0	204	29	4	6	0	0	0	0	0	0	0	0	**243**
11:00	1	215	32	2	3	0	0	0	0	0	0	0	0	**253**
11:15	0	232	34	4	7	1	0	0	0	0	0	0	0	**278**
11:30	1	241	38	2	5	3	1	0	0	0	0	0	0	**291**
11:45	0	244	33	3	3	1	0	0	0	0	0	0	0	**284**
12:00 PM	0	240	32	5	4	0	0	0	0	0	0	0	0	**281**
12:15	0	258	39	5	5	0	0	0	0	0	0	0	0	**307**
12:30	0	260	37	5	6	1	0	0	0	0	0	0	0	**309**
12:45	0	243	45	4	5	0	0	0	0	0	0	0	0	**297**
13:00	0	291	47	4	6	0	0	0	0	0	0	0	0	**348**
13:15	1	230	29	4	3	0	0	0	1	0	0	0	0	**268**
13:30	0	301	43	2	5	2	0	0	0	0	0	0	0	**353**
13:45	0	270	36	4	7	0	0	0	0	0	0	0	0	**317**
14:00	0	278	37	4	3	0	1	0	1	0	0	0	0	**324**
14:15	0	298	56	7	9	0	0	0	1	0	0	0	0	**371**
14:30	0	345	58	3	4	1	0	1	1	0	0	0	0	**413**
14:45	1	367	49	4	8	1	0	0	0	0	0	0	0	**430**
15:00	1	385	49	4	4	0	0	0	0	0	0	0	0	**443**
15:15	0	346	45	5	4	2	0	0	0	0	0	0	0	**402**
15:30	0	346	47	4	6	1	0	0	0	0	0	0	0	**404**
15:45	0	368	61	4	8	0	0	0	0	0	0	0	0	**441**
16:00	0	372	50	6	7	1	0	0	1	0	0	0	0	**437**
16:15	0	353	44	3	4	0	0	0	0	0	0	0	0	**404**
16:30	0	365	48	1	5	0	0	0	0	0	0	0	0	**419**
16:45	0	358	55	3	13	1	0	0	0	0	0	0	0	**430**
17:00	1	362	56	3	4	0	0	0	0	0	0	0	0	**426**
17:15	2	365	52	2	4	2	1	1	0	0	0	0	0	**429**
17:30	0	377	38	4	2	0	0	0	0	0	0	0	0	**421**
17:45	1	335	49	4	7	1	0	0	1	0	0	0	0	**398**
18:00	0	334	50	3	4	0	0	0	0	0	0	0	0	**391**
18:15	0	328	49	4	3	0	0	0	0	0	0	0	0	**384**
18:30	0	284	39	4	3	0	0	0	0	0	0	0	0	**330**
18:45	0	257	30	2	3	0	0	0	0	0	0	0	0	**292**
19:00	1	271	37	2	4	0	1	0	0	0	0	0	0	**316**
19:15	0	276	27	2	0	0	0	0	0	0	0	0	0	**305**
19:30	0	260	30	3	9	0	0	0	0	0	0	0	0	**302**
19:45	0	253	37	3	1	0	0	0	0	0	0	0	0	**294**
20:00	0	206	25	2	4	0	1	0	1	0	0	0	0	**239**
20:15	0	205	25	3	3	0	0	0	0	0	0	0	0	**236**
20:30	0	202	23	3	4	0	0	0	0	0	0	0	0	**232**
20:45	0	186	22	1	1	0	0	0	0	0	0	0	0	**210**
21:00	1	191	23	2	3	0	0	0	0	0	0	0	0	**220**
21:15	0	177	14	2	2	1	0	0	0	0	0	0	0	**196**
21:30	0	157	20	0	2	0	0	0	0	0	0	0	0	**179**
21:45	0	168	15	2	3	0	0	0	0	0	0	0	0	**188**
22:00	0	140	12	0	2	0	0	0	0	0	0	0	0	**154**
22:15	0	110	9	1	0	0	0	0	0	0	0	0	0	**120**
22:30	0	95	18	0	2	0	0	0	0	0	0	0	0	**115**
22:45	0	86	6	1	0	0	0	0	0	0	0	0	0	**93**
23:00	0	78	5	0	0	0	0	0	1	0	0	0	0	**84**
23:15	0	84	8	1	1	0	0	0	0	0	0	0	0	**94**
23:30	0	78	5	1	0	0	0	0	0	0	0	0	0	**84**
23:45	0	66	8	0	2	0	0	0	0	0	0	0	0	**76**
Totals	14	19270	2698	232	326	37	8	5	17					22607
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	07:15	07:30	07:30	07:30	07:30	06:45	07:15	04:00	08:15					07:30
Volume	2	1463	237	20	32	6	3	1	4					1765
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:45	14:15	12:00	16:00	14:30	13:15	13:45	13:45					16:45
Volume	4	1462	212	19	29	4	1	1	3					1706

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	2979	⟷	13%	2480	⟷	11%	3364	⟷	15%	13784	⟷	61%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	127	11	0	0	0	0	0	0	0	0	0	0	138
01:00	0	79	11	0	0	1	0	0	0	0	0	0	0	91
02:00	0	59	8	0	0	0	0	0	0	0	0	0	0	67
03:00	0	57	5	0	0	0	0	0	1	0	0	0	0	63
04:00	0	79	11	2	1	0	0	0	0	0	0	0	0	93
05:00	0	128	25	2	0	0	0	0	0	0	0	0	0	155
06:00	1	264	43	6	1	2	0	0	0	0	0	0	0	317
07:00	0	559	75	6	6	2	0	0	0	0	0	0	0	648
08:00	0	500	73	10	6	0	0	0	1	0	0	0	0	590
09:00	0	387	59	8	8	1	0	1	0	0	0	0	0	464
10:00	0	424	50	6	10	1	0	0	1	0	0	0	0	492
11:00	1	480	67	7	9	0	0	0	0	0	0	0	0	564
12:00 PM	0	526	67	7	4	0	0	0	0	0	0	0	0	604
13:00	0	558	75	6	7	1	0	0	0	0	0	0	0	647
14:00	1	690	103	9	8	1	0	1	0	0	0	0	0	813
15:00	0	819	112	8	8	2	0	0	0	0	0	0	0	949
16:00	0	893	116	6	12	1	0	0	0	0	0	0	0	1028
17:00	1	881	120	7	5	0	0	0	1	0	0	0	0	1015
18:00	0	705	88	7	7	0	0	0	0	0	0	0	0	807
19:00	1	573	65	5	10	0	0	0	0	0	0	0	0	654
20:00	0	450	50	5	7	0	0	0	0	0	0	0	0	512
21:00	1	418	40	3	3	0	0	0	0	0	0	0	0	465
22:00	0	254	24	1	1	0	0	0	0	0	0	0	0	280
23:00	0	182	14	1	2	0	0	0	0	0	0	0	0	199
Totals	6	10092	1312	112	115	12		2	4					11655
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:00	07:00	08:00	10:00	06:00		09:00	03:00					07:00
Volume	1	559	75	10	10	2		1	1					648
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:00	17:00	14:00	16:00	15:00		14:00	17:00					16:00
Volume	1	893	120	9	12	2		1	1					1028

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1238	⟷	11%	1251	⟷	11%	2043	⟷	18%	7123	⟷	61%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	83	12	0	0	0	0	0	0	0	0	0	0	95
01:00	0	47	7	0	0	0	0	0	0	0	0	0	0	54
02:00	0	60	6	0	1	0	0	0	0	0	0	0	0	67
03:00	0	82	9	0	0	0	0	0	0	0	0	0	0	91
04:00	0	165	33	1	4	0	0	1	0	0	0	0	0	204
05:00	0	335	50	6	4	1	0	0	0	0	0	0	0	396
06:00	0	434	64	7	12	2	0	0	1	0	0	0	0	520
07:00	0	782	125	9	22	4	2	1	0	0	0	0	0	945
08:00	2	650	110	9	19	3	1	0	2	0	0	0	0	796
09:00	0	406	63	6	15	0	0	0	2	0	0	0	0	492
10:00	0	426	72	7	10	1	0	0	1	0	0	0	0	517
11:00	1	452	70	4	9	5	1	0	0	0	0	0	0	542
12:00 PM	0	475	86	12	16	1	0	0	0	0	0	0	0	590
13:00	1	534	80	8	14	1	0	0	1	0	0	0	0	639
14:00	0	598	97	9	16	1	1	0	3	0	0	0	0	725
15:00	1	626	90	9	14	1	0	0	0	0	0	0	0	741
16:00	0	555	81	7	17	1	0	0	1	0	0	0	0	662
17:00	3	558	75	6	12	3	1	1	0	0	0	0	0	659
18:00	0	498	80	6	6	0	0	0	0	0	0	0	0	590
19:00	0	487	66	5	4	0	1	0	0	0	0	0	0	563
20:00	0	349	45	4	5	0	1	0	1	0	0	0	0	405
21:00	0	275	32	3	7	1	0	0	0	0	0	0	0	318
22:00	0	177	21	1	3	0	0	0	0	0	0	0	0	202
23:00	0	124	12	1	1	0	0	0	1	0	0	0	0	139
Totals	8	9178	1386	120	211	25	8	3	13					10952
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	08:00	07:00	07:00	07:00	07:00	11:00	07:00	04:00	08:00					07:00
Volume	2	782	125	9	22	5	2	1	2					945
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	15:00	14:00	12:00	16:00	17:00	14:00	17:00	14:00					15:00
Volume	3	626	97	12	17	3	1	1	3					741

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1741	⟷	16%	1229	⟷	11%	1321	⟷	12%	6661	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	210	23	0	0	0	0	0	0	0	0	0	0	**233**
01:00	0	126	18	0	0	1	0	0	0	0	0	0	0	**145**
02:00	0	119	14	0	1	0	0	0	0	0	0	0	0	**134**
03:00	0	139	14	0	0	0	0	0	1	0	0	0	0	**154**
04:00	0	244	44	3	5	0	0	1	0	0	0	0	0	**297**
05:00	0	463	75	8	4	1	0	0	0	0	0	0	0	**551**
06:00	1	698	107	13	13	4	0	0	1	0	0	0	0	**837**
07:00	0	1341	200	15	28	6	2	1	0	0	0	0	0	**1593**
08:00	2	1150	183	19	25	3	1	0	3	0	0	0	0	**1386**
09:00	0	793	122	14	23	1	0	1	2	0	0	0	0	**956**
10:00	0	850	122	13	20	2	0	0	2	0	0	0	0	**1009**
11:00	2	932	137	11	18	5	1	0	0	0	0	0	0	**1106**
12:00 PM	0	1001	153	19	20	1	0	0	0	0	0	0	0	**1194**
13:00	1	1092	155	14	21	2	0	0	1	0	0	0	0	**1286**
14:00	1	1288	200	18	24	2	1	1	3	0	0	0	0	**1538**
15:00	1	1445	202	17	22	3	0	0	0	0	0	0	0	**1690**
16:00	0	1448	197	13	29	2	0	0	1	0	0	0	0	**1690**
17:00	4	1439	195	13	17	3	1	1	1	0	0	0	0	**1674**
18:00	0	1203	168	13	13	0	0	0	0	0	0	0	0	**1397**
19:00	1	1060	131	10	14	0	1	0	0	0	0	0	0	**1217**
20:00	0	799	95	9	12	0	1	0	1	0	0	0	0	**917**
21:00	1	693	72	6	10	1	0	0	0	0	0	0	0	**783**
22:00	0	431	45	2	4	0	0	0	0	0	0	0	0	**482**
23:00	0	306	26	2	3	0	0	0	1	0	0	0	0	**338**
Totals	**14**	**19270**	**2698**	**232**	**326**	**37**	**8**	**5**	**17**					**22607**
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	08:00	07:00	07:00	08:00	07:00	07:00	07:00	04:00	08:00					07:00
Volume	2	1341	200	19	28	6	2	1	3					1593
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:00	15:00	12:00	16:00	15:00	14:00	14:00	14:00					15:00
Volume	4	1448	202	19	29	3	1	1	3					1690

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	2979	⟷	13%	2480	⟷	11%	3364	⟷	15%	13784	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOT
00:00	38		31		0	0	69		12:00	133		148		0	0	281
00:15	39		25		0	0	64		12:15	162		145		0	0	307
00:30	31		21		0	0	52		12:30	163		146		0	0	309
00:45	30	138	18	95	0	0	48	233	12:45	146	604	151	590	0	0	297
01:00	20		11		0	0	31		13:00	181		167		0	0	348
01:15	31		12		0	0	43		13:15	125		143		0	0	268
01:30	19		21		0	0	40		13:30	181		172		0	0	353
01:45	21	91	10	54	0	0	31	145	13:45	160	647	157	639	0	0	317
02:00	19		18		0	0	37		14:00	179		145		0	0	324
02:15	20		13		0	0	33		14:15	189		182		0	0	371
02:30	13		22		0	0	35		14:30	221		192		0	0	413
02:45	15	67	14	67	0	0	29	134	14:45	224	813	206	725	0	0	430
03:00	21		23		0	0	44		15:00	256		187		0	0	443
03:15	14		23		0	0	37		15:15	234		168		0	0	402
03:30	12		24		0	0	36		15:30	204		200		0	0	404
03:45	16	63	21	91	0	0	37	154	15:45	255	949	186	741	0	0	441
04:00	14		23		0	0	37		16:00	263		174		0	0	437
04:15	23		44		0	0	67		16:15	240		164		0	0	404
04:30	23		56		0	0	79		16:30	266		153		0	0	419
04:45	33	93	81	204	0	0	114	297	16:45	259	1028	171	662	0	0	430
05:00	41		51		0	0	92		17:00	265		161		0	0	426
05:15	37		93		0	0	130		17:15	260		169		0	0	429
05:30	31		124		0	0	155		17:30	261		160		0	0	421
05:45	46	155	128	396	0	0	174	551	17:45	229	1015	169	659	0	0	398
06:00	60		95		0	0	155		18:00	243		148		0	0	391
06:15	71		114		0	0	185		18:15	213		171		0	0	384
06:30	78		145		0	0	223		18:30	188		142		0	0	330
06:45	108	317	166	520	0	0	274	837	18:45	163	807	129	590	0	0	292
07:00	119		167		0	0	286		19:00	159		157		0	0	316
07:15	132		210		0	0	342		19:15	156		149		0	0	305
07:30	182		270		0	0	452		19:30	161		141		0	0	302
07:45	215	648	298	945	0	0	513	1593	19:45	178	654	116	563	0	0	294
08:00	173		254		0	0	427		20:00	127		112		0	0	239
08:15	148		225		0	0	373		20:15	128		108		0	0	236
08:30	132		167		0	0	299		20:30	131		101		0	0	232
08:45	137	590	150	796	0	0	287	1386	20:45	126	512	84	405	0	0	210
09:00	112		141		0	0	253		21:00	137		83		0	0	220
09:15	116		112		0	0	228		21:15	114		82		0	0	196
09:30	110		120		0	0	230		21:30	102		77		0	0	179
09:45	126	464	119	492	0	0	245	956	21:45	112	465	76	318	0	0	188
10:00	121		117		0	0	238		22:00	88		66		0	0	154
10:15	106		134		0	0	240		22:15	78		42		0	0	120
10:30	134		154		0	0	288		22:30	60		55		0	0	115
10:45	131	492	112	517	0	0	243	1009	22:45	54	280	39	202	0	0	93
11:00	135		118		0	0	253		23:00	47		37		0	0	84
11:15	136		142		0	0	278		23:15	54		40		0	0	94
11:30	148		143		0	0	291		23:30	51		33		0	0	84
11:45	145	564	139	542	0	0	284	1106	23:45	47	199	29	139	0	0	76
TOTALS		3682		4719				**8401**	**TOTALS**		7973		6233			
SPLIT %		43.8%		56.2%				**37.2%**	**SPLIT %**		56.1%		43.9%			

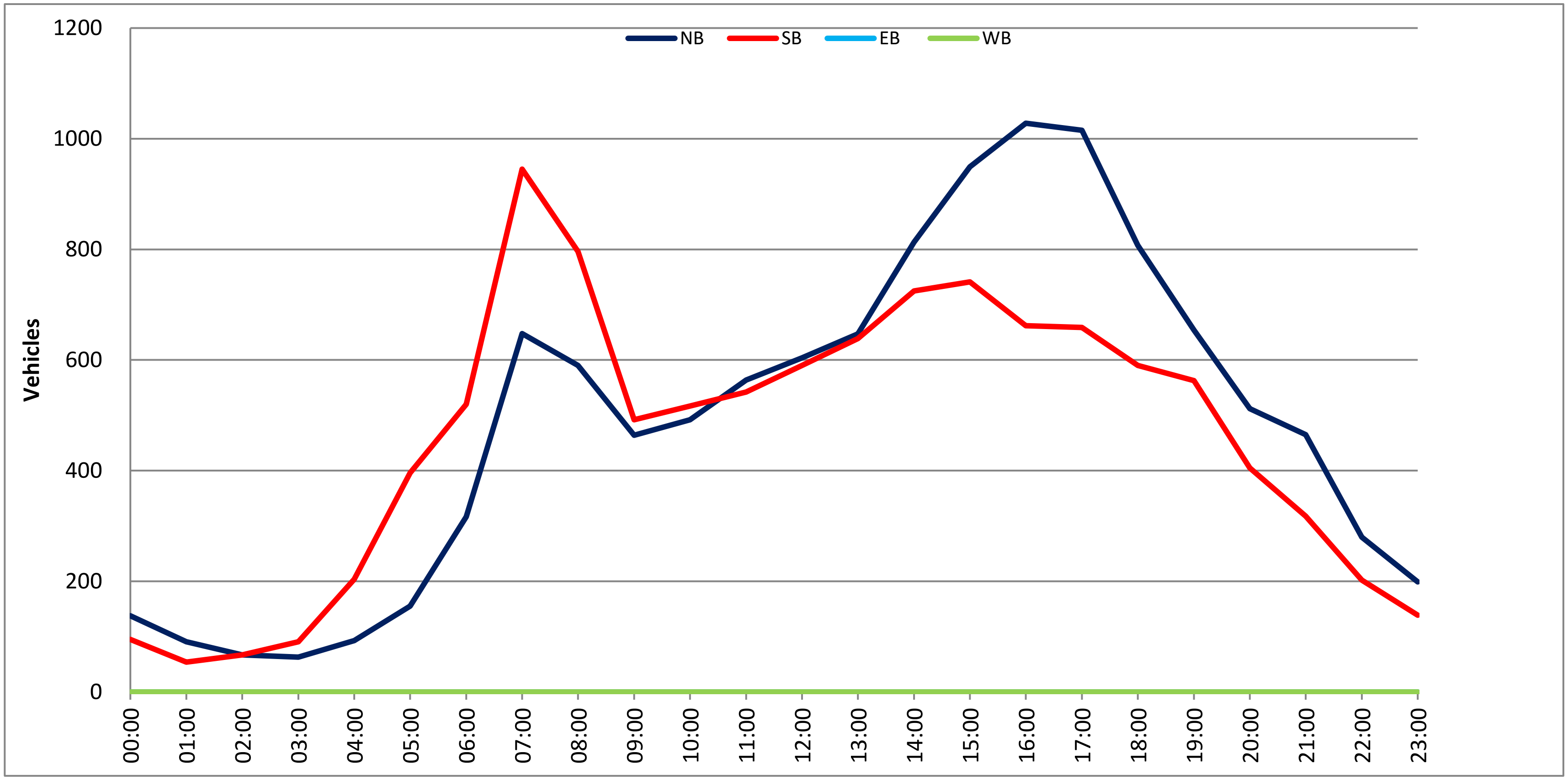
DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

AM Peak Hour	07:30	07:30			**07:30**	**PM Peak Hour**	16:30	14:15		
AM Pk Volume	718	1047			**1765**	**PM Pk Volume**	1050	767		
Pk Hr Factor	0.835	0.878			**0.860**	**Pk Hr Factor**	0.987	0.931		
7 - 9 Volume	1238	1741	0	0	**2979**	**4 - 6 Volume**	2043	1321	0	0
7 - 9 Peak Hour	07:30	07:30			**07:30**	**4 - 6 Peak Hour**	16:30	16:00		
7 - 9 Pk Volume	718	1047	0	0	**1765**	**4 - 6 Pk Volume**	1050	662	0	0
Pk Hr Factor	0.835	0.878	0.000	0.000	**0.860**	**Pk Hr Factor**	0.987	0.951	0.000	0.000

Prepared by NDS/ATD

Project #: CA19_5294_002 **City:** Compton

Location: N Wilmington Ave Bet. W School St & W **Date:** 5/21/2019



Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: N Wilmington Ave Bet. W School St & W Magnolia St
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Eastleg		Westleg			Eastleg		Westleg		
	NB	SB	NB	SB		NB	SB	NB	SB	
7:00 AM	1	2	1	6	10	0	0	0	1	1
7:15 AM	0	1	0	2	3	0	0	0	1	1
7:30 AM	4	0	0	0	4	1	0	0	0	1
7:45 AM	3	0	3	2	8	0	0	0	0	0
8:00 AM	1	0	1	0	2	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	2	0	0	2	1	0	0	0	1
8:45 AM	0	0	1	0	1	0	1	0	0	1
9:00 AM	0	2	1	0	3	1	0	0	0	1
9:15 AM	0	1	0	1	2	0	0	0	0	0
9:30 AM	0	0	0	0	0	1	0	0	0	1
9:45 AM	1	0	0	0	1	0	0	0	1	1
Totals	***10***	***8***	***7***	***11***	***36***	***5***	***2***	***0***	***4***	***11***
3:00 PM	0	2	3	1	6	0	1	0	0	1
3:15 PM	0	0	0	3	3	0	0	1	2	3
3:30 PM	0	2	3	2	7	2	0	0	0	2
3:45 PM	0	0	1	1	2	2	0	0	1	3
4:00 PM	1	2	5	1	9	0	0	0	0	0
4:15 PM	1	0	0	1	2	0	0	0	0	0
4:30 PM	0	0	1	0	1	2	1	0	0	3
4:45 PM	1	1	1	2	5	0	0	1	0	1
5:00 PM	4	2	5	1	12	0	1	1	1	3
5:15 PM	1	1	1	1	4	1	0	0	0	1
5:30 PM	1	0	0	0	1	0	0	1	1	2
5:45 PM	1	1	0	0	2	0	0	2	2	4
Totals	***10***	***11***	***20***	***13***	***54***	***7***	***3***	***6***	***7***	***23***
Grand Total	***20***	***19***	***27***	***24***	***90***	***12***	***5***	***6***	***11***	***34***