APPENDIX A

Air Quality CalEEMod Output Sheets

Bubbling Wells Modernization Construction - Phase 1 Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

3.3. Grading (2026) - Unmitigated

3.5. Building Construction (2026) - Unmitigated

3.7. Building Construction (2027) - Unmitigated

3.9. Paving (2027) - Unmitigated

3.11. Paving (2028) - Unmitigated

3.13. Architectural Coating (2028) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Construction - Phase 1
Construction Start Date	8/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	61.2	1000sqft	18.0	68,822	100,000	100,000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.90	6.73	21.3	26.7	0.04	0.85	0.80	1.65	0.79	0.16	0.94	—	4,876	4,876	0.17	0.12	2.69	4,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.87	6.72	39.7	43.6	0.10	1.54	3.58	5.12	1.42	1.24	2.66	—	11,595	11,595	0.39	0.40	0.17	11,725
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.11	2.05	7.77	11.1	0.02	0.31	0.55	0.85	0.28	0.17	0.45	—	2,027	2,027	0.07	0.07	0.46	2,041
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38	0.37	1.42	2.02	< 0.005	0.06	0.10	0.16	0.05	0.03	0.08	—	336	336	0.01	0.01	0.08	338
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	2.82	2.37	21.3	20.5	0.04	0.85	0.80	1.65	0.79	0.15	0.94	—	4,182	4,182	0.15	0.12	1.82	4,223
2027	2.34	1.97	16.9	26.7	0.04	0.64	0.67	1.31	0.59	0.16	0.75	—	4,876	4,876	0.17	0.10	2.69	4,913
2028	6.90	6.73	7.52	12.6	0.02	0.27	0.27	0.54	0.25	0.06	0.31	—	1,935	1,935	0.07	0.02	0.79	1,945
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	5.18	4.34	39.7	43.6	0.10	1.54	3.58	5.12	1.42	1.24	2.66	—	11,595	11,595	0.39	0.40	0.17	11,725
2027	1.37	1.14	9.90	14.4	0.03	0.34	0.47	0.82	0.31	0.12	0.43	—	3,091	3,091	0.11	0.08	0.05	3,117
2028	6.87	6.72	7.53	11.9	0.02	0.27	0.27	0.54	0.25	0.06	0.31	—	1,892	1,892	0.07	0.02	0.02	1,901
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.02	0.85	7.77	8.14	0.02	0.31	0.55	0.85	0.28	0.17	0.45	—	1,992	1,992	0.07	0.07	0.46	2,014
2027	0.99	0.84	7.29	11.1	0.02	0.28	0.27	0.55	0.26	0.07	0.32	—	2,027	2,027	0.07	0.04	0.46	2,041
2028	2.11	2.05	2.64	4.27	0.01	0.10	0.09	0.19	0.09	0.02	0.11	—	671	671	0.02	0.01	0.12	674
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.19	0.16	1.42	1.49	< 0.005	0.06	0.10	0.16	0.05	0.03	0.08	—	330	330	0.01	0.01	0.08	333
2027	0.18	0.15	1.33	2.02	< 0.005	0.05	0.05	0.10	0.05	0.01	0.06	—	336	336	0.01	0.01	0.08	338
2028	0.38	0.37	0.48	0.78	< 0.005	0.02	0.02	0.03	0.02	< 0.005	0.02	—	111	111	< 0.005	< 0.005	0.02	112

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	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.46	0.46	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.46	0.46	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.83	2.60	< 0.005	0.12	—	0.12	0.11	—	0.11	—	469	469	0.02	< 0.005	—	471

Demoliti	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.7	77.7	< 0.005	< 0.005	—	78.0
Demolition	—	—	—	—	—	—	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	0.08	0.07	0.07	1.33	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	218	218	0.01	0.01	0.70	221
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	0.02	0.01	0.60	0.14	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	537	537	0.01	0.08	1.12	564
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.08	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	186	186	< 0.005	0.01	0.02	188
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	0.02	0.01	0.64	0.14	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	538	538	0.01	0.08	0.03	563
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.2	27.2	< 0.005	< 0.005	0.04	27.5
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	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.6	73.6	< 0.005	0.01	0.07	77.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.50	4.50	< 0.005	< 0.005	0.01	4.56

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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.8

3.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—
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	0.45	0.38	3.36	3.40	0.01	0.14	—	0.14	0.13	—	0.13	—	814	814	0.03	0.01	—	816
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.12	0.12	—	—	—	—	—	—	—
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	0.08	0.07	0.61	0.62	< 0.005	0.03	—	0.03	0.02	—	0.02	—	135	135	0.01	< 0.005	—	135
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.00	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.02	251
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	0.05	0.03	1.96	0.43	0.01	0.03	0.45	0.48	0.03	0.11	0.15	—	1,643	1,643	0.02	0.26	0.09	1,720
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.6	32.6	< 0.005	< 0.005	0.05	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.24	0.05	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	202	202	< 0.005	0.03	0.18	212
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.40	5.40	< 0.005	< 0.005	0.01	5.47
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	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.5	33.5	< 0.005	0.01	0.03	35.1

3.5. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.18	1.55	< 0.005	0.05	—	0.05	0.04	—	0.04	—	286	286	0.01	< 0.005	—	287
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	0.21	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.4	47.4	< 0.005	< 0.005	—	47.5
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	0.15	1.45	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	358	358	0.01	0.01	0.03	362
Vendor	0.02	0.01	0.39	0.16	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	351	351	< 0.005	0.05	0.02	365
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.01	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.07	46.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.9	41.9	< 0.005	0.01	0.05	43.6
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.56	7.56	< 0.005	< 0.005	0.01	7.65
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.93	6.93	< 0.005	< 0.005	0.01	7.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (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	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.44	0.37	3.34	4.61	0.01	0.12	—	0.12	0.11	—	0.11	—	854	854	0.03	0.01	—	857
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-Roa d Equipm ent	0.08	0.07	0.61	0.84	< 0.005	0.02	—	0.02	0.02	—	0.02	—	141	141	0.01	< 0.005	—	142
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	0.14	0.12	0.13	2.38	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	412	412	< 0.005	0.01	1.21	417
Vendor	0.02	0.01	0.34	0.15	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	343	343	< 0.005	0.05	0.85	357
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.12	0.10	0.14	1.35	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	351	351	0.01	0.01	0.03	355
Vendor	0.02	0.01	0.37	0.15	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	343	343	< 0.005	0.05	0.02	357
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.04	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.19	135
Vendor	0.01	< 0.005	0.13	0.05	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.13	127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.1	22.1	< 0.005	< 0.005	0.03	22.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.2	20.2	< 0.005	< 0.005	0.02	21.0
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

3.9. 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	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.47	0.40	3.74	5.36	0.01	0.16	—	0.16	0.15	—	0.15	—	813	813	0.03	0.01	—	816
Paving	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	0.09	0.07	0.68	0.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	135	135	0.01	< 0.005	—	135
Paving	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	0.07	0.06	0.06	1.24	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	214	214	< 0.005	0.01	0.63	217
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.70	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	182	182	< 0.005	0.01	0.02	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.15	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	17.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2028) - 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	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.29	0.25	2.37	3.55	< 0.005	0.09	—	0.09	0.08	—	0.08	—	541	541	0.02	< 0.005	—	543
Paving	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	0.05	0.04	0.43	0.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.6	89.6	< 0.005	< 0.005	—	89.9
Paving	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	0.07	0.06	0.06	1.16	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	210	210	< 0.005	0.01	0.57	212
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.65	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.4	68.4	< 0.005	< 0.005	0.09	69.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.5
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	0.00	0.00	0.00	0.00	0.00	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. Architectural Coating (2028) - 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	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.85	5.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	5.85	5.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.03	0.24	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.9	39.9	< 0.005	< 0.005	—	40.0
Architectural Coatings	1.75	1.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.60	6.60	< 0.005	< 0.005	—	6.62
Architectural Coatings	0.32	0.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.45	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.8	80.8	< 0.005	< 0.005	0.22	81.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.9	68.9	< 0.005	< 0.005	0.01	69.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.0	22.0	< 0.005	< 0.005	0.03	22.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.68
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	8/1/2026	10/10/2026	5.00	50.0	—
Grading	Grading	10/11/2026	12/11/2026	5.00	45.0	—
Building Construction	Building Construction	11/1/2026	7/1/2027	5.00	174	—

Paving	Paving	4/1/2027	7/1/2028	5.00	327	—
Architectural Coating	Architectural Coating	2/1/2028	7/1/2028	5.00	109	—

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
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	8.06	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	24.6	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	28.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	11.3	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.78	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	103,233	34,411	—

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 (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	35,000	—
Grading	8,864	—	135	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

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
2028	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Project construction take place in two (2) phases, Phase 1 and Phase 2. Phase 1 includes the construction of 61,213 square feet of new buildings.
Construction: Construction Phases	Construction schedule based on timeline provided by district. Phase would one start in August 2026 and complete in July 2028.

Bubbling Wells Modernization Construction - Phase 2A Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2028) - Unmitigated

3.3. Grading (2028) - Unmitigated

3.5. Building Construction (Phase 2A) (2028) - Unmitigated

3.7. Building Construction (Phase 2A) (2029) - Unmitigated

3.9. Paving (2028) - Unmitigated

3.11. Architectural Coating (Phase 2A) (2029) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Construction - Phase 2A
Construction Start Date	6/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	16.2	1000sqft	18.0	16,223	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.74	3.98	33.4	42.2	0.08	1.29	2.77	4.05	1.18	1.04	2.22	—	9,449	9,449	0.37	0.13	1.74	9,489
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.29	7.27	33.5	41.3	0.08	1.29	2.77	4.05	1.18	1.04	2.22	—	9,394	9,394	0.37	0.10	0.03	9,432
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.41	1.19	10.3	13.0	0.02	0.39	0.48	0.87	0.35	0.16	0.51	—	2,665	2,665	0.10	0.04	0.23	2,678
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	0.22	1.89	2.38	< 0.005	0.07	0.09	0.16	0.06	0.03	0.09	—	441	441	0.02	0.01	0.04	443
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	4.74	3.98	33.4	42.2	0.08	1.29	2.77	4.05	1.18	1.04	2.22	—	9,449	9,449	0.37	0.13	1.74	9,489
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	4.71	3.96	33.5	41.3	0.08	1.29	2.77	4.05	1.18	1.04	2.22	—	9,394	9,394	0.37	0.10	0.03	9,432
2029	7.29	7.27	8.69	13.2	0.02	0.28	0.11	0.39	0.25	0.03	0.28	—	2,553	2,553	0.10	0.03	0.01	2,566
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.41	1.19	10.3	13.0	0.02	0.39	0.48	0.87	0.35	0.16	0.51	—	2,665	2,665	0.10	0.04	0.23	2,678
2029	0.49	0.48	0.59	0.90	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	169	169	0.01	< 0.005	0.01	170
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.26	0.22	1.89	2.38	< 0.005	0.07	0.09	0.16	0.06	0.03	0.09	—	441	441	0.02	0.01	0.04	443
2029	0.09	0.09	0.11	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	28.0	28.0	< 0.005	< 0.005	< 0.005	28.1

3. Construction Emissions Details

3.1. Demolition (2028) - 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	2.61	2.19	19.6	18.7	0.03	0.78	—	0.78	0.71	—	0.71	—	3,429	3,429	0.14	0.03	—	3,440
Demolition	—	—	—	—	—	—	0.35	0.35	—	0.05	0.05	—	—	—	—	—	—	—
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	0.37	0.31	2.74	2.61	< 0.005	0.11	—	0.11	0.10	—	0.10	—	479	479	0.02	< 0.005	—	481
Demolition	—	—	—	—	—	—	0.05	0.05	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.50	0.48	< 0.005	0.02	—	0.02	0.02	—	0.02	—	79.3	79.3	< 0.005	< 0.005	—	79.6
Demolition	—	—	—	—	—	—	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	0.07	0.06	0.06	1.16	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	210	210	< 0.005	0.01	0.57	212
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	0.43	0.10	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	387	387	< 0.005	0.06	0.73	406
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.7	26.7	< 0.005	< 0.005	0.03	27.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	54.1	54.1	< 0.005	0.01	0.04	56.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.42	4.42	< 0.005	< 0.005	0.01	4.47
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.96	8.96	< 0.005	< 0.005	0.01	9.40

3.3. Grading (2028) - 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	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—

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	3.43	2.88	24.3	27.2	0.06	0.99	—	0.99	0.91	—	0.91	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
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	0.41	0.35	2.93	3.28	0.01	0.12	—	0.12	0.11	—	0.11	—	795	795	0.03	0.01	—	798
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.54	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	132	132	0.01	< 0.005	—	132
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.54	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	280	280	< 0.005	0.01	0.76	283
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.09	0.87	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	238	238	< 0.005	0.01	0.02	241
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	0.04	31.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	0.01	5.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (Phase 2A) (2028) - 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	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.42	0.01	0.13	—	0.13	0.12	—	0.12	—	1,004	1,004	0.04	0.01	—	1,007
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	0.09	0.08	0.68	0.99	< 0.005	0.02	—	0.02	0.02	—	0.02	—	166	166	0.01	< 0.005	—	167
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	0.53	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.26	96.5
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	0.18	82.2
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.2	81.2	< 0.005	< 0.005	0.01	82.2
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	78.9	78.9	< 0.005	0.01	< 0.005	82.2
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	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	0.05	36.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.0	33.0	< 0.005	< 0.005	0.03	34.4
Hauling	0.00	0.00	0.00	0.00	0.00	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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	0.01	6.09
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.47	5.47	< 0.005	< 0.005	0.01	5.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (Phase 2A) (2029) - 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	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	150	150	0.01	< 0.005	—	151
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	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8	24.8	< 0.005	< 0.005	—	24.9
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	0.02	0.02	0.03	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.01	80.7
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.9	76.9	< 0.005	0.01	< 0.005	79.9
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.33	5.33	< 0.005	< 0.005	0.01	5.40
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.81	4.81	< 0.005	< 0.005	< 0.005	5.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.88	0.88	< 0.005	< 0.005	< 0.005	0.89
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.83
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.10	0.08	0.80	1.19	< 0.005	0.03	—	0.03	0.03	—	0.03	—	182	182	0.01	< 0.005	—	183
Paving	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	0.02	0.02	0.15	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3
Paving	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.06	0.65	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.03	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	3.86
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (Phase 2A) (2029) - 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 Equipm	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	7.16	7.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.68	7.68	< 0.005	< 0.005	—	7.71
Architectural Coatings	0.41	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.27	1.27	< 0.005	< 0.005	—	1.28
Architectural Coatings	0.08	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	< 0.005	16.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.98	0.98	< 0.005	< 0.005	< 0.005	0.99
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	0.00	0.00	0.00	0.00	0.00	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	—	0.16	0.16	< 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	0.00	0.00	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	6/1/2028	8/10/2028	5.00	51.0	—
Grading	Grading	8/11/2028	10/11/2028	5.00	44.0	—
Building Construction (Phase 2A)	Building Construction	6/1/2028	2/1/2029	5.00	176	—
Paving	Paving	10/12/2028	12/12/2028	5.00	44.0	—
Architectural Coating (Phase 2A)	Architectural Coating	2/2/2029	3/2/2029	5.00	21.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction (Phase 2A)	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction (Phase 2A)	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction (Phase 2A)	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction (Phase 2A)	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37

Building Construction (Phase 2A)	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating (Phase 2A)	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction (Phase 2A)	—	—	—	—
Building Construction (Phase 2A)	Worker	6.81	18.5	LDA,LDT1,LDT2
Building Construction (Phase 2A)	Vendor	2.66	10.2	HHDT,MHDT
Building Construction (Phase 2A)	Hauling	0.00	20.0	HHDT
Building Construction (Phase 2A)	Onsite truck	—	—	HHDT
Architectural Coating (Phase 2A)	—	—	—	—
Architectural Coating (Phase 2A)	Worker	1.36	18.5	LDA,LDT1,LDT2
Architectural Coating (Phase 2A)	Vendor	—	10.2	HHDT,MHDT
Architectural Coating (Phase 2A)	Hauling	0.00	20.0	HHDT
Architectural Coating (Phase 2A)	Onsite truck	—	—	HHDT
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	6.12	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating (Phase 2A)	0.00	0.00	24,335	8,112	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	27,046	—

Grading	—	—	132	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Phase 2 of the Project includes the demolition of 39,994 square feet of existing modular buildings and relocatables and modernization of 16,223 square feet of existing permanent and modular buildings.
Construction: Construction Phases	Construction schedule based on timeline provided by district with start date of June 2028 and completion in March 2029 for Phase 2A.

Bubbling Wells Modernization Construction - Phase 2B Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2029) - Unmitigated

3.3. Grading (2029) - Unmitigated

3.5. Paving (2029) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Construction - Phase 2B
Construction Start Date	3/1/2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	16.2	1000sqft	18.0	16,223	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.40	2.87	22.8	28.3	0.06	0.92	2.65	3.57	0.84	1.01	1.85	—	6,871	6,871	0.27	0.09	1.12	6,897
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.61	2.19	19.1	19.2	0.04	0.74	0.61	1.35	0.68	0.12	0.81	—	3,945	3,945	0.14	0.09	0.03	3,975
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.42	0.36	2.98	3.57	0.01	0.12	0.22	0.33	0.11	0.07	0.18	—	772	772	0.03	0.01	0.06	776
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.07	0.54	0.65	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	128	128	< 0.005	< 0.005	0.01	128
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	3.40	2.87	22.8	28.3	0.06	0.92	2.65	3.57	0.84	1.01	1.85	—	6,871	6,871	0.27	0.09	1.12	6,897
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	2.61	2.19	19.1	19.2	0.04	0.74	0.61	1.35	0.68	0.12	0.81	—	3,945	3,945	0.14	0.09	0.03	3,975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.42	0.36	2.98	3.57	0.01	0.12	0.22	0.33	0.11	0.07	0.18	—	772	772	0.03	0.01	0.06	776
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.08	0.07	0.54	0.65	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	128	128	< 0.005	< 0.005	0.01	128

3. Construction Emissions Details

3.1. Demolition (2029) - 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	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.31	0.31	—	0.05	0.05	—	—	—	—	—	—	—
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	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.31	0.31	—	0.05	0.05	—	—	—	—	—	—	—
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	0.15	0.13	1.12	1.11	< 0.005	0.04	—	0.04	0.04	—	0.04	—	207	207	0.01	< 0.005	—	207
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 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	0.03	0.02	0.20	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.2	34.2	< 0.005	< 0.005	—	34.3
Demolition	—	—	—	—	—	—	< 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	0.06	0.06	0.05	1.08	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.51	209
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	0.38	0.09	< 0.005	0.01	0.10	0.11	0.01	0.03	0.04	—	342	342	< 0.005	0.05	0.61	359
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.61	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	176	176	< 0.005	0.01	0.01	178
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	0.41	0.10	< 0.005	0.01	0.10	0.11	0.01	0.03	0.04	—	343	343	< 0.005	0.05	0.02	358
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	—	11.3	11.3	< 0.005	< 0.005	0.01	11.4
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	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.6	20.6	< 0.005	< 0.005	0.02	21.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
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	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.58

3.3. Grading (2029) - 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	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	2.39	2.39	—	0.95	0.95	—	—	—	—	—	—	—
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	0.21	0.18	1.43	1.69	< 0.005	0.06	—	0.06	0.05	—	0.05	—	416	416	0.02	< 0.005	—	417
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.26	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.8	68.8	< 0.005	< 0.005	—	69.1
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.43	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	275	275	< 0.005	0.01	0.68	278
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.02	16.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.61	2.61	< 0.005	< 0.005	< 0.005	2.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Paving (2029) - 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	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.05	0.04	0.39	0.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	91.1	91.1	< 0.005	< 0.005	—	91.4
Paving	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	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.1
Paving	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	0.06	0.06	0.05	1.08	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.51	209
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	—	11.3	11.3	< 0.005	< 0.005	0.01	11.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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	3/1/2029	4/1/2029	5.00	22.0	—
Grading	Grading	4/2/2029	5/2/2029	5.00	23.0	—
Paving	Paving	5/3/2029	6/3/2029	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	5.55	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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 (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	10,560	—
Grading	—	—	69.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Phase 2 of the Project includes the demolition of 39,994 square feet of existing modular buildings and relocatables and modernization of 16,223 square feet of existing permanent and modular buildings.
Construction: Construction Phases	Construction schedule based on timeline provided by district with start date of March 2029 and completion in June 2029 for Phase 2B.

Bubbling Wells Modernization Construction - Phase 2C Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

3. Construction Emissions Details

3.1. Demolition (2029) - Unmitigated

3.3. Grading (2029) - Unmitigated

3.5. Paving (2029) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Construction - Phase 2C
Construction Start Date	6/1/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	16.2	1000sqft	18.0	16,223	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.46	2.91	24.7	28.8	0.07	0.95	3.15	4.10	0.88	1.15	2.03	—	8,549	8,549	0.29	0.32	3.66	8,656
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28	0.24	2.06	2.40	< 0.005	0.08	0.15	0.23	0.07	0.05	0.13	—	574	574	0.02	0.02	0.09	579
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.04	0.38	0.44	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	95.0	95.0	< 0.005	< 0.005	0.01	95.9
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	3.46	2.91	24.7	28.8	0.07	0.95	3.15	4.10	0.88	1.15	2.03	—	8,549	8,549	0.29	0.32	3.66	8,656
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.28	0.24	2.06	2.40	< 0.005	0.08	0.15	0.23	0.07	0.05	0.13	—	574	574	0.02	0.02	0.09	579
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.05	0.04	0.38	0.44	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	95.0	95.0	< 0.005	< 0.005	0.01	95.9

3. Construction Emissions Details

3.1. Demolition (2029) - 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	2.55	2.14	18.6	18.5	0.03	0.74	—	0.74	0.68	—	0.68	—	3,427	3,427	0.14	0.03	—	3,439
Demolition	—	—	—	—	—	—	0.11	0.11	—	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	0.10	0.09	0.76	0.76	< 0.005	0.03	—	0.03	0.03	—	0.03	—	141	141	0.01	< 0.005	—	141
Demolition	—	—	—	—	—	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.3	23.3	< 0.005	< 0.005	—	23.4
Demolition	—	—	—	—	—	—	< 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	0.06	0.06	0.05	1.08	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.51	209
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	0.14	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	123	123	< 0.005	0.02	0.22	129
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	—	7.71	7.71	< 0.005	< 0.005	0.01	7.80
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.07	5.07	< 0.005	< 0.005	< 0.005	5.31
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.29
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	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88

3.3. Grading (2029) - 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	3.32	2.79	22.7	26.9	0.06	0.92	—	0.92	0.84	—	0.84	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	2.40	2.40	—	0.95	0.95	—	—	—	—	—	—	—
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	0.14	0.11	0.93	1.10	< 0.005	0.04	—	0.04	0.03	—	0.03	—	271	271	0.01	< 0.005	—	272
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.9	44.9	< 0.005	< 0.005	—	45.0
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	1.43	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	275	275	< 0.005	0.01	0.68	278
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	0.06	0.04	1.88	0.46	0.01	0.04	0.49	0.53	0.04	0.14	0.17	—	1,678	1,678	0.02	0.26	2.98	1,759
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.4
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.0	69.0	< 0.005	0.01	0.05	72.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.72
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	12.0

3.5. Paving (2029) - 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	0.80	0.67	6.46	9.92	0.01	0.24	—	0.24	0.22	—	0.22	—	1,511	1,511	0.06	0.01	—	1,516
Paving	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	0.03	0.27	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.1	62.1	< 0.005	< 0.005	—	62.3
Paving	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	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	—	10.3
Paving	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	0.06	0.06	0.05	1.08	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.51	209
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	—	7.71	7.71	< 0.005	< 0.005	0.01	7.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	6/9/2029	6/30/2029	5.00	15.0	—
Grading	Grading	7/1/2029	7/22/2029	5.00	15.0	—
Paving	Paving	7/23/2029	8/10/2029	5.00	15.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	2.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	27.2	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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 (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,560	—
Grading	—	3,260	45.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Elementary School	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Phase 2 of the Project includes the demolition of 39,994 square feet of existing modular buildings and relocatables and modernization of 16,223 square feet of existing permanent and modular buildings.
Construction: Construction Phases	Construction schedule based on timeline provided by district with start date of June 2029 and completion in August 2029 for Phase 2C.

Bubbling Wells Modernization Operations Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Operations
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	84.4	1000sqft	18.0	84,440	100,000	100,000	—	—
Parking Lot	76.0	Space	0.68	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.61	8.01	6.10	62.9	0.16	0.15	13.8	13.9	0.14	3.49	3.63	63.9	17,345	17,408	7.01	0.68	32.5	17,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.02	6.48	6.54	40.2	0.14	0.14	13.8	13.9	0.13	3.49	3.62	63.9	15,581	15,645	7.03	0.70	1.16	16,031
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.11	5.69	4.67	34.8	0.11	0.11	9.76	9.87	0.11	2.48	2.58	63.9	12,064	12,128	6.87	0.50	10.2	12,458
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.11	1.04	0.85	6.35	0.02	0.02	1.78	1.80	0.02	0.45	0.47	10.6	1,997	2,008	1.14	0.08	1.69	2,063
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.87	5.35	5.52	58.8	0.15	0.10	13.8	13.9	0.09	3.49	3.58	—	15,806	15,806	0.50	0.66	32.1	16,049
Area	2.68	2.63	0.03	3.67	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.2
Energy	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,487	1,487	0.11	0.01	—	1,492
Water	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Waste	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	8.61	8.01	6.10	62.9	0.16	0.15	13.8	13.9	0.14	3.49	3.63	63.9	17,345	17,408	7.01	0.68	32.5	17,820
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.93	4.42	6.00	39.7	0.14	0.10	13.8	13.9	0.09	3.49	3.58	—	14,058	14,058	0.52	0.68	0.83	14,275
Area	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,487	1,487	0.11	0.01	—	1,492
Water	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Waste	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	7.02	6.48	6.54	40.2	0.14	0.14	13.8	13.9	0.13	3.49	3.62	63.9	15,581	15,645	7.03	0.70	1.16	16,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.70	3.33	4.11	32.5	0.10	0.07	9.76	9.83	0.07	2.48	2.54	—	10,533	10,533	0.36	0.48	9.91	10,695

Area	2.35	2.32	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.45	7.45	< 0.005	< 0.005	—	7.47
Energy	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,487	1,487	0.11	0.01	—	1,492
Water	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Waste	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	6.11	5.69	4.67	34.8	0.11	0.11	9.76	9.87	0.11	2.48	2.58	63.9	12,064	12,128	6.87	0.50	10.2	12,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.68	0.61	0.75	5.93	0.02	0.01	1.78	1.79	0.01	0.45	0.46	—	1,744	1,744	0.06	0.08	1.64	1,771
Area	0.43	0.42	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.23	1.23	< 0.005	< 0.005	—	1.24
Energy	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	246	246	0.02	< 0.005	—	247
Water	—	—	—	—	—	—	—	—	—	—	—	0.78	6.04	6.81	0.08	< 0.005	—	9.39
Waste	—	—	—	—	—	—	—	—	—	—	—	9.79	0.00	9.79	0.98	0.00	—	34.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	1.11	1.04	0.85	6.35	0.02	0.02	1.78	1.80	0.02	0.45	0.47	10.6	1,997	2,008	1.14	0.08	1.69	2,063

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	5.87	5.35	5.52	58.8	0.15	0.10	13.8	13.9	0.09	3.49	3.58	—	15,806	15,806	0.50	0.66	32.1	16,049
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	5.87	5.35	5.52	58.8	0.15	0.10	13.8	13.9	0.09	3.49	3.58	—	15,806	15,806	0.50	0.66	32.1	16,049
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.93	4.42	6.00	39.7	0.14	0.10	13.8	13.9	0.09	3.49	3.58	—	14,058	14,058	0.52	0.68	0.83	14,275
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.93	4.42	6.00	39.7	0.14	0.10	13.8	13.9	0.09	3.49	3.58	—	14,058	14,058	0.52	0.68	0.83	14,275
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.68	0.61	0.75	5.93	0.02	0.01	1.78	1.79	0.01	0.45	0.46	—	1,744	1,744	0.06	0.08	1.64	1,771
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.68	0.61	0.75	5.93	0.02	0.01	1.78	1.79	0.01	0.45	0.46	—	1,744	1,744	0.06	0.08	1.64	1,771

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	801	801	0.05	0.01	—	804
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	839	839	0.05	0.01	—	842

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	801	801	0.05	0.01	—	804
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	839	839	0.05	0.01	—	842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	133	133	0.01	< 0.005	—	133
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Total	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.01	< 0.005	—	139

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	648	648	0.06	< 0.005	—	650
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	648	648	0.06	< 0.005	—	650
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	648	648	0.06	< 0.005	—	650
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.06	0.03	0.54	0.46	< 0.005	0.04	—	0.04	0.04	—	0.04	—	648	648	0.06	< 0.005	—	650
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	107	107	0.01	< 0.005	—	108
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	107	107	0.01	< 0.005	—	108

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.81	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.65	0.60	0.03	3.67	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.2
Total	2.68	2.63	0.03	3.67	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.81	1.81	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.23	1.23	< 0.005	< 0.005	—	1.24
Total	0.43	0.42	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.23	1.23	< 0.005	< 0.005	—	1.24

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Element School	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.69	36.5	41.2	0.48	0.01	—	56.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.78	6.04	6.81	0.08	< 0.005	—	9.39
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.78	6.04	6.81	0.08	< 0.005	—	9.39

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	59.2	0.00	59.2	5.91	0.00	—	207
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	9.79	0.00	9.79	0.98	0.00	—	34.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.79	0.00	9.79	0.98	0.00	—	34.3

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.33	0.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	1,648	0.00	0.00	429,727	19,459	0.00	0.00	5,073,244
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	126,660	42,220	1,788

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	549,542	532	0.0330	0.0040	2,021,531
Parking Lot	26,100	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	2,448,500	4,170,136
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	110	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Phase 2 of the Project includes the demolition of 39,994 square feet of existing modular buildings and relocatables and modernization of 16,223 square feet of existing permanent and modular buildings.
Construction: Construction Phases	Construction schedule based on timeline provided by district with start date of March 2029 and completion in June 2029 for Phase 2B.

Bubbling Wells Modernization Existing Operations Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bubbling Wells Modernization Existing Operations
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	11.2
Location	33.93868047151527, -116.48620694454667
County	Riverside-Salton Sea
City	Unincorporated
Air District	South Coast AQMD
Air Basin	Salton Sea
TAZ	5640
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

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
Elementary School	55.2	1000sqft	18.0	55,184	100,000	100,000	—	—
Parking Lot	110	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.76	6.29	5.16	51.0	0.11	0.11	8.99	9.10	0.10	2.28	2.38	41.7	12,382	12,423	4.65	0.51	38.5	12,730
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.41	4.97	5.56	32.7	0.10	0.11	8.99	9.10	0.10	2.28	2.38	41.7	11,093	11,135	4.67	0.53	1.21	11,409
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.64	4.31	3.93	28.0	0.08	0.09	6.37	6.46	0.08	1.62	1.70	41.7	8,567	8,609	4.54	0.37	12.0	8,845
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.85	0.79	0.72	5.11	0.01	0.02	1.16	1.18	0.01	0.30	0.31	6.91	1,418	1,425	0.75	0.06	1.99	1,464
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.98	4.55	4.78	48.3	0.11	0.08	8.99	9.07	0.07	2.28	2.35	—	11,394	11,394	0.40	0.50	38.3	11,591
Area	1.75	1.71	0.02	2.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.87	9.87	< 0.005	< 0.005	—	9.91
Energy	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	947	947	0.07	< 0.005	—	950
Water	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Waste	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Total	6.76	6.29	5.16	51.0	0.11	0.11	8.99	9.10	0.10	2.28	2.38	41.7	12,382	12,423	4.65	0.51	38.5	12,730
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.05	3.63	5.20	32.4	0.10	0.08	8.99	9.07	0.07	2.28	2.35	—	10,116	10,116	0.42	0.51	0.99	10,280
Area	1.32	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	947	947	0.07	< 0.005	—	950
Water	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Waste	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Total	5.41	4.97	5.56	32.7	0.10	0.11	8.99	9.10	0.10	2.28	2.38	41.7	11,093	11,135	4.67	0.53	1.21	11,409
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.07	2.77	3.56	26.5	0.07	0.06	6.37	6.43	0.05	1.62	1.67	—	7,585	7,585	0.29	0.36	11.8	7,711

Area	1.53	1.52	0.01	1.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.87	4.87	< 0.005	< 0.005	—	4.88
Energy	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	947	947	0.07	< 0.005	—	950
Water	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Waste	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Total	4.64	4.31	3.93	28.0	0.08	0.09	6.37	6.46	0.08	1.62	1.70	41.7	8,567	8,609	4.54	0.37	12.0	8,845
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.56	0.51	0.65	4.84	0.01	0.01	1.16	1.17	0.01	0.30	0.30	—	1,256	1,256	0.05	0.06	1.96	1,277
Area	0.28	0.28	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Energy	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	157	157	0.01	< 0.005	—	157
Water	—	—	—	—	—	—	—	—	—	—	—	0.51	5.07	5.58	0.05	< 0.005	—	7.26
Waste	—	—	—	—	—	—	—	—	—	—	—	6.40	0.00	6.40	0.64	0.00	—	22.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.85	0.79	0.72	5.11	0.01	0.02	1.16	1.18	0.01	0.30	0.31	6.91	1,418	1,425	0.75	0.06	1.99	1,464

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.98	4.55	4.78	48.3	0.11	0.08	8.99	9.07	0.07	2.28	2.35	—	11,394	11,394	0.40	0.50	38.3	11,591
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	4.98	4.55	4.78	48.3	0.11	0.08	8.99	9.07	0.07	2.28	2.35	—	11,394	11,394	0.40	0.50	38.3	11,591
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	4.05	3.63	5.20	32.4	0.10	0.08	8.99	9.07	0.07	2.28	2.35	—	10,116	10,116	0.42	0.51	0.99	10,280
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.05	3.63	5.20	32.4	0.10	0.08	8.99	9.07	0.07	2.28	2.35	—	10,116	10,116	0.42	0.51	0.99	10,280
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.56	0.51	0.65	4.84	0.01	0.01	1.16	1.17	0.01	0.30	0.30	—	1,256	1,256	0.05	0.06	1.96	1,277
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.56	0.51	0.65	4.84	0.01	0.01	1.16	1.17	0.01	0.30	0.30	—	1,256	1,256	0.05	0.06	1.96	1,277

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	523	523	0.03	< 0.005	—	525
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	523	523	0.03	< 0.005	—	525

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	523	523	0.03	< 0.005	—	525
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	523	523	0.03	< 0.005	—	525
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	86.7	86.7	0.01	< 0.005	—	87.0

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	423	423	0.04	< 0.005	—	425
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	423	423	0.04	< 0.005	—	425
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elementary	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	423	423	0.04	< 0.005	—	425
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	423	423	0.04	< 0.005	—	425
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.1	70.1	0.01	< 0.005	—	70.3

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.39	0.02	2.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.87	9.87	< 0.005	< 0.005	—	9.91
Total	1.75	1.71	0.02	2.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.87	9.87	< 0.005	< 0.005	—	9.91

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.32	1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.04	0.04	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Total	0.28	0.28	< 0.005	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

Element School	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.07	30.6	33.7	0.32	0.01	—	43.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	0.51	5.07	5.58	0.05	< 0.005	—	7.26
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.51	5.07	5.58	0.05	< 0.005	—	7.26

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	38.7	0.00	38.7	3.86	0.00	—	135
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	6.40	0.00	6.40	0.64	0.00	—	22.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.40	0.00	6.40	0.64	0.00	—	22.4

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.21	0.21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Elementary School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Elementary School	1,077	0.00	0.00	280,839	12,717	0.00	0.00	3,315,513
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	82,776	27,592	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Elementary School	359,142	532	0.0330	0.0040	1,321,129
Parking Lot	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Elementary School	1,600,166	4,170,136
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Elementary School	71.7	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Elementary School	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Elementary School	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Elementary School	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Elementary School	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Existing School is 55,184 square feet of building space on the 17.99 acre Project Site.
Construction: Construction Phases	Construction schedule based on timeline provided by district with start date of March 2029 and completion in June 2029 for Phase 2B.

APPENDIX B

Biological Resources Report

April 4, 2025

MERIDIAN
Attention: *Grace Bridges*

SUBJECT: **Biological Assessment for the Proposed Bubbling Wells Elementary Modernization Project Located at 67501 Camino Campanero, Desert Hot Springs, Riverside County, California**

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological review for the proposed Bubbling Wells Elementary Modernization Project located at 67501 Camino Campanero, Desert Hot Springs, Riverside County, California. It should be noted that the Palm Springs Unified School District is not a permittee under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and the rules and regulations of the CVMSHCP do not apply to this project. Therefore, the proposed Project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The review was conducted to determine if any biological surveys, mitigation measures, or permits would be required for the school's modernization project. Special attention was given to the suitability of the on-site habitat to support special-status species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring on or within the general vicinity of the project site. Special attention was given to the suitability of the on-site habitat to support special-status species known to occur in the area and potential jurisdictional drainage features.

Project Location

The project site is generally located north of Interstate 10, west of State Route 177, and south and east of State Route 62 in the City of Desert Hot Springs, Riverside County, California. The site is depicted on the Seven Palms Valley quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 5 of Township 3 South, Range 5 East. Specifically, the project site is bounded to the west by vacant land with Avenida Florencia beyond, to the south by residential development, to the east by Bubbling Wells Road, and to the north by Camino Campanero within APN 656-160-022. Refer to Exhibit 1-3 in Attachment A.

Project Description

The project proposes to modernize the existing buildings within the Bubbling Wells Elementary campus. Refer to Attachment D, *Site Plan*.

Existing Site Condition

The project site occurs in an area that is comprised of a mix of undeveloped, vacant land and residential

development. The site is bounded to the west by vacant land with Avenida Florencia and additional residential development beyond, to the south by residential development with Camino Campesino beyond, to the east by Bubbling Wells Road with residential development beyond, and to the north by Camino Campanero with vacant, undeveloped land beyond. At present, the project site supports the existing Bubbling Wells Elementary school campus. The site has been subject to existing development and anthropogenic disturbances associated with active school activity.

Topography and Soils

The project site is generally flat with limited topographic relief. On-site elevation ranges from 874 to 900 feet above mean sea level, and slopes slightly from northeast to southwest. Based on the NRCS USDA Web Soil Survey, the project site is underlain by Carsitas fine sand (0 to 5 percent slopes). Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., existing development, vehicle access and parking, and surrounding development).

Jurisdictional Areas

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

The NWI does not identify any jurisdictional or wetland features as occurring on the project site. Further, no blueline streams have been recorded on the project site. No jurisdictional drainage and/or wetland features were observed on the project site. Therefore, development of the proposed project will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

Migratory Corridors and Linkages

The project site has not been identified as occurring in a wildlife corridor or linkage. The proposed project will be confined to existing areas that have been heavily disturbed and are isolated from regional wildlife corridors and linkages. In addition, there are no riparian corridors, creeks, or useful patches of steppingstone habitat (natural areas) within or connecting the site to a recognized wildlife corridor or linkage. As such, implementation of the proposed project is not expected to impact wildlife movement opportunities. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

Special-Status Biological Resources

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as natural communities of special concern in the Seven Palms Valley USGS 7.5-minute quadrangle. Only one quadrangle was used due to the proximity of the site to quadrangle boundaries and regional topography. A search of published records within this quadrangle was conducted using the CNDDB Rarefind 5 online software and the CDFW BIOS database and the CNPS Inventory of Rare and Endangered Plants of California that supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The literature search identified five (5) special-status plant species and thirty-eight (38) special-status wildlife species as having potential to occur within the Seven Palms Valley quadrangle. One

(1) special-status plant community was identified as occurring within this quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table C-1: Potentially Occurring Special-Status Biological Resources*, provided in Attachment C. Refer to Table C-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

Special-Status Plants

Based on habitat requirements for specific special-status plant species, the availability and quality of habitats needed by each species, and known distributions, it was determined that the project site does not have the potential to support any special-status plant species listed as occurring within the Seven Palms Valley quadrangle, and all are presumed to be absent.

Special-Status Wildlife

Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site does not have the potential to support any special-status wildlife species listed as occurring within the Seven Palms Valley quadrangle, and all are presumed to be absent.

Special-Status Plant Communities

The CNDDB identifies one special-status plant community as occurring within the Seven Palms Valley quadrangle: desert fan palm oasis. This plant community is absent from the project site and will not be impacted from project development

Critical Habitat

The project site is not located with federally designated Critical Habitat. The nearest designated Critical Habitat is located approximately 2.23 miles to the southeast for spreading navarretia (*Navarretia fossalis*). Therefore, the loss or adverse modification of Critical Habitat will not occur as a result of proposed project implementation, and consultation with the USFWS will not be required for implementation of the proposed project.

Conclusion

Based literature review and existing site conditions discussed in this report, implementation of the project will have no significant impacts on federally or State listed species known to occur in the general vicinity of the project site. Additionally, the project will have no effect on designated Critical Habitat or regional wildlife corridors/linkage because none exists within the area. No jurisdictional drainage and/or wetland features were identified within the project site. No further surveys are recommended. With completion of the recommendations provided below, no impacts to year-round, seasonal, or special-status avian residents or special-status species will occur from implementation of the proposed project.

Recommendations

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds,

their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Please do not hesitate to contact Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions.

Sincerely,



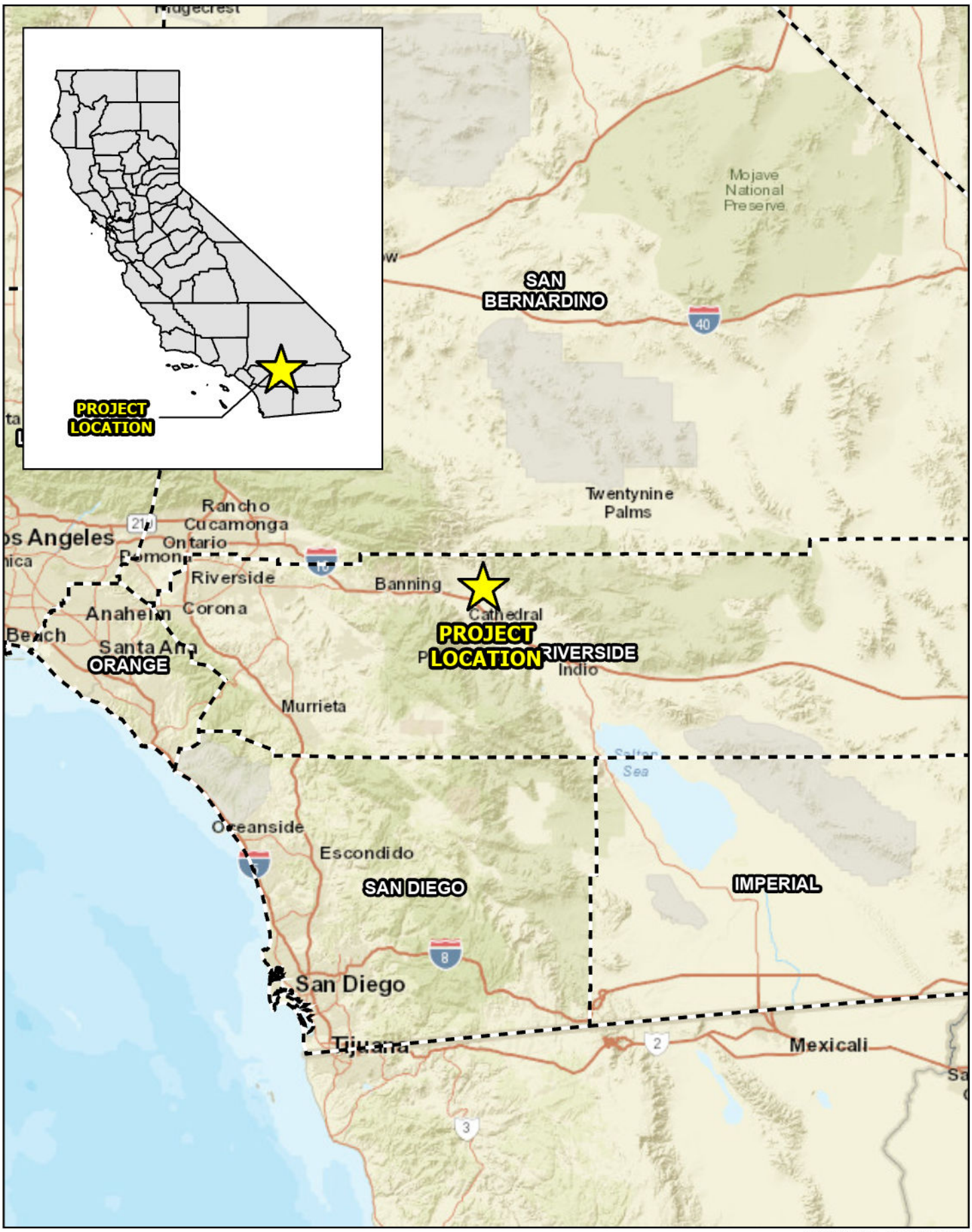
Travis J. McGill
Director

Attachments:

A. *Project Exhibits*
B. *Potentially Occurring Special-Status Biological Resources*
C. *Regulations*
D. *Site Plan*

Attachment A

Project Exhibits



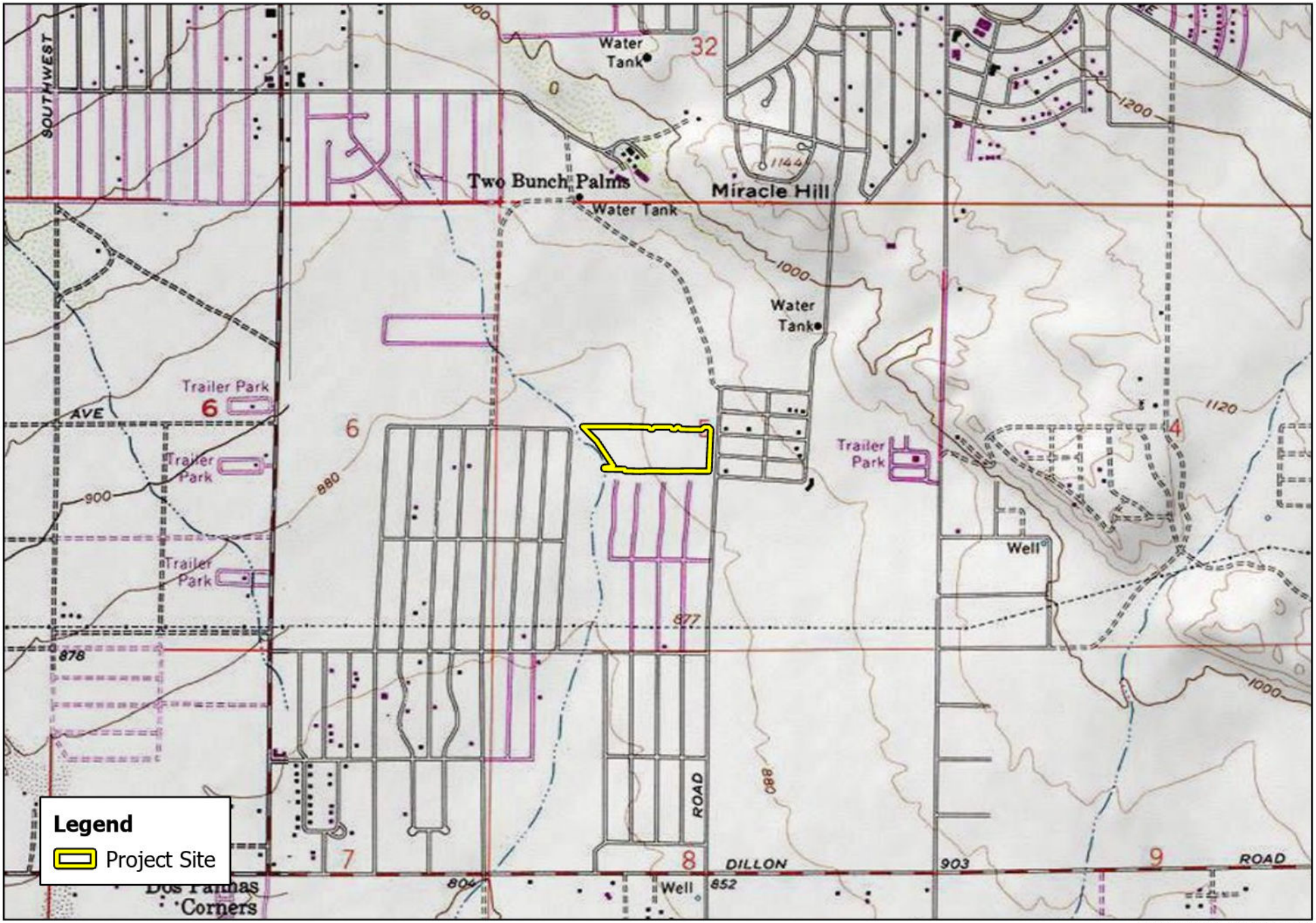
ELMT CONSULTING

Source: ESRI World Street Map

BIOLOGICAL ASSESSMENT
BUBBLING WELLS ELEMENTARY MODERNIZATION

Regional Vicinity

Exhibit 1



N

0 500 1,000 2,000 Feet

Source: USA Topographic Map, Riverside County

ELMT CONSULTING

BIOLOGICAL ASSESSMENT
BUBBLING WELLS ELEMENTARY MODERNIZATION

Site Vicinity

Exhibit 2



ELMT CONSULTING

N

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

BIOLOGICAL ASSESSMENT
BUBBLING WELLS ELEMENTARY MODERNIZATION

Project Site

Exhibit 3

Attachment B

Potentially Occurring Special-Status Biological Resources

Scientific Name	Common Name	Federal Status	State Status	CDFW Listing	CNPS Rare Plant Rank	Potential to Occur
Special-Status Wildlife Species						
Accipiter cooperii	Coopers hawk	None	None	WL	-	Presumed Absent
Accipiter striatus	sharp-shinned hawk	None	None	WL	-	Presumed Absent
Antrozous pallidus	pallid bat	None	None	SSC	-	Presumed Absent
Aquila chrysaetos	golden eagle	None	None	FP | WL	-	Presumed Absent
Asio otus	long-eared owl	None	None	SSC	-	Presumed Absent
Athene cunicularia	burrowing owl	None	CE	SSC	-	Presumed Absent
Calypte costae	Costas hummingbird	None	None	-	-	Presumed Absent
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None	None	-	-	Presumed Absent
Chaetura vauxi	Vauxs swift	None	None	SSC	-	Presumed Absent
Circus hudsonius	northern harrier	None	None	SSC	-	Presumed Absent
Contopus cooperi	olive-sided flycatcher	None	None	SSC	-	Presumed Absent
Crotalus ruber	red-diamond rattlesnake	None	None	SSC	-	Presumed Absent
Eremarionta morongoana	Morongo (=Colorado) desertsnail	None	None	-	-	Presumed Absent
Falco columbarius	merlin	None	None	WL	-	Presumed Absent
Falco mexicanus	prairie falcon	None	None	WL	-	Presumed Absent
Gopherus agassizii	desert tortoise	THR	THR	-	-	Presumed Absent
Icteria virens	yellow-breasted chat	None	None	SSC	-	Presumed Absent
Lanius ludovicianus	loggerhead shrike	None	None	SSC	-	Presumed Absent
Lasiurus xanthinus	western yellow bat	None	None	SSC	-	Presumed Absent
Leiothlypis luciae	Lucys warbler	None	None	SSC	-	Presumed Absent
Macrobaenetes valgum	Coachella giant sand treader cricket	None	None	-	-	Presumed Absent
Myotis yumanensis	Yuma myotis	None	None	-	-	Presumed Absent
Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC	-	Presumed Absent
Nycticorax nycticorax	black-crowned night heron	None	None	-	-	Presumed Absent
Nyctinomops femorosaccus	pocketed free-tailed bat	None	None	SSC	-	Presumed Absent
Ovis canadensis nelsoni	desert bighorn sheep	None	None	FP	-	Presumed Absent
Passerculus sandwichensis rostratus	large-billed savannah sparrow	None	None	SSC	-	Presumed Absent
Perognathus longimembris bangsi	Palm Springs pocket mouse	None	None	SSC	-	Presumed Absent
Polioptila melanura	black-tailed gnatcatcher	None	None	WL	-	Presumed Absent
Selasphorus rufus	rufous hummingbird	None	None	-	-	Presumed Absent
Setophaga petechia	yellow warbler	None	None	SSC	-	Presumed Absent
Spinus lawrencei	Lawrences goldfinch	None	None	-	-	Presumed Absent
Spizella breweri	Brewers sparrow	None	None	-	-	Presumed Absent
Toxostoma lecontei	Le Contes thrasher	None	None	SSC	-	Presumed Absent
Uma inornata	Coachella Valley fringe-toed lizard	THR	END	-	-	Presumed Absent
Vireo bellii pusillus	least Bells vireo	END	END	-	-	Presumed Absent
Xanthocephalus xanthocephalus	yellow-headed blackbird	None	None	SSC	-	Presumed Absent
Xerospermophilus tereticaudus chlorus	Palm Springs round-tailed ground squirrel	None	None	SSC	-	Presumed Absent
Special-Status Plant Species						
Astragalus lentiginosus var. coachellae	Coachella Valley milk-vetch	END	None	-	1B.2	Presumed Absent
Euphorbia arizonica	Arizona spurge	None	None	-	2B.3	Presumed Absent
Galium angustifolium ssp. gracillimum	slender bedstraw	None	None	-	4.2	Presumed Absent
Linanthus maculatus ssp. maculatus	Little San Bernardino Mtns. linanthus	None	None	-	1B.2	Presumed Absent
Selaginella eremophila	desert spike-moss	None	None	-	2B.2	Presumed Absent
Special-Status Plant Communities						
Desert Fan Palm Oasis Woodland	-	-	-	-	-	Absent

U.S. Fish and Wildlife Service (Fed) - Federal

END- Federal Endangered
THR- Federal Threatened
DL- Delisted

California Department of Fish and Wildlife (CA) - California

END- California Endangered
THR- California Threatened
CE- Candidate for listing under the California Endangered Species Act CTHR- Candidate Threatened
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank

1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List
4 Plants of Limited Distribution – A Watch List CBR- Considered But Rejected for ranking

CNPS Threat Ranks

0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Attachment C

Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in "take" of individuals (defined in CESA as; "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by CDFW. Habitat degradation or modification is not included in the definition of "take" under CESA. Nonetheless, CDFW has interpreted "take" to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

In accordance with the Revised Definition of "Waters of the United States"; Conforming (September 8, 2023), "waters of the United Sates" are defined as follows:

(a) ***Waters of the United States*** means:

(1) Waters which are:
(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(ii) The territorial seas; or
(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:
(i) Waters identified in paragraph (a)(1) of this section; or
(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted

cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.*, gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) ***Wetlands*** means those areas that are inundated or saturated by surface or ground water 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.

(2) ***Adjacent*** means having a continuous surface connection

(3) ***High tide line*** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) ***Ordinary high water mark*** means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) ***Tidal waters*** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

(1) substantially obstruct or divert the natural flow of a river, stream, or lake;
(2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
(3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

Attachment D

Site Plan

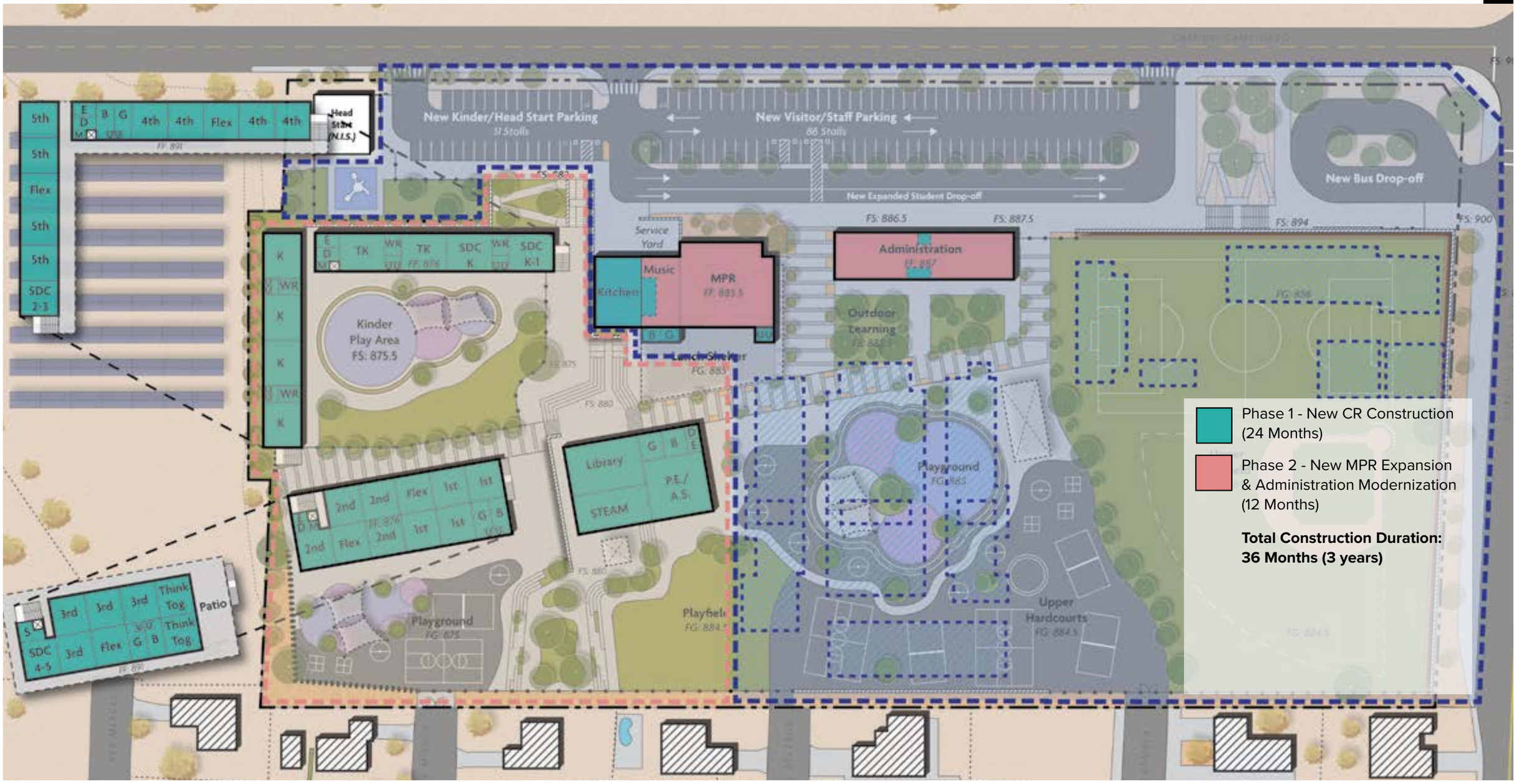


BUBBLING WELLS ELEMENTARY ▌50% SCHEMATIC DESIGN ▌EXISTING SITE PLAN

PALM SPRINGS UNIFIED SCHOOL DISTRICT

0’ 40’ 80’ 160’

BUHNAU CLARKE ARCHITECTS



BUBBLING WELLS ELEMENTARY ▌50% SCHEMATIC DESIGN ▌PHASING PLAN

PALM SPRINGS UNIFIED SCHOOL DISTRICT

0’ 40’ 80’ 160’

BUHNAU CLARKE ARCHITECTS



BUBBLING WELLS ELEMENTARY ▌50% SCHEMATIC DESIGN ▌COMPLEX PLAN

PALM SPRINGS UNIFIED SCHOOL DISTRICT

BUHNAU CLARKE ARCHITECTS

APPENDIX C

Cultural Resources Report

CHRONICLE™ HERITAGE

T: (626) 408-8006
F: (602) 254-6280
info@chronicleheritage.com

LOS ANGELES, CALIFORNIA
55 East Huntington Drive, Suite 238
Arcadia, California 91006

May 15, 2025

Christine Lan
Senior Project Manager
Meridian Consultants, LLC
706 South Hill Street, 11th Floor
Los Angeles, CA 90014
Transmitted via email to CLan@meridianconsultantsllc.com

RE: Cultural Resource Inventory for the Palm Springs Unified School District Modernization Project: Bubbling Wells Elementary School, Riverside County, California

Dear Ms. Lan:

At the request of Meridian Consultants, LLC, in 2021, Chronicle Heritage (formerly PaleoWest, LLC) conducted a cultural resource inventory for the Palm Springs Unified School District Modernization Project: Bubbling Wells Elementary School, Riverside County, California (Project). The cultural resource inventory was limited to a cultural resource data review and a review of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC). To assist in compliance with the California Environmental Quality Act, a secondary identification effort was conducted by searching California Historical Resources Information System (CHRIS) records. This memorandum summarizes the results of the CHRIS records search for the Project.

Records Search Review

The CHRIS records search was conducted at the South Coastal Information Center (SCIC) at San Diego State University in San Diego, California, on May 5, 2025. Chronicle Heritage staff archaeologist Gustavo Banuelos performed the search. The scope of the search encompasses records and resources within the Project area and a 0.5-mile (mi) buffer zone. The objective of the cultural resource inventory efforts was to identify prehistoric and historical cultural resources that have been previously documented within the Project area and buffer zone.

In addition to the CHRIS database search, U.S. Geological Survey topographic map quadrangles for the Project area were reviewed. Records show that 14 cultural studies have been conducted within the Project area and buffer zone. No previously identified cultural resources are within the Project area or its immediate vicinity. Within the 0.5-mi buffer zone, one resource (Table 1)—prehistoric site CA-RIV-1246—has been previously documented and is referenced in cultural resource report RI-06508. The report indicates that, in addition to the artifacts observed during the archaeological study, a cremation area with human remains was present. The report suggests the coroner confirmed the presence of human remains, and there was coordination with the most likely descendant, the Agua Caliente Band of Cahuilla Indians. According to the report, the Tribe expressed interest in a treatment plan including the removal of the feature. No formal documentation of a burial treatment plan or mitigation documentation was observed during the CHRIS records search conducted by Chronicle Heritage.



Table 1. Previous Cultural Resources within 0.5 mi of the Project Area

Primary No.	Trinomial	Type	Description
P-33-001246	CA-RIV-1246	Site	Prehistoric ceramic scatter

Two of the cultural resource studies, RI-09156 and RI-10977 (Table 2), intersect with the Project area. The archaeological investigations undertaken for RI-09156 and RI-10977 did not identify any prehistoric or historic-period resources associated with the Project area for this records search. The remaining 12 cultural resource studies (Table 3) were conducted within the buffer zone, and nearly all surveys and studies produced results indicating the absence of cultural resources, except for RI-06508 associated with CA-RIV-1246 (Table 1).

Table 2. Previous Cultural Resources Studies within the Project Area

Report No.	Year	Author(s)	Title
RI-09156	1991	Smallwood, Josh	Phase I Cultural Resources Assessment for the Bubbling Wells Elementary School Solar Project, Desert Hot Springs, Riverside County, California.
RI-10977	2018	Tang, Bai and Michael Hogan	Historical/Archaeological Resources Survey Report of the West Valley Water Reclamation Program, In and Near the City of Desert Hot Springs, Riverside County, California

Table 3. Previous Cultural Resource Studies within 0.5 mi of the Project Area

Report No.	Year	Author(s)	Title
RI-03271	1991	Torres, John, Joan Schneider, and Bruce Love	Cultural Resources Assessment Horton Wastewater Treatment Plant, Desert Hot Springs, Riverside County, California.
RI-04683	2003	Brock, James	Phase I Cultural Resources Assessment of a 10-acre property in the city of Desert Hot Springs, Riverside County, California (APNs 656- 040- 656-040-034-8 and 656-040-036-0)
RI-04753	2004	Brock, James	Phase I Cultural Resources Assessment for Tentative Tract No. 31885, City of Desert Hot Springs, Riverside County, California
RI-05191	2004	Ewers, Daniel and Curt Duke	Cultural Resources Assessment: Verbena Gardens (assessor's parcel number 656-040-032), City of Desert Hot Springs, Riverside County, California
RI-05260	2004	LSA Associates, Inc	Archaeological monitoring program, Mission Springs Water District, a, b, & c sewer improvements, City of Desert Hot Springs, Riverside County, California
RI-06361	2004	Michael Hogan, Bai Tang, Mariam Dahdul, Harry M. Quinn, and Michelle O. Quinn	Historical/Archaeological Resources Survey Report: Assessor's Parcel No. 656-050-008, City of Desert Hot Springs, Riverside County, California

Report No.	Year	Author(s)	Title
RI-06483	2005	Tang, Bai, Michael Hogan, Matthew Wetherbee, and Robert Porter	Historical/Archaeological Resources Survey Report, San Jacinto MDP Detention Basin, in the city of San Jacinto, Riverside County, California
RI-06508	2006	Tang, Bai, Michael Hogan, Mariam Dahdul, and Daniel Ballester	Historical/Archaeological Resources Survey an Archaeological Monitoring Report, Two Bunch Palms Resort Master Plan, City of Desert Hot Springs, Riverside County, California
RI-07765	2008	Hogan, Michael	Letter Report: Archaeological and Paleontological Monitoring of Trenching Activities, Mission Springs Water District Sewer Improvement Project, Service Area "L", Phases 1 and 2, City of Desert Hot Springs, Riverside County, California
RI-07872	2008	Tang, Bai "Tom"	Letter Report: Archaeological and Paleontological Monitoring of Trenching Activities Mission Springs Water District Sewer Improvement Project Service Area "L", Part of Phase 2, Near the City of Desert Hot Springs, Riverside County, California
RI-08553	2011	Hogan, Michael, and Bai "Tom" Tang	Desert Hot Springs Master Drainage Plan Line F, Stage 1
RI-10254	2010	Jacquemian, Terri, Harry M. Quinn, Baniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historic Properties: Mission Springs Water District, Groundwater Protection Pipeline Project, in and near the City of Desert Hot Springs, Riverside County, California

On February 8, 2021, the NAHC responded to Chronicle Heritage, stating that the SLF search was completed with negative results. However, the NAHC recommended that 20 Native American individuals representing 13 tribal groups be contacted to elicit information regarding cultural resource issues related to the proposed Project (see Exhibit A for a copy of the response letter received from the NAHC).

If you have any questions, please don't hesitate to contact me at gbanuelos@chronicleheritage.com.

Sincerely,
CHRONICLE HERITAGE



Gustavo Banuelos | Staff Archaeologist

EXHIBIT A

NATIVE AMERICAN HERITAGE COMMISSION

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EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
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Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

February 8, 2021

Roberta Thomas
PaleoWest Archaeology

Via Email to: rthomas@paleowest.com

Re: PSUSD Modernization (21-0058) – Bubbling Wells Elementary School Project, Riverside County

Dear Ms. Thomas:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

APPENDIX D

Energy Calculations

Construction Equipment Fuel Consumption								
Phase	**Number of Days**	**Offroad Equipment Type**	**Amount**	**Usage Hours**	**Horse Power**	**Load Factor**	**HP hrs/day**	**Estimated Fuel Consumption (gallons)**
Demolition	50	Concrete/Industrial Saws	1	8	33	0.73	192.72	481.80
	50	Excavators	3	8	36	0.38	328.32	273.60
	50	Rubber Tired Dozers	2	8	367	0.4	2348.8	2,936.00
Grading	45	Excavators	2	8	36	0.38	218.88	246.24
	45	Graders	1	8	148	0.41	485.44	1,092.24
	45	Rubber Tired Dozers	1	8	367	0.4	1174.4	2,642.40
	45	Scrapers	2	8	423	0.48	3248.64	3,654.72
	45	Tractors/Loaders/Backhoes	2	8	84	0.37	497.28	559.44
Building Construction	174	Cranes	1	7	367	0.29	745.01	6,481.59
	174	Forklift	3	8	8182	0.2	39273.6	113,893.44
	174	Generator Sets	1	8	14	0.74	82.88	721.06
	174	Tractors/Loaders/Backhoes	3	7	84	0.37	652.68	1,892.77
	174	Welders	1	8	46	0.45	165.6	1,440.72
Paving	327	Pavers	2	8	91	0.42	611.52	4,999.18
	327	Paving Equipment	2	8	89	0.36	512.64	4,190.83
	327	Rollers	2	8	36	0.38	218.88	1,789.34
Architectural Coating	109	Air Compressors	1	6	37	0.48	106.56	580.75
Demolition	51	Rubber Tired Dozers	2	8	367	0.4	2348.8	2,994.72
	51	Excavators	3	8	36	0.38	328.32	279.07
	51	Concrete/Industrial Saws	1	8	33	0.73	192.72	491.44
Grading	44	Graders	1	8	148	0.41	485.44	1,067.97
	44	Excavators	2	8	36	0.38	218.88	240.77
	44	Tractors/Loaders/Backhoes	2	8	84	0.37	497.28	547.01
	44	Scrapers	2	8	423	0.48	3248.64	3,573.50
	44	Rubber Tired Dozers	1	8	367	0.4	1174.4	2,583.68
Building Construction	176	Cranes	1	7	367	0.29	745.01	6,556.09
	176	Forklift	3	8	8182	0.2	39273.6	115,202.56
	176	Generator Sets	1	8	14	0.74	82.88	729.34
	176	Tractors/Loaders/Backhoes	3	7	84	0.37	652.68	1,914.53
	176	Welders	1	8	46	0.45	165.6	1,457.28
Paving	44	Pavers	2	8	91	0.42	611.52	672.67
	44	Paving Equipment	2	8	89	0.36	512.64	563.90
	44	Rollers	2	8	36	0.38	218.88	240.77
Architectural Coating	21	Air Compressors	1	6	37	0.48	106.56	111.89
Demolition	22	Rubber Tired Dozers	2	8	367	0.4	2348.8	1,291.84
	22	Excavators	3	8	36	0.38	328.32	120.38
	22	Concrete/Industrial Saws	1	8	33	0.73	192.72	211.99
Grading	23	Graders	1	8	148	0.41	485.44	558.26
	23	Excavators	2	8	36	0.38	218.88	125.86
	23	Tractors/Loaders/Backhoes	2	8	84	0.37	497.28	285.94
	23	Scrapers	2	8	423	0.48	3248.64	1,867.97
	23	Rubber Tired Dozers	1	8	367	0.4	1174.4	1,350.56
Paving	22	Pavers	2	8	91	0.42	611.52	336.34
	22	Paving Equipment	2	8	89	0.36	512.64	281.95
	22	Rollers	2	8	36	0.38	218.88	120.38
Demolition	15	Rubber Tired Dozers	2	8	367	0.4	2348.8	880.80
	15	Excavators	3	8	36	0.38	328.32	82.08
	15	Concrete/Industrial Saws	1	8	33	0.73	192.72	144.54
Grading	15	Graders	1	8	148	0.41	485.44	364.08
	15	Excavators	2	8	36	0.38	218.88	82.08
	15	Tractors/Loaders/Backhoes	2	8	84	0.37	497.28	186.48
	15	Scrapers	2	8	423	0.48	3248.64	1,218.24
	15	Rubber Tired Dozers	1	8	367	0.4	1174.4	880.80
Paving	15	Pavers	2	8	91	0.42	611.52	229.32
	15	Paving Equipment	2	8	89	0.36	512.64	192.24
	15	Rollers	2	8	36	0.38	218.88	82.08
Total Construction Equipment Fuel Consumption (gallons of diesel fuel)								**297,997.51**

Notes :

Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp.

Construction Worker Fuel Consumption						
Phase	**Number of Days**	**Worker Trips/Day**	**Trip Length (miles)**	**Vehicle Miles Traveled**	**Average Vehicle Fuel Economoy (mpg)**	**Estimated Fuel Consumption**
Demolition	50	15	18.5	13875	26.02	533.2
Grading	45	20	18.5	16650	26.02	639.9
Building Construction	174	29	18.5	93351	26.02	3587.7
Paving	327	15	18.5	90742.5	26.02	3487.4
Architechtural Coating	109	6	18.5	12099	26.02	465.0
Demolition	51	15	18.5	14152.5	26.02	543.9
Grading	44	20	18.5	16280	26.02	625.7
Building Construction	176	7	18.5	22792	26.02	875.9
Paving	44	15	18.5	12210	26.02	469.3
Architechtural Coating	21	1	18.5	388.5	26.02	14.9
Demolition	22	15	18.5	6105	26.02	234.6
Grading	23	20	18.5	8510	26.02	327.1
Paving	22	15	18.5	6105	26.02	234.6
Demolition	15	15	18.5	4162.5	26.02	160.0
Grading	15	20	18.5	5550	26.02	213.3
Paving	15	15	18.5	4162.5	26.02	160.0
Total Construction Worker Fuel Consumption (gallons of gasoline fuel)						**12572.5**

Notes :

Assumptions for the worker trip length and vehicle miles traveled are derived from CalEEMod defaults.

Construction Vendor Fuel Consumption						
Phase	**Number of Days**	**Vendor Trips/Day**	**Trip Length (miles)**	**Vehicle Miles Traveled**	**Average Vehicle Fuel Economy (mpg)**	**Estimated Fuel Consumption (gallons)**
Demolition	50	0	10.2	0	6.9	0.0
Grading	45	0	10.2	0	6.9	0.0
Building Construction	174	11	10.2	19522.8	6.9	2829.4
Paving	327	0	10.2	0	6.9	0.0
Architechtural Coating	109	0	10.2	0	6.9	0.0
Demolition	51	0	10.2	0	6.9	0.0
Grading	44	0	10.2	0	6.9	0.0
Building Construction	176	3	10.2	5385.6	6.9	780.5
Paving	44	0	10.2	0	6.9	0.0
Architechtural Coating	21	0	10.2	0	6.9	0.0
Demolition	22	0	10.2	0	6.9	0.0
Grading	23	0	10.2	0	6.9	0.0
Paving	22	0	10.2	0	6.9	0.0
Demolition	15	0	10.2	0	6.9	0.0
Grading	15	0	10.2	0	6.9	0.0
Paving	15	0	10.2	0	6.9	0.0
Total Construction Vendor Fuel Consumption (gallons of diesel fuel)						**3609.9**

Notes :
Assumptions for the vendor trip length and vehicle miles traveled are derived from CalEEMod defaults.

Construction Hauling Fuel Consumption						
Phase	**Number of Days**	**Hauling Trips/Day**	**Trip Length (miles)**	**Vehicle Miles Traveled**	**Average Vehicle Fuel Economy (mpg)**	**Estimated Fuel Consumption (gallons)**
Demolition	50	8	20	8000	6.05	1322.3
Grading	45	25	20	22500	6.05	3719.0
Building Construction	174	0	20	0	6.05	0.0
Paving	327	0	20	0	6.05	0.0
Architechtural Coating	109	0	20	0	6.05	0.0
Demolition	51	6	20	6120	6.05	1011.6
Grading	44	0	20	0	6.05	0.0
Building Construction	176	0	20	0	6.05	0.0
Paving	44	0	20	0	6.05	0.0
Architechtural Coating	21	0	20	0	6.05	0.0
Demolition	22	6	20	2640	6.05	436.4
Grading	23	0	20	0	6.05	0.0
Paving	22	0	20	0	6.05	0.0
Demolition	15	2	20	600	6.05	99.2
Grading	15	27	20	8100	6.05	1338.8
Paving	15	0	20	0	6.05	0.0
Total Construction Hauling Fuel Consumption (gallons of diesel fuel)						**7927.3**

Notes :

Assumptions for the haul trip length during grading based on haul route application. All other factors are derived from CalEEMod defaults.

Per CalEEMod User's Guide Appendix C, CalEEMod assumes hauling and onsite truck trips are made by a fleet consisting of 100 percent HHDT.

Water Usage for Control of Fugitive Dust During Construction			
Phase Name	**Total Acres**	**Gallons for Project**	**Electricity (kWh)**
Grading	381	**1,150,620**	**3502.5**

Notes:

Total acres graded based on CalEEMod output sheets.

Water Usage

3,020 gallons per acre per day

Source: Air & Waste Management Association, Air Pollution Engineering Manual, 1992 Edition

Supply Water Electricity Intensity

0.003044 kWh/gallons

Source: CalEEMod User's Guide, Appendix G: Default Data Tables, Table G-32

Estimated Operational Fuel Consumption			
Land Use	**Annual VMT**	**Gasoline Usage (gallons)**	**Diesel Usage (gallons)**
Elementary School	5,073,244	149,633.2	65,952.2
Total	**5,073,244**	**149,633.2**	**65,952.2**

Notes:

Based on the California Air Resources Board on-road vehicle emissions model, EMFAC 2021

(Modeling input: Los Angeles County; Fleet Aggregate; Year 2027 for proposed project).

For Year 2030, gasoline-fueld vehicles account for approximately 81.7% percent of the total VMT at 27.7 miles per gallon and diesel fueled-vehicles account for approximately 10.4% percent of thet total VMT at 8.0 miles per gallon

Annual Operational Electricity Demand					
		Water Usage			
Electricity Demand	kWh/year	Indoor (gal/yr)	Outdoor (gal/yr)	Water-Related Electricity Use (kWh/yr)	Total Annual Electricity Use (kWh)
Elementary School	549,542	2,448,500	4,170,136	38793.7	588,336
Parking Lot	26,100	0	0	0.0	26,100
Total	**575,642**	**2,448,500**	**4,170,136**	**38,793.7**	**614,436**

Annual Operational Natrual Gas Demand	
Natural Gas Demand	kBTU/year
Elementary School	2,021,531
Parking Lot	-
Total	**2,021,531**

Notes:

Taken from the CalEEMod annual output

Indoor water results in 0.006807 kWh/gallon of electricity usage per gallon from the supplying, treating, and distributing of water and the processing of resulting wastewater within South Coast.

Outdoor water results in 0.005306 kWh/gallon of electricity usage per gallon from supplying, treating, and distributing of water within South Coast.

APPENDIX E

Geotechnical Report

Palm Springs Unified School District
150 District Center Drive
Palm Springs, California 92264

Geotechnical Engineering and Geohazards Report, with Preliminary Percolation Testing
Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

May 23, 2025

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File No.: 307067-001
Doc. No.: 25-05-705

May 23, 2025

File No.: 307067-001
Doc. No.: 25-05-705

Palm Springs Unified School District
150 District Center Drive
Palm Springs, California 92264

Attention: Mr. Ernesto Dominguez, Facilities Planning and Development

Subject: **Geotechnical Engineering and Geohazards Report, with Preliminary Percolation Testing**

Projects: **Bubbling Wells Elementary School**
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems Pacific (Earth Systems) is pleased to present this Geotechnical Engineering and Geohazards Report for the proposed new construction and modernization project at the existing Bubbling Wells Elementary School located at 67501 Camino Campanero, Desert Hot Springs, Riverside County, California. This report presents our findings and recommendations for site grading and foundation design, incorporating the information provided to our office. The site is suitable for the proposed development, provided the recommendations in this report are followed in design and construction. This report should stand as a whole, and no part of the report should be excerpted or used to the exclusion of any other part.

This report completes our scope of services in accordance with our proposal BER-24-9-004, dated September 30, 2024 and the Palm Springs Unified School District Contract Number C-0005233 dated January 31, 2025. Unless requested in writing, the client is responsible for distributing this report to the appropriate governing agency or other members of the design team.

We appreciate the opportunity to provide our professional services. Please contact our office if there are any questions or comments concerning this report or its recommendations.

Respectfully submitted,
EARTH SYSTEMS PACIFIC



Rocio Carrillo
Project Engineer
CE 75721



Kevin L. Paul
Principal Engineer
CE 70084, GE 2930



Mark S. Spykerman
Principal Engineering Geologist
EG 1174

Distribution: 1/Palm Springs USD, 1/BER

TABLE OF CONTENTS

Section 1 INTRODUCTION 1
1.1 Project Description 1
1.2 Site Description 1
1.3 Purpose and Scope of Services 2
Section 2 METHODS OF EXPLORATION AND TESTING 5
2.1 Field Exploration 5
2.2 Laboratory Testing 6
Section 3 DISCUSSION 7
3.1 Soil Conditions 7
3.2 Groundwater 7
3.3 Collapse and Consolidation Potential 7
3.4 Expansive Soils 8
3.5 Corrosivity 9
3.6 Stormwater Percolation Testing 10
3.7 Geologic Setting 11
3.8 Geologic Hazards 12
3.8.1 Seismic Hazards 12
3.8.2 Other Hazards 16
Section 4 CONCLUSIONS 17
Section 5 RECOMMENDATIONS 19
5.1 Site Development and Grading 19
5.2 Excavations and Shoring 24
5.3 Utility Trenches 27
STRUCTURES 28
5.4 Foundations 28
5.5 Slope Construction 33
5.6 Slabs-on-Grade 34
5.7 Retaining Walls and Lateral Earth Pressures 36
5.8 Seismic Design Criteria 39
5.9 Driveways and Parking Areas 41
5.10 Surface and Subsurface Site Drainage and Maintenance 45
Section 6 LIMITATIONS AND ADDITIONAL SERVICES 48
6.1 Uniformity of Conditions and Limitations 48
6.2 Additional Services 49
REFERENCES 51

APPENDIX A

Plate 1 – Site Vicinity Map
Plate 2 – Proposed Site Improvements
Plate 3a & 3b – Boring Location Map & Site Geology
Plate 3c – Geologic Cross Section, A-A'
Plate 3d – Geologic Cross Section, B-B'
Plate 4 – State of California Geomorphic Map
Plate 5 – Regional Geologic Map
Plate 6 – Local Geologic Map
Plate 7 – Alquist-Priolo Earthquake Faults Zones
Plate 8 – Regional Fault Map
Plate 9 – Earthquake Epicenter Map
Table A-1 - Fault Parameters
Table A-2 - Historic Earthquakes
Table A-3 2022 - CBC Seismic Design Parameters
Terms and Symbols Used on Boring Logs
Soil Classification System
Logs of Geotechnical Borings (13)
Site Class Estimator (1 page)
Dry Seismic Settlement (2 pages)
Spread Footing Static Load Settlement (1 page)
Continuous Footing Static Load Settlement (1 page)

APPENDIX B

Laboratory Test Results

**Geotechnical Engineering and Geohazards Report, with
Preliminary Percolation Testing
Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California**

Section 1
INTRODUCTION

1.1 Project Description

This Geotechnical Engineering and Geohazards Report has been prepared for the new construction and modernization project at the existing Bubbling Wells Elementary School located at 67501 Camino Campanero in the city of Desert Hot Springs, Riverside County, California, see Plate 1 (Site Vicinity Map).

We understand that the proposed school site improvements will consist of adding a new 2-story classroom and Library/STEM buildings, new lunch shelter and addition to existing MPR building, new entry canopy and addition to the existing administration building, new parking lot expansion and bus drop-off reconfiguration, new outdoor landscape, playground, hardcourt, and play field. In addition, appurtenant site work is assumed to include underground utilities, landscaping, reconfigurations and expansion of flatwork and access drives. New building construction is currently proposed at 11,548 square-feet (sqft), 8,625 sqft, 6,637 sqft, 6,011 sqft, 2,702 sqft, 422 sqft, and 222 sqft, for a total of approximately 36,167 sqft.

We have assumed the structures will be one to two stories in height made of masonry, concrete, wood-framed or metal construction founded on shallow permanent foundations, and that there will be no below grade basement levels. We have assumed the anticipated loads will be less than approximately 100 kips for isolated spread footings and 4 kip/lineal foot for continuous footings. As the basis for the foundation recommendations, all loading is assumed to be dead plus actual live load.

No preliminary design loading was provided by the structural engineer. If actual structural loading exceeds these assumed values, we will need to re-evaluate the given recommendations.

1.2 Site Description

The proposed site improvements are located throughout the campus of the existing Bubbling Wells Elementary School where modular and portable buildings currently exist in the city of Desert Hot Springs, Riverside County, California. The approximate latitude and longitude near the northern center of the school are 33.9389°N/116.4857°W. Plate 1 in Appendix A presents the approximate site location. The school site is bounded on the north by Camino Campanero, on the east by Bubbling Wells Road, on the west by vacant land, and on the south by residential developments. Topographically, the campus is located between topographical contours 865 and 900 Mean-Sea-Level (MSL), and grades dip towards the west. The site is terraced being divided into the western approximate 1/3 and the eastern 2/3 by a retaining wall system. The retaining wall is approximately 4-9 feet in height.

Earth Systems personnel also reviewed select historical aerial photographs of the project site. Historical aerial photographs revealed items of interest. It appears the campus was constructed between 1984 and 1995. Other permanent and relocatable buildings were added between 1996 and 2019 throughout the campus. The campus has remained relatively unchanged since 2019.

1.3 Purpose and Scope of Services

The purpose for our services was to evaluate the site soil and geologic conditions at our exploration locations and to provide professional opinions and recommendations, from a geologic and geotechnical point of view, regarding the proposed development of the site. We understand that these proposed additional school site improvements will be developed under the regulation of the Division of the State Architect (DSA), the current California Building Code (2022), and California Geological Survey (CGS) Note 48 requirements (2022), and with DSA IR A-4 and IR 4.13 for geotechnical reports submitted to DSA.

The conclusions and recommendations included in this report are based upon the data collected for this commission. The scope of services included:

Task 1 - Literature and Photograph Reviews

We began our services by reviewing select geologic and geotechnical literature pertaining to the project. This included a review of various hazard, fault, and geologic maps prepared by the California Geological Survey, the U.S. Geological Survey, the County of Riverside and other governmental agencies as they relate to the project area. Historical aerial photographs were reviewed using the Google Earth Pro website and Historical Aerials website.

Task 2 – Utility Clearance, USA Dig Alert

Each of our proposed field exploration locations was located and marked in the field and cleared with known utility lines as identified by Underground Service Alert (USA), “Dig Alert”. Our exploration locations were located in the field by consumer grade Global Positioning System (GPS) accurate to ± 15 feet in conjunction with pacing based upon the control provided or sighting from landmarks identified on the project topographic map.

Task 3 – Field Exploration

We evaluated the general subsurface conditions at the site by drilling thirteen small diameter borings, from approximately 6½ feet to 51½ feet in depth. The borings were located in general accordance with CGS Note 48 requirements for school facilities which requires a minimum of one exploration point within the near-vicinity of the building footprint for every 5,000 square feet of first floor area, with a minimum of two borings per structure. Based on 36,167 sqft, 8 building borings were required. Nine deeper building borings were drilled for this study based on building layout. Should the proposed structures be moved from the presently proposed and previously discussed locations, the current boring locations may not satisfy the required criteria and additional borings may be required. The field exploration also included a geologic site reconnaissance of the project area and immediate surroundings. Plate 3a shows the surface geology and the approximate location of each boring.

Task 4 – Percolation Testing for Basin Infiltration

Four test holes were drilled to a maximum depth of 5 feet below the existing ground surface for the proposed infiltration locations, as approved by the School District. These holes were drilled on April 8, 2025 with the same drill rig as the exploration borings. Plate 3a shows the approximate location of the tests. The tests were run in general conformance with the deep boring percolation testing according to the Riverside County Flood Control and Water Conservation District Design Handbook for Low Impact Development Best Management Practices, June 2014, Whitewater River Region.

Task 5 - Laboratory Testing

Laboratory tests were performed on selected samples to evaluate the physical characteristics of the materials encountered during our field exploration. Laboratory testing included moisture content, dry unit weight, maximum density/optimum moisture content, sieve analysis, consolidation/collapse potential, Expansion Index, R-value, and direct shear. The testing was performed in general accordance with American Society for Testing and Materials (ASTM) or appropriate test procedures. Selected samples were also tested for a preliminary screening level of corrosion potential (pH, electrical resistivity, water-soluble sulfates and water-soluble chlorides). Earth Systems does not practice corrosion engineering; however, these test results may be used by a qualified engineer in designing an appropriate corrosion plan for the project.

Task 6 – Analysis and Report

Earth Systems analyzed the field data obtained, performed engineering analyses, and provided recommended design parameters for earthwork and foundations for the structures as described within. Our report includes:

- A description of the proposed project including a site plan showing the approximate boring locations;
- A description of the surface and subsurface site conditions including groundwater conditions, as encountered in our field exploration;
- A description of the site geologic setting and possible associated geology-related hazards, including liquefaction, subsidence, and seismic settlement analysis;
- A site-specific geologic map and geologic cross section in accordance with CGS requirements;
- A discussion of regional geology and site seismicity, including a regional geology map;
- A description of local and regional active faults, their distances from the site, their potential for future earthquakes, and a regional fault map;
- A discussion of other geologic hazards such as ground shaking, landslides, flooding, and tsunamis;
- A General Procedure seismic analysis including recommendations for geotechnical seismic design coefficients in accordance with the 2022 CBC.
- A discussion of site conditions, including the geotechnical suitability of the site for the general type of construction proposed;

- Recommendations for imported fill for use in compacted fills;
- Recommendations for foundation design including parameters for shallow foundations and subgrade preparation;
- Anticipated total and differential settlements for the recommended foundation system;
- Preliminary recommendations for the mitigation of liquefaction (if applicable);
- Recommendations for lateral load resistance (earth pressures and drainage) for below grade structures including drainage requirements and seismic earth pressures;
- Recommendations for site preparation, earthwork, and fill compaction specifications, including remedial grading to address cut/fill and fill/bedrock transition conditions;
- Discussion of anticipated excavation conditions;
- Recommendations for underground utility trench backfill;
- Recommendations for stability of temporary trench excavations;
- Recommendations for slabs-on-grade, including recommendations for reducing the potential for moisture transmission through interior slabs;
- Recommendations for collapsible or expansive soils (if applicable);
- Recommendations for fire lanes and pavements;
- A discussion of the corrosion potential of the near-surface soils encountered during our field exploration; and
- An appendix, which includes a summary of the field exploration (computer generated boring logs) and laboratory testing program (computer generated plots).

Not Contained in This Report: Although available through Earth Systems, the current geotechnical scope of our services does not include:

- An environmental Phase 1 assessment.
- An investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property.

Section 2
METHODS OF EXPLORATION AND TESTING

2.1 Field Exploration

The current subsurface exploration program included advancing thirteen exploratory borings. The borings were drilled to depths ranging from approximately 6½ to 51½ feet below existing grades using a Mobile B-61 truck-mounted drill rig equipped with 8-inch hollow-stem augers provided by GP Drilling of Apple Valley, California. The borings were advanced to observe soil profiles and obtain samples for laboratory testing. The approximate boring locations are shown on Plates 3a and 3b, in Appendix A. The locations shown are approximate, established by consumer grade Global Positioning System (GPS) accurate to ± 15 feet in conjunction with pacing based upon the control provided.

Staff from Earth Systems maintained a log of the subsurface conditions encountered and obtained samples for logging, classification and laboratory testing. Subsurface conditions encountered in the borings were categorized and logged in general accordance with the Unified Soil Classification System (USCS) and ASTM D 2487 and 2488 (current edition). Our typical sampling interval within the borings was approximately every 2½ or 5 feet to the full depth explored; however, sampling intervals were adjusted depending on the materials encountered onsite. Current samples were obtained within the test borings using a Modified California (MC) ring sampler (ASTM D 3550 with those similar to ASTM D 1586) and a Standard Penetration (SPT) sampler. The MC sampler has an approximate 3-inch outside diameter and 2.4-inch inside diameter, while the SPT sampler has an outside diameter of approximate 2 inches and an inside diameter of approximately 1.4 inches. The samplers were mounted on a drill rod and driven using a rig-mounted 140-pound automatic hammer falling for a height of 30 inches. The number of blows necessary to drive the samplers within the borings was recorded.

Design parameters provided by Earth Systems in this report have considered an estimated 78% hammer efficiency based on data provided by the drilling subcontractor, past report information, and limits per SP117A. The N-values (blow count) using the California sampler can be roughly correlated to SPT N-values using a conversion factor that may vary from about 0.5 to 0.7. In general, a conversion factor of approximately 0.63 from a study at the Port of Los Angeles (Zueger and McNeilan, 1998 per SP 117A) is considered satisfactory. A value of 0.63 was applied in our calculations for this project.

Bulk samples of the soil materials were obtained from the drill auger cuttings, representing a mixture of soils encountered at the depths noted. The depth to groundwater, if any, was measured in the boreholes. Following drilling, sampling, and logging, the borings were backfilled with the cuttings and tamped upon completion. Our field exploration was provided under the direction of a State of California Registered Geotechnical Engineer from our firm.

The logs of the borings represent our interpretation of the contents of the field data and the results of laboratory testing performed on the samples obtained during the subsurface exploration. The final logs are included in Appendix A of this report. The stratification lines represent the approximate boundaries between soil types, although the transitions may be gradual. In reviewing the logs and legend, the reader should recognize the legend is intended as a guideline only, and there are a number of conditions that may influence the soil characteristics

observed during drilling. These include, but are not limited to cementation, variations in soil moisture, presence of groundwater, and other factors.

The boring logs present field blow counts per 6 inches of driven embedment (or portion thereof) for a total driven depth attempted of 18 inches. Where gravel was observed in sufficient quantity, blows were recorded in 1-inch increments summed, and erroneous blows on rock discarded, as needed. The blow counts on the logs are uncorrected (i.e. not corrected for overburden, sampling, etc.). Consequently, the user must correct the blow counts per standard methodology if they are to be used for design and exercise judgment in interpreting soil characteristics, possibly resulting in soil descriptions that vary somewhat from the legend.

2.2 Laboratory Testing

Samples were reviewed along with field logs to select those that would be analyzed further. Those selected for laboratory testing include, but were not limited to, soils that would be exposed and those deemed to be within the influence of the proposed structures. Test results from 2015 and current are presented in graphic and tabular form in Appendix B of this report. Testing was performed in general accordance with American Society for Testing and Materials (ASTM) or other appropriate test procedure. Selected samples were also tested for a screening level of corrosion potential (pH, electrical resistivity, water-soluble sulfates, and water-soluble chlorides). Earth Systems does not practice corrosion engineering; however, these test results may be used by a qualified corrosion engineer in designing an appropriate corrosion control plan for the project.

Our testing program consisted of the following:

- Density and Moisture Content of select samples of the site soils (ASTM D 2937 & 2216).
- Maximum Dry Density/Optimum Moisture Content tests to evaluate the moisture-density relationship of typical soils encountered (ASTM D 1557).
- Particle Size Analysis to classify and evaluate soil composition. The gradation characteristics of selected samples were made by sieve analysis procedures (ASTM D 6913 and D1140).
- Consolidation and Collapse Potential to evaluate the compressibility and hydroconsolidation (collapse) potential of the soil upon wetting (ASTM D 5333).
- Direct Shear to evaluate the relative frictional strength of the surficial slope soils. Specimens were in a saturated condition prior to and during testing and were sheared under normal loads ranging from 1.0 to 4.0 kips per square foot (ASTM D 3080).
- Expansion Index tests to evaluate the expansive nature of the soil. The samples were surcharged under 144 pounds per square foot at moisture contents of near 50% saturation. Samples were then submerged in water for 24 hours and the amount of expansion was recorded with a dial indicator (ASTM D 4829).
- Screening Level Chemical Analyses (Soluble Sulfates and Chlorides (ASTM D 4327), pH (APHA 2320-B), and Electrical Resistivity/Conductivity (ASTM G 187) to evaluate the potential for adverse effects of the soil on concrete and steel.
- R-Value for pavement section analysis (CTM 301).

Section 3
DISCUSSION

3.1 Soil Conditions

The field exploration indicates that site soils consist predominantly of sand, sand with silt, and silty sand (Unified Soils Classification System symbols of SP, SP-SM, and SM) to the maximum depth of exploration of 51½ feet below the ground surface. The upper 2 to 5 feet of soils generally consist of sand, sand with silt, and silty sand (SP, SP-SM, and SM) and are likely fill soils associated with previous site development. Below these soils, generally sand, sand with silt, and silty sand (SP, SP-SM, and SM) were observed to the maximum depth of exploration of 51½ feet. These soils were generally dry to moist and contained varying amounts of gravel. The underlying coarse-grained soils encountered were found to be medium dense to dense. The boring logs provided in Appendix A include more detailed descriptions of the soils encountered. Site soils are classified as Type C in accordance with Cal OSHA.

3.2 Groundwater

Groundwater or perched water was not encountered during our field exploration to the maximum depth of exploration of 51½ feet. Nearby State monitoring wells were researched for their recent and historic well readings. The following is a summary of our findings for the two wells closest to the site.

- Well No. 03S05E04M001S located approximately 0.7 miles to the southeast of the site. The surface elevation of the well is approximately 977 feet and groundwater elevation reading as measured from 1994 was 744 feet.
- Well No. 03S04E01J001S located approximately 1.5 miles to the west of the site. The surface elevation of the well is approximately 932 feet and groundwater elevation readings as measured from 2011 to 2024 varied from 699 to 715 feet.

Based on the above data, groundwater is not anticipated to be encountered during construction and is expected to be deeper than 50 feet at the site such that liquefaction is not a concern. Fluctuations of the groundwater level, and localized zones of increased soil moisture content may be anticipated during and following the rainy season or from irrigation.

3.3 Collapse and Consolidation Potential

Collapsible soil deposits generally exist in regions of moisture deficiency. Collapsible soils are generally defined as soils that have potential to suddenly decrease in volume upon increase in moisture content even without increase in external loads. Soils susceptible to collapse include loose or weakly cemented sands and silts where the cementing agent is soluble (e.g. soluble gypsum, halite), valley alluvial deposits within semi-arid to arid climate, and certain granite derived residual soils. Soils such as these exist on-site.

The degree of collapse of a soil can be defined by the Collapse Potential (CP) value, which is expressed as a percent of collapse of the total sample using the Collapse Potential Test (ASTM Standard Test Method D 5333). Based on the Naval Facilities Engineering Command (Department

of Navy, 1986) Design Manual 7.1, the severity of collapse potential is commonly evaluated by the following Table, Collapse Potential Values.

Table 1
Collapse Potential Values

Collapse Potential Value	Severity of Problem
0-1%	No Problem
1-5%	Moderate Problem
5-10%	Trouble
10-20%	Severe Trouble
> 20%	Very Severe Trouble

Table 2 can be combined with other factors such as the probability of ground wetting to occur on-site and the extent or depth of potential collapsible soil zone to evaluate the potential hazard by collapsible soil at a specific site. A hazard ranking system associated with collapsible soil as developed by Hunt (1984) is presented in Table 2, Collapsible Soil Hazard Ranking System.

Table 2
Collapsible Soil Hazard Ranking System

Degree of Hazard	Definition of Hazard
No Hazard	No hazard exists where the potential collapse magnitudes are non-existent under any condition of ground wetting.
Low Hazard	Low hazards exist where the potential collapse magnitudes are small and tolerable, or the probability of significant ground wetting is low.
Moderate Hazard	Moderate hazards exist where the potential collapse magnitudes are undesirable or the probability of substantial ground wetting is low, or the occurrence of the collapsible unit is limited.
High Hazard	High hazard exist where potential collapse magnitudes are undesirably high and the probability of occurrence is high.

The results of collapse potential tests performed on six selected individual ring samples from depths ranging from 2.5 to 20 feet below the ground surface indicated a collapse potential ranging from 0.9 to 1.4 percent. Typically, the initial 1% is estimated to be from sampler disturbance as demonstrated by Table 1. Based on the above criteria and our field and laboratory findings, and assuming the grading is accomplished according to Section 5.1 of this report, we estimate the collapse potential is very low. Based on that, collapse settlement is estimated to be negligible.

3.4 Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors, and may cause unacceptable settlement or heave of structures, concrete slabs

supported-on-grade, or pavements supported over these materials. Depending on the extent and location below finished subgrade, expansive soils can have a detrimental effect on structures. Based on our visual observations, laboratory testing, and past reporting, the Expansion Index of the onsite soils is "very low" as defined by ASTM D 4829 and the 2022 California Building Code. Samples of building pad soils should be tested during grading to confirm or modify these findings.

3.5 Corrosivity

Two samples of the near-surface soils within the site were currently tested for potential corrosion of concrete and ferrous metals. Soils were tested as blended (composite) samples. The tests were conducted in general accordance with the ASTM Standard Test Methods to evaluate pH, resistivity, and water-soluble sulfate and chloride content. The test results are presented in Appendix B. These tests should be considered as only an indicator of corrosivity for the samples tested. Other earth materials found on site may be more, less, or of a similar corrosive nature.

Water-soluble sulfates in soil can react adversely with concrete. ACI 318 provides the relationship between corrosivity to concrete and sulfate concentration, presented in the table below:

Table 3

Water-Soluble Sulfate in Soil (ppm)	Corrosivity to Concrete
0-1,000	Negligible
1,000 – 2,000	Moderate
2,000 – 20,000	Severe
Over 20,000	Very Severe

In general, the lower the pH (the more acidic the environment), the higher the soil corrosivity will be with respect to ferrous structures and utilities. As soil pH increases above 7 (the neutral value), the soil is increasingly more alkaline and less corrosive to buried steel structures, due to protective surface films, which form on steel in high pH environments. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint. High chloride levels tend to reduce soil resistivity and break down otherwise protective surface deposits, which can result in corrosion of buried steel or reinforced concrete structures. Soil resistivity is a measure of how easily electrical current flows through soils and is the most influential factor. Based on the findings of studies presented in ASTM STP 1013 titled "Effects of Soil Characteristics on Corrosion" (ASTM, 1989), the approximate relationship between soil resistivity and soil corrosivity was developed as shown in Table 4.

Table 4

Soil Resistivity (Ohm-cm)	Corrosivity to Ferrous Metals
0 to 900	Very Severely Corrosive
900 to 2,300	Severely Corrosive
2,300 to 5,000	Moderately Corrosive
5,000 to 10,000	Mildly Corrosive
10,000 to >100,000	Very Mildly Corrosive

Test results show pH values of 8.2 to 8.9, chloride contents were not detected, sulfate contents of 5 to 11 ppm and minimum resistivity's of 22,800 to 25,600 Ohm-cm. Although Earth Systems does not practice corrosion engineering, the corrosion values from the soils tested are normally considered as being very mildly corrosive to buried metals and as possessing a "negligible" sulfate exposure to sulfate attack for concrete as defined in American Concrete Institute (ACI, 2011) 318, Section 4.3. The results of current chemical testing have been provided in Appendix B. The above values can potentially change based on several factors, such as importing soil from another job site and the quality of construction water used during grading and subsequent landscape irrigation.

3.6 Stormwater Percolation Testing

As indicated in Section 1.3 of this report, four test holes were drilled using the same drill rig as the exploration borings. Test holes were drilled on April 8, 2025 and reached a depth of approximately 5 feet below the ground surface. The test locations represent the soils at the assumed bottom of the proposed infiltration system. The percolation boring locations are shown on the Boring Location Map (Plate 3a), in Appendix A.

The presence of gravel and PVC pipe (inserted in the boring) were accounted for in the percolation test results. The borings were pre-saturated with potable water prior to testing. Test results were taken with a water surface at approximate depths between 3 and 5 feet below existing grade at the test locations, respectively (see Table 5).

Test procedures followed the procedures for deep boring percolation testing according to the Riverside County Flood Control and Water Conservation District Design Handbook for Low Impact Development Best Management Practices, June 2014 for Whitewater River Region. The soils encountered at the test location and the percolation rate as well as empirically correlated infiltration rate are presented in Table 5.

Table 5
Infiltration Rate Results

Test	Soil Condition	USCS Soil Description in Test Zone	Test Zone Below Existing Surface (feet)	Percolation Rate (min/in)	Porchet Empirical Infiltration Rate (in/hr)
P-1	(Native)	Sand (SP)	3 to 5	0.2	10.9 in/hr
P-2	(Native)	Sand (SP)	3 to 5	0.4	5.4 in/hr
P-3	(Native)	Sand with Silt (SP-SM)	3 to 5	0.6	4.3 in/hr
P-4	(Native)	Silty Sand (SM)	3 to 5	1.3	1.2 in/hr

*Field Values, No factor of safety applied. Typical factors of safety range from 3 to 12 depending on the type of system which will be designed using the field values and depending on the level of pre-treatment and influent which will be discharged into the infiltration trenches (Riverside County Flood Control and Water Conservation District Design Handbook for Low Impact Development Best Management Practices, 2014).

3.7 Geologic Setting

Regional Geology: The site lies within the Coachella Valley, at the transition between the Transverse Ranges and Salton Trough geomorphic provinces (see Plate 4). The Salton Trough is a large northwest-trending structural depression that extends approximately 180 miles from the San Gorgonio Pass to the Gulf of California. Much of this depression in the area of the Salton Sea is below sea level.

The Coachella Valley forms the northerly part of the Salton Trough and contains a thick sequence of Miocene to Holocene sedimentary deposits. Mountains surrounding the Coachella Valley include the Little San Bernardino Mountains on the northeast, foothills of the San Bernardino Mountains on the northwest, and the San Jacinto and Santa Rosa Mountains on the southwest. These mountains expose primarily Precambrian metamorphic and Mesozoic granitic rocks. Within the immediate site area, native geologic lithologic units consist of a mix of younger (Holocene) alluvium, older alluvium north of Mission Creek fault, and metamorphic and granitic rocks in the highlands forming the Little San Bernardino Mountains.

Active or potentially active faults in the immediate vicinity (within 25 miles) of the site include the San Andreas, San Jacinto, Burnt Mountain, and Eureka Peak faults and multiple faults associated with the Eastern California shear zone (See Table A-1). The closest active faults are multiple traces of the San Andreas fault zone including the Garnet Hill fault, the Banning fault (south branch), and the Mission/Mill Creek fault (north branch) that traverse along the northeast margin of the valley. The site does not lie within a currently designated Alquist-Priolo Earthquake Fault zone, Riverside County designated fault zone, or city fault zone per their General Plan.

Local Geology: The project site is located within the northwest portion of the Coachella Valley (see Plates 1 and 5), in the southern portion of the city of Desert Hot Springs. Sediments within the valley consist of fine- to coarse-grained sands with interbedded clays, silts, gravels, and cobbles of aeolian (wind-blown) and alluvial (water-laid) origin.

The project site is located in a mapped area where surficially, a mix of Quaternary younger alluvial and fluvial wash deposits are prevalent. Thin deposits of artificial fill resulting from site modification are also present across the site and are generally undifferentiated from the underlying sandy alluvial deposits. The prominent geologic feature in the Desert Hot Springs area is the well-defined zone of the Mission/Mill Creek branch of the San Andreas fault. The fault is defined by aligned oasis and trends in a northwest to southeast direction about 0.3 miles northeast of the campus.

3.8 Geologic Hazards

Geologic hazards that may affect the region include seismic hazards (ground shaking, surface fault rupture, soil liquefaction, and other secondary earthquake-related hazards), slope instability, flooding, ground subsidence, and erosion. A discussion follows on the specific hazards to this site.

3.8.1 Seismic Hazards

Seismic Sources: Several active faults or seismic zones lie within 50 miles of the project site as shown on Table A-1 in Appendix A. The primary seismic hazard to the site is strong ground shaking from earthquakes along regional faults including the San Andreas and San Jacinto faults.

Surface Fault Rupture: The project site does not lie within a currently delineated State of California, *Alquist-Priolo* Earthquake Fault Zone (CGS 2018). Well-delineated fault lines cross through this region as shown on California Geological Survey [CGS] Fault Activity map (2010); however, no active faults are mapped in the immediate vicinity of the site (Plates 4-8). The closest active fault is the Mission/Mill Creek segment of the San Andreas fault, located approximately 0.3 miles northeast of the site. Therefore, Holocene-active fault rupture is unlikely to occur at the project site. While fault rupture would most likely occur along previously established fault traces, future fault rupture could occur at other locations.

Review of select aerial photographs reveal that the site is located in an area predominated by alluvial fan development from Mission Creek, Morongo Wash and other secondary drainages from the Little San Bernardino Mountains. Photographs dated 1955 through 1984 show similar alluvial fan geomorphology where development has not occurred. No aerial photograph lineaments were noted in regard to the site.

Historic Seismicity: The site is located within an active seismic area in southern California where large numbers of earthquakes are recorded each year. Approximately 40 magnitude 5.5 or greater earthquakes have occurred within 60 miles of the campus since 1856. Plate 6, Earthquake Epicenter Map, depicts epicenters of significant seismic events greater than magnitude 5.5 that have occurred in southern California between 1812 and 2010.

Six historic seismic events (5.9 M or greater) have significantly affected the Coachella Valley in the last 100 years. They are as follows:

- *Desert Hot Springs Earthquake* – On December 4, 1948, a magnitude 6.5 M_L (6.0M_W) earthquake occurred east of Desert Hot Springs. This event was strongly felt in the Desert Hot Springs area.

- *Palm Springs Earthquake* – A magnitude 5.9 M_L (6.2M_W) earthquake occurred on July 8, 1986 in the Painted Hills, causing minor surface creep of the Banning segment of the San Andreas fault. This event was strongly felt in the Desert Hot Springs area and caused structural damage, as well as injuries.
- *Joshua Tree Earthquake* – On April 22, 1992, a magnitude 6.1 M_L (6.1M_W) earthquake occurred in the mountains 9 miles east of Desert Hot Springs. Structural damage and minor injuries occurred in the Coachella Valley as a result of this earthquake.
- *Landers and Big Bear Earthquakes* – Early on June 28, 1992, a magnitude 7.5 M_S (7.3M_W) earthquake occurred near Landers, the largest seismic event in Southern California for 40 years. Surface rupture occurred just south of the town of Yucca Valley and extended some 43 miles toward Barstow. About three hours later, a magnitude 6.6 M_S (6.4M_W) earthquake occurred near Big Bear Lake. No significant structural damage from these earthquakes was reported in the Desert Hot Springs area.
- *Hector Mine Earthquake* – On October 16, 1999, a magnitude 7.1 M_W earthquake occurred on the Lavic Lake and Bullion Mountain faults north of Twentynine Palms. While this event was widely felt, no significant structural damage has been reported in the Coachella Valley.

Table 6 lists select significant recorded earthquakes felt in the Palm Springs area and the estimated intensity of ground shaking near the site based on the Modified Mercalli Scale. A description of damage based on the Modified Mercalli Scale is included as Table A-2 in Appendix A.

Table 6
Significant Historical Earthquakes

Earthquake	~ Distance to Epicenter Miles	Earthquake Magnitude*	Estimated Intensity**	Date
Desert Hot Springs	6	6.0	V-VI	1948
North Palm Spring	8	6.0	V-VI	1986
Joshua Tree	10	6.2	VI-VII	1992
Landers	18	7.3	VII	1992
Big Bear	25	6.5	V-VI	1992
San Jacinto	31	6.7	V-VI	1899
San Jacinto	32	6.8	V-VI	1918
San Jacinto	39	6.8	VI-VII	1890
Pinto Mountain	46	5.8	V-VI	1949
Hector Mine	47	7.1	VI	1999
Arroyo Salada	49	6.3	VI-VII	1954
Borrego Mountain	56	6.6	VI-VII	1968
El Mayor-Cucapah	137	7.2	IV	2010
Ridgecrest	141	7.1	II-IV	2019

* Moment Magnitude after 1933 or above 6, or Local Magnitude prior to 1933 or below 6 (S.C.E.C.)
** Modified Mercalli Scale

From this analysis, it appears that the past maximum intensity in the Desert Hot Springs area from historical earthquakes due to regional faults is on the order of VII on the Modified Mercalli Scale. Anticipated intensities from a local 7+ magnitude earthquake along the nearby San

Andreas fault are VIII-IX. Table A-1 in Appendix A summarizes select significant regional faults that represent potential earthquake sources for this site.

Seismic Risk: While accurate earthquake predictions are not possible, various agencies have conducted statistical risk analyses. The Working Group of California Earthquake Probabilities (WGCEP, 2014) estimated a 31% conditional probability that a magnitude 7 or greater earthquake may occur by 2045 along the Coachella segments of the San Andreas fault.

The primary seismic risk at the site is a potential earthquake along the San Andreas fault. Geologists believe that the San Andreas fault has characteristic earthquakes that result from rupture of each fault segment. The estimated characteristic earthquake is magnitude 7.7 for the Southern Segment of the fault (USGS, 2002). This segment has the longest elapsed time since rupture of any part of the San Andreas fault. The last rupture occurred about 1690 AD, based on dating by the USGS near Indio (WGCEP, 1995). This segment has also ruptured on about 1020, 1300, and 1450 AD, with an average recurrence interval of about 220 years. The San Andreas fault may rupture in multiple segments, producing a higher magnitude earthquake. Recent paleoseismic studies suggest that the San Bernardino Mountain Segment to the north and the Coachella Segment may have ruptured together in 1450 and 1690 AD (WGCEP, 1995). Based on Paleoseismic studies, a Magnitude of 7.9 is inferred as the multi-segment event potential.

Secondary seismic hazards related to ground shaking include soil liquefaction, ground subsidence, tsunamis, and seiches. Other hazards include flooding and slope instability. The site is far inland, so the hazard from tsunamis is non-existent. At the present time, several water storage tanks are located upgradient of the campus, however, local improvements and the distances to the tanks will minimize the flood hazard in the event of catastrophic tank failure. Therefore, hazards from seiches are considered negligible at this time as related flooding would follow existing local drainage/roadway improvements, such that the impact to the site would be low.

Soil Liquefaction and Lateral Spreading: Liquefaction is the loss of soil strength from sudden shock (usually earthquake shaking), causing the soil to become a fluid mass. In general, for the effects of liquefaction to be manifested at the surface, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. The site is within a city of Desert Hot Springs General Plan “moderate” liquefaction area due to susceptible sediments should groundwater rise, although groundwater is greater than 100 feet deep. However, the potential for liquefaction to occur at this site is considered low because the current and historic high groundwater at the site are deeper than 50 feet below the ground surface. Due to the deep groundwater and low potential for liquefaction the potential for lateral spreading is considered very low.

Dry Seismic Settlement: The amount of dry seismic settlement is dependent on relative density of the soil, ground motion, and earthquake duration. In accordance with current CGS policy (Earth Systems discussion with Jennifer Thornburg, CGS May 2014), we used a site peak ground acceleration of ⅔ $PGA_{M.}$ The reasoning for using ⅔ PGA_M has stemmed from the limitations of the Pradel (modified Tokimatsu and Seed) method of calculating dry seismic settlement. This issue manifested during the code change from ASCE 7-05 to ASCE 7-10 (2013) and has been continued into the ASCE 7-16 document, where it was no longer codified to evaluate liquefaction

and seismic settlement as a design value (S_{DS}/2.5) but to evaluate it at full PGA. PGA_M equated to a maximum considered value and the design spectral response, $S_{DS,}$ is equal to ⅔ S_{MS}, where S_{MS} is the Site Class adjusted maximum considered earthquake value. When using the full PGA_M in Pradel's method, (Pradel's method is the Standard of Care methodology of calculating dry sand settlement), the potential settlements increased dramatically resulting in unreasonable amounts of assumed settlement (stress/strain curves defaulted to 10 percent vertical strain as high acceleration) which did not correlate with field observations of earthquake events. Given these unreasonably high potential settlements and after much discussion with agencies and CGS, the PGA used for dry seismic analysis was returned to a "design" value in practice. This is on the basis that since dry seismic shaking will typically not cause bearing failure (like liquefaction will) but is only settlement related deformation. Earth Systems is in concurrence with this methodology and thus the method utilized for our analysis and that ⅔ PGA_M may be used as an appropriate acceleration in the analysis of seismic settlement of unsaturated soils.

In accordance with the above discussion, we used a site peak ground acceleration of ⅔ PGA_M (where PGA_M = 1.06g) and an earthquake magnitude of 7.9 (multi-segment rupture) to evaluate dry seismic settlement potential. The design peak ground acceleration values were obtained from the SEAOC/OSHPD online application (https://seismicmaps.org/) and amended as per ASCE 7-16. Based upon methods presented by Tokimatsu and Seed (1987), the potential for seismically induced dry settlement of soils above the groundwater table for the full soil column height (51½ feet) was calculated in our deeper boring at the site and estimated to be 0.6 inches (boring B-4). Comparing the 30 foot borings of B-6, B-8, and the upper 30 feet of B-4, yields 0.5, 0.4, and 0.2 inches. As such, the conservatively estimated dry seismic settlement is less than 1 inch total, with a differential of 0.5 inches. Seismic settlement is based on post grading recommendations stated in Section 5.1.

Fissuring and Ground Subsidence: The Riverside County Parcel report indicates that the site is within a "Susceptible" potential subsidence area. In areas of fairly uniform thickness of alluvium, fissures are thought to be the result of tensional stress near the ground surface and generally occur near the margins of the areas of maximum subsidence. Surface runoff and erosion of the incipient fissures augment the appearance and size of the fissures.

Changes in pumping regimes can affect localized groundwater depths, related cones of depression, and associated subsidence such that the prediction of where fissures might occur in the future is difficult. In the project area, groundwater depths remain fairly deep. However, in the event of future nearby aggressive groundwater pumping and utilization, the occurrence of deep subsidence cannot be ruled out. Changes in regional groundwater pumping could result in areal subsidence. The risk of areal subsidence in the future is more a function of whether groundwater recharge continues and/or over-drafting stops, than geologic processes, and therefore the risk cannot be predicted or quantified from a geotechnical perspective. Soil improvement recommended within can reduce the potential for subsidence distress.

Seismic Hazard Zones: This portion of Riverside County has been mapped for the California Seismic Hazard Mapping Act (Ca. PRC 2690 to 2699) with respect to surface fault rupture. The site is not located within a currently delineated earthquake fault zone. The site is within a city of Desert Hot Springs General Plan moderate liquefaction zone and a Zone X flood zone. It is not within a City fault zone or landslide zone.

General Procedure: The Seismic Design Category for this site is E. The Code seismic parameter S_1 is 0.874 g (> 0.2 g). The site is not within a designated Alquist-Priolo Earthquake Fault Zone or County Fault Zone, and the site has a "low" potential for liquefaction. However, per Section 11.4.8 of ASCE7-16, a probabilistic analysis may be required, or the exception to section 11.4.8 in ASCE7-16 may apply. See Section 5.8 of this report for further discussion.

Acceleration values provided are estimates only. Actual spectral acceleration values may be more or less than those provided and will exceed 1 g assuming a maximum considered earthquake event occurs on the nearby branches of the San Andreas fault. Vertical accelerations are typically 1/3 to 2/3 of the horizontal accelerations but can equal or exceed the horizontal accelerations depending upon the local site effects and amplification. General procedures are included.

2022 CBC Seismic Coefficients: The California Building Code [CBC] seismic design parameters criteria are based on a Design Earthquake that has an earthquake ground motion $^2/_3$ of the lesser of 2 percent probability of occurrence in 50 years or maximum 84^{th} percentile of the mean deterministic maximum considered earthquake. The General Procedure seismic and site coefficients given in Chapter 16 of the 2022 California Building Code are provided in Section 5.8 of this report and in Appendix A in more detail.

3.8.2 Other Hazards

Landslides and Slope Instability: The site is relatively flat. No evidence of landslides within the subject site were observed. Recommendations to mitigate surficial erosion and sloughing are presented in the Recommendations sections of this report. The site in not within a landslide hazard area as per the city of Desert Hot Springs General Plan.

Flooding: The project site lies within a designated FEMA "Zone X: Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." (Area No. 06065C0905G, Effective 8/28/2008). The project site may be in an area where sheet flooding and erosion could occur. Appropriate project design by the project civil engineer, construction, and maintenance can minimize the site flooding potential.

Section 4
CONCLUSIONS

The following is a summary of our conclusions and professional opinions based on the data obtained from a review of selected technical literature and the field explorations.

General:

Based on our field exploration, laboratory testing, and geotechnical analyses conducted for this study, it is our professional opinion that the site is suitable, from a geotechnical standpoint, for construction of the school improvements as proposed, provided the recommendations presented in this report are incorporated into project design and construction.

The recommendations presented in this report may change pending a review of final grading plans and foundation plans. Recommendations presented in this report should not be extrapolated to other areas or be used for other projects (beyond those expressly identified within) without our prior review and comment.

Geotechnical Constraints and Mitigation:

- The primary geologic hazard is moderate to severe ground shaking from earthquakes originating on regional faults. A major earthquake originating on the nearby segments of the San Andreas fault, San Jacinto fault zone, Eastern California shear zone, and other regional faults would be the critical seismic event that may affect the site within the design life of the campus. Engineered design and earthquake-resistant construction increase safety and allow development of seismic areas.
- The underlying geologic condition for seismic design is Site Class D. The campus is about 0.3 miles from a Holocene-active fault/seismic source as defined by the California Geological Survey. A qualified professional should design any permanent structure constructed on the site. The *minimum* seismic design should comply with the 2022 edition of the California Building Code.
- The site is not within the County of Riverside designated fault zone, nor a currently designated Alquist-Priolo Earthquake Fault Zone. In our professional opinion, no known Holocene-Active faults or fault related lineaments cross the site. Therefore, the potential for surface fault rupture at the site is considered low.
- The potential for seismic settlement hazards are considered low for this project. The site is not within an area of significant documented areal subsidence.
- The soils are susceptible to wind and water erosion. Preventative measures to reduce seasonal flooding and erosion should be incorporated into site grading plans. Dust control should also be implemented during construction. Site grading should be in strict compliance with the requirements of the South Coast Air Quality Management District (SCAQMD).
- Other geologic hazards, including landslides, are considered low potential on this site.

- Based on current conditions, groundwater is not anticipated to be encountered during construction; however, landscaped or watered areas may encounter moist to wet soils in the upper shallow profile.
- Based on our laboratory testing and experience with the project, the Expansion Index of the onsite soil is “very low” as defined by ASTM D 4829. Samples of pad soils should be evaluated to confirm or modify these findings.
- Laboratory testing of two samples showed potentially “very mild” corrosivity to buried metallic elements and “negligible” to “moderate” for sulfate exposure to concrete. See Section 3.5 for further information. Site soils should be reviewed by an engineer competent in corrosion evaluation and protection for all elements embedded or founded upon site soils.
- In our professional opinion, structure foundations can be supported on shallow foundations bearing on a zone of properly prepared and compacted soils placed as recommended in Section 5.1. The recommendations that follow are based on “very low” expansion category soils.
- The site has the potential for high ground acceleration. Due to the proximity of proposed new structures to potentially existing retaining walls, those retaining walls, if to be reused, should be verified to incorporate or meet the design soil parameters, presented within (Section 5.7). Wall design or verification should incorporate the presented seismic loading for any wall over 6 feet in retained height, as well incorporate the surcharge loading from vehicles or nearby building loads/footing pressures.

Section 5
RECOMMENDATIONS

5.1 Site Development and Grading

A representative of Earth Systems should observe site clearing, grading, and the bottoms of excavations before placing fill. Local variations in soil conditions may warrant increasing or decreasing the depth of recompaction and over-excavation. Proper geotechnical observation and testing during construction is imperative to allow the geotechnical engineer the opportunity to verify assumptions made during the design process, to verify that our geotechnical recommendations have been properly interpreted and implemented during construction and is required by the 2022 California Building Code.

Observation of fill placement by the Geotechnical Engineer of Record should be in conformance with Section 17 of the 2022 California Building Code. California Building Code requires full time observation by the geotechnical consultant during site grading (fill placement). Therefore, we recommend that Earth Systems be retained during the construction of the proposed improvements to provide testing and observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this study. Additionally, the California Building Code requires the testing agency to be employed by the project owner or representative (i.e. architect) to avoid a conflict of interest if employed by the contractor. Unless noted otherwise, grading should be performed in general accordance with Appendix J of the 2022 CBC.

Clearing and Grubbing: At the start of site grading, existing vegetation, trees (including the entire rootball from current or past trees), large roots, overly wet and/or soft soil, undocumented fill, demolition disturbance, pavements, foundations (including pole foundations), construction debris, septic tanks, leach fields, deleterious material, trash, and abandoned underground utilities should be removed from the proposed building, structural, pavement and engineered fill areas. Organic growth should be stripped off the surface and removed from the construction area. Areas disturbed during demolition and clearing should be properly backfilled and compacted as described below. Any existing utilities that extend into the limits of the proposed development and are to be abandoned should be entirely removed.

Undocumented fill, and buried utilities may be located in the vicinity of the planned structures and within other areas of the project site. All buried structures which are removed should have the resultant excavation backfilled with soil compacted as engineered fill described herein or with a minimum 2-sack cement-sand slurry approved by the project geotechnical engineer. Abandoned utilities should be removed entirely, or pressure-filled with concrete or grout and be capped. Abandoned buried utilities structures, or foundations should not extend under building limits.

Dust control should also be implemented during construction. Site grading should be in strict compliance with the requirements of the South Coast Air Quality Management District (SCAQMD).

After stripping and grubbing operations, areas to receive fill should be stripped of loose or soft earth materials until a firm subgrade is exposed, as evaluated by the geotechnical engineer or geologist. Before the placement of fill or after cut, the existing surface soils within the building pads and improvement areas should be over-excavated as follows:

Building Pad Preparation: Subsequent to clearing and grubbing operations, the entire building pad and other structural areas (such as areas of fill (including all fill slopes), shade structures, canopies, overhead awnings, or any areas with shallow foundations, etc.), should be over-excavated to remove existing undocumented fill, demolition disturbance, and the upper compressible portion of the native soils. Structures supported on pile/caisson foundations founded deeper than 5 feet do not require the above overexcavation, except slab areas defined later in this section. The existing soils within the building pad and foundation areas should be over-excavated a minimum of 5 feet below existing grade or finished grade, or 3 feet below the bottom of the deepest foundation, whichever is lower. Due to existing compacted fill, for proposed additions to the existing administration proposed building, music room, and MPR, the overexcavation may be reduced to 2 feet below existing grade or finished grade, or 1 foot below the bottom of the deepest foundation, whichever is lower.

The exposed undisturbed subgrade bottom should be observed and tested by the geotechnical engineer or their representative to verify an in-place density of the subgrade is at or greater than 85% relative compaction per ASTM D 1557 (90% in admin, music & MPR area), or soils are firm (as determined by the geotechnical engineer). Deeper over-excavation may be recommended if the required in-place density is not achieved, or soils are not firm. The over-excavation should extend horizontally for at least 5 feet beyond the outer edge of the building pad (2 feet in admin, music & MPR area), where possible (as determined by the project geotechnical engineer), and include all exterior footings or slabs and include any overhead canopy/or covered walkway and patio areas.

The approved bottom of the sub-excavation should then be scarified 12 inches; moisture conditioned to near over optimum moisture content, and recompacted to at least 90% relative compaction (ASTM D 1557) prior to fill placement. Moisture conditioned and compacted engineered fill should then be placed to finish subgrade elevation. Compaction should be to at least 90% relative compaction. Compaction should be verified by testing.

Auxiliary Structures and Utility Subgrade Preparation: Auxiliary structures such as retaining walls, equipment pads, etc., should have the foundation subgrade prepared similar to the building pad recommendations given above. The over-excavation should extend horizontally for 2 feet beyond the outer edge of the foundation or slab. The exposed soils should then be moisture conditioned to near optimum moisture content, and recompacted to at least 90-percent relative compaction (ASTM D 1557). Moisture conditioned, engineered fill may then be placed to finished subgrade. Compaction should be verified by testing.

Retention Basin and Infiltrator Bottom Preparation: Compaction effort should be kept to a minimum at retention basin bottom areas and bottom areas used for any infiltrators (except under foundations). The subgrade below the bottom of basins and infiltrator bottoms should be compacted to approximately 85% relative compaction. Side slopes and any other fill or foundation subgrade should be compacted to at least 90% relative compaction. Slope

construction should be per report. Loose rock, such as pea gravel placed in the basin bottoms does not require compaction testing, but should be placed in lifts no greater than 2 feet and consolidated by thoroughly wetting and consolidating by passes with heavy equipment (such as a loader with full bucket or full water truck) until firm such that zero to minimal deformation (less than 1 inch) occurs under the weight of passing of equipment. Infiltrator bottoms are recommended to be at least 10 feet deep below existing grades into competent soil. Competent soil is defined as soil meeting the compaction or density criteria as described for *Building Pads*.

Slope Construction: Please see Section 5.5 for detailed slope preparation recommendations.

Pavement, Hardscape Area, and Fence Wall Preparation: In street, drive, permanent parking, and exterior hardscape areas, and fence walls with continuous foundations, the subgrade should be over-excavated a minimum depth of two feet below existing grade or finish grade, or 2 feet below the bottom of foundation or slab (whichever is deeper) for the applicable item described above. The excavation bottom should be scarified 8 inches, moisture conditioned to near or over optimum moisture content and be recompacted to at least 90% relative compaction. Engineered fill should then be moisture conditioned, placed in suitable lifts, and compacted to a minimum of 90% relative compaction prior to the placement of subsequent lifts, with the upper 1 foot compacted to at least 95% relative compaction in parking and drive areas. Compacted fill should be placed to finish subgrade elevation.

Exterior slabs-on-grade for play court flatwork may be placed on a minimum of 4 inches of Class 2 aggregate base compacted to at least 95% relative compaction at near optimum moisture content. Compaction should be verified by testing.

Engineered Fill Soils: The native soil is suitable for use as engineered fill and utility trench backfill provided it is free of significant organic or deleterious matter (less than 1%), debris, concrete, and oversize rock and is “very low” in Expansion Index. Construction debris, concrete, asphalt, etc. is not suitable for placement within fill. These materials should be hauled offsite.

Within areas to receive foundations and slabs-on-grade the fill should be “very low” in Expansion Index. Expansive soils which are identified should be blended or removed and replaced with low permeability soils which are “very low” in expansion potential under the observation of the Geotechnical Engineer or his representative.

Engineered fill (and any import) should be placed in maximum 8-inch lifts (loose) and compacted to at least 90 percent relative compaction (ASTM D 1557) at near optimum moisture content, prior to the placement of subsequent lifts. Fill shall be removed of oversize material and blended/mixed to create a uniform mix prior to compaction and prior to placement of subsequent lifts. Within pavement areas, the upper 12 inches of subgrade should be compacted to at least 95 percent relative compaction (ASTM D 1557). Compaction should be verified by testing.

The upper 3 feet of fill shall be limited to 3 inch minus material. 6-inch minus material within the building pad is allowed at a depth of at least three feet below footings and approximately 5 feet below the finished subgrade in slab areas. Utility corridors shall be 3-inch minus.

Imported fill soils should be "very low" Expansion Index granular soils meeting the USCS classifications of SM, SP-SM, or SW-SM with a maximum rock size of 3 inches and 15 to 50-percent passing the No. 200 sieve (unless otherwise approved by the geotechnical engineer). The geotechnical engineer should evaluate the import fill soils before hauling to the site. However, because of the potential variations within the borrow source, import soil will not be prequalified by Earth Systems. At the approval of the geotechnical engineer, a 1 or 2 sack cement-sand slurry may be used as non-structural, or structural backfill, respectively, upon geotechnical approval.

A program of compaction testing and expansion testing, including frequency and method of test, should be developed by the project geotechnical engineer at the time of grading. Acceptable methods of test may include Nuclear methods such as those outlined in ASTM D 6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods), and ASTM D 4829, (Standard Method for Expansion Index of Soils). Additionally, a minimum of 5% of the in-place density evaluation should be performed using an alternative method for quality assurance of compaction levels. Alternative methods may include methods outlined in ASTM D 1556 (Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method) or correlation probing with a hand probe.

All soils should be moisture conditioned prior to application of compactive effort and prior to foundation, slab-on-grade and pavement placement. Moisture conditioning of soils refers to adjusting the soil moisture to or just above optimum moisture content. If the soils are overly moist so that instability occurs, or if the minimum recommended compaction cannot be readily achieved, it may be necessary to aerate to dry the soil to optimum moisture content or use other means such as dry material import to address soft soils (as approved by the geotechnical engineer prior to use). Site soils will require conditioning due to very moist conditions.

Sand-Cement Slurry Backfill (Controlled Low Strength Material, CLSM) : Where approved by the geotechnical engineer for use, sand-cement "slurry" (controlled low strength material (CLSM)), shall comply with the provisions of this report for the following:

1. Specifications for the preparation of the site prior to placement of the CLSM.
    - Remove any spoils, uncertified fill, loose material, debris and standing water from the existing excavations to a firm subgrade as approved by the geotechnical engineer or his representative.
    - A representative of Earth Systems should observe bottoms of excavations before placing CLSM.
    - CLSM shall not be placed on a sloping surface with a gradient steeper than 5:1 (H:V).
2. Specifications for the CLSM.
    - CLSM shall be ready-mixed by an ACI approved batch plant.
    - Use minimum 2-sack sand-cement CLSM complying, in general, with Caltrans Standard Specification (2015) Section 19-3.02F Controlled Low-Strength Material. CLSM should have a low or non-shrinkage.
    - CLSM must have a 28-day compressive strength of at least 100 psi; however, it is cautioned that increased strength may not be excavatable.

3. Placement of CLSM After Item 1 above is Completed

    i. Place CLSM to the bottom of the foundation area or, in maximum 3-foot lifts if the structural engineer has verified that no "blowouts" will occur, (the minimum placement of CLSM should be 12 inches thickness under foundations and 2 inches when used for "rat" slabs), and allow the CLSM to cure at least for 24 hours or initial set, whichever is longer before placing a subsequent lift. Vibration and rodding of the entire lift should be accomplished during placement. Repeat as needed until the CLSM is to the bottom of the footing grade, or finished slab grade.

4. Laboratory or field test method(s) to be used to determine the compressive strength or bearing capacity of the CLSM.

    - Sample CLSM and fabricate test cylinder in accordance with ASTM D4832. Test for density in accordance with ASTM D6023 at the discretion of the Geotechnical engineer. Test for compressive strength at 28 days in accordance with ASTM D4832.

5. Test methods for determining the acceptance of the CLSM in the field.

    - ASTM D4832, Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.
    - ASTM D6023, Density (Unit Weight), Yield, Cement Content, and Air Content (Gravimetric) of Controlled Low-Strength Material (CLSM).

6. Number and frequency of field tests required to determine compliance with item 5.

    - Fabricate one set of 5 cylinders and test for density for each 50 cubic yards or fraction thereof or as directed by the geotechnical engineer (GE) of record or the GE's representative.

Shrinkage and Bulking: The shrinkage factor for earthwork for the alluvial and fill materials is expected to range from -8 to 11 percent for the upper excavated or scarified site soils. Negative shrinkage is bulking. This estimate is based on compactive effort to achieve an average relative compaction of about 92 percent. Shrinkage is highly dependent on and may vary with contractor methods for compaction. Losses from site clearing, oversize rock removal, and removal of existing site improvements may significantly affect earthwork quantity calculations and should be considered.

Dust Control: The proposed site lies within an area of high potential for wind erosion. The site soils have a fine-grained component of their composition. As such, exposed soil surfaces may be subject to disturbed fine particulate matter (PM_{10}) which can create airborne dust if the soil surface or roadways are not maintained. During construction, watering the soil surface can reduce airborne dust. Alternatively, a dust control palliative may be spray applied to the soil surface to act as a tackifier which contains loose soil particles. Palliatives must be reapplied periodically as they weather and degrade. Further guidance for dust palliatives can be found in reviewing the United States Department of Agriculture publication *Dust Palliative Selection and*

Application Guide, Document No. 9977-1207-SDTDC. The recommended soil input parameters are Plasticity Index <3, and fines content <5 percent.

5.2 Excavations and Shoring

Excavations should be made in accordance with Cal/OSHA requirements. Using the Cal/OSHA standards and general soil information obtained from the field exploration, classification of the near surface on-site soils will likely be characterized as Types: A, B, and C. Earth Systems recommends safety values be based on the worse case, typically Type C. Actual classification of site specific soil type per Cal/OSHA specifications as they pertain to trench safety should be based on real-time observations and determinations of exposed soils by the contractors *Competent Person* (as defined by OSHA) during grading and trenching operations.

Our site exploration and knowledge of the general area indicates there is a moderate potential for caving and sloughing of site excavations (over excavation areas, utilities, footings, etc.) due to dry and also overly moist/wet conditions. Where excavations in soils over 4 feet deep are planned, lateral bracing or appropriate cut slopes of 1.5:1 (horizontal/vertical) should be provided. No surcharge loads from stockpiled soils or construction materials should be allowed within a horizontal distance measured from the top of the excavation slope and equal to the depth of the excavation.

The borings were advanced with minimal effort within the existing on-site soils. Conventional equipment should be capable of performing shallow on-site excavations.

Localized perched groundwater or overly moist soils could be encountered during remedial grading in landscape or watered areas. Techniques to stabilize the bottom of the excavation may be required (such as placing gravel and punching it into the soft soil, blending with dry material, or other techniques chosen by the contractor), and reviewed by the geotechnical engineer.

Excavations which parallel structures, pavements, or other flatwork, should be planned so that they do not extend into a plane having a downward slope of 1:1 (horizontal: vertical) from the bottom edge of the footings, pavements, or flatwork. Shoring or other excavation techniques may be required where these recommendations cannot be satisfied due to space limitations or foundation layout. Where overexcavation will be performed adjacent to existing structures, ABC slot cutting techniques may be used.

Slot-Cutting Procedures: For proposed cuts adjacent to existing structures or property lines, slot-cutting methods may need to be employed to maintain the integrity of existing foundations and slabs. ***Whether this is needed will have to be determined after the final elevations and horizontal boundaries of the over-excavated area are determined.*** In the event the over-excavation cuts into the soil near existing buildings and are within the zone of influence of the existing footing, slot cutting methods will need to be employed to maintain the integrity of the existing foundations.

Therefore, we recommend that excavations along existing footing lines be performed with the ABC slot-cutting procedure with a maximum slot width of 5 feet.

An "ABC slot cutting method" as described below should be performed during the grading operation (over-excavation and recompaction). The excavation and backfill of all the designated "A" slots should be performed first with the "B" slots either unopened or cut at a 1.5:1 (horizontal: vertical) slope from the face of the existing building grade to the bottom of excavation. Once the A-slots are completed, work may progress on the B-slots, then after the B slots, C slots may be opened.

Excavation and Backfill Sequence for A-slots:

1. Excavate all the A-slots for the entire excavation depth of 6 feet. The slots may be at most 5 feet wide.
2. In maximum 8-inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the A-slot. Compact to at least 90% relative compaction prior to the placement of subsequent lifts.

Excavation and Backfill Sequence for B-slots:

3. Excavate all the B-slots for the entire excavation depth of 6 feet. The slots may be at most 5 feet wide.
4. In maximum 8-inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the B-slot. Compact to at least 90% relative compaction prior to the placement of subsequent lifts.

Excavation and Backfill Sequence for C-slots:

5. Excavate all the C-slots for the entire excavation depth of 6 feet. The slots may be at most 5 feet wide.
6. In maximum 8-inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the C-slot.

The excavation sequence should be approved by the geotechnical engineer. The bottom of the over-excavation slot should be scarified 8 inches, moisture-conditioned to near optimum and compacted to 90% relative compaction (ASTM D 1557) prior to the placement of subsequent lifts. Prior to fill placement compaction should be verified by testing.

Shoring: Shoring may be required where soil conditions, space, or other restrictions do not allow a sloped excavation or slotting cutting is not an option. A braced or cantilevered shoring system may be used. Trench boxes should not be placed below or within the pipe zone elevation as their removal may loosen compacted backfill. Positive trench shoring may be required (jacks and plates).

A temporary cantilevered shoring system should be designed to resist an active earth pressure equivalent to a fluid weighing as shown in the table below. Cantilevered (Active, some

movement) or restrained excavations above the groundwater table should be designed to resist a uniform horizontal equivalent soil pressure as presented in the table below.

Table 8
Temporary Cantilevered and Braced Shoring System Parameters

Equivalent Fluid Pressure pounds per cubic foot (pcf)	
Cantilevered	**Braced**
39	60

The values provided above assume a level ground surface adjacent to the top of the shoring and do not include a factor of safety. Fifty percent of an areal surcharge placed adjacent to the shoring may be assumed to act as an additional uniform horizontal pressure against the shoring. Special cases such as combinations of slopes and shoring or other surcharge loads may require an increase in the design values recommended above. These conditions should be evaluated by the project geotechnical or shoring engineer on a case-by-case basis. Retaining walls subjected to traffic loads should include a uniform surcharge load equivalent to at least 240 psf for auto or delivery truck (2 axle) traffic at least 3 feet from the back of the wall. Retaining walls with closer traffic or heavier traffic loads should be designed for a 450 psf surcharge load. Retaining walls should be designed with a minimum factor of safety of 1.5.

The wall pressures above the groundwater do not include hydrostatic pressures; it is assumed that drainage will be provided. If drainage is not provided, shoring extending below the groundwater level should be evaluated on a case-by-case basis.

Cantilevered shoring must extend to a sufficient depth below the excavation bottom to provide the required lateral resistance. We recommend required embedment depths be determined using methods for evaluating sheet pile walls and based on the principles of force and moment equilibrium. For this method, the allowable passive pressure against shoring, which extends below the level of excavation, may be assumed to be equivalent to a fluid weighing 250 pcf. Additionally, we recommend a factor of safety of at least 1.2 be applied to the calculated embedment depth and that passive pressure be limited to 2,000 psf.

The contractor should be responsible for the structural design and safety of all temporary shoring systems. The contractor should carefully review the boring logs in this report, and perform their own assessment of potential construction difficulties, and methods should be selected accordingly. Shoring should be sealed to prevent the piping of soil material and potential soil loss conditions which can cause settlement. The method of excavation and support is ultimately left to the contractor with guidance and restrictions provided by the designer and owner. We recommend that existing structures be monitored for both vertical and horizontal movement.

The contractor should carefully review the boring logs in this report, and perform their own assessment of potential construction difficulties, and methods should be selected accordingly. The method of excavation and support is ultimately left to the contractor. A representative from our firm should be present during grading operations to monitor site conditions; substantiate proper use of materials; evaluate compaction operations; and verify that the recommendations contained herein are met.

5.3 Utility Trenches

Backfill of utilities within roads or public rights-of-way should be placed in conformance with the requirements of the governing agency (water district, public works department, etc.). Utility trench backfill within private property should be placed in conformance with the provisions of this report. Backfill operations should be observed and tested to monitor compliance with these recommendations.

Due to the need to test pipeline subgrade, where excavations require trench entry, the contractor should make allowance and provide proper shoring or stabilize the excavation in accordance with Cal-OSHA for safe entry by the testing lab and workers.

Trench Width and Vertical Loads on Pipelines: Vertical loads to the pipeline are highly dependent upon the geometry of the trench. In general, the narrower the trench is at the top of the pipe/conduit with respect to the diameter of the conduit, the less vertical load is applied to the conduit. This is because as the trench backfill and bedding compress or consolidate over time, the weight of the soil mass is partially offset by the frictional resistance along the trench sidewalls. In addition, the type of bedding supporting the pipeline affects the bearing strength of the conduit. This is accounted by a load factor that is multiplied to the design strength of the conduit. The pipe manufacturer recommendations for trench installation and maximum width should be followed to reduce the potential for overloading the pipe due to excess backfill load.

Pipe Subgrade and Bedding: Native soil is gravelly and may not be suitable to support pipe haunches, there by requiring a sandy import, as below for bedding. Pipeline subgrade should be compacted to a minimum of 90% relative compaction (ASTM D 1557) or be in a firm condition as evaluated by the geotechnical engineer or his representative for a depth of 6 inches below any bedding. Bedding material shall consist of sand 100 percent passing a No. 4 sieve and less than 5 percent fines (passing a No. 200 sieve) with a sand equivalent of 30, or if mechanically compacted 15 percent fines, or as approved by the project inspector and geotechnical engineer. The unprocessed native soils are not typical of that used for bedding and import will be required if needed. Bedding should be compacted to at least 90% relative compaction or firm (less than 2" insertion of a ½" probe under typical 200 pound user weight). Jetting is not recommended.

Pipe-Zone, Trench–Zone, Trench Backfill and Compaction: Backfill of utilities should be placed in conformance with the requirements of the specifications. Backfill of utilities within roads or public rights-of-way should be placed in conformance with the requirements of the governing agency (water district, public works department, etc.).

Pipe zone backfill material (defined as the pipe area from the top of the bedding to 12 inches above the top of pipe) placed as import sand (as described above for bedding) as dictated by the pipe designer or manufacturer. The pipe zone backfill material should be placed in maximum 8-inch lifts (loose) and compacted near its optimum moisture content prior to the placement of subsequent lifts. Pipe zone backfill should be compacted to a minimum of 90% relative compaction (ASTM D 1557) or to a firm condition as evaluated by the geotechnical engineer or his representative. Compaction should be assured in the pipe haunches.

The native soil is suitable for use as trench zone and street zone (and manholes) backfill (from the top of pipe zone up to finished grade), provided it is free of significant organic or deleterious

matter and oversize materials. This backfill shall contain no particles larger than 3 inches in greatest dimension. The final backfill material should be placed in maximum 8-inch lifts (loose) and compacted to at least 90% relative compaction (ASTM D 1557) near its optimum moisture content prior to the placement of subsequent lifts for the trench zone and 95% for the street zone (upper 12 inches) where below pavement. Compaction should be verified by testing.

Backfill materials should be brought up at substantially the same rate on both sides of the pipe or conduit and be worked into the haunches. Reduction of the lift thickness may be necessary to achieve the above recommended compaction. Care should be taken to not overstress the piping during compaction operations. Mechanical compaction is recommended; ponding or jetting is not recommended.

Alternatively, if the utility cannot accommodate the increased stress, or if compaction is difficult, we recommend the pipe be encased by at least 1 foot of 1-sack cement-sand slurry (at least 1 foot as measured from the top of pipe), 2-sack cement-sand below structural areas. Backfill operations should be observed and tested to monitor compliance with these recommendations.

In general, coarse-grained sand and/or gap graded gravel (i.e. ¾-inch rock or pea-gravel, etc.) should not be used for pipe or trench zone backfill due to the potential for soil migration into the relatively large void spaces present in this type of material and water seepage along trenches backfilled with coarse-grained sand and/or gravel. Water seepage or soil migration will cause settlement of the overlying soils. Rock backfill, where permitted, should be wrapped in filter fabric such as Mirafi 140N where there is contact with native or other fill soils.

Compaction should be verified by testing. Backfill operations should be observed and tested to monitor compliance with these recommendations. Trench backfill compacted per these requirements can be expected to settle 0.1 to 0.3 percent of the trench depth. This can cause an elevation difference between backfilled trenches and the surrounding soil or pavement. Increased relative compaction can reduce settlement if the potentials presented are not acceptable. The geotechnical engineer should be consulted on a case-by-case basis to provide further recommendations to reduce the settlement potential. Utilities which are not traffic rated under drive areas should be founded at least 3 feet below the drive surface to minimize traffic loading on the utility.

STRUCTURES

In our professional opinion, structure foundations can be supported on shallow foundations bearing on a zone of properly prepared and compacted soils placed as recommended in Section 5.1. The recommendations that follow are based on “very low” expansion category soils.

5.4 Foundations

Footing design of widths, depths, and reinforcing are the responsibility of the Structural Engineer, considering the structural loading and the geotechnical parameters given in this report. A minimum footing depth of 18 inches (below lowest adjacent grade) should be maintained and considers a “very low” Expansion Index soil as described in Section 5.1. 1.163. Lowest adjacent grade is the lowest grade within 3 feet laterally of the footing edge. A representative of Earth Systems should observe foundation excavations to verify compaction (minimum 90% per ASTM

D 1557) before placement of reinforcing steel or concrete. Loose soil or construction debris should be removed from footing excavations before placement of concrete. *All footing excavations should be probed for uniformity. Soft or loose zones should be excavated and recompacted to finish foundation bottom subgrade. The bottom of all foundations should be compacted, and tested to confirm compaction effort and moisture contents as stated in Section 5.1 of this report are met.* The moisture contents should be at least the indicated moisture content 24 hours prior to and immediately prior to placing concrete for a depth of at least 12 inches below the foundation subgrade. If the moisture condition is less than indicated, it shall be brought up to or above the indicated moisture content.

Minimum Slope Setback for Foundations: Earth Systems recommends a minimum setback distance of 5 feet. The 2022 California Building Code provides setback distances for foundations along slopes. Setback distances are measured differently for foundations located above the slope and those located below the slope. For foundations located at the top of the slope, the measurement is taken horizontally from the outside face of the foundation footing to the face of the slope. For foundations located below the slope, the horizontal distance is measured from the face of the structure foundation to the toe of the slope. For pools and slopes steeper than 1(H):1(V), please contact Earth System for these setbacks with submittal of detailed information using plan form.

Conventional Spread Foundations: Allowable soil bearing pressures are given below for foundations bearing on recompacted soils as described in Section 5.1. Allowable bearing pressures are net (weight of footing and soil surcharge may be neglected).

- Continuous wall foundations, 12-inch minimum and 36-inch maximum width and 12-inch minimum depth below grade:

  1,500 psf for dead plus design live loads

  An additional 500 psf may be used for each additional 6 inches of footing width, up to a maximum of 2,500 psf.

- Pad foundations, 2 x 2-foot minimum and 9 x 9-foot maximum in plan and 18 inches below grade:

  2,500 psf for dead plus design live loads

  An additional 500 psf may be used for each additional 6 inches of width, up to a maximum of 3,500 psf.

A one-third (⅓) increase in the allowable bearing pressure may be used when calculating resistance to wind or seismic loads as allowable bearing pressure is governed by settlement and not ultimate soil failure. The indicated 1/3 increases to allowable bearing pressures for wind or seismic loads are applicable to ASD calculation methods as presented in ASCE7-16, Section 2.4 for ASD design.

If the anticipated loads exceed the estimated values stated in Section 1.1 (100 kips for Isolated Footings and 4 kip/linear-ft for continuous footings), the geotechnical engineer must reevaluate the allowable bearing values as the allowable bearing was controlled by the allowable settlement

from dry seismic, collapse, and static loads. Underground utilities should be designed for an anticipated settlement within the building areas.

The spacing between any large spread footings should be evaluated by the geotechnical engineer during the plan review stage to confirm or modify the settlement estimates and bearing capacity due to large footings and the influences from adjacent footings. A preliminary analysis suggests spacing the footings (adjacent edge to adjacent edge) a lateral distance from one another of the width of the largest footing from any adjacent footing, such that influence effects are minor.

Maximum foundation sizes given above are based on settlement due to Dead + Live loads. Transient loads such as earthquake or wind loads are not subject to the stated size limitations; however, the allowable bearing pressure (including ⅓ increase) should be followed considering the relevant foundation sizes given above.

A 1:1 (h:v) influence zone may be considered for footing design which extends downward and outward from the footing outside edges. Other structures or footings within this 1:1 projection should include surcharge loading and vice versa if other footings or structures project onto new footings.

An average modulus of subgrade reaction, k, of 200 pounds per cubic inch (pci) can be used to design lightly loaded footings and slabs founded upon compacted fill. Other foundations such as mat slabs, will require the use of differing modulus of subgrade reaction values than used for lightly loaded slabs. Please contact Earth Systems for k values used for mat foundations.

The table below is based upon the above presented allowable, short term, and ultimate bearing pressures. Values may be increased by the provisions given above. Short Term allowable bearing may use the values presented below (based on Allowable Stress Design) or be based on Code mandated structural reductions, whichever is less. Ultimate bearing capacities consider a factor of safety of 3 (ASD design) to control settlement (7,500 to 10,500 psf ultimate) and a safety factor of 2.25 on transient loads. Ultimate bearing to soil failure depends on foundation size and could be much greater than 10,500 psf. The restrictions of Section 1605A.1.1 apply to the cited bearing values for Allowable Stress Design (ASD).

Table 9

	Maximum Allowable Bearing Capacity (psf) (FS = 3)	**Short Term (Wind/Seismic) (FS = 2.25)**	**Ultimate Bearing Capacity (FS = 1)**
Continuous Foundations	2,500	3,300	7,500
Isolated Pad Foundations	3,000	4,000	10,500

FS = Factor of Safety

Footings should be designed and reinforced by the structural engineer for the specific loading, settlement, or expansive soil conditions. A minimum of two, #4 reinforcing bars should be placed. One near the top of the footing and one near the bottom (3 inches above and below). This reinforcing is not intended to supersede any structural requirements provided by the structural engineer.

An average modulus of subgrade reaction, k, of 200 pounds per cubic inch (pci) can be used to design footings founded upon compacted fill. Stepped foundations should be designed in accordance with the 2022 CBC. CBC 2022 and ACI Section 4.3, Table 4.3.1 should be followed for recommended cement type, water cement ratio, and compressive strength. Seismic Design Category for compressive strength determination is 'E'. Concrete should be proportioned in accordance with ACI recommendations considering the time of year for placement. Hot weather proportions should be used during high ambient heat days during placement and curing.

Expected Foundation and Fill Settlement: Based on the recommendation for compacted fill, the estimated static settlement (static, collapse) should be less than 1 inch, based on footings founded on firm soils as recommended and the loads presented in Section 1.1. Differential static settlement is estimated to be less than ½ inch over 40 feet. Within the building area, seismic settlement is estimated to be less than 1 inch, with differential seismic settlement less than ½ inch over 40 feet. Settlement of compacted trench backfill is calculated to be on the order of 0.2% of the total fill height. Differential total settlement between similarly loaded bearing members should be less than 1 inch over a distance of approximately 40 feet, expressed in a post-construction angular distortion ratio of 1:480 or better which includes seismic settlement estimates. At a minimum, foundations should be designed by the structural engineer for the specific static and seismic settlement conditions presented. Settlement calculations are presented in Appendix A.

Minor Deep Foundations: Although no specific elements were identified by the architect, for miscellaneous structural components such as light poles, gate posts, shade structures, temporary retaining walls, and flag poles, may be supported on cast-in-place piles, or direct embed in drilled holes filled with concrete, and the design be based on parameters presented in the subsequent sections of this report assuming 1 inch of settlement. Construction employing poles or posts may utilize design methods presented in Sections 1806A and 1807A with Table 1806A.2 of the CBC Sand (SP) material class. For designs utilizing allowable frictional resistance, Earth Systems recommends the use of Section 1810A.3.3.1.4 and .5 of the CBC. Skin friction and bearing should not act together (not additive) to determine capacity. For piles with an axial load, these design methods apply for piles spaced at least 3 pile diameters center to center for axial loads and 6 pile diameters (in the direction of (and)) for lateral loads as graded in accordance with Section 5.1. Piles spaced closer than these limits could have soil strength reduction and should be evaluated on a case-by-case basis by geotechnical engineer. A minimum factor of safety of 3 should be considered. Piles which are laterally loaded and located laterally within a distance of ½ the pile length from the retaining wall, should contact Earth Systems for applied wall pressures. Piles located further from the wall do not require application of pressure to the wall.

For piers founded in areas with native soil at the surface, an additional 1.5 feet should be added to the calculated pile embedment due to the potential effects of long-term surficial disturbance and erosion. Additionally, where piers are constructed adjacent to the tops of slopes, there should be a minimum distance between the top of the slope and the closest edge of the pier of H/3, where 'H' is the height of the slope, otherwise a lateral resistance reduction must be applied. For piers founded closer than a distance H/3 to the crest or within the slope area itself, the calculated lateral resistance of the soil should be reduced by 30 percent. The above recommendations have considered slopes no steeper than 2:1 (horizontal:vertical). Steeper slopes will require additional analysis and may change the recommendations presented.

The on-site soils are expected to be excavatable with conventional drilling, however, soils are sandy and will have a potential for caving. Drilled piers should have a minimum 3 inches of clearance between the embedded post and the soil side wall to allow for adequate placement and flow of concrete.

Drill holes may end up oversize. Casing or other means may be required in a drilled hole. Any "slough" or loose soils at the bottom of the shaft must be removed or tamped prior to setting rebar cages and placing concrete. Extreme care must be exercised to carefully position reinforcing steel cages and place concrete without disturbing the sidewalls of the drilled shafts. We recommend centralizers be used to positively locate rebar cages within the pier shaft. It is recommended that pier excavations that have not received concrete, not be left open overnight and concrete should be placed the same day.

Normally, drilled pier excavations should be made without the use of water. If necessary, water may be used to facilitate removal of cuttings unless it aggravates caving problems. Added water that may accumulate at the bottom of the hole should be removed from the drilled hole prior to placing the concrete. Sidewalls which have softened from the addition of water should be cleaned of the soft/loose material. Each excavation should be completed in a continuous operation and the concrete should be placed without undue delay. The contractor should use appropriate means to clean the bottom of the excavation so that no loose material is present at the base of the pier. We do not recommend overdrilling beyond specified pier tip elevations to eliminate the need for bottom cleaning in order to account for slough or loose materials at the excavation bottom. To reduce the potential for caving and sidewall sloughing which may contaminate concrete during placement, and segregation, concrete should be placed by tremie methods and not directly chute-dumped into the hole.

Where casing is used with drilled holes and cannot be withdrawn, the skin friction capacity is theoretically reduced, as are passive resistance and stiffness. The amount of reduction is subject to assessment by the geotechnical consultant. The use of casing with drilled holes should be approved prior to use by the geotechnical engineer.

If casing is required, it should be withdrawn as the concrete is being placed, maintaining a 3-foot minimum head of concrete within the casing. This is to prevent reduction in the diameter of the drilled shaft due to earth pressure on the fresh concrete and to prevent extraneous material from falling in from the sides and mixing with the concrete. Concrete placement should continue in this manner until suitable concrete extends to the top of the excavation or forms. The upper eight feet of the pier should be consolidated by vibratory means.

Pier capacity is greatly dependent on the soil conditions at the location of the pier and upon contractor means and methods of placement. It is recommended that drilling operations and concrete placement be performed in the continuous presence of the geotechnical consultant or his representative to confirm that suitable materials for pier support are penetrated, that the dimensions of the installed piers meet the design dimensions, and that the installation has been performed as specified by the 2022 California Building Code. Observation during drilling is required by the 2022 California Building Code on a full-time basis by the geotechnical engineer or his representative. If subsurface conditions noted during drilled pier installation are

significantly different than those encountered in our borings, it may be necessary to adjust the overall length of the pier.

Prior to the placement of steel, and again prior to and during the placement of concrete, the excavation must be examined by the geotechnical consultant before proceeding with construction. The contractor should provide all aid and assistance required by the geotechnical and geologic consultants for field monitoring of the drilled pier operations.

Piers are accepted or rejected based on visual observation and testing during construction. The contractor should not allow nor cause any of this work to be permanently enclosed or covered up until it has been observed, tested, and accepted by the geotechnical engineer and all legally constituted authorities having jurisdiction.

5.5 Slope Construction

Slopes are not generally proposed for this project; however, minor slopes (less than 10 feet in height) may be constructed. Site soils are highly susceptible to erosion. Compacted fill slopes protected against erosion (per approved methods such as significant planting, facing, or erosion blankets, etc.) should be constructed at 2:1 (horizontal: vertical) or flatter inclinations. Unprotected slopes with exposed native soils at the surface should be expected to require repair after heavy nuisance or storm runoff occurs due to significant erosion. Slope recommendations may change pending a more in-depth geotechnical evaluation once design plans are developed. Slopes used as nuisance or storm drainage channel slopes, or where erosion will not be maintained should be no steeper than 3:1, or shallower.

Compacted fill should be placed at near optimum moisture content and compacted to a minimum 90 percent of the maximum dry unit weight, as measured in relation to ASTM D 1557 test procedures. The exposed face of any cut or fill slope (upper 12 inches) should have a minimum relative compaction of 90 percent, as measured in relation to ASTM D 1557 test procedures and be compacted at near optimum moisture content for sandy soils. Due to erodible site soils, slope faces should be protected with facing or densely spaced vegetation to reduce the erosion potential.

Surficial Slope Failures: Site soils are highly susceptible to erosion from wind and water sources. All slopes will be exposed to weathering, resulting in decomposition of surficial earth materials, thus potentially reducing shear strength properties of the surficial soils. In addition, these slopes become increasingly susceptible to rodent burrowing. As these slopes deteriorate, they can be expected to become susceptible to surficial instability such as soil slumps, erosion, soil creep, and debris flows. Development areas immediately adjacent to ascending or descending slopes should address future surficial sloughing of soil material and erosion. Such measures may include debris fences, slope facing, catchment areas or walls, freeboard, diversion ditches or berms, soil planting, velocity reducers or other techniques to contain soil material away from developed areas and reduce erosion. Additionally, foundations should be set back at least 5 feet from the edge of slope or as per the 2022 CBC, whichever is greater.

Operation and maintenance inspections should be done after a significant rainfall event and on a time-based criteria (annually or less) to evaluate distress such as erosion, slope condition, rodent infestation burrows, etc. Inspections should be recorded and photographs taken to

document current conditions. The repair procedure should outline a plan for fixing and maintaining surficial slope failures, erosional areas, gullies, animal burrows, etc. Repair methods could consist of excavating and infilling with compacted soil erosional features, track walking the slope faces with heavy equipment, as determined by the type and size of repair. These repairs should be performed in a prompt manner after their occurrence. Slope inclinations should be maintained and a maintenance program should include identifying areas where slopes begin to steepen. Where future maintenance is not possible, slopes should be faced to reduce the erosion and degradation potential.

Slope faces are highly erodible even if compacted and will gradually erode and move down slope presenting maintenance issues and debris deposited in drainage devices and flatwork areas. The minimum material necessary to support landscaping should be specified by the landscape consultant (typically less than 6 inches).

5.6 Slabs-on-Grade

Subgrade: Concrete slabs-on-grade and flatwork may be supported on compacted and moisture conditioned soil placed in accordance with Section 5.1 of this report. The moisture content should be at least the indicated moisture content 24 hours prior to and immediately prior to placing concrete for a depth 12 inches. If the moisture condition is less than indicated, it shall be brought up to or above the indicated moisture content. Exterior play court slabs may be placed on 4 inches of compacted aggregate base (Class 2). Compaction should be to at least 95% at near optimum moisture content.

Vapor Retarder: In areas of moisture-sensitive floor coverings, coatings, adhesives, underlayment, goods or equipment stored in direct contact with the top of the slab, bare slabs, humidity controlled environments, or climate-controlled cooled environments, an appropriate vapor retarder that maintains a permeance of 0.01 perms or less after ASTM E1745's mandatory conditioning tests should be installed to reduce moisture transmission from the subgrade soil to the slab. For these areas, a vapor retarder (Stego wrap 15-mil thickness or equal) should underlie the floor slabs. If a Class A vapor retarder (ASTM E 1745) is specified, the retarder can be placed directly on compacted soil, and be covered with a minimum 2 inches of clean sand.

Clean sand is defined as well or poorly-graded sand (ASTM D 2488) of which less than 5 percent passes the No. 200 sieve and all the material passes a No. 4 sieve. The site soils do not fulfill the criteria to be considered clean sand. Alternatively, the slab designer may consider the use of other vapor retarder systems that are recommended by the American Concrete Institute.

Low-slump concrete should be used to help reduce the potential for concrete shrinkage. The effectiveness of the membrane is dependent upon its quality, the method of overlapping, its protection during construction, the successful sealing of the membrane around utility lines, and sealing the membrane at perimeter terminations and of all penetrations. Capillary breaks beneath slabs should consist of a minimum of at least four inches of permeable aggregate base (Caltrans) material with the following specified gradation;

Table 10
Percent Passing Sieve Size

Sieve Size	Percent Passing
1 inch	100
¾ Inch	90-100
3/8 Inch	40-100
#4	25-40
#8	18-33
#30	5-15
#50	0-7
#200	0-3

Where vapor retarders are placed directly on a gravel capillary break, they should be a minimum of 15 mil thickness.

Where concrete is placed directly on the vapor retarder "plastic", proper curing techniques are essential to minimizing the potential of slab edge curl and shrinkage cracking. The edges of slabs can curl upward because of differential shrinkage when the top of the slab dries to lower moisture content than the bottom of the slab. Curling and cracking are caused by the difference in drying shrinkage between the top and bottom of the slab. Curling and cracking can be exacerbated by hot weather, or dry condition concrete placement, even with proper curing techniques.

The following minimum slab recommendations are intended to address geotechnical concerns such as potential variations of the subgrade and are not to be construed as superseding any structural design. A design engineer should be retained to provide building specific systems to handle subgrade moisture to ensure compliance with SB800 with regards to moisture and moisture vapor.

Slab Thickness and Reinforcement: Structural slabs should be a minimum of 4 inches in actual thickness and be reinforced with # 3 bars at 18 inches on center both ways. Flatwork slabs should be a minimum of 4 inches thick and be jointed to reduce cracking potential. Drive slabs should per as per Section 5.9. Slabs in contact with earth should use closer joints to control cracking or be thickened to allow adequate earth to rebar clearance. Reinforcing bars should extend at least 40 bar diameters into the footings and slabs. Playcourt flatwork may be supported by at least 4 inches of aggregate base on compacted and moisture conditioned soil placed in accordance with this report. If slabs are structural, they should be designed for the specific settlement conditions presented within.

Slab thickness and reinforcement of slabs-on-grade are contingent on the recommendations of the structural engineer or architect and the Expansion Index of the supporting soil. Based upon our findings, a modulus of subgrade reaction of approximately 200 pounds per cubic inch can be used in concrete lightly loaded (not mat) slab design for the expected compacted subgrade. Mat

slab design will require differing modulus values. ACI Section 4.3, Table 4.3.1 should be followed for recommended cement type, water cement ratio, and compressive strength.

If heavily loaded flatwork is proposed (forklift drive areas, heavy racking, etc.), the actual thickness should be designed by the structural engineer utilizing techniques of the American Concrete Institute (ACI) and may be greater than 4 inches in thickness. Concrete floor slabs may either be monolithically placed with the foundations or doweled (No. 4 bar embedded at least 40 bar diameters) after footing placement. The thickness and reinforcing given are not intended to supersede any structural requirements provided by the structural engineer. The project architect or concrete inspector should continually observe all reinforcing steel in slabs during placement of concrete to check for proper location within the slab. The minimum concrete rebar cover should be as per the project architect or structural engineer.

Slab-On-Grade Control Joints: Control joints should be provided in all regular concrete slabs-on-grade at a maximum spacing of 26 to 36 times the slab thickness (12 feet maximum on-center each way, 4 to 6 feet for sidewalks) as recommended by American Concrete Institute [ACI] guidelines. All joints should form approximately square patterns to reduce the potential for randomly oriented shrinkage cracks. Control joints in the slabs should be tooled at the time of the concrete placement or saw cut (¼ of slab depth) as soon as practical but not more than 8 hours from concrete placement. We recommend a concrete joint location plan be included with the project plans by the architect.

Construction (cold) joints, especially at door threshold exterior to interior slab transitions, should be reinforced with thickened butt joints with ¾-inch dowels at 12 inches on center embedded per ACI or a thickened keyed-joint to resist vertical deflection at the joint. All control joints in exterior flatwork should be sealed to reduce the potential of moisture or foreign material intrusion. These procedures will reduce the potential for randomly oriented cracks, but may not prevent them from occurring.

Curing and Quality Control: The contractor should take precautions to reduce the potential of curling and cracking of slabs in this arid desert region using proper batching, placement, and curing methods. Curing is highly affected by temperature, wind, and humidity.

Quality control procedures should be used, including trial batch mix designs, batch plant inspection, and on-site special inspection and testing. Curing should be in accordance with ACI recommendations contained in ACI 211, 304, 305, 308, 309, and 318. Additionally, the concrete should be vibrated during placement. Concrete should be wet cured for at least 7 days with burlap or plastic and not allowed to dry out to minimize surface cracking.

5.7 Retaining Walls and Lateral Earth Pressures

Retaining Walls: Walls which are restrained at the top such as retaining wall returns, below-grade walls and top of walls tied to floor slabs should be designed with “at rest” earth pressures. Retaining walls, free to tilt at the top 0.1 (dense sand) percent of the wall height, should be designed for “active” earth pressures.

The following list presents lateral earth pressures for use in wall design. The values are given as equivalent fluid pressures ***without*** surcharge loads or hydrostatic pressure. Clay or silt, non-free

draining soils are not suitable for wall backfill. Sand or silty sand material may be used for backfill or free draining material should be imported as wall backfill within the zone of 45 degrees projected up from the wall bottom. For free draining material, active and restrained walls equivalent fluid pressures are as follows:

- Retaining walls should be designed for an active soil pressure equivalent to a fluid density of 39 pcf. The active lateral earth pressures are for slope conditions similar to those on-site and backfills using the on-site soils on walls that are free to rotate at least 0.1 percent of the wall height. Walls, which are restrained against movement or rotation at the top, should be designed for an at-rest equivalent fluid pressure of 60 pcf. Walls retaining sloped backfill of 3:1 or 2:1 should increase the presented fluid pressures by 6 pcf and 9 pcf, respectively. Earth Pressures for walls retaining other sloping backfill above the wall can be provided on a case-by-case basis by the geotechnical engineer. The lateral earth pressure values for level backfill are provided for walls backfilled with drainage materials and "very low" expansive soils.
- In addition to the active or at rest soil pressure, the proposed wall structures should be designed (where not excepted) to include forces from dynamic (seismic) earth pressure. Dynamic pressures are additive to active and at-rest earth pressures (and utilize their respective standard load distribution) and should be considered as an additional 77 pcf for flexible walls, and 94 pcf for rigid walls (Al Atik and Sitar, 2010, Mikola and Sitar, 2013). Seismic pressures are based on PGA_M of 1.06 g (ASCE7-16), Friction Soil Angle of 31^o, and a maximum total moist fill density of 120 pcf.
- Where continuous or isolated foundations (building or otherwise) are loaded within 2 feet laterally of a retaining wall, a surcharge pressure from those foundations should be applied to the wall. In these instances, a surcharge of 600 psf should be applied as a horizontal pressure acting on the wall. The pressure distribution should be triangular with 600 psf applied at the top of the retained portion of wall decreasing to zero at the top of wall footing. This surcharge is for footing design as described within. For other footings or pressures, as well as foundations closer than 2 feet, please contact Earth Systems. For footings located at or greater than 7 feet from the top of wall, no foundation surcharge is required to be applied.
- The above recommended values do not include compaction or truck-induced wall pressures. Care must be taken during the compaction operation not to overstress the wall. Heavy construction equipment should be maintained a distance of at least 3 feet away from the walls while the backfill soils are placed. Upward sloping backfill or rock, or surcharge loads from nearby footings can create larger lateral pressures. Should any walls be considered for retaining sloped backfill (or rock) or placed next to foundations, our office should be contacted for recommended design parameters. Where not explicitly defined as above for building foundation surcharge, surcharge loads should be considered if they exist within a zone between the face of the wall and a plane projected 45 degrees upward from the base of the wall. The increase in lateral earth pressure should be taken as 50% of the surcharge load within this zone. Retaining walls subjected to traffic loads should include a uniform surcharge load equivalent to at least 240 psf for auto or delivery truck (2 axle) traffic at least 3 feet from the back of the wall. Retaining walls with closer

traffic or heavier traffic loads should be designed for a 450 psf surcharge load. Retaining walls should be designed with a minimum factor of safety of 1.5.

- A backdrain or an equivalent system of backfill drainage should be incorporated into the retaining wall design, whereby the collected water is conveyed to an approved point of discharge. Design should be in accordance with the 2022 California Building Code. Drain rock should be wrapped in filter fabric such as Mirafi 140N as a minimum. Backfill immediately behind the retaining structure should be a free-draining granular material or commercial drainage panels behind the wall which lead to an approved outlet system. Waterproofing should be according to the designer's specifications. Water should not be allowed to pond or infiltrate near the top of the wall. To accomplish this, the final backfill grade should be such that water is diverted away from the retaining wall.
- Compaction on the retained side of the wall within a horizontal distance equal to one wall height (to a maximum of 6 feet) should be performed by hand-operated or other lightweight compaction equipment (90% compaction relative to ASTM D 1557 at near optimum moisture content). This is intended to reduce potential locked-in lateral pressures caused by compaction with heavy grading equipment. Foundation subgrade preparation should be as specified in Section 5.1.

Frictional and Lateral Coefficients:

- Resistance to lateral loads (including those due to wind or seismic forces) may be provided by frictional resistance between the bottom of concrete foundations and the underlying soil/slurry, and by passive soil pressure against the foundations. An allowable coefficient of friction of 0.35 may be used between cast-in-place concrete foundations and slabs and the underlying soil. An allowable coefficient of friction of 0.30 may be used between pre-cast or formed concrete foundations and slabs and the underlying soil
- Allowable passive pressure may be taken as equivalent to the pressure exerted by a fluid weighing 300 pounds per cubic foot (pcf). The upper 1 foot of soil should not be considered when calculating passive pressure unless confined by overlying asphalt concrete pavement or Portland cement concrete slab. The soils pressures presented have considered onsite fill soils. Testing or observation should be performed during grading by the soils engineer or his representative to confirm or revise the presented values.
- Passive resistance for thrust blocks bearing against firm natural soil or properly compacted backfill can be calculated using an equivalent fluid pressure of 300 pcf. The maximum passive resistance should not exceed 2,000 psf.
- Friction and soil pressure values (resistance) presented above are considered to have a factor of safety of 1.5 in relation to ultimate values (factor of safety = 1) and may be combined. The above values are not permitted to be increased by 1/3 due to short term loads such as wind or seismic forces.
- Construction employing poles or posts (i.e. lamp posts) may utilize design methods presented in Section 1807 of the CBC for sand (SP) material class, using the lateral bearing pressure values (psf/ft) given in Table 1806A.2.
- The passive resistance of the subsurface soils will diminish or be non-existent if trench sidewalls slough, cave, or are over-widened during or following excavations. If this

condition is encountered, our firm should be notified to review the condition and provide remedial recommendations, if warranted.

5.8 Seismic Design Criteria

This site is subject to strong ground shaking due to potential fault movements along regional faults including San Andreas, Elsinore, Chino and San Jacinto fault zones. Engineered design and earthquake-resistant construction increase safety and allow development of seismic areas. The minimum seismic design should comply with the 2022 edition of the California Building Code and ASCE 7-16 (including Supplement 3) using the seismic coefficients given in the table below, which assume the Exception of 11.4.8 in ASCE7-16 applies. The site is not liquefiable. Based on this section, the site is classified as Site Class D. If these exceptions do not apply, the structural engineer should contact Earth Systems for a Site-Specific Ground Motion Analysis, as the values below would no longer be valid.

Note to the Structural Engineer: the seismic coefficients in the Table, below, apply to the general procedure for determining seismic coefficients. In other words, the seismic coefficients were not determined by a Site-Specific Ground Motion Analysis, which is allowed if ASCE 7-16's Section 11.4.8 Supplement 3 Exceptions are accepted by the structural engineer.

According to the current procedure as outlined in ASCE 7-16, Supplement 3, a ground motion hazard analysis shall be performed in accordance with Section 21.2 for structures:

1) On Site Class D sites with S_1 greater than or equal to 0.2.

> EXCEPTION Item 1: A ground motion hazard analysis is not required where the value of the parameter S_{M1} determined by Eq. (11.4-2) is increased by 50% for all applications of S_{M1} in this Standard. The resulting value of the parameter S_{D1} determined by Eq. (11.4-4) shall be used for all applications of S_{D1} in this Standard.

During plan review of the foundation, **Earth Systems will request a letter from the structural engineer** stating ASCE 7-16's Section 11.4.8 Exception 1 applies to the structures applicable to this report's Table below, which contains the modified S_{M1} and resultant modified S_{D1} values. The structural engineer and client should contact Earth Systems if ASCE 7-16's Exceptions do not apply to the structure/s and request Earth Systems to perform a Site-Specific Ground Motion Hazard Analysis.

General Procedure for seismic parameters is presented below considering a Site Class D shear wave velocity. Values were obtained from a web site (https://seismicmaps.org/) using a coordinate location of Latitude 33.9389°N and Longitude 117.4857°W for approximate closest fault location to proposed improvements. The structural design engineer should use the most conservative results based of the specific building design and spectral response.

Table 11
2022 CBC (ASCE 7-16) Seismic Parameters

Site Class:	D
Risk Category:	III
Seismic Design Category	E
Maximum Considered Earthquake [MCE] Ground Motion	
Short Period Spectral Response S_s:	2.344 g
1 second Spectral Response, S_1:	0.874 g
Code Design Earthquake Ground Motion*	
F_a	1.0
F_v	1.70
F_{PGA}	1.1
S_{MS}	2.344 g
$S_{M1\ (unmodified)}$	1.486 g
$S_{M1\ (ASCE\ 7\text{-}16\ Supplement\ 3\ Modified)}$	2.229 g
Short Period Spectral Response, S_{DS}	1.563 g
1 second Spectral Response, $S_{D1\ (unmodified)}$	0.991 g
1 second Spectral Response, $S_{D1\ (ASCE\ 7\text{-}16\ Supplement\ 3\ Modified)}$	1.486 g
Peak Ground Acceleration (PGA_M) Eq 11.8-1	1.06 g

*Only if Exception applies, see Section 5.8 text.

The intent of the CBC lateral force requirements is to provide a structural design that will resist collapse to provide reasonable life safety from a major earthquake but may experience some structural and nonstructural damage. A fundamental tenet of seismic design is that inelastic yielding is allowed to adapt to the seismic demand on the structure. In other words, *damage is allowed*. The CBC lateral force requirements should be considered a *minimum* design. The owner and the designer may evaluate the level of risk and performance that is acceptable. Performance based criteria could be set in the design. The design engineer should exercise special care so that all components of the design are fully met with attention to providing a continuous load path. An adequate quality assurance and control program is urged during project construction to verify that the design plans and good construction practices are followed. This is especially important for sites lying close to the major seismic sources.

Actual accelerations may be more or less than estimated and spectral accelerations will exceed 1 g for the assumed near-field San Andreas fault earthquake. Vertical accelerations are typically ⅓ to ⅔ of the horizontal accelerations, but can equal or exceed the horizontal accelerations, depending upon the local site effects and amplification.

Earthquake Performance Statement: Depending upon the extent of structural and geotechnical design of exterior flatwork, walls, utilities, roadways, and other similar site improvements, some damage due to seismic events will occur. Note that all of southern California in general is in earthquake country. Site developments in southern California are typically not designed to

mitigate anticipated seismic events without some damage. In fact, the Building Code is intended to provide Life-Safety performance, not complete damage-free design. In other words, some damage from earthquakes in the form of structural damage, settlement, cracking, and disruption of utilities is expected and that repair after an earthquake event will likely be required. It is not the standard of practice for site developers to fully mitigate all anticipated earthquake induced hazards. This report is based on that understanding and Standard of Care.

According to literature form Robert W. Day, doors and windows may stick at distortion angles between 1:240 and 1:175. In this situation, a human being could be put in a life-threatening situation. Therefore, Earth Systems recommends the maximum distortion angle using all the settlement conditions including seismic settlements be 1:240 or better. For all settlement conditions excluding seismic settlement, the structure's maximum distortion angle should be 1:480 unless greater structural design is provided to accommodate the anticipated distortion.

5.9 Driveways and Parking Areas

Pavement structural sections for associated drive areas including recommendations for standard asphalt concrete, and Portland cement concrete are provided below and are based upon blended on-site soils as described in Section 5.1. Soils differing from those described will require differing pavement sections. The appropriate pavement section depends primarily on the shear strength of the subgrade soil exposed after grading in the near finished subgrade elevation and the anticipated traffic over the useful life of the pavement. R-value testing or observation of subgrade soils should be performed of near finished subgrade elevation soils to verify and/or modify the preliminary pavement sections presented within this report.

Pavement Area Preparation: In street, drive, and parking areas, the exposed subgrade should be overexcavated as recommended in Section 5.1, moisture conditioned, and compacted. Compaction should be verified by testing. Aggregate base should be compacted to a minimum 95% relative compaction (ASTM D 1557).

Automobile Traffic and Parking Areas: Pavement sections presented in Table 12 for automobile type traffic areas and are based on an assumed R-value and current Caltrans design procedures. Traffic Indices (TI) of 5 and 7 were used to facilitate the design of asphalt concrete pavements for parking and main drives, including fire lanes. The fire lane calculation assumed a conservative traffic flow of one fire truck per day entering and exiting the site on the same path (20 year life cycle), and a maximum loading of an 88,000 lb Tandem Axle apparatus (approximate 20,000 lb front axle load and two 34,000 lb rear axles loads) which is based upon the *Emergency Vehicle Size and Weight Regulation Guideline*, dated November 22, 2011, prepared by the Fire Apparatus Manufacturers' Association.

Based on the above stated traffic pattern and apparatus loads, a Traffic Index of 4.6 is calculated for fire lanes. For comparison, a 40-year fire lane life cycle analysis results in a Traffic Index of 5. The TI's assumed below should be reviewed by the project Civil Engineer to evaluate the suitability for this project. All design should be based upon an appropriately selected traffic index. Changes in the traffic indices will affect the corresponding pavement section.

Table 12
Preliminary Flexible Pavement Section Recommendations
On-site/Interior Automobile Drive Areas

R-Value of Subgrade Soils - 55 (Tested) Design Method – CALTRANS

Traffic Index (Assumed)*	Pavement Use	Flexible Pavements**	
		Asphaltic Concrete Thickness (inches)	Aggregate Base Thickness (inches)
5	Parking Areas & Fire Lanes***	3	4
7	Main Drive Areas	4	4

*The presented Traffic Indices should be confirmed by the project civil engineer. Changes to the Traffic Index will result in a differing pavement section required.

**Pavement Sections were calculated using Caltrans methods.

***Where fire lanes will be a part of a main drive use with other traffic, buses, or trucks, the Main Drive Area pavement section should be used.

Conventional, rigid pavements, i.e. Portland cement concrete (PCC) pavements, are recommended in areas that will be subject to relatively high static wheel loads and/or heavy vehicle loading and unloading and turning areas (i.e. truck/bus lanes). This is due to rutting and shoving that can occur due to the heavy vehicle loads and the repetitious set path which is followed at the bus/delivery trucks areas where the same wheel track and stopping occurs generally in the same spot each time. The vehicle load combined with hot summer asphalt (AC) concrete causes the upper surface of the AC to creep forming ruts in conjunction with the braking and accelerating forces which shove the AC. Turning forces also do the same.

The pavement section below is based upon the American Concrete Institute (ACI) *Guide for Construction of Concrete Parking Lots, ACI 330R*, utilizing a Jointed Plain Concrete Pavement (no rebar) with load resistance based upon PCC thickness, and the assumptions outlined below. The civil engineer and client may elect to incorporate reinforcing bar into PCC to control the opening of typical fracture faces should it be desired; however rebar is not needed for load support. ACI 330R provides reinforcement options.

Table 13
Preliminary Portland Cement Concrete Pavement Sections

Area	Minimum Pavement PCC Thickness (inches)	Minimum Class 2 Aggregate Base Thickness* (inches)	Minimum 28 Day Flexural Strength (psi)	Concrete Compressive Strength (psi)
Fire Lane (Traffic Category A-1, ADTT =1)	4.5	4	550	3,650
Truck/Bus Access or Loading/Unloading Areas (Rubber-Tired Forklift) (Traffic Category C, ADTT =100)	6.5	4	550	3,650

*See Section 5.6 for other slab on grade thickness recommendations

Should the actual traffic category vary from those assumed and listed above, these sections should be modified. All above recommended preliminary pavement sections are contingent on the following recommendations being implemented during construction:

- Pavement should be placed upon compacted fill processed as described in Section 5.1. The upper 12 inches of subgrade soils beneath the asphalt concrete and conventional PCC pavement section should be compacted to a minimum of 95% relative compaction (ASTM D 1557).
- Subsequent to utility installation, the entire pavement (including PCC) final subgrade should be scarified 12 inches, moisture conditioned to near optimum moisture content, and compacted to a minimum 95% relative compaction immediately prior (within a few days) to the placement and compaction of aggregate base.
- Subgrade soils and aggregate base should be in a stable, non-pumping condition at the time of placement and compaction. Exposed subgrades should be proof-rolled to verify the absence of soft or unstable zones.
- Aggregate base materials should be compacted at near optimum moisture content to at least 95 percent relative compaction (ASTM D 1557) and should conform to Caltrans Class II criteria. Standard Specifications for Public Works Construction “Greenbook” standards (Crushed Aggregate Base class) may be used in lieu of Caltrans. Compaction efforts should include rubber tire proof-rolling of the aggregate base with heavy compaction-specific equipment (i.e. fully loaded water trucks).
- All concrete curbs separating pavement from landscaped areas should extend at least 6 inches into the subgrade soils to reduce the potential for movement of moisture into the

aggregate base layer (this reduces the risk of pavement failures due to subsurface water originating from landscaped areas).

- Asphaltic concrete should be Caltrans 70-10, ½-in. or ¾-in. grading and compacted to a minimum of 95% of the 75-blow Marshall density (ASTM D 1559) or equivalent.
- Portland cement concrete pavements should be constructed with transverse joints at maximum spacing of 12 feet. A thickened edge should be used where possible and, as a minimum, where concrete pavements abut asphalt pavements. The thickened edge should be 1.2 times the thickness of the pavement (e.g. 5.4 inches for a 4.5-inch pavement), and should taper back to the PCC thickness over a horizontal distance on the order of 3 feet.
- All longitudinal or transverse control joints should be constructed by hand forming or placing pre-molded filler such as "zip strips." Expansion joints should be used to isolate fixed objects abutting or within the pavement area.
- The expansion joint should extend the full depth of the PCC pavement. Joints should run continuously and extend through integral curbs and thickened edges. We recommend that joint layout be adjusted to coincide with the corners of objects and structures. In addition, the following is recommended for concrete pavements:

    1. Slope pavement at least ½ percent to provide drainage;
    2. Provide rough surface texture for traction;
    3. Cure PCC concrete with curing compound or keep continuously moist for a minimum of seven days;
    4. Keep all traffic off concrete until PCC compressive strength exceeds 2,000 pounds per square inch (truck traffic should be limited until the concrete meets the design strength (3,650 psi); and
    5. Consideration should be given to having PCC construction joints keyed or using slip dowels on 24-inch centers to strengthen control and construction joints. Dowels placed within dowel baskets should be incorporated into the concrete at each saw-cut control joint (i.e. dowel baskets and dowels are set in place prior to placement of concrete).

- Portland cement concrete placement and curing should, at a minimum, be in accordance with the American Concrete Institute [ACI] recommendations contained in ACI 211, 304, 305, 308, 309, and 318.
- Within the structural pavement section areas, positive drainage (both surface and subsurface) should be provided. In no instance should water be allowed to pond on the pavement. Roadway performance depends greatly on how well runoff water drains from the site. This drainage should be maintained both during construction and over the entire life of the project.
- Proper methods, such as hot-sealing or caulking, should be employed to limit water infiltration into the pavement base course and/or subgrade at construction/expansion

joints and/or between existing and reconstructed asphalt concrete sections (if any). Water infiltration could lead to premature pavement failure.

- To reduce the potential for detrimental settlement, excess soil material, and/or fill material removed during any footing or utility trench excavation, should not be spread or placed over compacted finished grade soils unless subsequently compacted to at least 90% of the maximum dry unit weight, as evaluated by ASTM D 1557 test procedure, at near optimum moisture content, or 95% if placed under areas designated for pavement.
- Where new roadways will be installed against existing roadways, the repaired asphalt concrete pavement section should be designed and constructed to have at least the pavement and aggregate base section as the original pavement section thickness (for both AC and base) or upon the newly calculated pavement sections presented within, whichever is greater.
- **Pavement designs assume that heavy construction traffic will not be allowed on base cap or finished pavement sections. Construction equipment will cause premature cracking of AC pavement.**

5.10 Surface and Subsurface Site Drainage and Maintenance

- Water control and conveyance is a critical aspect of project design. It is highly recommended that landscape irrigation or other sources of water be collected and conducted to an approved drainage device. Landscaping grades should be lowered and sloped such that water drains to appropriate collection and disposal areas. All runoff water should be controlled, collected, and drained into proper drain outlets. Control methods may include curbing, ribbon gutters, landscape vertical barriers in planters, 'V' ditches, or other suitable containment and redirection devices.
- It is highly recommended that landscape irrigation or other sources of water be collected and conducted to an approved drainage device. Site drainage should be devised such that runoff should be directed away from the tops of all graded slopes. Water should not freely flow over slopes or retaining wall faces. Diversion and conveyance structures which can accommodate water and eroded soil should be constructed at the tops and toes of all slopes. Lined swales at the top and bottom of slopes, and at the top of retaining walls are recommended.
- Positive drainage should be maintained away from the structure foundations (5 percent for 10 feet minimum) to prevent ponding, water intrusion, and subsequent saturation of the foundation soils. Gutters and downspouts in conjunction with a 2 percent (%) hardscape grade sloped away from structures draining to area drains can be considered as a means to convey water away from foundations if increased fall is not provided. A minimum 2% fall is required by the 2022 CBC. There is an exception where less than 2 % grade is allowable if the area is for a door landing or ramp per ADA regulations.
- In no instance should water be allowed to flow or pond against structures, slabs or foundations or flow over unprotected slope faces. Adequate provisions should be employed to control and limit moisture changes in the subgrade beneath foundations or structures to reduce the potential for soil saturation. Landscape borders should not act

as traps for water within landscape areas. Potential sources of water such as piping, drains, over-spray broken sprinklers, etc., should be frequently examined. Any such leakage, over-spray, or plugging should be immediately repaired.

- Drainage should be maintained for paved areas. Water should not pond on or near paved areas, slabs, or foundations. Ponded water can saturate subgrade soils and lead to pavement, slab, flooring, and foundation failure. The following additional recommendations are provided in regard to site drainage and structure performance. These recommendations are in addition to those in the 2022 project soils report.
- The above recommendations are recommended to be available as part of the maintenance documents such that end user improvements can be designed and maintained to allow proper drainage. End user improvements which do not follow these recommendations are at increased risk of causing moisture intrusion and water damage.
- When grades of 5 percent for 10 feet away from foundations are not possible, the CBC allows for alternative drainage systems (Section 1804A.3). Earth Systems experience has found that alternative methods may include impervious surface material (such as concrete and asphalt), area drains, and horizontal moisture barriers. Please contact Earth Systems for additional information or if the project has difficulty making grades.
- Applied irrigation to maintain landscaping should be controlled to the minimum volume and frequency necessary to sustain plant material. Excess and frequent watering could lead to saturation and standing water which increase the potential for soil expansion. The irrigation system designer should consider these conditions in their design and control irrigation accordingly.
- Maintenance of drainage systems and infiltration structures can be the most critical element in determining the success of a design. They must be protected and maintained from sediment-laden water both during and after construction to prevent clogging of the surficial soils any filter medium. The potential for clogging can be reduced by pre-treating structure inflow through the installation of maintainable forebays, biofilters, or sedimentation chambers. In addition, sediment, leaves, and debris must be removed from inlets and traps on a regular basis. Since these and other factors (such as varying soil conditions) may affect the rate of water infiltration, it is imperative to apply a conservative factor of safety [FOS] to unfactored Basic Percolation/Infiltration Rates to provide a reliable basis for design. In order to account not only for the unknown factors above but also for changes of conditions during the use of the structures such as potential clogging effects due to washing in of soil fines, a FOS between 3 and 10 should be applied to lower infiltration rates.
- The factor of safety should be selected by the project drainage engineer and may be dependent on agency guidelines and the presence of testing, filters, and sedimentation structures. If these measures are provided, the factor of safety can be reduced.
- The drainage pattern should be established at the time of final grading and maintained throughout the life of the project. Additionally, drainage structures should be maintained (including the de-clogging of piping, basin bottom scarification, soil crust removal, etc.) throughout their design life. Maintenance of these structures should be incorporated into

the facility operation and maintenance manual. Structural performance is dependent on many drainage-related factors such as landscaping, irrigation, lateral drainage patterns and other improvements.

- Drywells and any gravel fill should be separated from the native soils with filter fabric such as Mirafi 140N or directly similar (similarly approved by the geotechnical engineer).
- Drywells and infiltration underground chambers should be located at least 20 feet from any structure or be setback outside a projection of 1:1 (h:v) from the projection upward from the bottom of any foundation, whichever is greater.
- Water should not pond within 10 feet of building foundations (Nelson, 2015). The civil engineer producing the grading plan is notified that a gap made of clean sand is typically found between the vapor barrier and bottom of slabs or foundations. If water intrusion into this gap is possible the civil engineer shall either provide for no ponding or an impervious material to prevent water intrusion into the sand gap.

Section 6
LIMITATIONS AND ADDITIONAL SERVICES

6.1 Uniformity of Conditions and Limitations

Our findings and recommendations in this report are based on selected points of field exploration, laboratory testing, and our understanding of the proposed project. Furthermore, our findings and recommendations are based on the assumption that soil conditions do not vary significantly from those found at specific exploratory locations. Variations in soil or groundwater conditions could exist between and beyond the exploration points. The nature and extent of these variations may not become evident until construction. Variations in soil or groundwater may require additional studies, consultation, and possible revisions to our recommendations.

The planning and construction process is an integral design component with respect to the geotechnical aspects of this project. Because geotechnical engineering is an inexact science due to the variability of natural processes and because we sample only a small portion of the soil and material affecting the performance of the proposed structure, unanticipated or changed conditions can be disclosed during demolition and construction. Proper geotechnical observation and testing during construction is imperative to allow the geotechnical engineer the opportunity to verify assumptions made during the design process and to verify that our geotechnical recommendations have been properly interpreted and implemented during construction. Therefore, we recommend that Earth Systems be retained during the construction of the proposed improvements to observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this investigation. If we are not accorded the privilege of performing this review, we can assume no responsibility for misinterpretation or the applicability of our recommendations. The above services can be provided in accordance with our current Fee Schedule.

Our evaluation of subsurface conditions at the site has considered subgrade soil and groundwater conditions present at the time of our study. The influence(s) of post-construction changes to these conditions such as introduction or removal of water into or from the subsurface will likely influence future performance of the proposed project. It should be recognized that definition and evaluation of subsurface conditions are difficult. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions due to the limitation of data from field studies. The availability and broadening of knowledge and professional standards applicable to engineering services are continually evolving. As such, our services are intended to provide the Client with a source of professional advice, opinions and recommendations based on the information available as applicable to the project location and scope. If the scope of the proposed construction changes from that described in this report, the conclusions and recommendations contained in this report are not considered valid unless the changes are reviewed, and the conclusions of this report are modified or approved in writing by Earth Systems.

Findings of this report are valid as of the issued date of the report. However, changes in conditions of a property can occur with passage of time, whether they are from natural processes or works of man, on this or adjoining properties. In addition, changes in applicable standards

occur, whether they result from legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of one year.

This report is issued with the understanding that the owner or the owner's representative has the responsibility to bring the information and recommendations contained herein to the attention of the architect and engineers for the project so that they are incorporated into the plans and specifications for the project. The owner or the owner's representative also has the responsibility to verify that the general contractor and all subcontractors follow such recommendations. It is further understood that the owner or the owner's representative is responsible for submittal of this report to the appropriate governing agencies.

Earth Systems has striven to provide our services in accordance with generally accepted geotechnical engineering practices in this locality at this time. No warranty or guarantee, express or implied, is made. This report was prepared for the exclusive use of the Client and the Client's authorized agents. Earth Systems does not practice architectural, civil, structural, or similar professional services and takes no responsibility for calculations, design methods, or any portion of others design.

Earth Systems should be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications. If Earth Systems is not accorded the privilege of making this recommended review, we can assume no responsibility for misinterpretation of our recommendations. The owner or the owner's representative has the responsibility to provide the final plans requiring review to Earth Systems' attention so that we may perform our review.

Any party other than the client who wishes to use this report shall notify Earth Systems of such intended use. Based on the intended use of the report, Earth Systems may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Earth Systems from any liability resulting from the use of this report by any unauthorized party.

In addition, if there are any changes in the field to the plans and specifications, the Client must obtain written approval from Earth Systems' engineer that such changes do not affect our recommendations. Failure to do so will vitiate Earth Systems' recommendations.

Although available through Earth Systems, the current scope of our services does not include an environmental assessment or an investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property.

6.2 Additional Services

This report is based on the assumption that an adequate program of client consultation, construction monitoring, and testing will be performed during the final design and construction phases to check compliance with these recommendations. Maintaining Earth Systems as the geotechnical consultant from beginning to end of the project will provide continuity of services.

The geotechnical engineering firm providing tests and observations shall assume the responsibility of Geotechnical Engineer of Record.

Construction monitoring and testing would be additional services provided by our firm. The costs of these services are not included in our present fee arrangements, but can be obtained from our office. The recommended review, tests, and observations include, but are not necessarily limited to, the following:

- Consultation during the final design stages of the project;
- A review of the building and grading plans to observe that recommendations of our report have been properly implemented into the design;
- Observation and testing during site preparation, grading, and placement of engineered fill as required by CBC Sections 17 and Appendix J or local grading ordinances;
- Consultation as needed during construction;
- Special Inspection and materials testing of concrete, steel, welding, etc.

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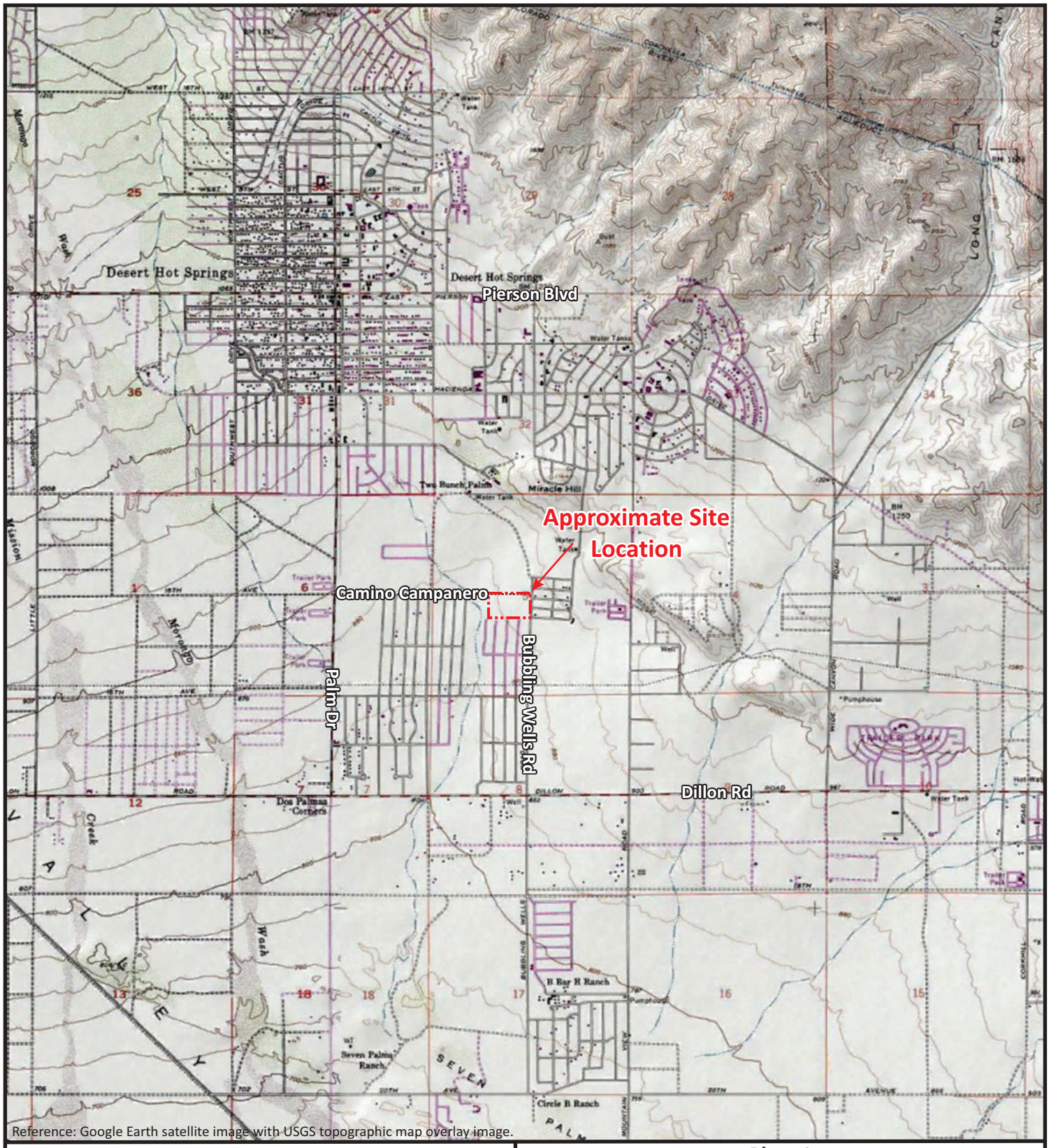
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APPENDIX A

Plate 1 – Site Vicinity Map
Plate 2 – Proposed Site Improvements
Plate 3a & 3b – Boring Location Map & Site Geology
Plate 3c – Geologic Cross Section, A-A'
Plate 3d – Geologic Cross Section, B-B'
Plate 4 – State of California Geomorphic Map
Plate 5 – Regional Geologic Map
Plate 6 – Local Geologic Map
Plate 7 – Alquist-Priolo Earthquake Faults Zones
Plate 8 – Regional Fault Map
Plate 9 – Earthquake Epicenter Map
Table A-1 - Fault Parameters
Table A-2 - Historic Earthquakes
Table A-3 2022 - CBC Seismic Design Parameters
Terms and Symbols Used on Boring Logs
Soil Classification System
Logs of Geotechnical Borings (13)
Site Class Estimator (1 page)
Dry Seismic Settlement (8 pages)
Spread Footing Static Load Settlement (1 page)
Continuous Footing Static Load Settlement (1 page)



Reference: Google Earth satellite image with USGS topographic map overlay image.

LEGEND

Approximate Site Boundary

Scale: 1" = 1½ Miles

0 1½ Mile 3 Miles

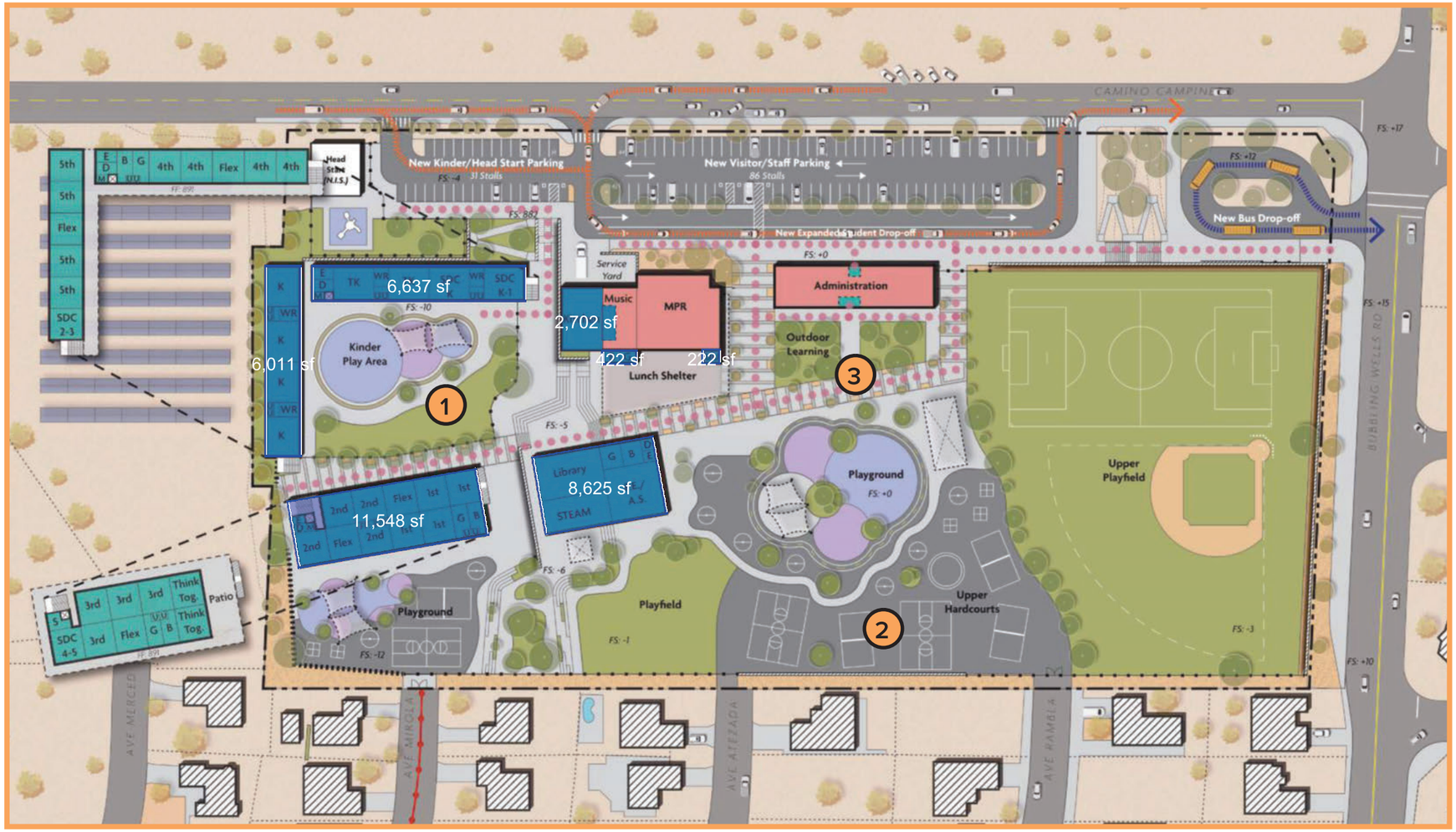
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Plate 1
Site Vicinity Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

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1 New Permanent Buildings



2 New Hard Courts & Play Fields



3 New Outdoor Learning & Landscape Areas

OPTION 3 SITE PLAN

- Light Mod
- Heavy Mod
- New Construction

Total

BENEFITS

Addresses all site & building issues.

Meets all ADA, CDE, & program req.

Completely revamped campus.

No need for interim housing.

Shortest construction schedule.

CHALLENGES

Large amount of site grading.

Highest construction cost.

Plate 2
Proposed Site Improvements

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

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LEGEND

B-13	Approximate Exploration Locations
P-4	Approximate Infiltration Test Locations
B — B'	Approximate Cross Section Locations

af/Qa Artificial Fill over Quaternary Alluvium

Approximate Scale: 1" = 100'

0 100' 200'

N

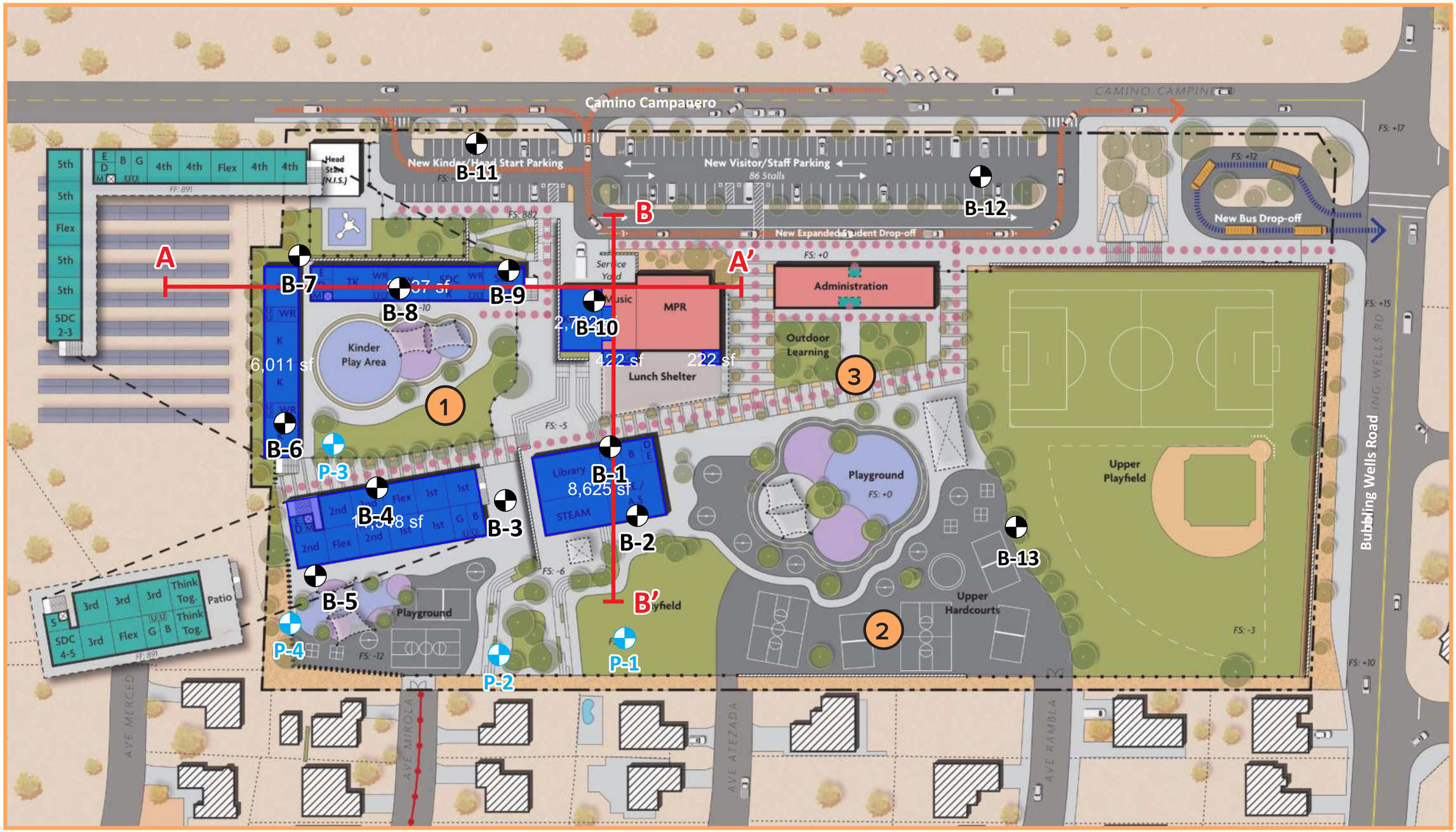
Source: Google Earth satellite image dated 2/6/2024.

Plate 3a
Boring Location Map & Site Geology

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025 | File No.: 307067-001



LEGEND

B-13	Approximate Exploration Locations
P-4	Approximate Infiltration Test Locations
B — B'	Approximate Cross Section Locations

Approximate Scale: 1" = 100'

0 100' 200'

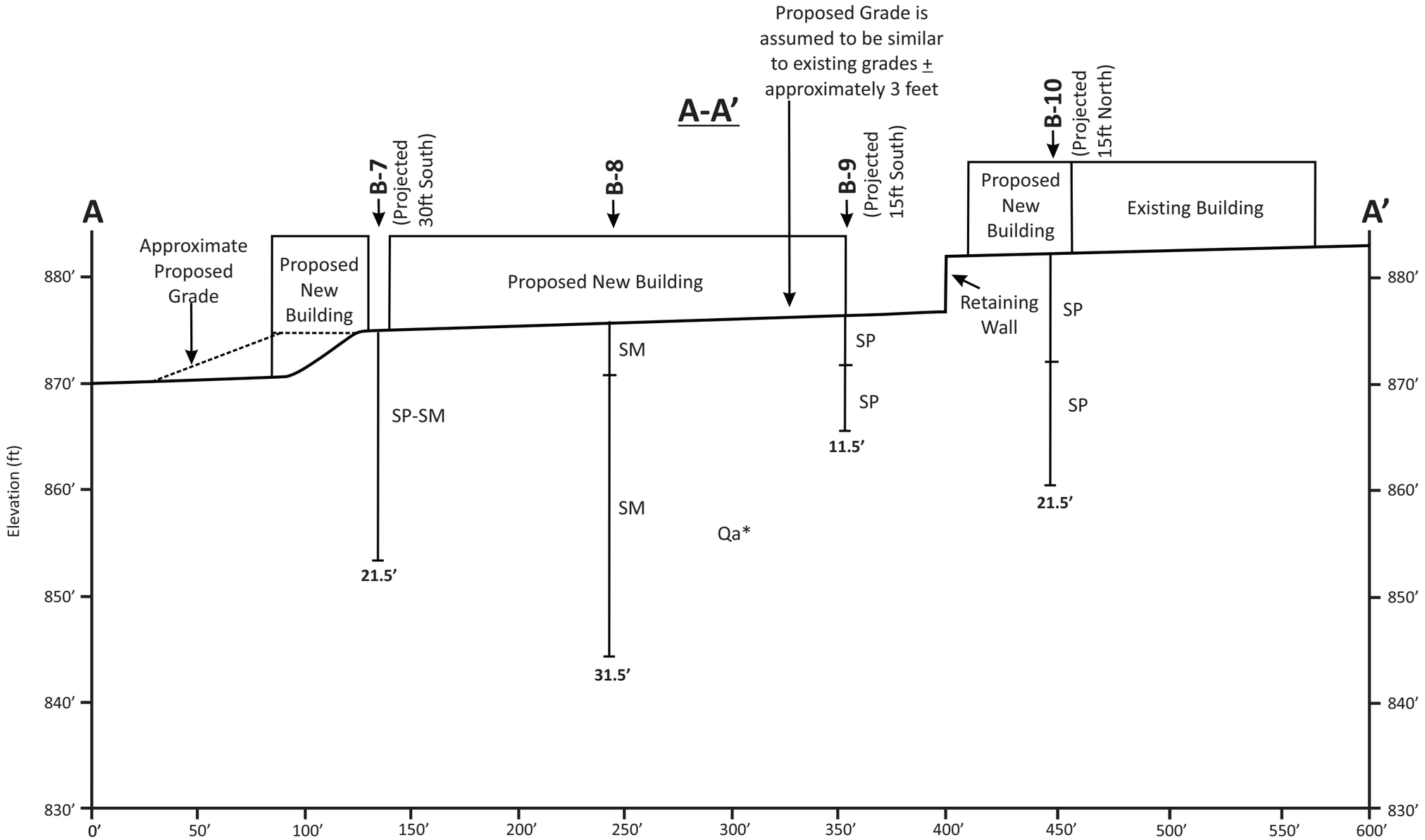
Source: Option 3 Site Plan, page 15.

Plate 3b
Boring Location Map & Site Geology

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025 | File No.: 307067-001



LEGEND

B-10 Approximate Boring Location

Approximate Horizontal Scale 1"= 50'

Approximate Vertical Scale 1"= 10'

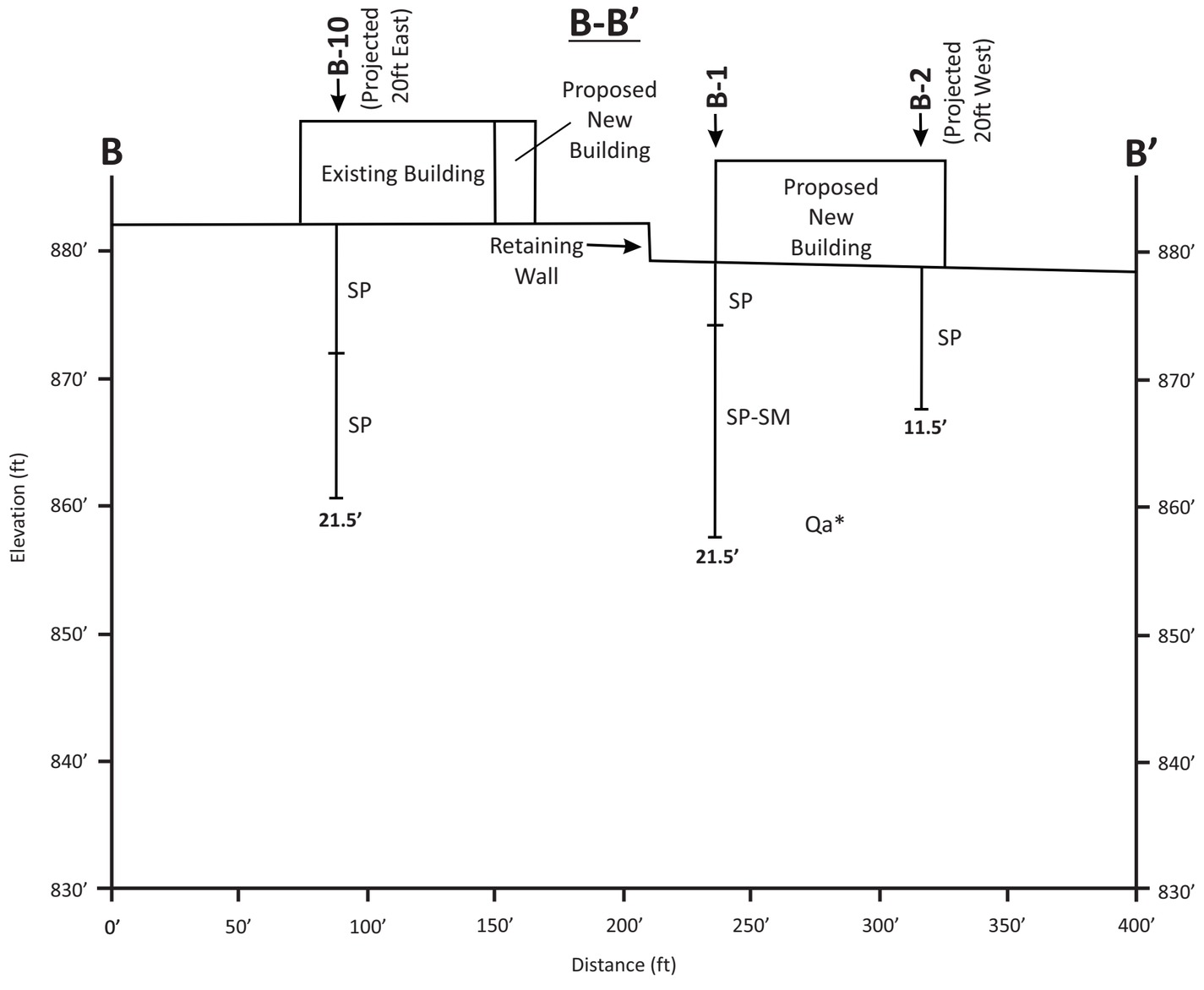
* **Note**: Site is predominantly Qa alluvium. Undifferentiated af (artificial fill) exist to maximum depths of approximately 7 feet at developed areas

Plate 3c
Geologic Cross Section A-A'

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025 | File No.: 307067-001



LEGEND

B-10 Approximate Boring Location

Approximate Horizontal Scale 1”= 50’
Approximate Vertical Scale 1”= 10’

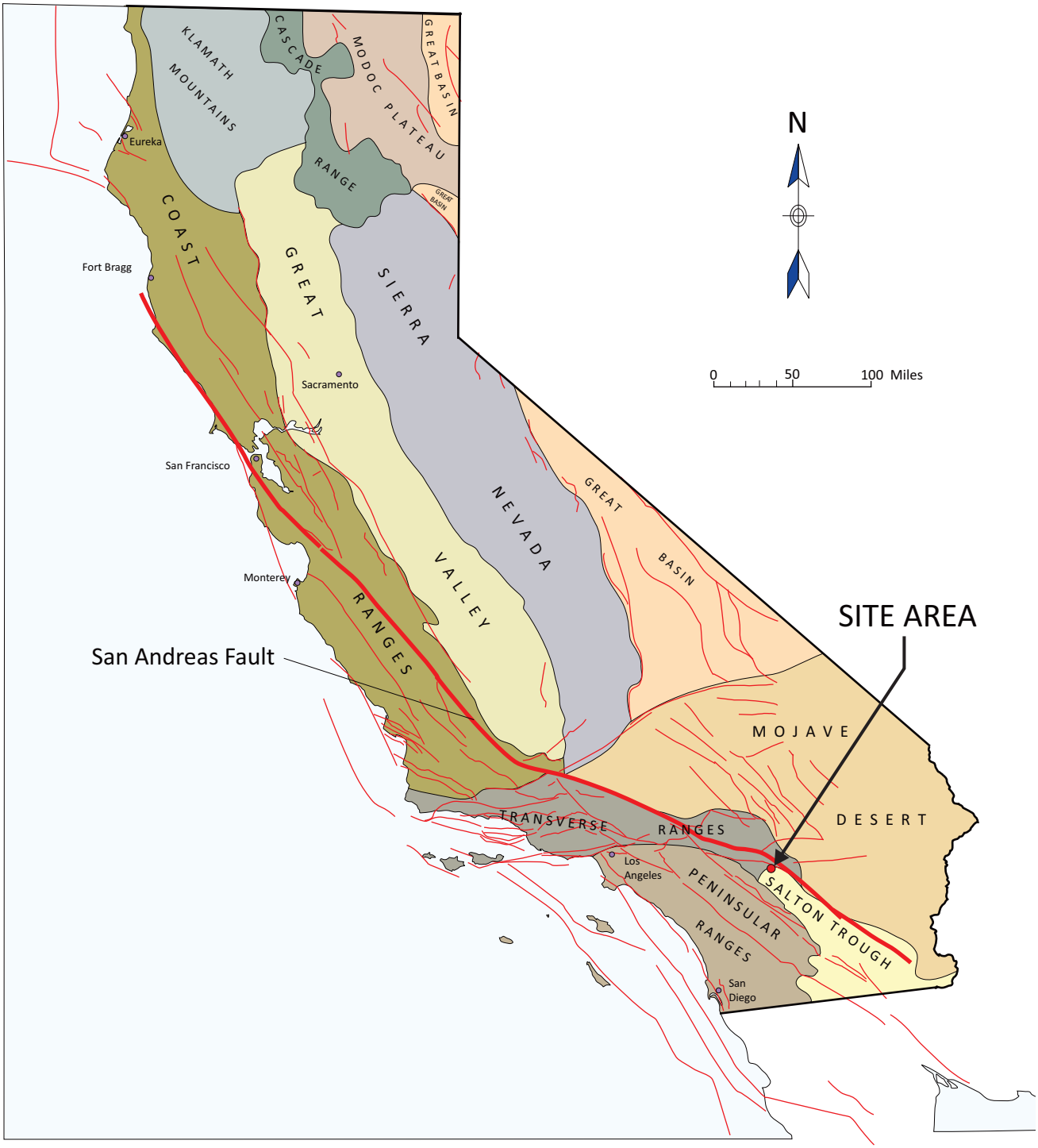
* **Note**: Site is predominantly Qa alluvium. Undifferentiated af (artificial fill) exist to maximum depths of approximately 7 feet at developed areas

Plate 3d
Geologic Cross Section B-B’

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New Construction and Modernization Project
67501 Camino Campanero
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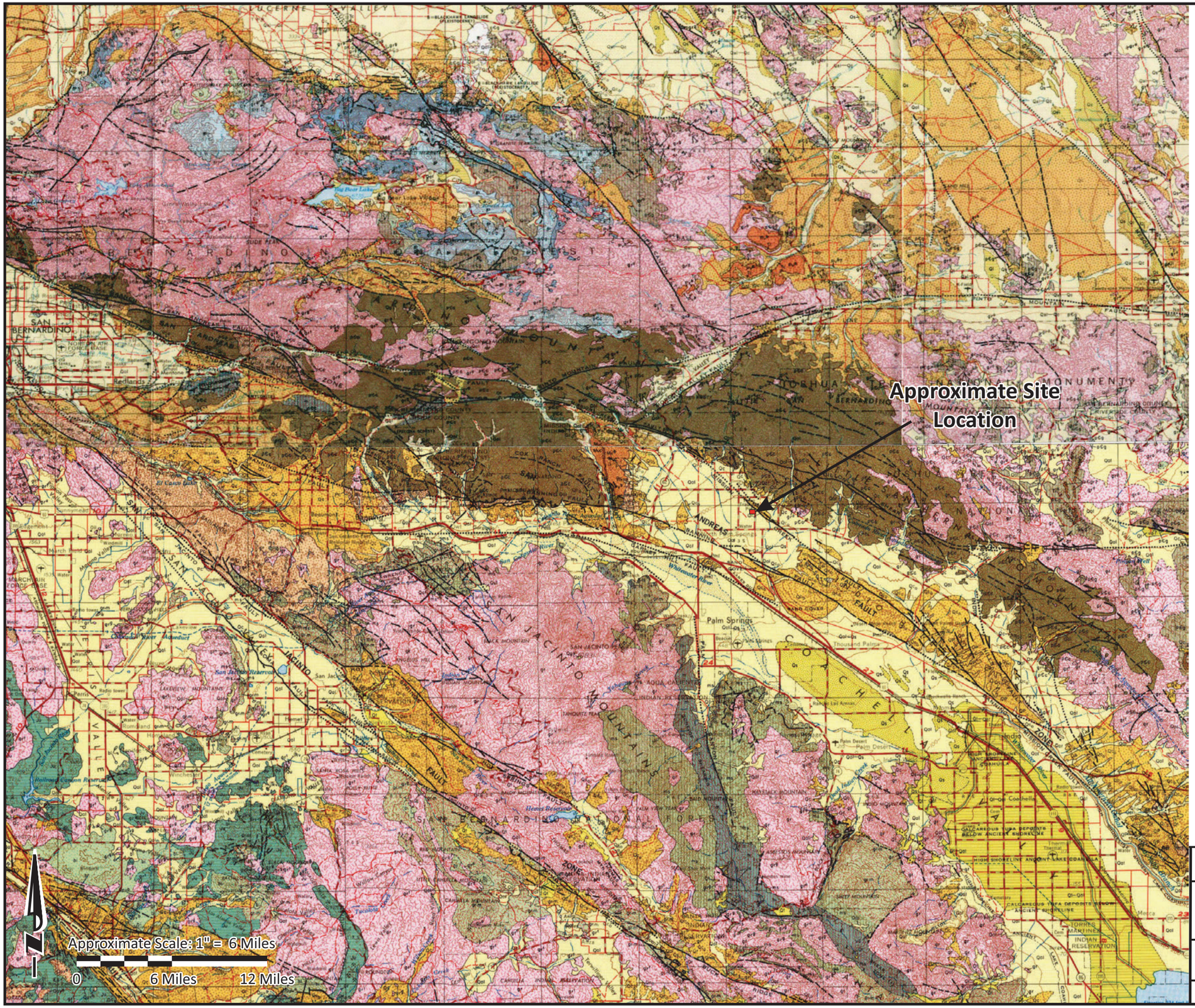
Map showing geomorphic provinces of California and major active and potentially active faults. Fault locations are based on Jennings (1994) and Blake (2000).

Plate 4
State of California Geomorphic Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

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LEGEND

Qs	Dune sand	Qc	Oligocene nonmarine
Qal	Alluvium	Ec	Eocene nonmarine
Ql	Lake deposits	E	Eocene marine
Qg	Glacial deposits	Ep	Paleocene marine
Qr	River terrace deposits	Tc	Tertiary nonmarine
Qm	Pleistocene marine and marine terrace deposits	Tm	Tertiary marine
Qpv	Pleistocene volcanic rocks Qpv^r-rhyolite Qpv^a-andesite Qpv^b-basalt Qpv^p-pyroclastic rocks	Ti	Tertiary intrusive (hypabyssal) rocks Ti^r-rhyolite Ti^a-andesite Ti^b-basalt
Qc	Pleistocene nonmarine	Tl	Tertiary lake deposits
QP	Plio-Pleistocene nonmarine	Tv	Tertiary volcanic rocks Tv^r-rhyolite Tv^a-andesite Tv^b-basalt Tv^p-pyroclastic rocks
	Quaternary and/or Pliocene cinder cones	Ku	Upper Cretaceous marine
Pc	Undivided Pliocene nonmarine	Ju	Upper Jurasssic marine
Pu	Upper Pliocene marine	gr	Mesozoic granitic rocks
Pmlc	Middle and/or lower Pliocene nonmarine	bi	Mesozoic basic intrusive rocks
Pml	Middle and/or lower Pliocene marine	ub	Mesozoic ultrabasic intrusive rocks
Pv	Pliocene volcanic rocks Pv^r-rhyolite Pv^a-andesite Pv^b-basalt Pv^p-pyroclastic rocks	JTrv	Jurassic-Triassic metavolcanic rocks
Mc	Undivided Miocene nonmarine	ls	Pre-Cretaceous metamorphic rocks (ls=limestone)
Mus	Upper Miocene nonmarine	ms	Pre-Cretaceous metasedimentary rocks
Mu	Upper Miocene marine	mv	Pre-Cretaceous metavolcanic rocks
Mm	Middle Miocene marine	gr-m	Pre-Cenozoic granitic and metamorphic rocks
Ml	Lower Miocene marine	pCc	Precambrian igneous and metamorphic rock complex
Mv	Miocene volcanic rocks Mv^r-rhyolite Mv^a-andesite Mv^b-basalt Mv^p-pyroclastic rocks	pC	Undivided Precambrian metamorphic rocks pCg=gneiss pCs=schist pCls=limestone and/or dolomite
		pCgr	Undivided Precambrian granitic rocks

– Fault: Dashed where approximate, dotted where concealed

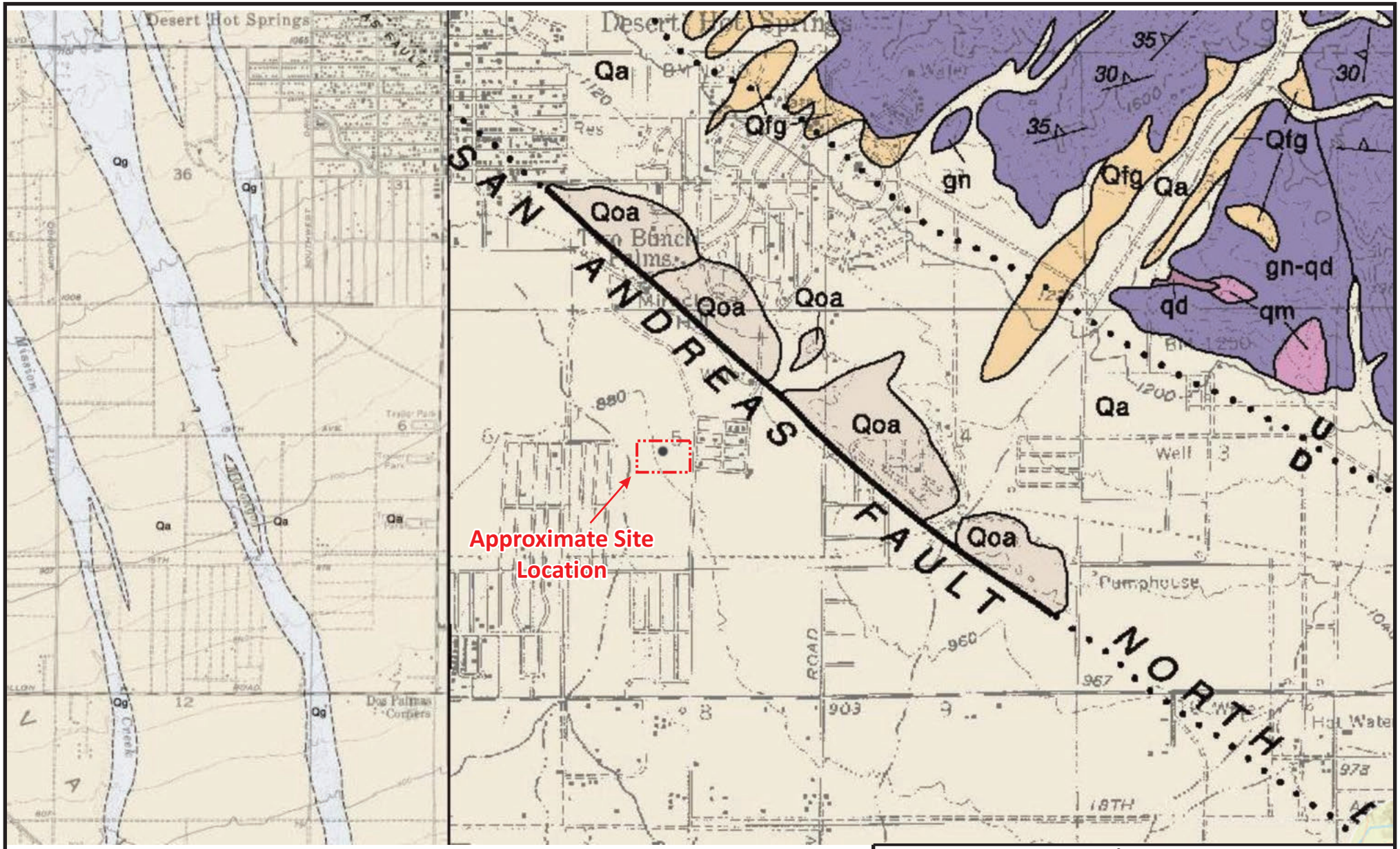
Source: USGS Geologic Map of California, Santa Ana sheet, dated 1965

Plate 5
Regional Geologic Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025 | File No.: 307067-001



LEGEND

Qg – Quaternary Younger alluvial sand and gravel in major stream washes.
Qa – Quaternary Younger alluvium.
Qoa – Quaternary Older alluvium.
Qfg – Quaternary Older fanglomerate.
qm – Pre-Tertiary quartz monzonite.
qd – Pre-Tertiary quartz diorite.
gn-qd – Pre-Tertiary mix of granitic and gneissic rocks.

Source: Thomas W. Dibblee, 2008, Dibblee Foundation Map DF-372

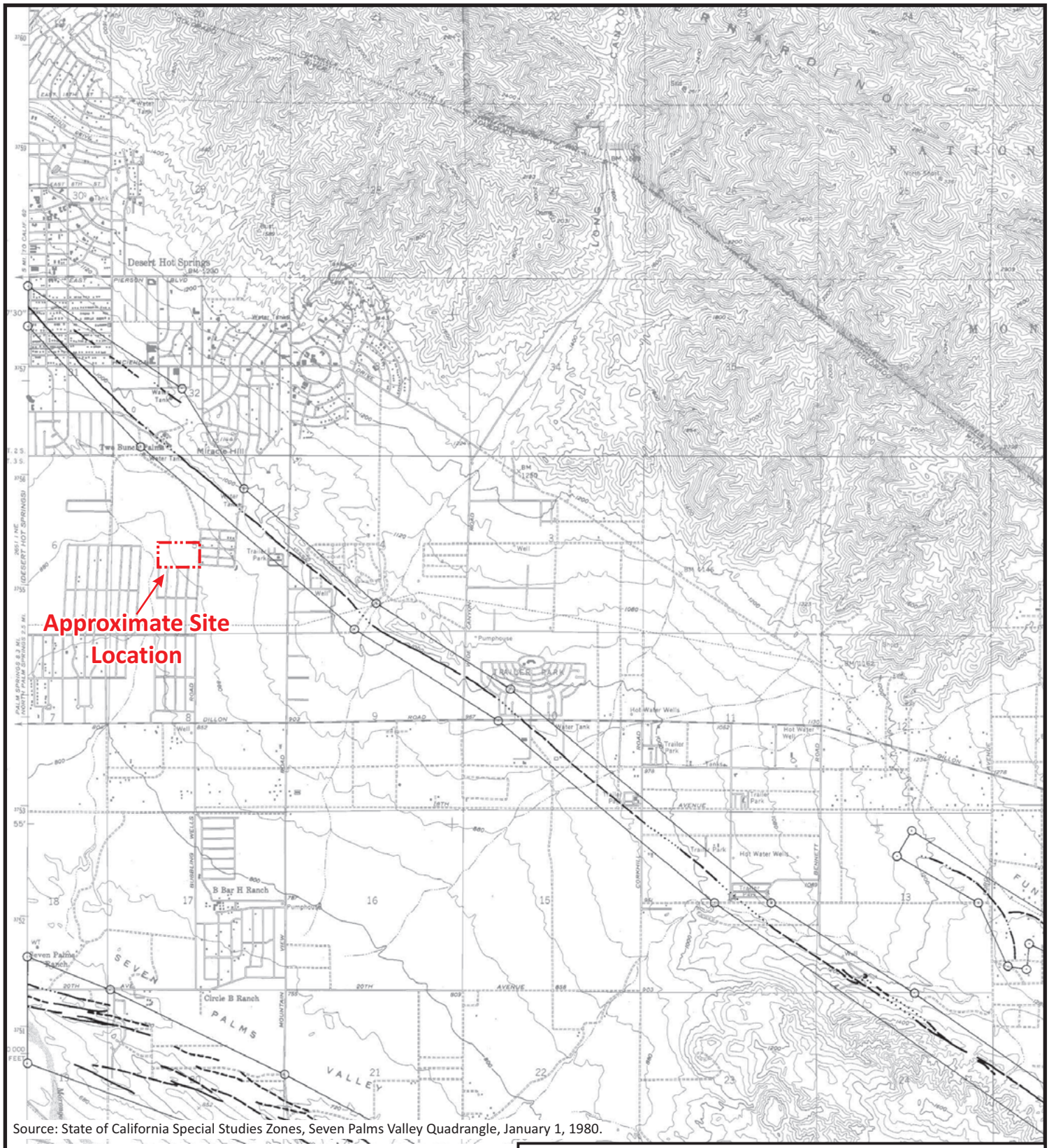
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Plate 6
Local Geologic Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

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Source: State of California Special Studies Zones, Seven Palms Valley Quadrangle, January 1, 1980.

LEGEND

Approximate Site Location

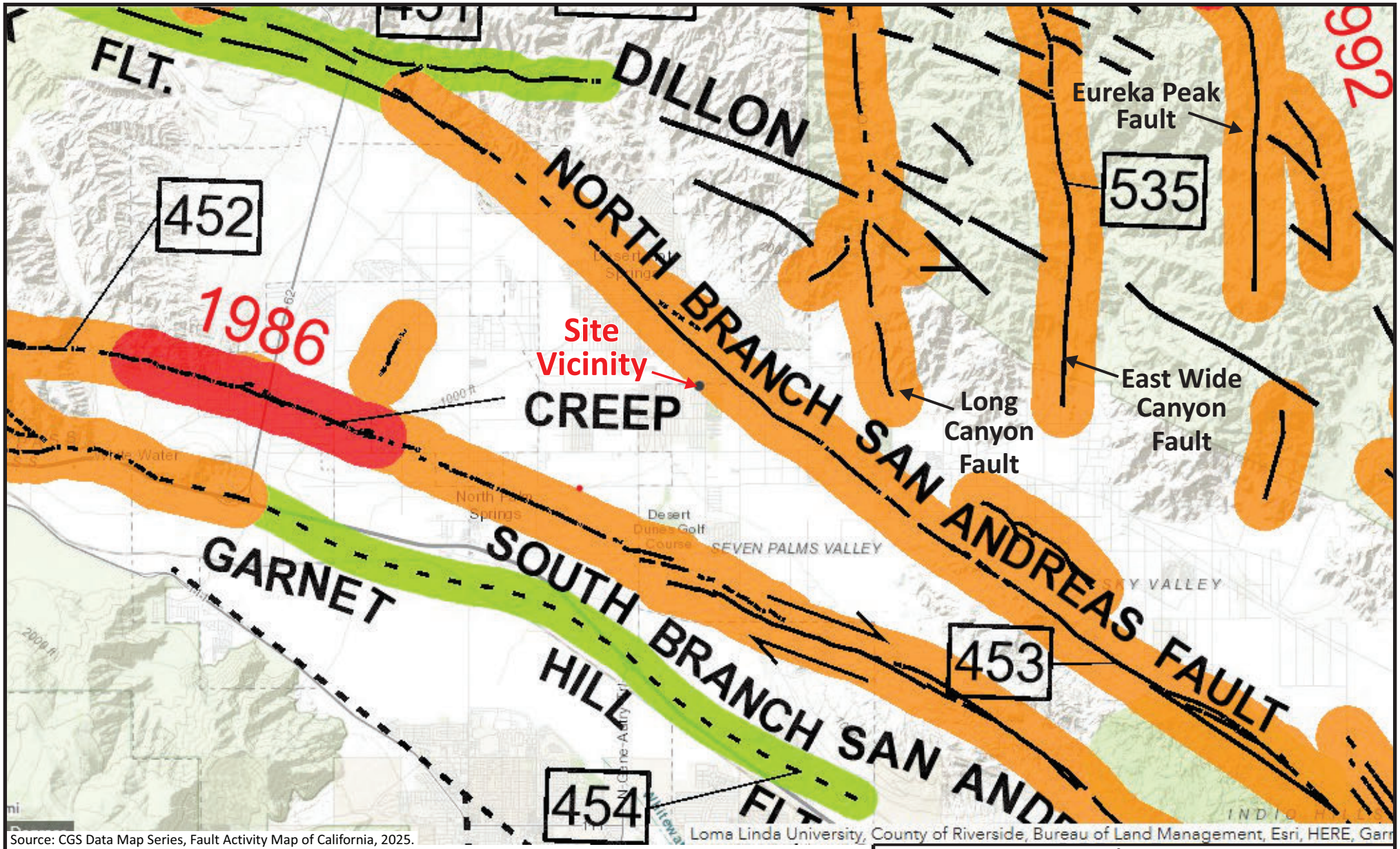
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Plate 7
Alquist-Priolo Earthquake Fault Zones

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025	File No.: 307067-001



LEGEND

- Fault along which historic (last 200 years) displacement has occurred.
- Fault along which Holocene (last 11,700 years) displacement, has occurred.
- Fault along which Late Quaternary (past 700,000 years) displacement has occurred.
- Fault along which Quaternary (past 1.6 million years) displacement has occurred.

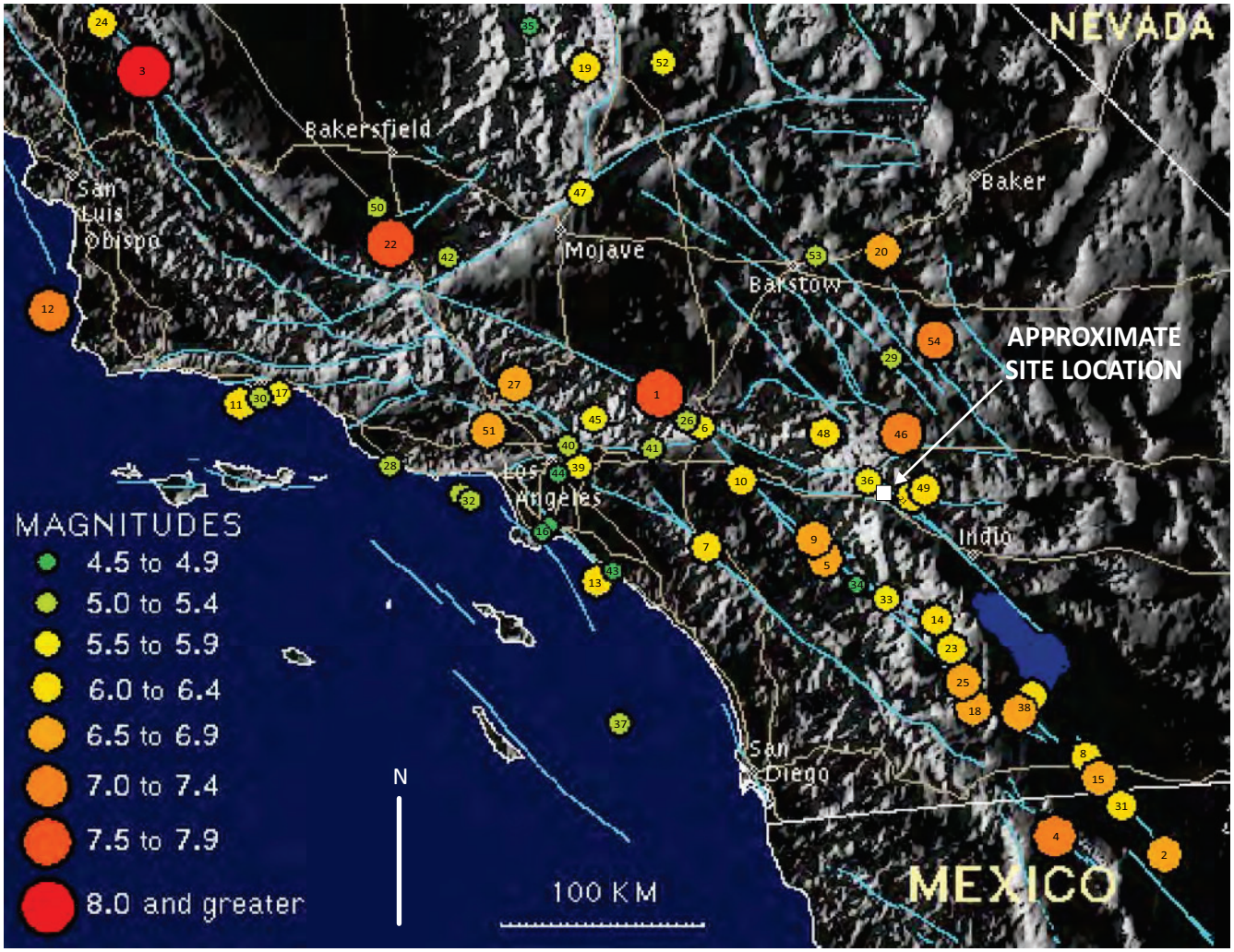
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Plate 8
Regional Fault Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

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HISTORIC EARTHQUAKES AND EPICENTERS

1. 1812, WRIGHTWOOD
2. 1852, VOLCANO LAKE
3. 1857, FORT TEJON
4. 1892, LAGUNA SALADA
5. 1899, SAN JACINTO
6. 1899, CAJON PASS
7. 1910, ELSINORE
8. 1915, IMPERIAL VALLEY
9. 1918, SAN JACINTO
10. 1923, NORTH SAN JACINTO
11. 1925, SANTA BARBARA
12. 1927, LOMPOC
13. 1933, LONG BEACH
14. 1937, SAN JACINTO
15. 1940, IMPERIAL VALLEY
16. 1941, TORRANCE-GARDENA
17. 1941, SANTA BARBARA
18. 1942, FISH CREEK MOUNTAINS
19. 1946, WALKER PASS
20. 1947, MANIX
21. 1948, DESERT HOT SPRINGS
22. 1952, KERN COUNTY
23. 1954, SAN JACINTO
24. 1966, PARKFIELD
25. 1968, BORREGO MOUNTAINS
26. 1970, LYTLE CREEK
27. 1971, SAN FERNANDO
28. 1973, POINT MAGU
29. 1975, GALWAY LAKE
30. 1978, SANTA BARBARA
31. 1979, IMPERIAL VALLEY
32. 1979, MALIBU
33. 1980, WHITE WASH
34. 1982, ANZA GAP
35. 1983, DURRWOOD MEADOWS SWARM
36. 1986, NORTH PALM SPRINGS
37. 1986, OCEANSIDE
38. 1987, ELMORE RANCH & SUPERSTITION HILLS
39. 1987, WHITTIER NARROWS
40. 1988, PASADENA
41. 1988, UPLAND
42. 1988, TEJON RANCH
43. 1989, NEWPORT BEACH
44. 1989, MONTEBELLO
45. 1991, SIERRA MADRE
46. 1992, LANDERS
47. 1992, MOJAVE
48. 1992, BIG BEAR
49. 1992, JOSHUA TREE
50. 1993, WHEELER RIDGE
51. 1994, NORTHRIDGE
52. 1995, RIDGECREST
53. 1997, CALICO
54. 1999, HECTOR MINE

MAP SHOWING LOCATIONS OF SIGNIFICANT HISTORICAL EARTHQUAKES IN SOUTHERN CALIFORNIA FROM 1812 TO 2000

SOURCE: SOUTHERN CALIFORNIA EARTHQUAKE CENTER, WEB PAGE, 2000

Plate 9
Earthquake Epicenter Map

Bubbling Wells Elementary School
New Construction and Modernization Project
67501 Camino Campanero
Desert Hot Springs, Riverside County, California

Earth Systems

5/23/2025 | File No.: 307067-001

Table A-1
Fault Parameters

Fault Section Name	Distance (miles)	Distance (km)	Upper Seis. Depth (km)	Lower Seis. Depth (km)	Avg Dip Angle (deg.)	Avg Dip Direction (deg.)	Avg Rake (deg.)	Trace Length (km)	Fault Type	**Mean Mag**	Mean Return Interval (years)	Slip Rate (mm/yr)
San Andreas, (North Branch, Mill Creek) FM3.1,	0.3	0.5	0.0	18.2	76	204	180	106	A	**7.6**	219	34
San Andreas (San Gorgonio Pass-Garnet HIll) FM	2.5	4.0	0.0	12.8	58	20	180	56	A	**7.6**	219	24
Burnt Mtn FM3.1, 3.2	5.4	8.8	0.0	15.9	67	265	180	21	B	**6.7**		0.6
Mission Creek FM3.1, 3.2	6.7	10.7	0.0	17.7	65	5	180	31	B'	**6.9**		
Eureka Peak FM3.1, 3.2	8.4	13.5	0.0	15.0	90	75	180	19	B	**6.6**		0.6
Joshua Tree (Seismicity) FM3.1, 3.2	10.1	16.2	0.0	13.3	90	271	na	17	B'	**6.5**		
Pinto Mtn FM3.1, 3.2	10.8	17.4	0.0	15.5	90	175	0	74	B	**7.2**		2.5
Blue Cut FM3.1, 3.2	12.8	20.6	0.0	13.1	90	177	na	79	B'	**7.1**		
Johnson Valley (No) 2011 rev FM3.1, 3.2	16.3	26.2	0.0	15.9	90	51	180	52	B	**6.8**		0.6
San Gorgonio Pass FM3.1, 3.2	16.8	27.1	0.0	18.5	60	11	na	29	B'	**6.9**		
San Andreas (Coachella) rev FM3.1, 3.2	17.2	27.7	0.0	11.1	90	224	180	69	A	**6.8**	89	9
Homestead Valley FM3.1, 3.2	18.2	29.3	0.0	15.9	90	na	na	46	B'	**7.0**		
San Andreas (San Bernardino S) FM3.1, 3.2	19.2	30.8	0.0	12.8	90	210	180	43	A	**7.6**	150	29
Emerson-Copper Mtn FM3.1, 3.2	22.7	36.6	0.0	14.1	90	51	180	54	B	**7.0**		0.6
Calico-Hidalgo FM3.1, 3.2	25.0	40.2	0.0	13.9	90	52	180	117	B	**7.4**		1.8
Kickapoo FM3.1, 3.2	25.6	41.2	0.0	15.1	90	na	na	6	B'	**6.1**		
North Frontal (East) FM3.1, 3.2	25.8	41.5	0.0	16.6	41	187	90	28	B	**6.9**		0.5
San Jacinto (Anza) rev FM3.1, 3.2	26.1	42.0	0.0	16.8	90	216	180	46	A	**7.6**	219	17
San Jacinto (San Jacinto Valley, stepover)	27.0	43.5	0.0	16.1	90	224	180	24	A	**7.6**	219	9
San Jacinto (Stepovers Combined) FM3.1, 3.2	28.2	45.5	0.0	16.5	90	229	180	25	A	**7.5**	110	4
Lenwood-Lockhart-Old Woman Springs FM3.1,	29.8	47.9	0.0	13.2	90	43	180	145	B	**7.5**		0.9
Pisgah-Bullion Mtn-Mesquite Lk FM3.1, 3.2	30.1	48.4	0.0	13.1	90	60	180	91	B	**7.3**		0.8
San Jacinto (Clark) rev FM3.1, 3.2	31.0	50.0	0.0	16.8	90	214	180	47	A	**7.6**	219	17
San Jacinto (Coyote Creek) FM3.1, 3.2	32.6	52.5	0.0	15.9	90	223	180	43	A	**7.6**	219	17
Helendale-So Lockhart FM3.1, 3.2	32.6	52.5	0.0	12.8	90	51	180	114	B	**7.4**		0.6
San Jacinto (San Jacinto Valley) rev FM3.1, 3.2	34.7	55.8	0.0	16.1	90	223	180	18	A	**7.6**	219	18
North Frontal (West) FM3.1, 3.2	36.4	58.5	0.0	15.7	49	171	90	50	B	**7.2**		1
Bullion Mountains FM3.1, 3.2	37.9	61.0	0.0	13.0	90	na	na	38	B'	**6.8**		
Hector Mine FM3.1, 3.2	40.3	64.9	0.0	14.6	90	246	na	28	B'	**6.7**		
Cleghorn Pass FM3.1, 3.2	42.2	68.0	0.0	13.0	90	na	na	20	B'	**6.5**		
San Jacinto (San Bernardino) FM3.1, 3.2	43.3	69.7	0.0	16.1	90	225	180	37	A	**7.6**	219	17
Earthquake Valley (No Ext.) FM3.1, 3.2	44.2	71.1	0.0	18.8	90	221	180	33	B'	**6.9**		
San Andreas (San Bernardino N) FM3.1, 3.2	44.6	71.7	0.0	12.8	90	212	180	35	A	**7.5**	103	27
Camp Rock FM3.1, 3.2	44.8	72.0	0.0	15.1	90	na	na	45	B'	**6.9**		
Cleghorn Lake FM3.1, 3.2	45.2	72.8	0.0	13.0	90	na	na	29	B'	**6.7**		
Cleghorn FM3.1, 3.2	47.4	76.3	0.0	15.5	90	187	0	25	B	**6.7**		3
Sheephole FM3.1, 3.2	47.5	76.4	0.0	13.0	90	na	na	15	B'	**6.4**		
Elsinore (Temecula) rev FM3.1, 3.2	48.3	77.7	0.0	14.2	90	230	180	40	A	**7.4**	431	3
San Jacinto (Lytle Creek connector) FM3.1, 3.2	49.3	79.3	0.0	16.1	90	na	na	23	B'	**6.7**		
Elsinore (Julian) FM3.1, 3.2	49.7	80.0	0.0	18.8	84	36	180	75	A	**7.6**	725	2.5

Reference: USGS OFR 2013-1165 (CGS SP 228) Based on Site Coordinates of 33.9386 Latitude, -116.4862 Longitude

Mean Magnitude for Type A Faults based on 0.1 weight for unsegmented section, 0.9 weight for segmented model (weighted by probability of each scenario with section listed as given on Table 3 of Appendix G in OFR 2008-1437). Mean magntude is average of Ellworths-B and Hanks & Bakun moment area relationship.

Site Coordinates: 33.939 N 116.486 W

Table A-2

Historical Earthquakes in Vicinity of Project Site, M >= 5.0

		Epicenter		*Distance*	
		Latittude	*Longitude*	*from*	*Magnitude*
Day	*Year*	*(Degrees)*		*Site (mi)*	M_W
7/24	1947	34.02	116.48	5.6	**5.3**
7/8	1986	34.00	116.61	8.3	**6.0**
6/30	1992	34.00	116.36	8.4	**5.1**
6/28	1992	34.06	116.47	8.4	**5.0**
7/25	1947	34.05	116.42	8.6	**5.2**
4/23	1992	33.96	116.32	9.6	**6.2**
9/15	1992	34.06	116.36	11.1	**5.2**
8/21	1993	34.03	116.32	11.4	**5.0**
12/16	1988	33.98	116.68	11.5	**5.0**
6/28	1992	34.10	116.42	11.8	**5.0**
6/29	1992	34.10	116.40	12.2	**5.7**
6/29	1992	34.10	116.39	12.4	**5.4**
6/12	1944	34.01	116.69	12.7	**5.2**
6/28	1992	34.12	116.43	12.9	**5.5**
5/18	1940	34.05	116.30	13.1	**5.2**
6/29	1992	33.87	116.27	13.3	**5.5**
6/28	1992	34.13	116.41	13.9	**5.8**
6/12	1944	34.00	116.72	14.0	**5.1**
5/18	1940	34.08	116.30	14.5	**5.3**
12/4	1948	34.00	116.23	15.3	**6.0**
6/28	1992	34.12	116.32	15.7	**5.7**
2/7	1889	34.10	116.70	16.5	**5.6**
6/28	1992	34.20	116.44	18.2	**7.3**
6/28	1992	34.16	116.85	25.8	**5.5**
6/6	1918	33.60	116.70	26.4	**5.5**
10/2	1928	33.60	116.70	26.4	**5.5**
6/28	1992	34.20	116.83	26.7	**6.5**
7/1	1992	34.33	116.46	27.1	**5.3**
3/15	1979	34.33	116.44	27.2	**5.5**
6/28	1992	34.34	116.51	27.7	**5.4**
8/17	1992	34.20	116.86	28.0	**5.2**
4/3	1926	34.00	116.00	28.2	**5.5**
6/12	2005	33.53	116.57	28.6	**5.2**
7/9	1992	34.24	116.84	29.0	**5.3**
2/25	1980	33.52	116.55	29.1	**5.1**
10/31	2001	33.51	116.51	29.6	**5.1**
11/22	1880	34.00	117.00	29.7	**5.5**
12/19	1880	34.00	117.00	29.7	**5.9**
1/16	1930	34.20	116.90	29.8	**5.5**
1/16	1930	34.18	116.92	29.9	**5.1**

From full earthquake catalog in USGS OFR 2008-1437h as updated with current events through 2021. For events with an asterisk, alternate solutions are given in the OFR. Ordered By Closest Event. Maximum 40 Closest Events Shown.

Table A-3 - General Procedure Seismic Design Values

2022 California Building Code (CBC) (ASCE 7-16, Supplement 3) Seismic Design Parameters

(Values presented should only be used by a Structural Engineer to determine if the exception in 11.4.8 (ASCE 7-16) can be used)

			CBC Reference	ASCE 7-16 Reference
Seismic Design Category		**E**		
Site Class		**D**	Table 1613.5.6	Table 11.6-2
Latitude:		33.939	Table 1613.5.2	Table 20.3-1
Longitude:		-116.486		
Maximum Considered Earthquake (MCE) Ground Motion				
Short Period Spectral Reponse	S_S	**2.344 g**	Figure 1613.5	Figure 22-1
1 second Spectral Response	S_1	**0.874 g**	Figure 1613.5	Figure 22-2
Site Coefficient	F_a	1.00	Table 1613.5.3(1)	Table 11.4-1
Site Coefficient	F_v	1.70	Table 1613.5.3(2)	Table 11-4.2
	S_{MS}	2.344 g	$= F_a x S_S$	
	S_{M1}	1.486 g	$= F_v x S_1$	
ASCE7-16 Supplement 3, Exception 1*	S_{M1*}	2.229 g	$=S_{M1} x 1.5$	Exception 1, 11.4.8, Supplement 3
Design Earthquake Ground Motion				
Short Period Spectral Reponse	S_{DS}	**1.563 g**	$= 2/3 x S_{MS}$	
Unadjusted 1 second Spectral Response	S_{D1}	**0.991 g**	$= 2/3 x S_{M1}$	
Modified 1 second Spectral Response*	S_{D1*}	**1.486 g**	$= 2/3 x S_{M1}$*	*Exception 1, 11.4.8, Supplement 3

Site Specific Evaluation May Be Required for Site Class=D or E & S1>=0.2. The Above SDS and SD1 are NOT Valid Unless the Exception of ASCE7-16 Supplement 3, Section 11.4.8 Applies & the SM1* & SD1* Values are used for Site Class D.

To	0.13 sec	$= 0.2 * S_{D1}/S_{DS}$	
Ts (11.4.8 ASCE 7-16 Exception Assumed)	0.63 sec	$= S_{D1}/S_{DS}$	
Risk Category	III	Table 1604.5	
Seismic Importance Factor	1.25		
F_{PGA}	1.10		
PGA_M	**1.06**		
Vertical Coefficient (C_V)	1.50	Table 11.9-1	

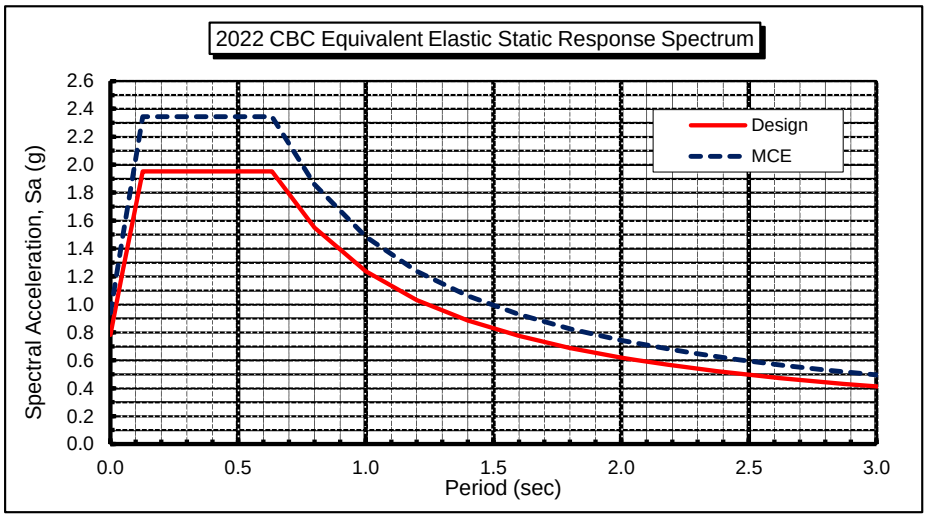


Table 11.5-1

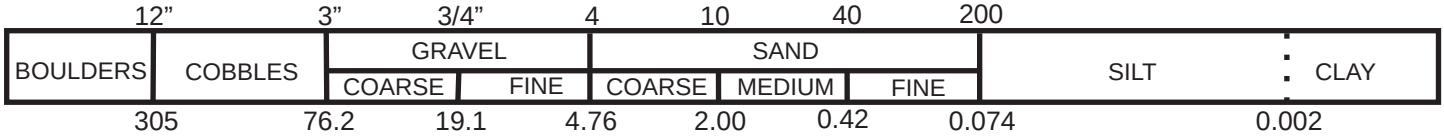
Period T (sec)	Design Sa (g)
0.00	0.781
0.05	1.244
0.13	1.953
0.63	1.953
0.80	1.548
1.00	1.238
1.20	1.032
1.40	0.884
1.60	0.774
1.80	0.688
2.00	0.619
2.20	0.563
2.40	0.516
2.60	0.476
2.80	0.442
3.00	0.413

DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on ASTM Designations D 2487 and D 2488 (Unified Soil Classification System). Information on each boring log is a compilation of subsurface conditions obtained from the field as well as from laboratory testing of selected samples. The indicated boundaries between strata on the boring logs are approximate only and may be transitional.

SOIL GRAIN SIZE

U.S. STANDARD SIEVE



SOIL GRAIN SIZE IN MILLIMETERS

RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS, AND NON-PLASTIC SILTS)

Very Loose	*N=0-4	RD=0-30	Easily push a 1/2-inch reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a 1/2-inch reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a 1/2-inch reinforcing rod with hammer
Dense	N=31-50	RD=70-90	Drive a 1/2-inch reinforcing rod 1 foot with difficulty by a hammer
Very Dense	N>50	RD=90-100	Drive a 1/2-inch reinforcing rod a few inches with hammer

*N=Blows per foot in the Standard Penetration Test at 60% theoretical energy. For the 3-inch diameter Modified California sampler,140-pound weight, multiply the blow count by 0.63 (about 2/3) to estimate N. If automatic hammer is used, multiply a factor of 1.3 to 1.5 to estimate N. RD=Relative Density (%). C=Undrained shear strength (cohesion).

CONSISTENCY OF COHESIVE SOILS (CLAY OR CLAYEY SOILS)

Very Soft	*N=0-1	*C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Firm	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very Stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000	Dented slightly by a pencil point or thumbnail

MOISTURE DENSITY

Moisture Condition: An observational term; dry, damp, moist, wet, saturated.
Moisture Content: The weight of water in a sample divided by the weight of dry soil in the soil sample expressed as a percentage.
Dry Density: The pounds of dry soil in a cubic foot.

MOISTURE CONDITION

Dry.....Absence of moisture, dusty, dry to the touch
Damp.....Slight indication of moisture
Slightly Moist.....Very quick (less than 1 minute) color change when exposed to air (granular soil), Below optimum (granular)
Moist.....Color change with period of air exposure (granular soil)
Below optimum moisture content (cohesive soil)
Very Moist.....High degree of saturation by visual and touch (granular soil)
Above optimum moisture content (cohesive soil), No free water
Wet.....Free surface water

PLASTICITY

DESCRIPTION	FIELD TEST
Nonplastic	A 1/8 in. (3-mm) thread cannot be rolled at any moisture content.
Low	The thread can barely be rolled.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit.
High	The thread can be rerolled several times after reaching the plastic limit.

GROUNDWATER LEVEL

Water Level (measured or after drilling)

Water Level (during drilling)

RELATIVE PROPORTIONS

Trace.....minor amount (<5%)
some.....significant amount
with.....(Typically greater than 15%)
modifier/and...sufficient amount to influence material behavior (Typically >30%)

LOG KEY SYMBOLS

Bulk, Bag or Grab Sample

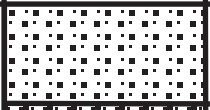
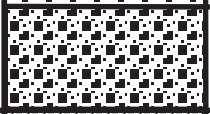
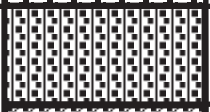
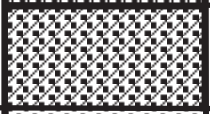
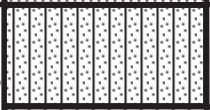
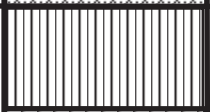
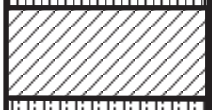
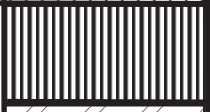
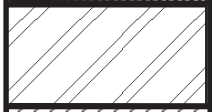
Standard Penetration Split Spoon Sampler (2” outside diameter)

Modified California Sampler (3” outside diameter)

No Recovery

Terms and Symbols Used on Boring Logs

Earth Systems

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS More than 50% of material is larger than No. 200 sieve size	GRAVEL AND GRAVELLY SOILS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures. Little or no fines
		GRAVELS WITH FINES		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS More than 50% of coarse fraction passing No. 4 sieve	CLEAN SAND (Little or no fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
		SAND WITH FINES (appreciable amount of fines)		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS More than 50% of material is smaller than No. 200 sieve size	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	Inorganic silts and very fine sands, rock flour, silty low clayey fine sands or clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
		LIQUID LIMIT GREATER THAN 50		MH	Inorganic silty, micaceous, or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS				PT	Peat, humus, swamp soils with high organic contents
VARIOUS SOILS AND MAN MADE MATERIALS					Fill Materials
MAN MADE MATERIALS					Asphalt and concrete

Soil Classification System

Earth Systems

Earth Systems

1680 Illinois Ave., Perris, CA 92571
Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-1
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

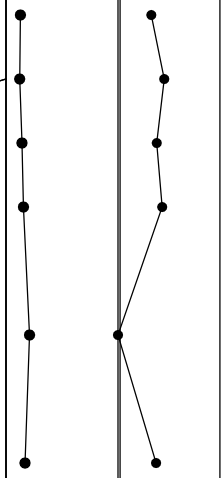
Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0			AC				ASPHALT CONCRETE: 2" /AGGREGATE BASE 6"
		6,9,10	SP		99	1	SAND: brown, medium dense, dry, fine to medium grained sand, trace silt and gravel 3/8" (Fill)
5		7,28,30	SP-SM		118	2	SAND WITH SILT: brown, medium dense, damp, fine to medium grained sand, trace silt and gravel 3/8", with more coarse sand and fine gravel (Native)
		7,22,12			107	3	
10		8,31,32			115	2	dense
15		9,24,27			119	2	with traces of gravel to 1"
20		8,20,15			106	7	
25							
30							
35							
40							
45							
50							
55							Boring completed at 21-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete
60							

Graphic Trend
Blow Count Dry Density



Earth Systems

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Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-2
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

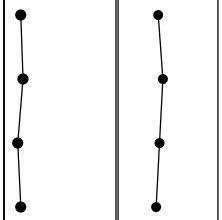
Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0			AC				ASPHALT CONCRETE: 2" / AGGREGATE BASE 3"
5	RING	6,29,33		SP	112	3	SAND: brown, medium dense, moist, fine to medium grained sand, trace gravel to 1" (Native likely upper 1' fill)
	RING	9,22,33			119	1	
	RING	7,28,30			114	2	
10	RING	9,20,22			109	3	
15							Boring completed at 11-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete
20							
25							
30							
35							
40							
45							
50							
55							
60							

Graphic Trend
Blow Count Dry Density



Earth Systems

1680 Illinois Ave., Perris, CA 92571
Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-3
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk, BAG, RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 3"/AGGREGATE BASE 3"
5	RING	7,8,10		SP-SM	103	5	SAND WITH SAND: brown, medium dense, damp, fine to medium grained sand, with some coarse sand (Native likely upper 1' fill)
	RING	4,25,18			108	3	
60							Boring completed at 6-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete

Earth Systems

1680 Illinois Ave., Perris, CA 92571
Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-4
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

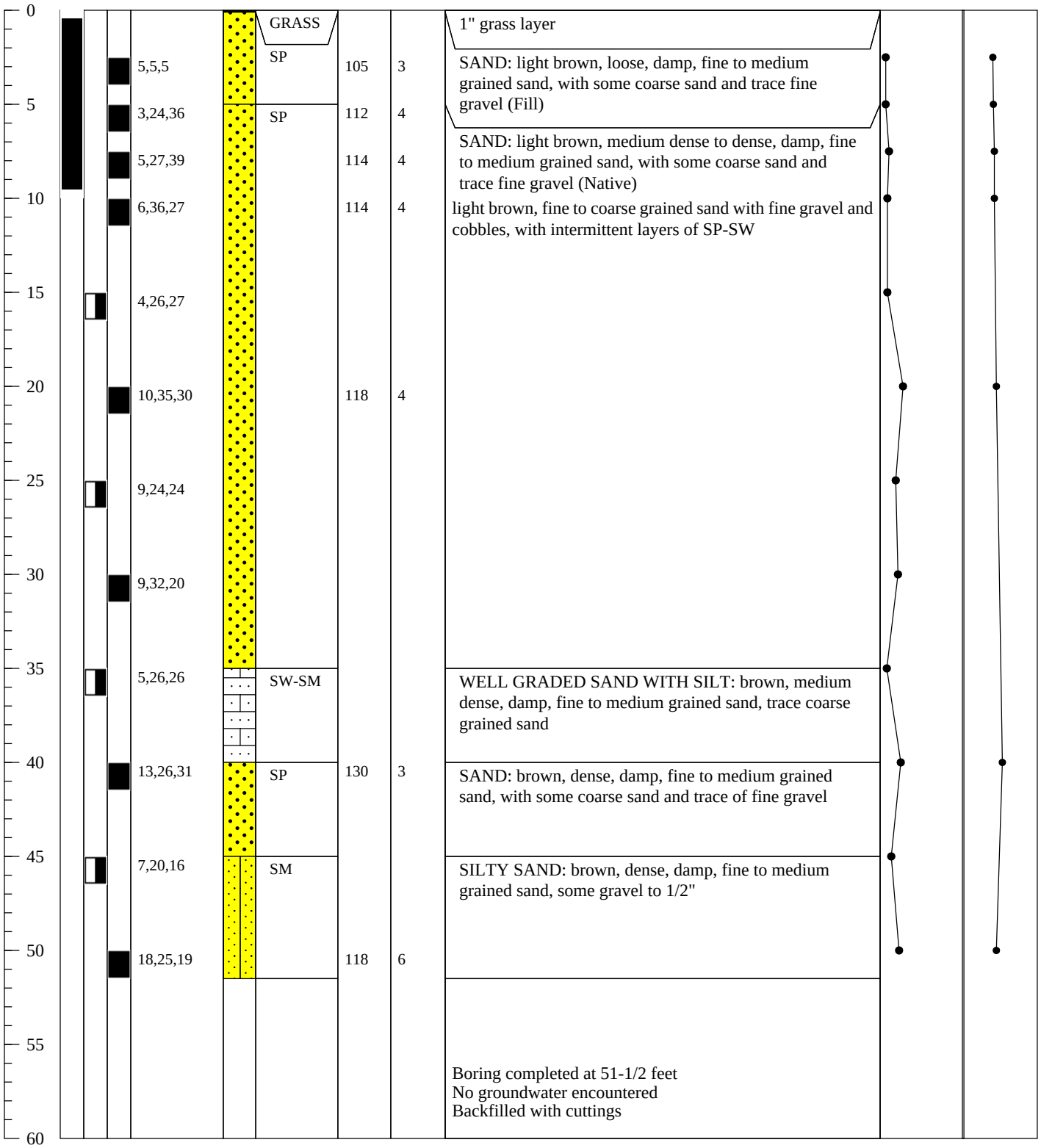
Drilling Date: April 7, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				GRASS			1" grass layer
	RING	5,5,5		SP	105	3	SAND: light brown, loose, damp, fine to medium grained sand, with some coarse sand and trace fine gravel (Fill)
5	RING	3,24,36		SP	112	4	
	RING	5,27,39			114	4	SAND: light brown, medium dense to dense, damp, fine to medium grained sand, with some coarse sand and trace fine gravel (Native)
10	RING	6,36,27			114	4	light brown, fine to coarse grained sand with fine gravel and cobbles, with intermittent layers of SP-SW
15	BAG	4,26,27					
20	RING	10,35,30			118	4	
25	BAG	9,24,24					
30	RING	9,32,20					
35	BAG	5,26,26		SW-SM			WELL GRADED SAND WITH SILT: brown, medium dense, damp, fine to medium grained sand, trace coarse grained sand
40	RING	13,26,31		SP	130	3	SAND: brown, dense, damp, fine to medium grained sand, with some coarse sand and trace of fine gravel
45	BAG	7,20,16		SM			SILTY SAND: brown, dense, damp, fine to medium grained sand, some gravel to 1/2"
50	RING	18,25,19			118	6	
55							Boring completed at 51-1/2 feet No groundwater encountered Backfilled with cuttings
60							



Earth Systems

1680 Illinois Ave., Perris, CA 92571
Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-5

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

Drilling Date: April 7, 2025
Drilling Method: Mobile 61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0			GRASS				1" grass layer
	RING	7,21,22		SP	109	3	SAND: light grey brown, medium dense, damp, fine to medium grained sand, with some coarse sand and trace gravel to 1/4" (Native)
5	RING	4,5,6			104	4	
	RING	5,7,12			117	4	
10	RING	8,28,28			111	4	gravel to 1/2"
15	RING	5,28,29		SM	114	5	SILTY SAND: brown, medium dense, moist, fine grained sand, trace medium grained sand and mica
20	RING	7,20,24	⊠	SP-GP	114	5	GRAVELLY SAND: grey brown, medium dense, medium to coarse grained sand, fine gravel
25							
30							
35							
40							
45							
50							
55							Boring completed at 21-1/2 feet No groundwater encountered Backfilled with cuttings
60							

Earth Systems

1680 Illinois Ave., Perris, CA 92571
Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-6

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

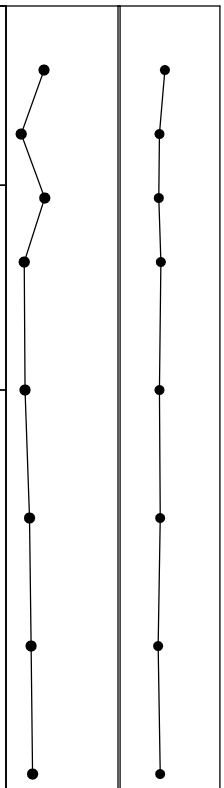
Drilling Date: April 7, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				SP			SAND: light brown, dense, damp, fine to medium grained sand, with coarse and traces of gravel and silt (Fill)
5	RING	15,24,26			119	3	
	RING	8,30,20			111	3	
	RING	11,28,23		SP-SM	110	3	SAND WITH SILT: light brown, dense, damp, fine to coarse grained sand, with some cobbles (Native)
10	RING	10,22,32			113	2	medium dense
15	RING	8,20,25		SP	111	3	SAND: light brown, medium dense, damp, fine to medium grained sand, with some coarse sand and trace of fine gravel
20	RING	11,23,28			112	3	
25	RING	8,24,20			109	4	
30	RING	9,20,20			112	4	
35							Boring completed at 31-1/2 feet No groundwater encountered Backfilled with cuttings
40							
45							
50							
55							
60							



Earth Systems

1680 Illinois Ave., Perris, CA 92571
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Boring No. B-7
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

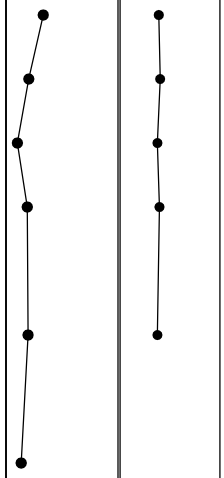
Drilling Date: April 7, 2025
Drilling Method: Mobile-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				GRASS			1" grass layer
5	RING	14,22,27		SP-SM	110	4	SAND WITH SILT: light brown, medium dense to dense, damp, fine to medium grained sand, with trace coarse sand (Native) trace gravel to 1/2"
	RING	10,15,16			112	4	
	RING	5,23,17			108	4	
10	RING	6,22,16			111	4	
15	RING	11,12,17			108	5	
20	BAG	8,19,11					
25							Boring completed at 21-1/2 feet No groundwater encountered Backfilled with cuttings
30							
35							
40							
45							
50							
55							
60							



Earth Systems

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Phone (951) 928-9799, Fax (951) 928-9948

Boring No. B-8

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

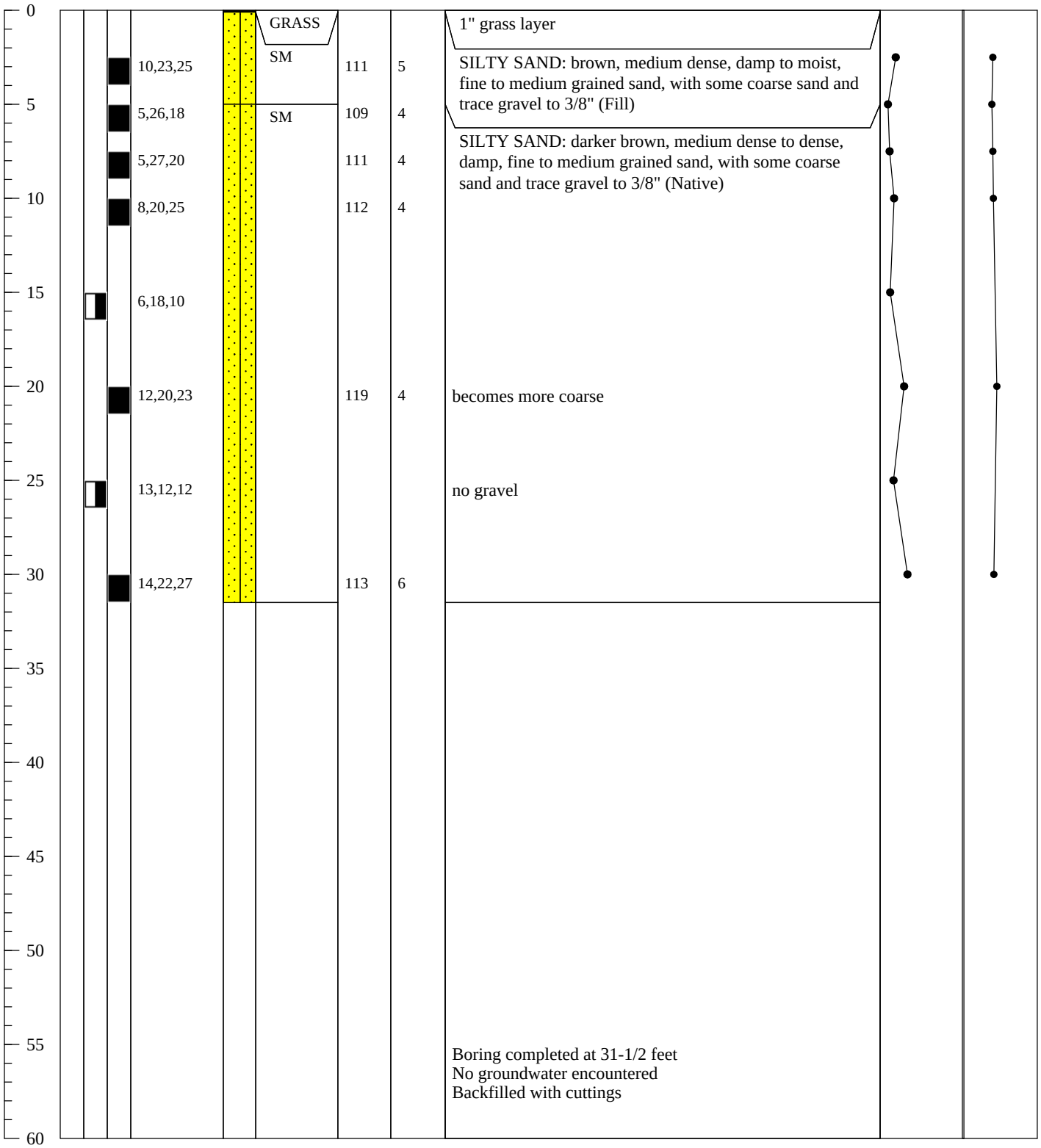
Drilling Date: April 7, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				GRASS			1" grass layer
2.5	RING	10,23,25		SM	111	5	SILTY SAND: brown, medium dense, damp to moist, fine to medium grained sand, with some coarse sand and trace gravel to 3/8" (Fill)
5	RING	5,26,18		SM	109	4	
7.5	RING	5,27,20			111	4	SILTY SAND: darker brown, medium dense to dense, damp, fine to medium grained sand, with some coarse sand and trace gravel to 3/8" (Native)
10	RING	8,20,25			112	4	
15	BAG	6,18,10					
20	RING	12,20,23			119	4	becomes more coarse
25	BAG	13,12,12					no gravel
30	RING	14,22,27			113	6	
31.5							Boring completed at 31-1/2 feet No groundwater encountered Backfilled with cuttings



Earth Systems

1680 Illinois Ave., Perris, CA 92571
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Boring No. B-9

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

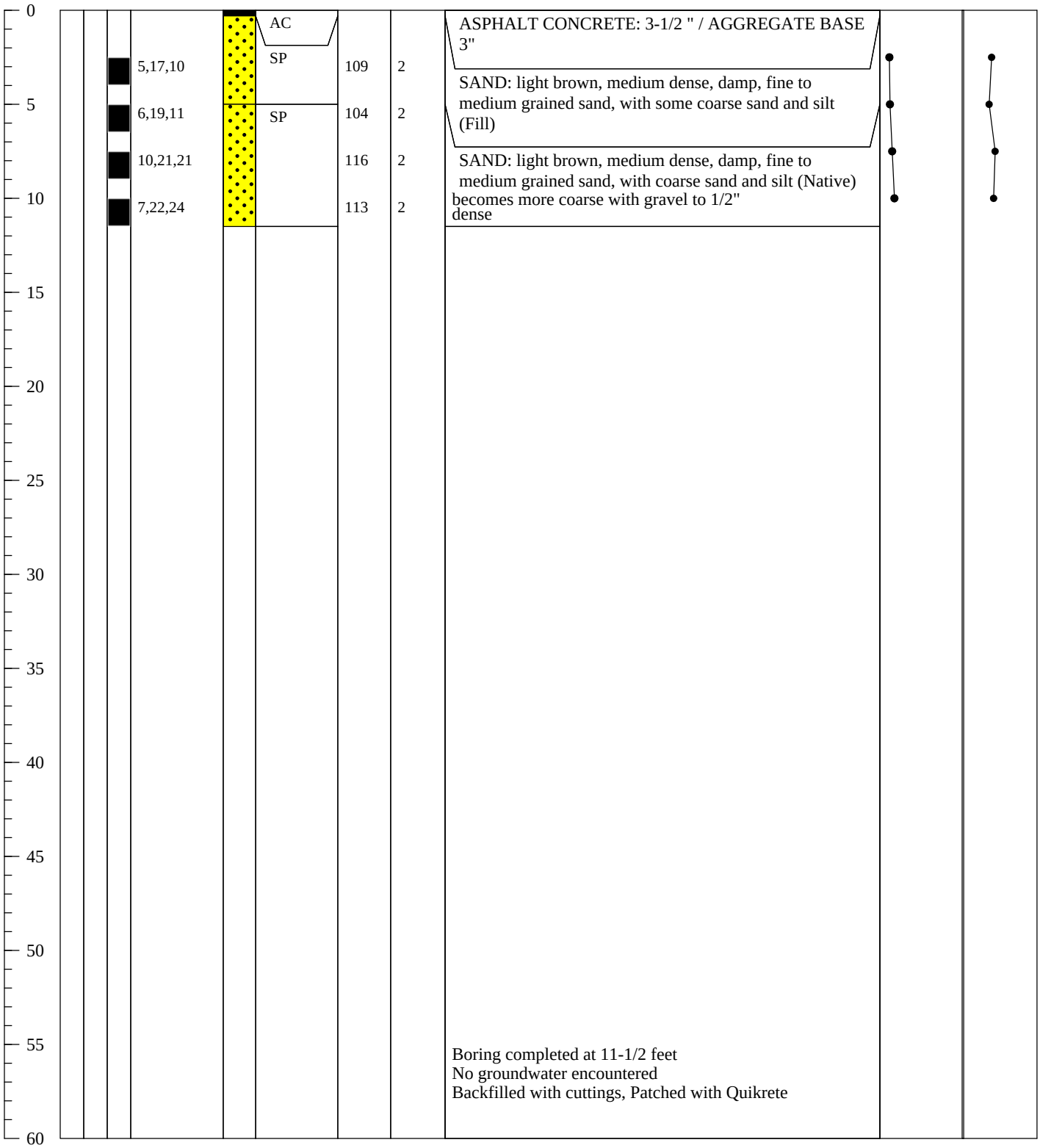
Drilling Date: April 7, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 3-1/2 " / AGGREGATE BASE 3"
2.5	RING	5,17,10		SP	109	2	SAND: light brown, medium dense, damp, fine to medium grained sand, with some coarse sand and silt (Fill)
5	RING	6,19,11		SP	104	2	
7.5	RING	10,21,21			116	2	SAND: light brown, medium dense, damp, fine to medium grained sand, with coarse sand and silt (Native)
10	RING	7,22,24			113	2	becomes more coarse with gravel to 1/2" dense
11.5							Boring completed at 11-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete



Earth Systems

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Boring No. B-10

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

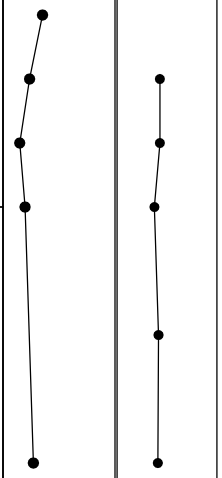
Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 6"
				SP			SAND: brown, dense, damp, fine to coarse grained sand, gravel to 2", trace of silt (Fill)
5	RING	16,25,27			116	3	becomes more coarse
	RING	12,25,20			116	2	
10	RING	15,20,22		SP	108	3	SAND: brown, medium dense, damp, fine to coarse grained sand, gravel to 2", trace of silt (Native)
15	RING	9,24,25			114	2	
20	RING	10,19,21			113	2	dense
25							
30							
35							
40							
45							
50							
55							Boring completed at 31-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete
60							



Earth Systems

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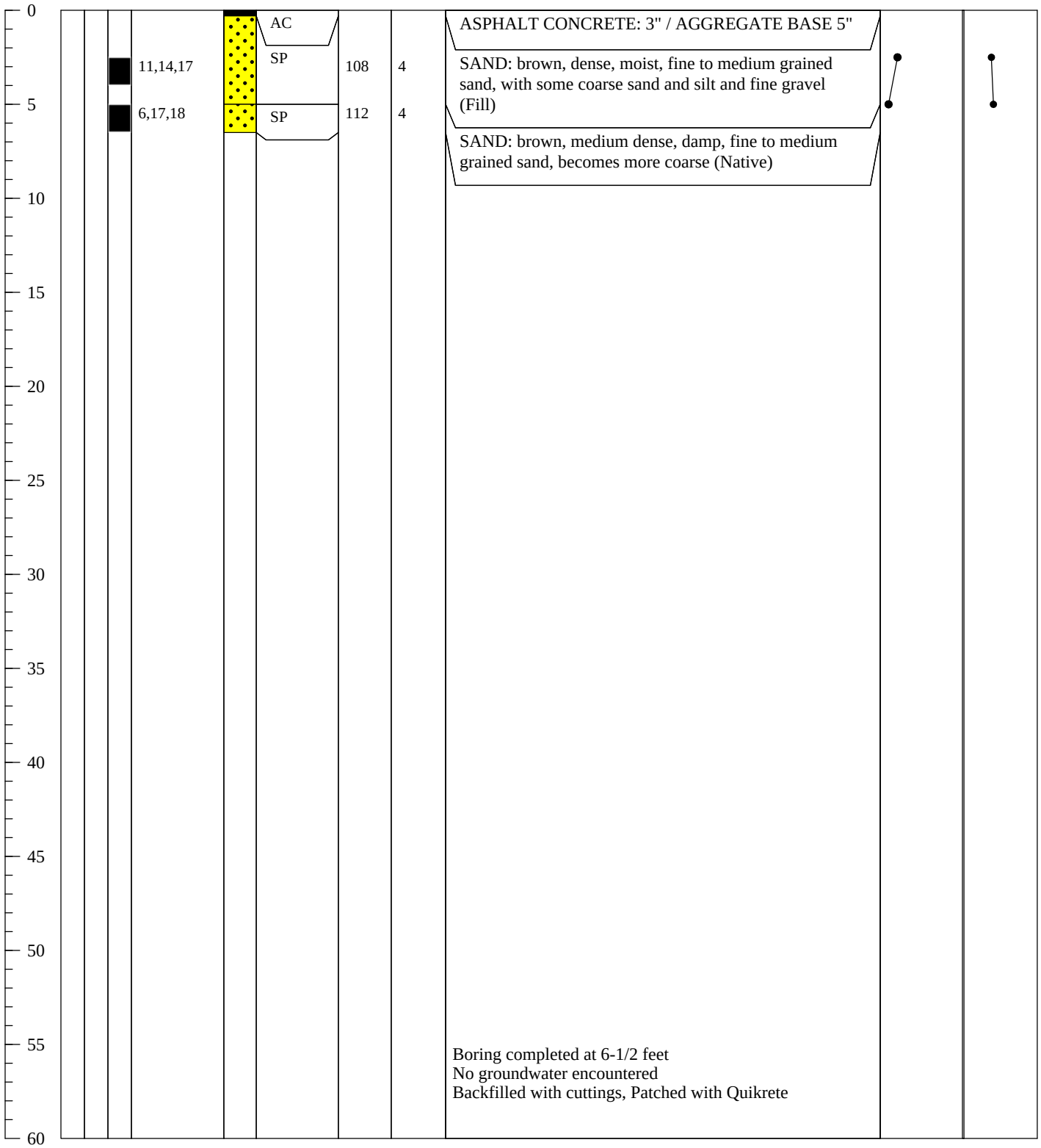
Boring No. B-11
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				AC			ASPHALT CONCRETE: 3" / AGGREGATE BASE 5"
	RING	11,14,17		SP	108	4	SAND: brown, dense, moist, fine to medium grained sand, with some coarse sand and silt and fine gravel (Fill)
5	RING	6,17,18		SP	112	4	SAND: brown, medium dense, damp, fine to medium grained sand, becomes more coarse (Native)
10							
15							
20							
25							
30							
35							
40							
45							
50							
55							Boring completed at 6-1/2 feet No groundwater encountered Backfilled with cuttings, Patched with Quikrete
60							

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density



Earth Systems

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Boring No. B-12

Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

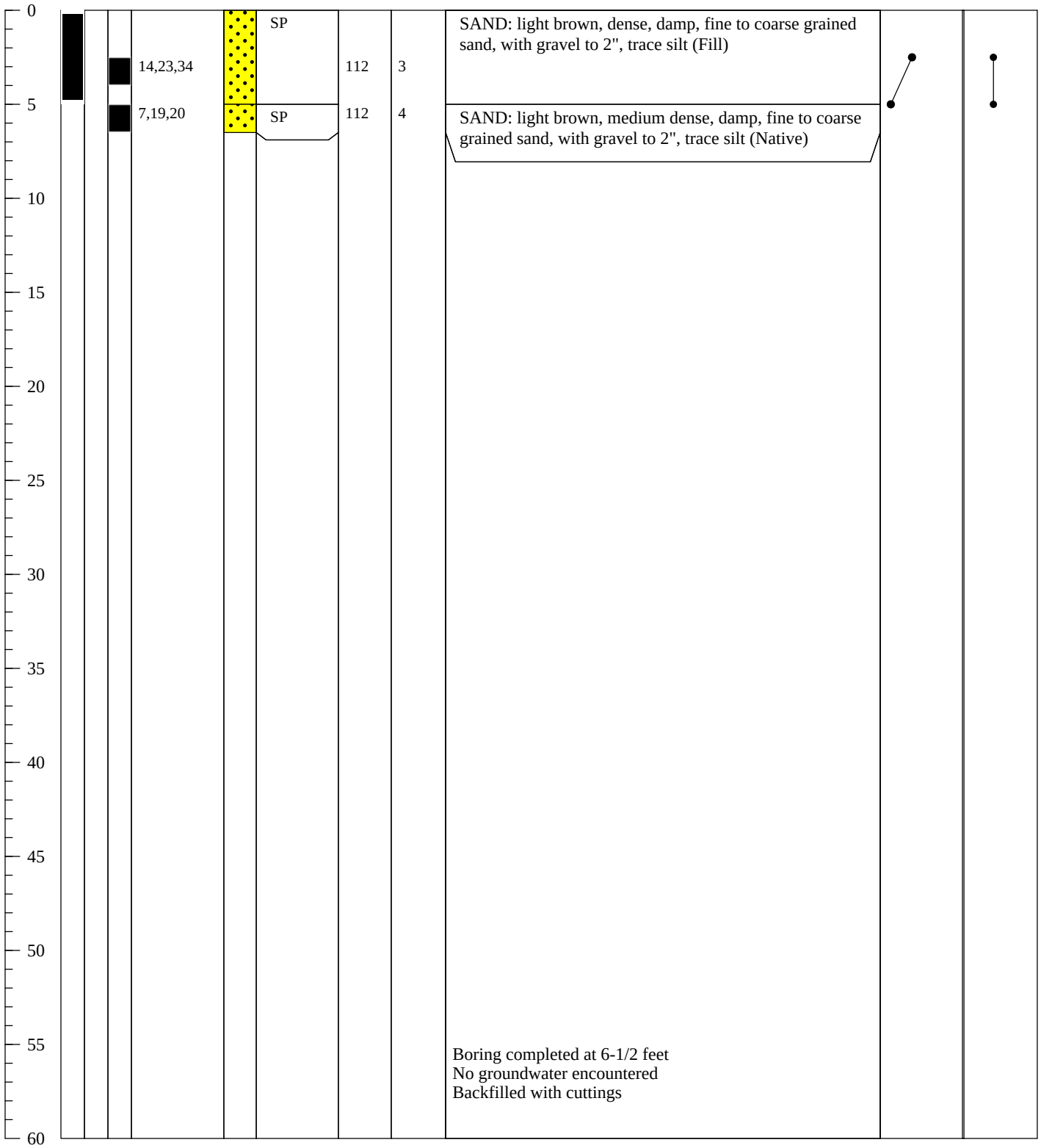
Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0	RING	14,23,34		SP	112	3	SAND: light brown, dense, damp, fine to coarse grained sand, with gravel to 2", trace silt (Fill)
5	RING	7,19,20		SP	112	4	SAND: light brown, medium dense, damp, fine to coarse grained sand, with gravel to 2", trace silt (Native)
10							
15							
20							
25							
30							
35							
40							
45							
50							
55							Boring completed at 6-1/2 feet No groundwater encountered Backfilled with cuttings
60							



Earth Systems

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Boring No. B-13
Project Name: Bubbling Wells Elementary School
Project Number: 307067-001
Boring Location: See Plate 3

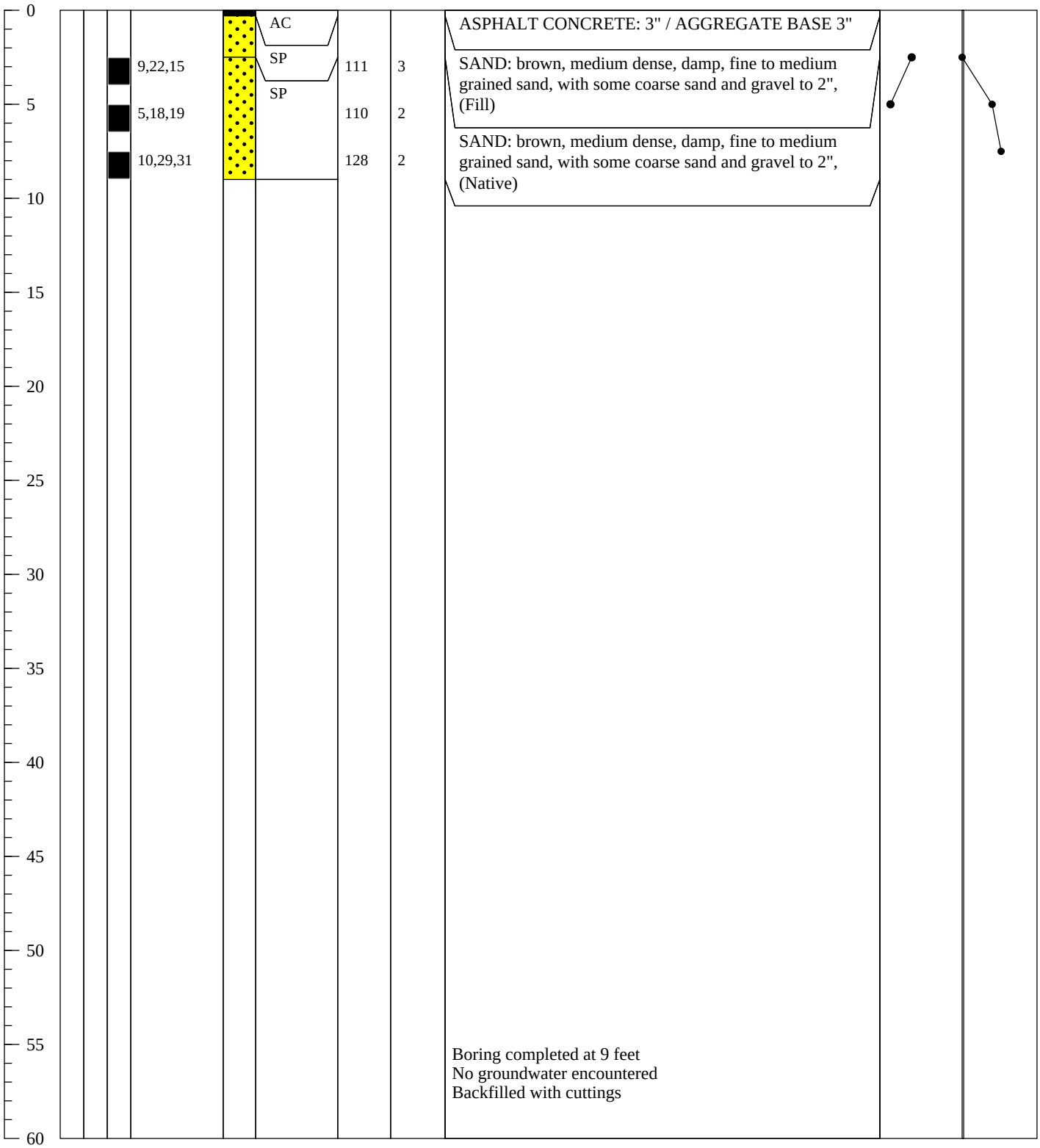
Drilling Date: April 8, 2025
Drilling Method: Mobile B-61 w/auto hammer
Drill Type: 8" HSA
Logged By: JG

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Depth (Ft.)	Sample Type (Bulk / BAG / RING)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 3" / AGGREGATE BASE 3"
2.5	RING	9,22,15		SP	111	3	SAND: brown, medium dense, damp, fine to medium grained sand, with some coarse sand and gravel to 2", (Fill)
5	RING	5,18,19		SP	110	2	
7.5	RING	10,29,31			128	2	SAND: brown, medium dense, damp, fine to medium grained sand, with some coarse sand and gravel to 2", (Native)
9							Boring completed at 9 feet No groundwater encountered Backfilled with cuttings

Graphic Trend
Blow Count Dry Density



Boring No.	B-4	Project and Number	Bubbling Wells Eleme	307067-001
		ESSW Field Staff		
		Drilling Company	GP Drilling	
		Drilling Method	6-8" H S A	HSA Inner Diameter 3"
		Site Latitude (North)	Decimal Degrees	
		Site Longitude (West)	Decimal Degrees	

Date Drilled
4/7/2025

Hammer Weight (lbs)
140

Hammer Drop (inches)
30

Hammer Efficiency (E_M)
78

Borehole Correction (Cb)*
1

*inside diameter of Hollow Stem Auger

Sampler Correction Mod Cal to SPT
0.63

Sampler Liner Correction (Cs)
1.2 Applied if SPT Sampler Used
1.0 Applied if Cal Sampler Used

Rod Length Above Ground (ft)
3

Depth to Estimate Vs Over (ft)*
100

*Caltrans Estimation Method

*N_{sub} Value Desired For Column 6
70

*Only Used for Calculating Nsub otherwise not used by program (i.e.N50, N70, N80, etc)

Calculation Results
Ave. SPT N_{60HE}-value (blows/ft)
38
(Based on Upper 51 feet)
Ave. Shear Wave Velocity (ft/sec)
983
(Based on Upper 51 feet)
Soil Profile Type (Site Class)
D
(Based on Upper 51 feet)
Ave. Friction Angle (degrees)
37
(Based on Upper 51 feet)
Estimated Shear Wave Velocity ** Based on Depth Less than 100' ft
982 (ft/sec Upper 100 feet)
Soil Profile Type (Site Class)**
D Based on Ave. Shear Wave Velocity (ft/sec) 299 (m/sec Upper 100 feet)
Ave. Field SPT N-value (blows/ft)
29.2
(Based on Upper 51 feet)
Ave. Field SPT N-value (blows/ft)
35.7
(Based on Upper 100 feet)

Soil Profile Type (Site Class)**
D Based on Ave. Field Blow Count 36 (Upper 100 feet)

	Equipment variable	Typical Correction (%/100)
Energy ratio (Skempton, 1986)	Donut Hammer	0.50 to 1.00
	Safety Hammer	0.70 to 1.20
	Automatic-Trip Donut-type Hammer	0.80 to 1.30

→ Hammer energy as related to the standard 60% delivered energy, i.e. a 72% hammer has and energy ratio of 1.2, i.e. (72/60=1.2)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bottom of Layer Depth (ft)	Blow Count***	Type of Sampler	d_i (feet)	N_{60} (blows/ft)	N70 (blows/ft)	N_{60HE} (blows/ft)	V_{si}** (m/sec)	V_{si} (ft/sec)	Φ_i (degrees)	d_i/N_{60HEi}	d_i/V_{si}	d_i/Φ_i	Consistency if Coarse Grained (Based on ASTM and Corrected for N60)	Consistency if Fine Grained (Based on ASTM and Corrected for N60)
3.0	10	c	3.0	6.14	5.27	8.19	184.93	606.59	28.48	0.36630	0.00495	0.105348	Loose	Firm
7.0	60	c	4.0	36.86	31.59	49.14	310.94	1019.90	37.16	0.08140	0.00392	0.107628	Dense	Hard
9.0	66	c	2.0	40.54	34.75	54.05	319.66	1048.48	37.76	0.03700	0.00191	0.052963	Dense	Hard
13.0	63	c	4.0	43.86	37.59	51.60	315.37	1034.43	37.47	0.07752	0.00387	0.106756	Dense	Hard
17.0	53	c	4.0	36.90	31.63	43.41	299.96	983.86	36.41	0.09215	0.00407	0.109856	Dense	Hard
23.0	65	c	6.0	50.57	43.35	53.24	318.25	1043.85	37.67	0.11271	0.00575	0.159297	Very Dense	Hard
27.0	48	s	4.0	71.14	60.97	62.40	333.25	1093.06	38.69	0.06410	0.00366	0.103376	Very Dense	Hard
33.0	52	c	6.0	42.59	36.50	42.59	298.30	978.44	36.30	0.14088	0.00613	0.165299	Dense	Hard
38.0	52	s	5.0	81.12	69.53	67.60	341.08	1118.73	39.23	0.07396	0.00447	0.127455	Very Dense	Hard
43.0	57	c	5.0	46.68	40.01	46.68	306.35	1004.84	36.85	0.10711	0.00498	0.135685	Dense	Hard
48.0	36	s	5.0	56.16	48.14	46.80	306.58	1005.57	36.87	0.10684	0.00497	0.135629	Very Dense	Hard
51.0	44	c	3.0	36.04	30.89	36.04	284.20	932.17	35.33	0.08325	0.00322	0.084916	Dense	Hard
		Total:	51.0	"d" Feet				Total:		1.34323	0.05188	1.394208		

**Used When Boring Depths are less than 100 feet to estimate Shear Wave Velocity over 100 feet. Caltrans Geotechnical Services Design Manual, Version 1.0, August 2009 using N60HE corrected only for Hammer Energy (Empirical Calculation)

*** Uncorrected blowcount not to exceed 100 blows as entry per CBC

Consistency classification based upon ASCE 1996

BOREHOLE, SAMPLER, AND ROD CORRECTION FACTORS

Factor	Equipment Variables	Value
Borehole diameter factor, C_B	2.5 - 4.5 in (65 - 115 mm)	1.00
	6 in (150 mm)	1.05
	8 in (200 mm)	1.15
Sampling method factor, C_S	Standard sampler	1.00
	Sampler without liner	1.20
Rod length factor, C_R	10 - 13 ft (3 - 4 m)	0.75
	13 - 20 ft (4 - 6 m)	0.85
	20 - 30 ft (6 - 10 m)	0.95
	> 30 ft (> 10 m)	1.00

Adapted from Skempton (1986).

Spreadsheet Version 2.6, 2019: Prepared by Kevin L. Paul, PE, GE

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Coryright & Developed 2007 by Shelton L. Stringer, PE, GE, PG , EG - Earth Systems Southwest

Project: Bubbling Wells Elementary School
Job No: 307067-001
Date: 5/28/2025
Boring: B-4 Data Set: 1

Methods: **Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)**
Journal of Geotechnical and Enviromental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
Settlement Analysis from Tokimatsu and Seed (1987), JGEE,Vol 113, No.8, ASCE
Modified by Pradel, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:

Magnitude: 7.9 7.5
PGA, g: 0.71 0.81
MSF: 0.88
GWT: 100.0 feet
Calc GWT: 100.0 feet
Remediate to: 5.0 feet

SPT N VALUE CORRECTIONS:

Energy Correction to N60 (C_E): 1.30 Automatic Hammer
Drive Rod Corr. (C_R): 1 Default
Rod Length above ground (feet): 3.0
Borehole Dia. Corr. (C_B): 1.00
Sampler Liner Correction for SPT?: 1 Yes
Cal Mod/ SPT Ratio: 0.63

Threshold Acceler., g: #N/A

Total (ft) Liquefied Thickness	Total (in.) Induced Subsidence
0	0.6

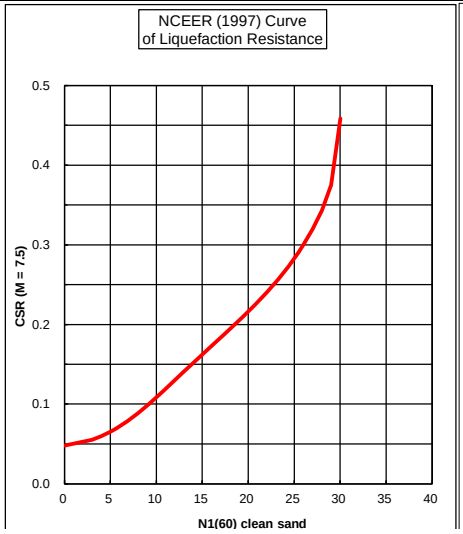
upper 50 ft

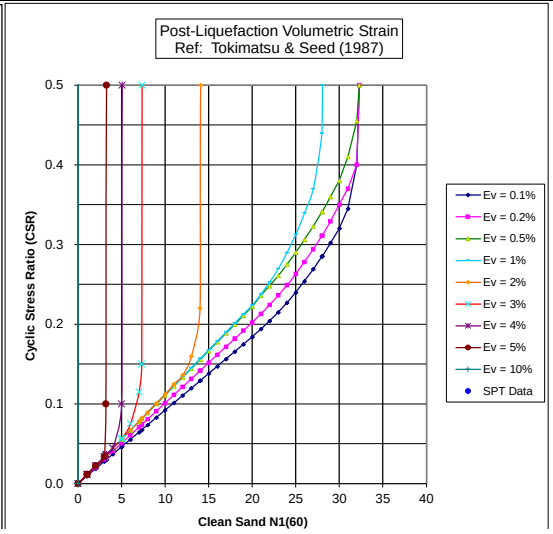
Required SF: 1.50
Minimum Calculated SF: #N/A

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Nc = 19.2

Base Depth (feet)	Cal Mod N	SPT N	Liquef. Suscept. (0 or 1)	Total Unit Wt. (pcf)	Fines Content (%)	Depth of SPT (feet)	Rod Length (feet)	Tot.Stress at SPT po (tsf)	Eff.Stress at SPT p'o (tsf)	rd	C_N	C_R	C_S	$N_{1(60)}$	Rel. Dens. Dr (%)	*Trigger FC Adj.* $\Delta N_{1(60)}$	*Equiv. Sand* $N_{1(60)CS}$	Kσ	M = 7.5 Available CRR	M =7.5 Induced CSR*	**Liquefac. Safety Factor**	*Post FC Adj.* $\Delta N_{1(60)}$	$N_{1(60)CS}$	Volumetric *Strain* (%)	**Induced Subsidence (in.)**	p (tsf)	G_{max} (tsf)	τ_{av} (tsf)	Shear Strain γ	Strain E_{15}	Strain Enc	**Dry Sand Subsidence (in.)**
								0.000																								
4.5	50	**50**	1	114	5	2.5	5.5	0.143	0.143	1.00	1.70	0.75	1.00	82.9	100	0.0	82.9	1.00	1.200	0.525	**Non-Liq.**	0.0	82.9	0.01	**0.01**	0.095	602	0.066	3.1E-04	5.6E-05	6.3E-05	**0.01**
7.0	60	**38**	1	117	5	5.0	8.0	0.286	0.286	0.99	1.70	0.75	1.00	62.7	95	0.0	62.7	1.00	1.200	0.522	**Non-Liq.**	0.0	62.7	0.03	**0.01**	0.191	777	0.131	5.0E-04	1.3E-04	1.4E-04	**0.01**
9.5	66	**42**	1	119	5	7.5	10.5	0.433	0.433	0.98	1.56	0.75	1.00	63.4	95	0.0	63.4	1.00	1.200	0.519	**Non-Liq.**	0.0	63.4	0.03	**0.01**	0.290	960	0.197	5.6E-04	1.4E-04	1.6E-04	**0.01**
13.0	64	**40**	1	119	5	10.0	13.0	0.581	0.581	0.98	1.35	0.76	1.00	53.6	87	0.0	53.6	1.00	1.200	0.516	**Non-Liq.**	0.0	53.6	0.05	**0.02**	0.389	1,052	0.263	7.3E-04	2.2E-04	2.5E-04	**0.02**
17.0		**53**	1	119	5	15.0	18.0	0.879	0.879	0.97	1.10	0.86	1.30	84.9	100	0.0	84.9	1.00	1.200	0.511	**Non-Liq.**	0.0	84.9	0.02	**0.01**	0.589	1,508	0.393	5.6E-04	9.8E-05	1.1E-04	**0.01**
23.0	65	**41**	1	123	5	20.0	23.0	1.182	1.182	0.96	0.95	0.93	1.00	47.0	82	0.0	47.0	0.96	1.200	0.528	**Non-Liq.**	0.0	47.0	0.08	**0.06**	0.792	1,436	0.522	1.0E-03	3.7E-04	4.1E-04	**0.06**
28.0		**48**	1	119	5	25.0	28.0	1.486	1.486	0.94	0.84	0.98	1.30	67.3	98	0.0	67.3	0.87	1.200	0.569	**Non-Liq.**	0.0	67.3	0.04	**0.02**	0.995	1,814	0.646	8.0E-04	1.9E-04	2.1E-04	**0.02**
33.0	52	**33**	1	119	5	30.0	33.0	1.783	1.783	0.92	0.77	1.00	1.00	32.8	68	0.0	32.8	0.86	1.200	0.568	**Non-Liq.**	0.0	32.8	0.19	**0.12**	1.195	1,564	0.758	1.6E-03	8.6E-04	9.6E-04	**0.12**
38.0		**52**	1	119	6	35.0	38.0	2.081	2.081	0.89	0.71	1.00	1.30	62.7	95	0.3	63.0	0.76	1.200	0.616	**Non-Liq.**	0.3	63.0	0.05	**0.03**	1.394	2,100	0.855	8.7E-04	2.2E-04	2.4E-04	**0.03**
43.0	57	**36**	1	134	5	40.0	43.0	2.393	2.393	0.85	0.66	1.00	1.00	31.0	67	0.0	31.0	0.78	1.200	0.573	**Non-Liq.**	0.0	31.0	0.20	**0.12**	1.603	1,779	0.940	1.5E-03	8.9E-04	9.9E-04	**0.12**
48.0		**36**	1	125	15	45.0	48.0	2.719	2.719	0.80	0.62	1.00	1.30	37.9	74	4.3	42.3	0.69	1.200	0.618	**Non-Liq.**	4.3	42.3	0.10	**0.06**	1.822	2,102	1.009	1.1E-03	4.4E-04	4.9E-04	**0.06**
51.5	44	**28**	1	125	15	50.0	53.0	3.032	3.032	0.75	0.59	1.00	1.00	21.3	55	3.5	24.8	0.73	0.280	0.544	**Non-Liq.**	3.5	24.8	0.26	**0.11**	2.031	1,858	1.053	1.5E-03	1.2E-03	1.3E-03	**0.11**





$N_{1(60)} = C_N*C_E*C_B*C_R*C_S*N$

C_R = 0.75 for Rod lengths < 3m, 1.0 for > 10m
= min(1,max(0.75,1.4666-2.556/(z(ft))$^{0.5}$))

$C_N = (1 \text{ atm}/p'o)^{0.5}$, max 1.7

C_S = max(1.1,min(1.3,1+$N_{1(60)}$/100)) for SPT without liners

MSF = $10^{2.24}/M^{2.56}$

z = Depth (m)

pa = 1 atm = 101 KPa = 1.058 tsf

p = 0.67*po

τ_{av} = 0.65*PGA*po*rd

$G_{max} = 447*N_{1(60)CS}^{(1/3)}*p^{0.5}$

a = 0.0389*(p/1)+0.124

b = $6400*(p/1)^{(-0.6)}$

γ = [1+a*EXP(b*τ_{av}/G_{max})]/[(1+a)*τ_{av}/G_{max}]

$E_{15} = \gamma*(N_{1(60)CS}/20)^{-1.2}$

$E_{nc} = (Nc/15)^{0.45}*E15$

Nc = $(MAG-4)^{2.17}$

S = 2*H*E_{nc}

rd = (1-0.4113*z^0.5+0.04052*z+0.001753*z^1.5)/(1-0.4177*z^0.5+0.05729*z-0.006205*z^1.5+0.00121*z^2))

$\Delta N_{1(60)}$ = min(10,IF(FC<35,exp(1.76-(190/FC^2)),5)+IF(FC<=5,1,IF(FC<35,0.99+(FC^1.5/1000),1.2))*N1(60) - N1(60)

$N_{1(60)CS} = N_{1(60)CS} + \Delta N_{1(60)}$

Kσ = min of 1.0 or $(p'o/1.058)^{(IF(Dr>0.7,0.6,IF(Dr<0.5,0.8,0.7))-1)}$

Dr = $(N_{1(60)}/70)^{0.5}$

CSReq = 0.65*PGA*(po/p'o)*rd

CSR* = CSReq/MSF/Kσ

$CRR_{7.5}$ = (0.048-0.004721*N+0.0006136*N^2-0.00001673*N^3)/(1-0.1248*N+0.009578*N^2-0.0003285*N^3+0.000003714*N^4))

N = $N_{1(60)CS}$

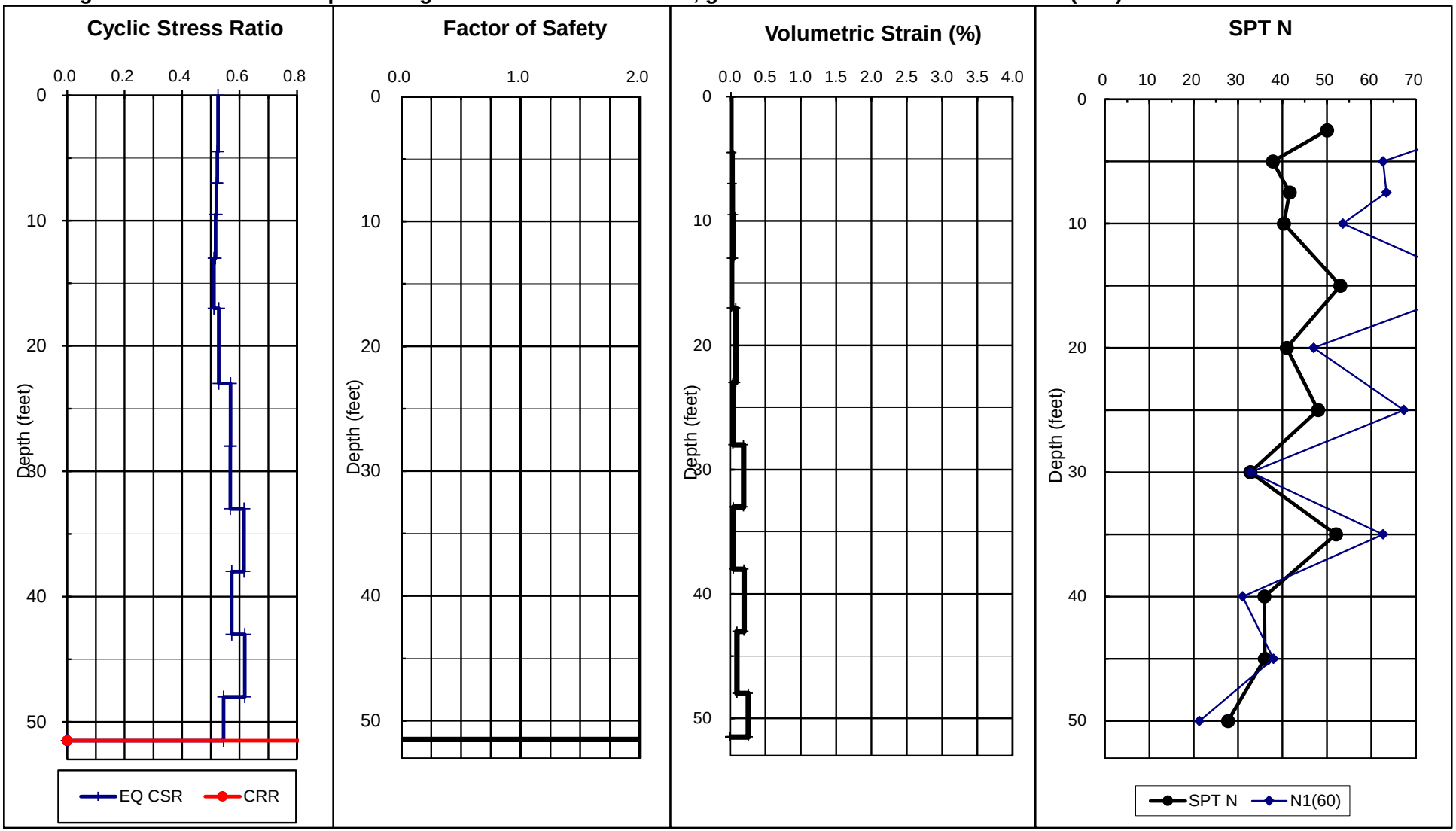
SF = $CRR_{7.5,1atm}$/CSR*

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Bubbling Wells Elementary School **Project No: 307067-001** 1996/1998 NCEER Method

Ground Compaction Remediated to 5 foot depth

Boring: B-4 **Earthquake Magnitude: 7.9** **PGA, g: 0.71** **Calc GWT (feet): 100**



Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.6 inches

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Coryright & Developed 2007 by Shelton L. Stringer, PE, GE, PG , EG - Earth Systems Southwest

Project: Bubbling Wells Elementary School
Job No: 307067-001
Date: 5/28/2025
Boring: B-4 upper 30 Data Set: 3

Methods: **Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)**
Journal of Geotechnical and Enviromental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
Settlement Analysis from Tokimatsu and Seed (1987), JGEE,Vol 113, No.8, ASCE
Modified by Pradel, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:

Magnitude: 7.9 7.5
PGA, g: 0.71 0.81
MSF: 0.88
GWT: 100.0 feet
Calc GWT: 100.0 feet
Remediate to: 5.0 feet

SPT N VALUE CORRECTIONS:

Energy Correction to N60 (C_E): 1.30 Automatic Hammer
Drive Rod Corr. (C_R): 1 Default
Rod Length above ground (feet): 3.0
Borehole Dia. Corr. (C_B): 1.00
Sampler Liner Correction for SPT?: 1 Yes
Cal Mod/ SPT Ratio: 0.63

Threshold Acceler., g: #N/A

Total (ft) Liquefied Thickness	Total (in.) Induced Subsidence
0	0.2

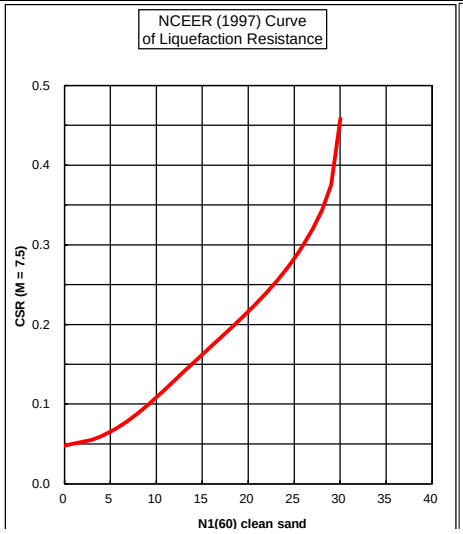
upper 50 ft

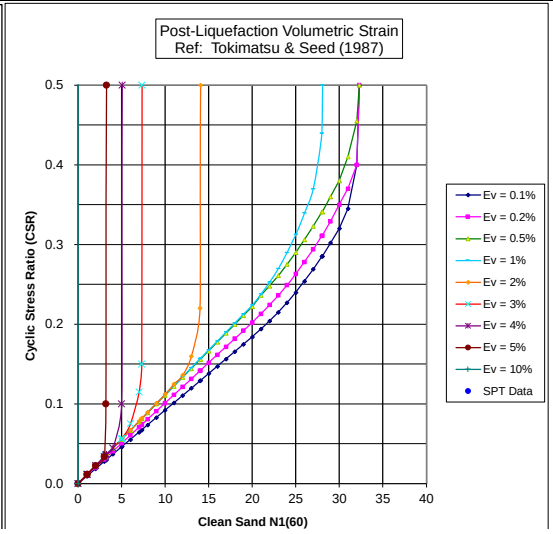
Required SF: 1.50
Minimum Calculated SF: #N/A

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Nc = 19.2

Base Depth (feet)	Cal Mod N	SPT N	Liquef. Suscept. (0 or 1)	Total Unit Wt. (pcf)	Fines Content (%)	Depth of SPT (feet)	Rod Length (feet)	Tot.Stress at SPT po (tsf)	Eff.Stress at SPT p'o (tsf)	rd	C_N	C_R	C_S	$N_{1(60)}$	Rel. Dens. Dr (%)	*Trigger FC Adj.* $\Delta N_{1(60)}$	*Equiv. Sand* $N_{1(60)CS}$	Kσ	M = 7.5 Available CRR	M =7.5 Induced CSR*	**Liquefac. Safety Factor**	*Post FC Adj.* $\Delta N_{1(60)}$	$N_{1(60)CS}$	Volumetric *Strain (%)*	**Induced Subsidence (in.)**	p (tsf)	G_{max} (tsf)	τ_{av} (tsf)	Shear Strain γ	Strain E_{15}	Strain Enc	**Dry Sand Subsidence (in.)**
								0.000																								
4.5	50	**50**	1	114	5	2.5	5.5	0.143	0.143	1.00	1.70	0.75	1.00	82.9	100	0.0	82.9	1.00	1.200	0.525	**Non-Liq.**	0.0	82.9	0.01	**0.01**	0.095	602	0.066	3.1E-04	5.6E-05	6.3E-05	**0.01**
7.0	60	**38**	1	117	5	5.0	8.0	0.286	0.286	0.99	1.70	0.75	1.00	62.7	95	0.0	62.7	1.00	1.200	0.522	**Non-Liq.**	0.0	62.7	0.03	**0.01**	0.191	777	0.131	5.0E-04	1.3E-04	1.4E-04	**0.01**
9.5	66	**42**	1	119	5	7.5	10.5	0.433	0.433	0.98	1.56	0.75	1.00	63.4	95	0.0	63.4	1.00	1.200	0.519	**Non-Liq.**	0.0	63.4	0.03	**0.01**	0.290	960	0.197	5.6E-04	1.4E-04	1.6E-04	**0.01**
13.0	64	**40**	1	119	5	10.0	13.0	0.581	0.581	0.98	1.35	0.76	1.00	53.6	87	0.0	53.6	1.00	1.200	0.516	**Non-Liq.**	0.0	53.6	0.05	**0.02**	0.389	1,052	0.263	7.3E-04	2.2E-04	2.5E-04	**0.02**
17.0		**53**	1	119	5	15.0	18.0	0.879	0.879	0.97	1.10	0.86	1.30	84.9	100	0.0	84.9	1.00	1.200	0.511	**Non-Liq.**	0.0	84.9	0.02	**0.01**	0.589	1,508	0.393	5.6E-04	9.8E-05	1.1E-04	**0.01**
23.0	65	**41**	1	123	5	20.0	23.0	1.182	1.182	0.96	0.95	0.93	1.00	47.0	82	0.0	47.0	0.96	1.200	0.528	**Non-Liq.**	0.0	47.0	0.08	**0.06**	0.792	1,436	0.522	1.0E-03	3.7E-04	4.1E-04	**0.06**
28.0		**48**	1	119	5	25.0	28.0	1.486	1.486	0.94	0.84	0.98	1.30	67.3	98	0.0	67.3	0.87	1.200	0.569	**Non-Liq.**	0.0	67.3	0.04	**0.02**	0.995	1,814	0.646	8.0E-04	1.9E-04	2.1E-04	**0.02**
31.5	52	**33**	1	119	5	30.0	33.0	1.783	1.783	0.92	0.77	1.00	1.00	32.8	68	0.0	32.8	0.86	1.200	0.568	**Non-Liq.**	0.0	32.8	0.19	**0.08**	1.195	1,564	0.758	1.6E-03	8.6E-04	9.6E-04	**0.08**





$N_{1(60)} = C_N*C_E*C_B*C_R*C_S*N$

C_R = 0.75 for Rod lengths < 3m, 1.0 for > 10m
= min(1,max(0.75,1.4666-2.556/(z(ft))$^{0.5}$))

$C_N = (1 \text{ atm}/p'o)^{0.5}$, max 1.7

C_S = max(1.1,min(1.3,1+$N_{1(60)}$/100)) for SPT without liners

MSF = $10^{2.24}/M^{2.56}$

z = Depth (m)

pa = 1 atm = 101 KPa = 1.058 tsf

p = 0.67*po

τ_{av} = 0.65*PGA*po*rd

$G_{max} = 447*N_{1(60)CS}^{(1/3)}*p^{0.5}$

a = 0.0389*(p/1)+0.124

b = $6400*(p/1)^{(-0.6)}$

$\gamma = [1+a*EXP(b*\tau_{av}/G_{max})]/[(1+a)*\tau_{av}/G_{max}]$

$E_{15} = \gamma*(N_{1(60)CS}/20)^{-1.2}$

$E_{nc} = (Nc/15)^{0.45}*E15$

$Nc = (MAG-4)^{2.17}$

$S = 2*H*E_{nc}$

rd = (1-0.4113*z^0.5+0.04052*z+0.001753*z^1.5)/(1-0.4177*z^0.5+0.05729*z-0.006205*z^1.5+0.00121*z^2))

$\Delta N_{1(60)}$ = min(10,IF(FC<35,exp(1.76-(190/FC^2)),5)+IF(FC<=5,1,IF(FC<35,0.99+(FC^1.5/1000),1.2))*N1(60) - N1(60)

$N_{1(60)CS} = N_{1(60)CS} + \Delta N_{1(60)}$

Kσ = min of 1.0 or $(p'o/1.058)^{(IF(Dr>0.7,0.6,IF(Dr<0.5,0.8,0.7))-1)}$

Dr = $(N_{1(60)}/70)^{0.5}$

CSReq = 0.65*PGA*(po/p'o)*rd

CSR* = CSReq/MSF/Kσ

$CRR_{7.5}$ = (0.048-0.004721*N+0.0006136*N^2-0.00001673*N^3)/(1-0.1248*N+0.009578*N^2-0.0003285*N^3+0.000003714*N^4))

N = $N_{1(60)CS}$

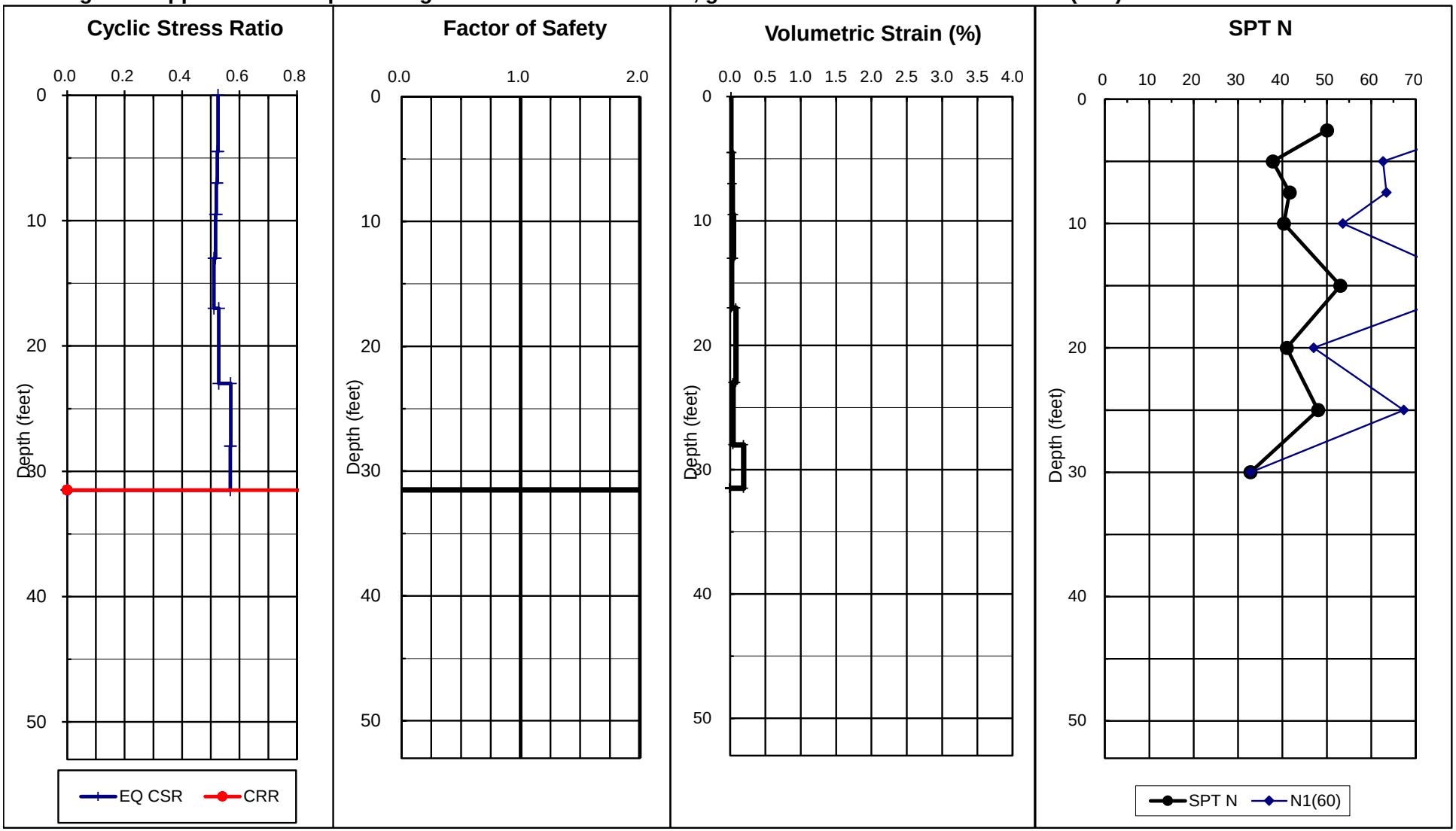
SF = $CRR_{7.5,1atm}$/CSR*

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Bubbling Wells Elementary School **Project No: 307067-001** 1996/1998 NCEER Method

Ground Compaction Remediated to 5 foot depth

Boring: B-4 upper 30 Earthquake Magnitude: 7.9 PGA, g: 0.71 Calc GWT (feet): 100



Total Thickness of Liquefiable Layers: 0.0 feet **Estimated Total Ground Subsidence: 0.2 inches**

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Coryright & Developed 2007 by Shelton L. Stringer, PE, GE, PG , EG - Earth Systems Southwest

Project: Bubbling Wells Elementary School
Job No: 307067-001
Date: 5/28/2025
Boring: B-6 Data Set: 2

Methods: **Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)**
Journal of Geotechnical and Enviromental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
Settlement Analysis from Tokimatsu and Seed (1987), JGEE,Vol 113, No.8, ASCE
Modified by Pradel, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:
Magnitude: 7.9 7.5
PGA, g: 0.71 0.81
MSF: 0.88
GWT: 100.0 feet
Calc GWT: 100.0 feet
Remediate to: 5.0 feet

SPT N VALUE CORRECTIONS:
Energy Correction to N60 (C_E): 1.30 Automatic Hammer
Drive Rod Corr. (C_R): 1 Default
Rod Length above ground (feet): 3.0
Borehole Dia. Corr. (C_B): 1.00
Sampler Liner Correction for SPT?: 1 Yes
Cal Mod/ SPT Ratio: 0.63

Threshold Acceler., g: #N/A

Total (ft) Liquefied Thickness	Total (in.) Induced Subsidence
0	0.5

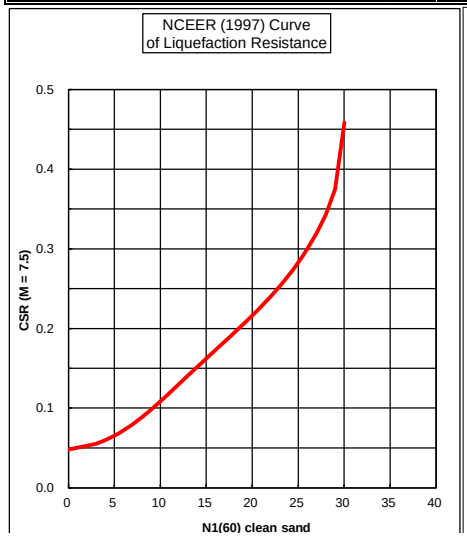
upper 50 ft

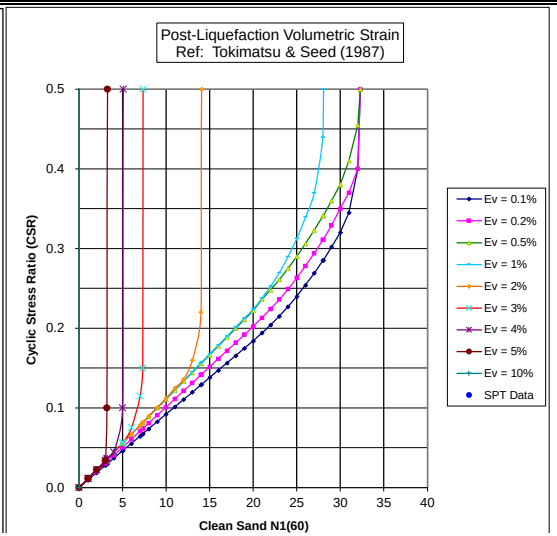
Required SF: 1.50
Minimum Calculated SF: #N/A

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Nc = 19.2

Base Depth (feet)	Cal Mod N	SPT N	Liquef. Suscept. (0 or 1)	Total Unit Wt. (pcf)	Fines Content (%)	Depth of SPT (feet)	Rod Length (feet)	Tot.Stress at SPT po (tsf)	Eff.Stress at SPT p'o (tsf)	rd	C_N	C_R	C_S	$N_{1(60)}$	Rel. Dens. Dr (%)	*Trigger FC Adj.* $\Delta N_{1(60)}$	*Equiv. Sand* $N_{1(60)CS}$	Kσ	M = 7.5 Available CRR	M =7.5 Induced CSR*	**Liquefac. Safety Factor**	*Post FC Adj.* $\Delta N_{1(60)}$	$N_{1(60)CS}$	Volumetric *Strain (%)*	**Induced Subsidence (in.)**	p (tsf)	G_{max} (tsf)	τ_{av} (tsf)	Shear Strain γ	Strain E_{15}	Strain Enc	**Dry Sand Subsidence (in.)**
								0.000																								
4.5	50	**50**	1	122	5	2.5	5.5	0.153	0.153	1.00	1.70	0.75	1.00	82.9	100	0.0	82.9	1.00	1.200	0.525	**Non-Liq.**	0.0	82.9	0.01	**0.01**	0.102	623	0.070	3.2E-04	5.7E-05	6.4E-05	**0.01**
7.0	50	**32**	1	115	5	5.0	8.0	0.303	0.303	0.99	1.70	0.75	1.00	52.2	86	0.0	52.2	1.00	1.200	0.522	**Non-Liq.**	0.0	52.2	0.04	**0.01**	0.203	753	0.139	6.2E-04	2.0E-04	2.2E-04	**0.01**
9.5	51	**32**	1	115	12	7.5	10.5	0.447	0.447	0.98	1.54	0.75	1.00	48.2	83	3.1	51.3	1.00	1.200	0.519	**Non-Liq.**	3.1	51.3	0.05	**0.02**	0.299	909	0.203	7.1E-04	2.3E-04	2.5E-04	**0.02**
13.0	55	**35**	1	115	12	10.0	13.0	0.591	0.591	0.98	1.34	0.76	1.00	45.7	81	3.0	48.7	1.00	1.200	0.516	**Non-Liq.**	3.0	48.7	0.06	**0.03**	0.396	1,027	0.267	8.1E-04	2.8E-04	3.1E-04	**0.03**
17.0	45	**28**	1	115	5	15.0	18.0	0.878	0.878	0.97	1.10	0.86	1.00	35.0	71	0.0	35.0	1.00	1.200	0.511	**Non-Liq.**	0.0	35.0	0.15	**0.07**	0.588	1,121	0.393	1.3E-03	6.6E-04	7.3E-04	**0.07**
23.0	51	**32**	1	115	5	20.0	23.0	1.166	1.166	0.96	0.95	0.93	1.00	37.1	73	0.0	37.2	0.96	1.200	0.525	**Non-Liq.**	0.0	37.2	0.14	**0.10**	0.781	1,318	0.515	1.3E-03	6.1E-04	6.8E-04	**0.10**
28.0	44	**28**	1	115	5	25.0	28.0	1.453	1.453	0.94	0.85	0.98	1.00	30.2	66	0.0	30.2	0.91	1.200	0.546	**Non-Liq.**	0.0	30.2	0.23	**0.14**	0.974	1,374	0.632	1.7E-03	1.0E-03	1.1E-03	**0.14**
31.5	40	**25**	1	115	5	30.0	33.0	1.741	1.741	0.92	0.78	1.00	1.00	25.5	60	0.0	25.5	0.86	0.292	0.564	**Non-Liq.**	0.0	25.5	0.34	**0.14**	1.166	1,422	0.740	2.0E-03	1.5E-03	1.7E-03	**0.14**





$N_{1(60)} = C_N*C_E*C_B*C_R*C_S*N$

C_R = 0.75 for Rod lengths < 3m, 1.0 for > 10m
= min(1,max(0.75,1.4666-2.556/(z(ft))$^{0.5}$))

$C_N = (1 \text{ atm}/p'o)^{0.5}$, max 1.7

C_S = max(1.1,min(1.3,1+$N_{1(60)}$/100)) for SPT without liners

MSF = $10^{2.24}/M^{2.56}$

z = Depth (m)

pa = 1 atm = 101 KPa = 1.058 tsf

p = 0.67*po

τ_{av} = 0.65*PGA*po*rd

$G_{max} = 447*N_{1(60)CS}^{(1/3)}*p^{0.5}$

a = 0.0389*(p/1)+0.124

b = $6400*(p/1)^{(-0.6)}$

γ = [1+a*EXP(b*τ_{av}/G_{max})]/[(1+a)*τ_{av}/G_{max}]

$E_{15} = \gamma*(N_{1(60)CS}/20)^{-1.2}$

$E_{nc} = (Nc/15)^{0.45}*E15$

Nc = $(MAG-4)^{2.17}$

S = 2*H*E_{nc}

rd = (1-0.4113*z^0.5+0.04052*z+0.001753*z^1.5)/(1-0.4177*z^0.5+0.05729*z-0.006205*z^1.5+0.00121*z^2))

$\Delta N_{1(60)}$ = min(10,IF(FC<35,exp(1.76-(190/FC^2)),5)+IF(FC<=5,1,IF(FC<35,0.99+(FC^1.5/1000),1.2))*N1(60) - N1(60)

$N_{1(60)CS} = N_{1(60)CS} + \Delta N_{1(60)}$

Kσ = min of 1.0 or $(p'o/1.058)^{(IF(Dr>0.7,0.6,IF(Dr<0.5,0.8,0.7))-1)}$

Dr = $(N_{1(60)}/70)^{0.5}$

CSReq = 0.65*PGA*(po/p'o)*rd

CSR* = CSReq/MSF/Kσ

$CRR_{7.5}$ = (0.048-0.004721*N+0.0006136*N^2-0.00001673*N^3)/(1-0.1248*N+0.009578*N^2-0.0003285*N^3+0.000003714*N^4))

N = $N_{1(60)CS}$

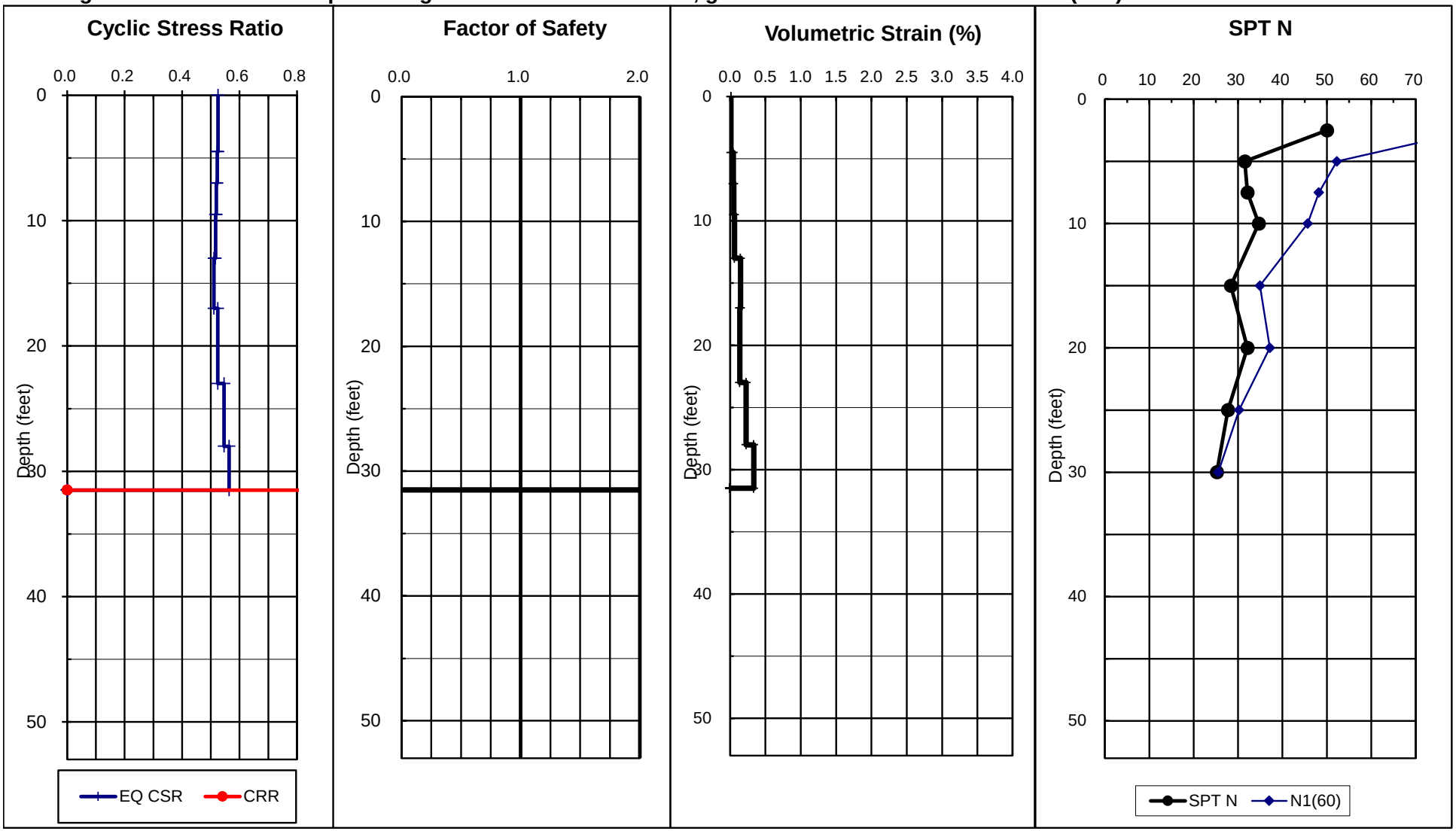
SF = $CRR_{7.5,1atm}$/CSR*

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Bubbling Wells Elementary School **Project No: 307067-001** 1996/1998 NCEER Method

Ground Compaction Remediated to 5 foot depth

Boring: B-6 **Earthquake Magnitude: 7.9** **PGA, g: 0.71** **Calc GWT (feet): 100**



Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.5 inches

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Coryright & Developed 2007 by Shelton L. Stringer, PE, GE, PG , EG - Earth Systems Southwest

Project: Bubbling Wells Elementary School
Job No: 307067-001
Date: 5/28/2025
Boring: B-8 Data Set: 4

Methods: **Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)**
Journal of Geotechnical and Enviromental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
Settlement Analysis from Tokimatsu and Seed (1987), JGEE,Vol 113, No.8, ASCE
Modified by Pradel, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:

Magnitude: 7.9 7.5
PGA, g: 0.71 0.81
MSF: 0.88
GWT: 100.0 feet
Calc GWT: 100.0 feet
Remediate to: 5.0 feet

SPT N VALUE CORRECTIONS:

Energy Correction to N60 (C_E): 1.30 Automatic Hammer
Drive Rod Corr. (C_R): 1 Default
Rod Length above ground (feet): 3.0
Borehole Dia. Corr. (C_B): 1.00
Sampler Liner Correction for SPT?: 1 Yes
Cal Mod/ SPT Ratio: 0.63

Threshold Acceler., g: #N/A

Total (ft) Liquefied Thickness	Total (in.) Induced Subsidence
0	0.4

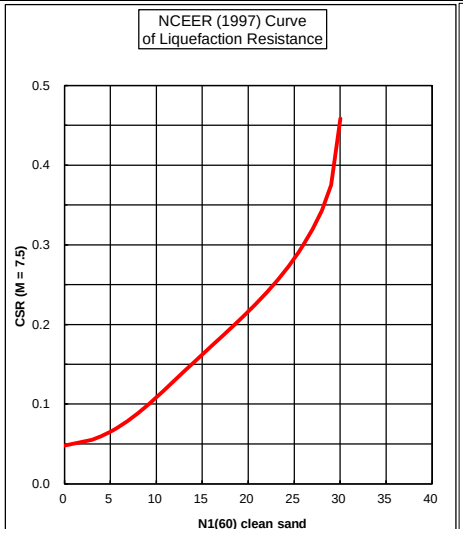
upper 50 ft

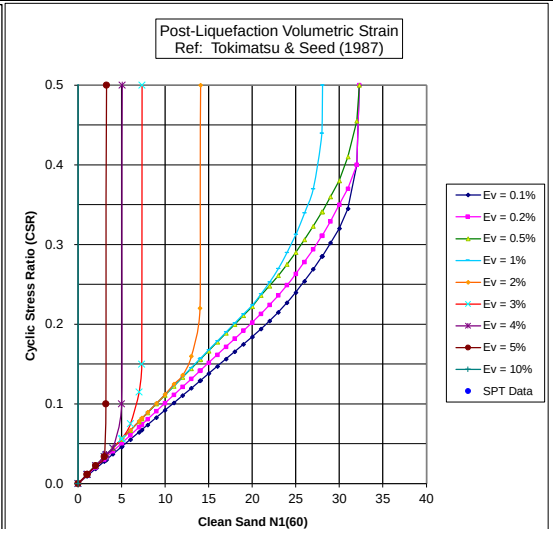
Required SF: 1.50
Minimum Calculated SF: #N/A

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Nc = 19.2

Base Depth (feet)	Cal Mod N	SPT N	Liquef. Suscept. (0 or 1)	Total Unit Wt. (pcf)	Fines Content (%)	Depth of SPT (feet)	Rod Length (feet)	Tot.Stress at SPT po (tsf)	Eff.Stress at SPT p'o (tsf)	rd	C_N	C_R	C_S	$N_{1(60)}$	Rel. Dens. Dr (%)	*Trigger FC Adj.* $\Delta N_{1(60)}$	*Equiv. Sand* $N_{1(60)CS}$	Kσ	M = 7.5 Available CRR	M =7.5 Induced CSR*	**Liquefac. Safety Factor**	*Post FC Adj.* $\Delta N_{1(60)}$	$N_{1(60)CS}$	Volumetric *Strain (%)*	**Induced Subsidence (in.)**	p (tsf)	G_{max} (tsf)	τ_{av} (tsf)	Shear Strain γ	Strain E_{15}	Strain Enc	**Dry Sand Subsidence (in.)**
								0.000																								
4.5	48	**50**	1	122	15	2.5	5.5	0.153	0.153	1.00	1.70	0.75	1.00	82.9	100	6.5	89.4	1.00	1.200	0.525	**Non-Liq.**	6.5	89.4	0.01	**0.01**	0.102	639	0.070	2.9E-04	4.9E-05	5.4E-05	**0.01**
7.0	44	**28**	1	115	15	5.0	8.0	0.303	0.303	0.99	1.70	0.75	1.00	45.9	81	4.7	50.7	1.00	1.200	0.522	**Non-Liq.**	4.7	50.7	0.05	**0.01**	0.203	746	0.139	6.4E-04	2.1E-04	2.4E-04	**0.01**
9.5	47	**30**	1	115	15	7.5	10.5	0.447	0.447	0.98	1.54	0.75	1.00	44.4	80	4.6	49.0	1.00	1.200	0.519	**Non-Liq.**	4.6	49.0	0.06	**0.02**	0.299	895	0.203	7.4E-04	2.5E-04	2.8E-04	**0.02**
13.0	45	**28**	1	115	15	10.0	13.0	0.591	0.591	0.98	1.34	0.76	1.00	37.4	73	4.3	41.7	1.00	1.200	0.516	**Non-Liq.**	4.3	41.7	0.09	**0.04**	0.396	975	0.267	9.5E-04	3.9E-04	4.4E-04	**0.04**
17.0		**28**	1	115	15	15.0	18.0	0.878	0.878	0.97	1.10	0.86	1.30	44.9	80	4.7	49.5	1.00	1.200	0.511	**Non-Liq.**	4.7	49.5	0.07	**0.03**	0.588	1,259	0.393	8.9E-04	3.0E-04	3.4E-04	**0.03**
23.0	43	**27**	1	115	15	20.0	23.0	1.166	1.166	0.96	0.95	0.93	1.00	31.3	67	4.0	35.3	0.97	1.200	0.520	**Non-Liq.**	4.0	35.3	0.15	**0.11**	0.781	1,296	0.515	1.4E-03	6.9E-04	7.7E-04	**0.11**
28.0		**24**	1	115	15	25.0	28.0	1.453	1.453	0.94	0.85	0.98	1.30	34.0	70	4.1	38.2	0.91	1.200	0.546	**Non-Liq.**	4.1	38.2	0.13	**0.08**	0.974	1,485	0.632	1.3E-03	6.0E-04	6.7E-04	**0.08**
31.5	49	**31**	1	115	15	30.0	33.0	1.741	1.741	0.92	0.78	1.00	1.00	31.3	67	4.0	35.3	0.86	1.200	0.564	**Non-Liq.**	4.0	35.3	0.16	**0.07**	1.166	1,583	0.740	1.4E-03	7.2E-04	8.1E-04	**0.07**





$N_{1(60)} = C_N*C_E*C_B*C_R*C_S*N$

C_R = 0.75 for Rod lengths < 3m, 1.0 for > 10m
= min(1,max(0.75,1.4666-2.556/(z(ft))$^{0.5}$))

$C_N = (1 \text{ atm}/p'o)^{0.5}$, max 1.7

C_S = max(1.1,min(1.3,1+$N_{1(60)}$/100)) for SPT without liners

MSF = $10^{2.24}/M^{2.56}$

z = Depth (m)

pa = 1 atm = 101 KPa = 1.058 tsf

p = 0.67*po

τ_{av} = 0.65*PGA*po*rd

$G_{max} = 447*N_{1(60)CS}^{(1/3)}*p^{0.5}$

a = 0.0389*(p/1)+0.124

b = $6400*(p/1)^{(-0.6)}$

$\gamma = [1+a*EXP(b*\tau_{av}/G_{max})]/[(1+a)*\tau_{av}/G_{max}]$

$E_{15} = \gamma*(N_{1(60)CS}/20)^{-1.2}$

$E_{nc} = (Nc/15)^{0.45}*E15$

$Nc = (MAG-4)^{2.17}$

S = 2*H*E_{nc}

rd = (1-0.4113*z^0.5+0.04052*z+0.001753*z^1.5)/(1-0.4177*z^0.5+0.05729*z-0.006205*z^1.5+0.00121*z^2))

$\Delta N_{1(60)}$ = min(10,IF(FC<35,exp(1.76-(190/FC^2)),5)+IF(FC<=5,1,IF(FC<35,0.99+(FC^1.5/1000),1.2))*N1(60) - N1(60)

$N_{1(60)CS} = N_{1(60)CS} + \Delta N_{1(60)}$

Kσ = min of 1.0 or $(p'o/1.058)^{(IF(Dr>0.7,0.6,IF(Dr<0.5,0.8,0.7))-1)}$

Dr = $(N_{1(60)}/70)^{0.5}$

CSReq = 0.65*PGA*(po/p'o)*rd

CSR* = CSReq/MSF/Kσ

$CRR_{7.5}$ = (0.048-0.004721*N+0.0006136*N^2-0.00001673*N^3)/(1-0.1248*N+0.009578*N^2-0.0003285*N^3+0.000003714*N^4))

N = $N_{1(60)CS}$

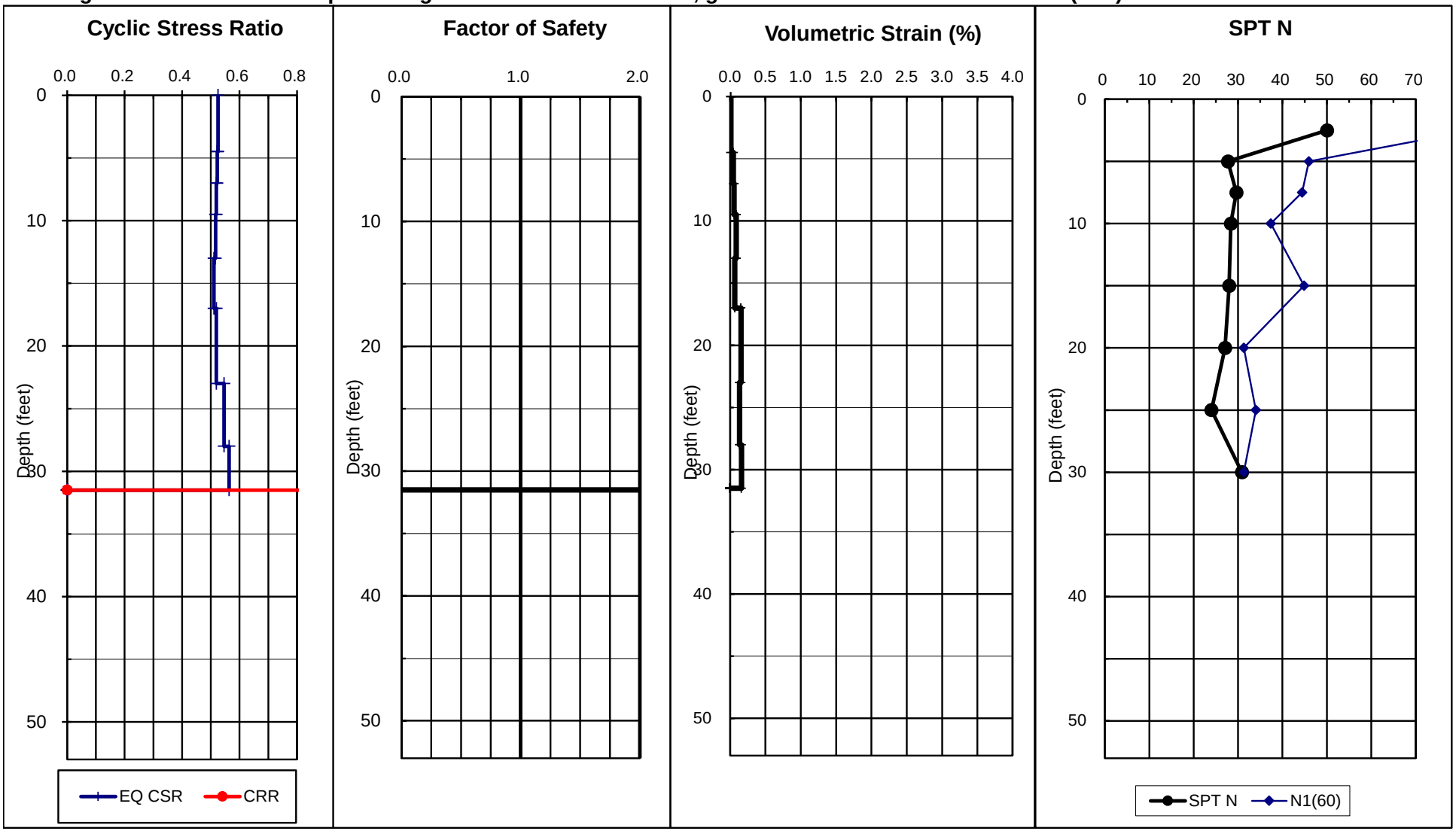
SF = $CRR_{7.5,1atm}$/CSR*

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Bubbling Wells Elementary School **Project No: 307067-001** 1996/1998 NCEER Method

Ground Compaction Remediated to 5 foot depth

Boring: B-8 **Earthquake Magnitude: 7.9** **PGA, g: 0.71** **Calc GWT (feet): 100**



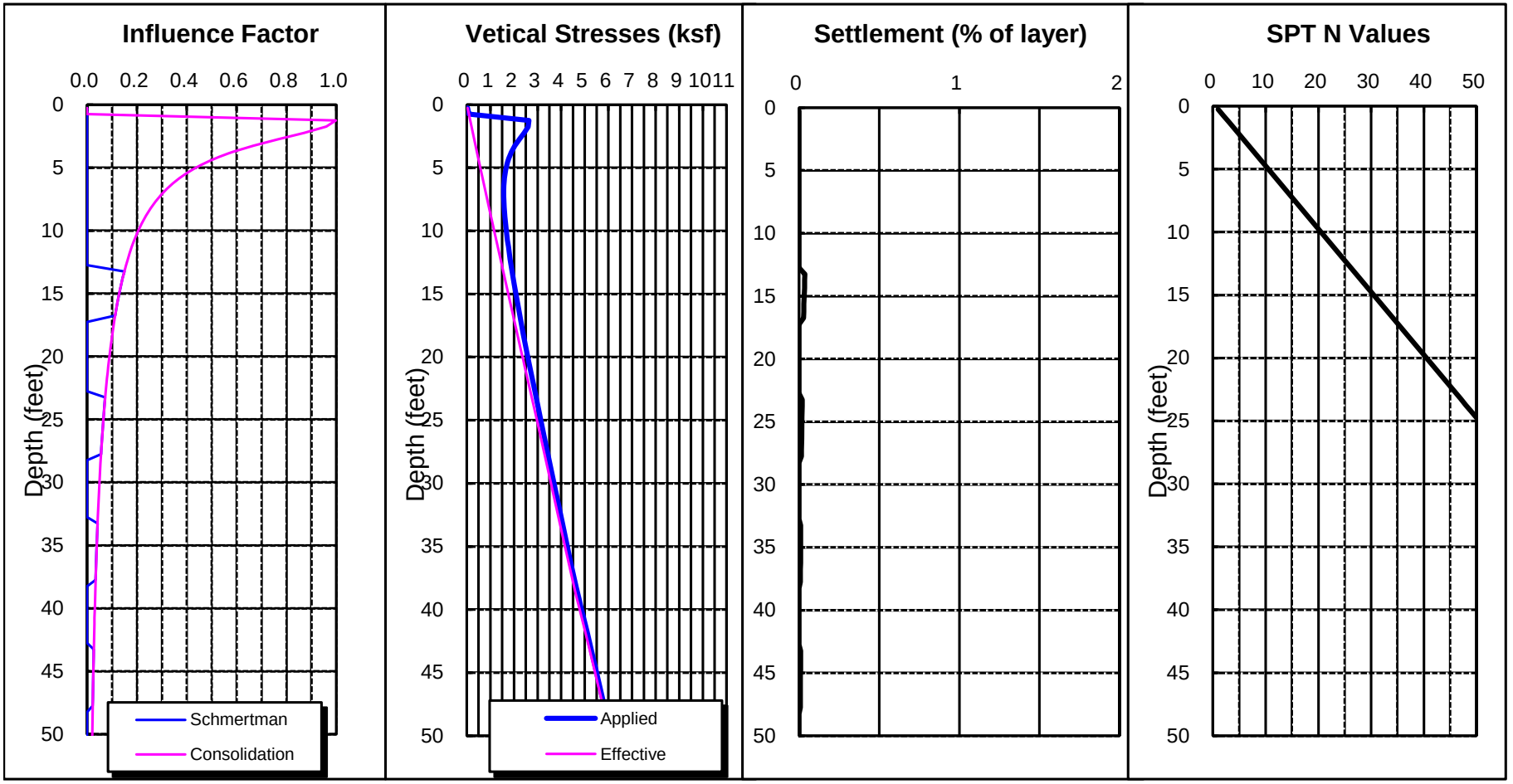
Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.4 inches

EARTH SYSTEMS - SETTLEMENT ANALYSES

Bubbling Wells Elementary School 307067-001

Width, ft: 3.0 Length, ft: 40.0 Net pressure, ksf: 2.50 **Settlement, inches: 0.1**

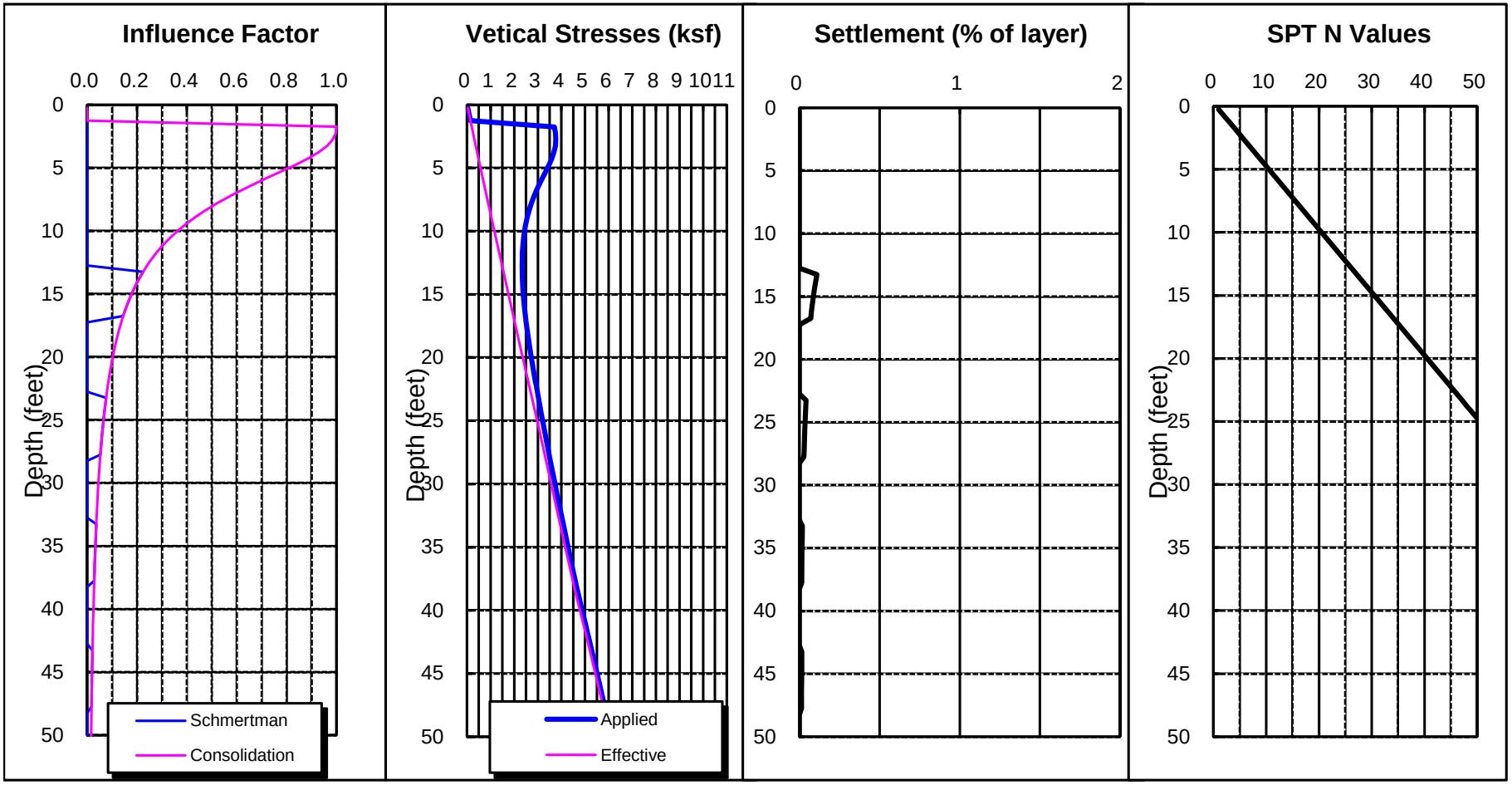


Load, Q: 8 kpf Embedment, feet: 1.0 **Boring: B-4**

EARTH SYSTEMS - SETTLEMENT ANALYSES

Bubbling Wells Elementary School 307067-001

Width, ft: 9.0 Length, ft: 9.0 Net pressure, ksf: 3.50 **Settlement, inches: 0.1**



Load, Q: 284 kips Embedment, feet: 1.5 **Boring: B-4**

APPENDIX B

Laboratory Test Results

File No.: 307067-001 May 23, 2025

Lab No.: 25-116

UNIT DENSITIES AND MOISTURE CONTENT ASTM D2937 & D2216

Job Name: Bubbling Wells Elementary School

Sample Location	Depth (feet)	Unit Dry Density (pcf)	Moisture Content (%)	USCS Group Symbol
B-1	2.5	99	1	SP
B-1	5	118	2	SP-SM
B-1	7.5	107	3	SP-SM
B-1	10	115	2	SP-SM
B-1	15	119	2	SP-SM
B-1	20	106	7	SP-SM
B-2	2.5	112	3	SP
B-2	5	119	1	SP
B-2	7.5	114	2	SP
B-2	10	109	3	SP
B-3	2.5	103	5	SP-SM
B-3	5	108	3	SP-SM
B-4	2.5	111	3	SP
B-4	5	112	4	SP
B-4	7.5	114	4	SP
B-4	10	114	4	SP
B-4	20	118	4	SP
B-4	30	114	4	SP
B-4	40	130	3	SP
B-4	50	118	6	SM

File No.: 307067-001 May 23, 2025

Lab No.: 25-116

UNIT DENSITIES AND MOISTURE CONTENT ASTM D2937 & D2216

Job Name: Bubbling Wells Elementary School

Sample Location	Depth (feet)	Unit Dry Density (pcf)	Moisture Content (%)	USCS Group Symbol
B-5	2.5	109	3	SP
B-5	5	104	4	SP
B-5	7.5	117	4	SP
B-5	10	111	4	SP
B-5	15	114	5	SM
B-5	20	114	5	SP-GP
B-6	2.5	119	3	SP
B-6	5	111	3	SP
B-6	7.5	110	3	SP-SM
B-6	10	113	2	SP-SM
B-6	15	111	3	SP
B-6	20	112	3	SP
B-6	25	109	4	SP
B-6	30	112	4	SP
B-7	2.5	110	4	SP-SM
B-7	5	112	4	SP-SM
B-7	7.5	108	4	SP-SM
B-7	10	111	4	SP-SM
B-7	15	108	5	SP-SM

File No.: 307067-001 May 23, 2025

Lab No.: 25-116

UNIT DENSITIES AND MOISTURE CONTENT ASTM D2937 & D2216

Job Name: Bubbling Wells Elementary School

Sample Location	Depth (feet)	Unit Dry Density (pcf)	Moisture Content (%)	USCS Group Symbol
B-8	2.5	111	5	SM
B-8	5	109	4	SM
B-8	7.5	111	4	SM
B-8	10	112	4	SM
B-8	20	119	4	SM
B-8	30	113	6	SM
B-9	2.5	109	2	SP
B-9	5	104	2	SP
B-9	7.5	116	2	SP
B-9	10	113	2	SP
B-10	5	116	3	SP
B-10	7.5	116	2	SP
B-10	10	108	3	SP
B-10	15	114	2	SP
B-10	20	113	2	SP
B-11	2.5	108	4	SP
B-11	5	112	4	SP
B-12	2.5	112	3	SP
B-12	5	112	4	SP
B-13	2.5	111	3	SP
B-13	5	110	2	SP
B-13	7.5	128	2	SP

File No.: 307067-001 5/23/2025

Lab No.: 25-116

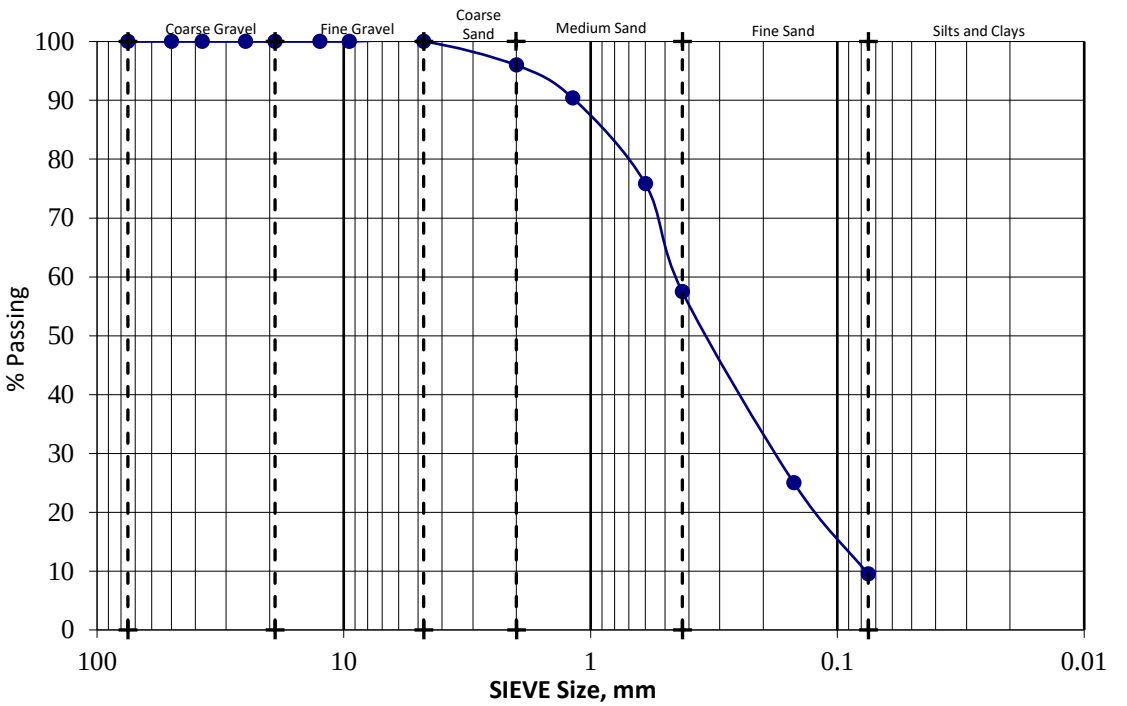
SIEVE ANALYSIS ASTM D6913

Job Name: Bubbling Wells Elementary School

Sample ID: B-3 @ 5'

Description: Poorly Graded Sand with Silt (SP-SM)

Sieve Size	% Passing
3"	100
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
#4	100
#10	96
#16	90
#30	76
#40	57
#100	25
#200	9.5



FM= 1.73

% Coarse Gravel:	0	% Coarse Sand:	4			
% Fine Gravel:	0	% Medium Sand:	39	Cu:	5.802	
		% Fine Sand:	48	Cc:	0.907	Gradation
% Total Gravel	0	% Total Sand	91	% Fines:	9.5	Poorly Graded

File No.: 307067-001 5/23/2025

Lab No.: 25-116

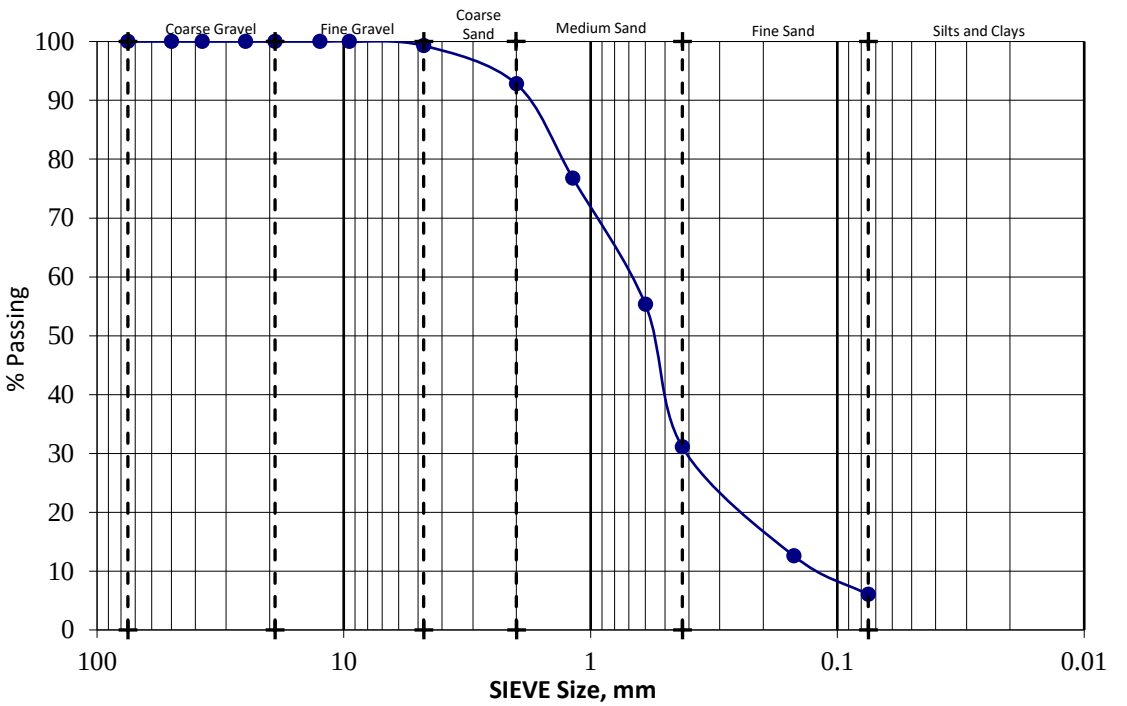
SIEVE ANALYSIS ASTM D6913

Job Name: Bubbling Wells Elementary School

Sample ID: B-4 @ 35'

Description: Well Graded Sand with Silt (SW-SM)

Sieve Size	% Passing
3"	100
2"	100
1-1/2"	100
1"	100
3/4"	100
1/2"	100
3/8"	100
#4	99
#10	93
#16	77
#30	55
#40	31
#100	13
#200	6.0



FM= 2.45

% Coarse Gravel:	0	% Coarse Sand:	7			
% Fine Gravel:	1	% Medium Sand:	62	Cu:	6.08	
		% Fine Sand:	25	Cc:	2.01	Gradation
% Total Gravel	1	% Total Sand	93	% Fines:	6.0	Well Graded

File No.: 307067-001 May 23, 2025

Job Name: Bubbling Wells Elementary School

Lab Number: 25-116

ASTM D-1140 or Earth Systems Method (circle one)

AMOUNT PASSING NO. 200 SIEVE (Earth Systems Method Transfers Sample until water runs clear)

Sample Location	Depth (feet)	Fines Content (%)	USCS Group Symbol	Soaking Time
B-1	5	9.0	SP-SM	10
B-6	7.5	10.2	SP-SM	10
B-7	2.5	11.7	SP-SM	10

File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-4 @ 2.5'

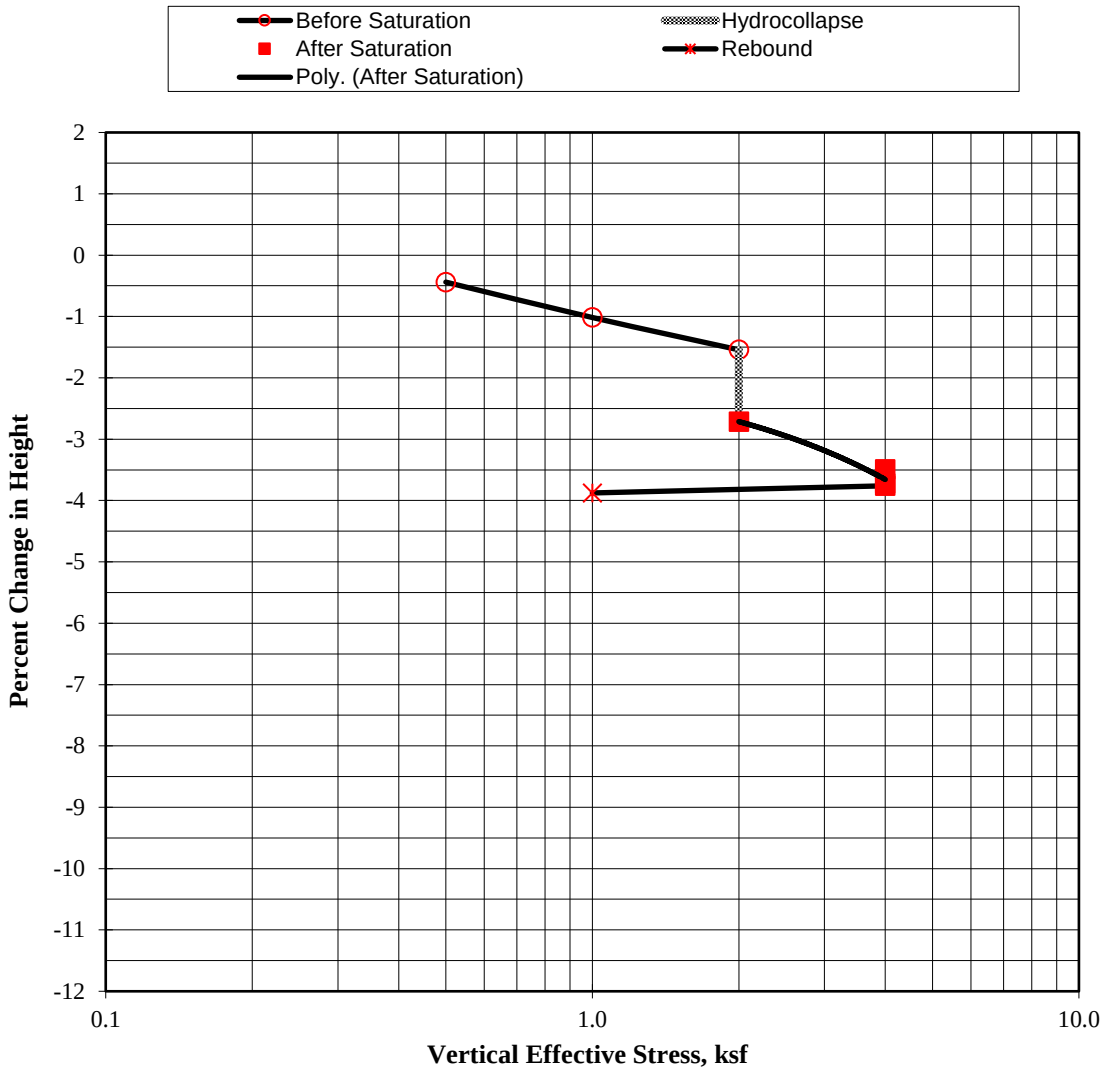
Sand (SP)

Ring Sample

Initial Dry Density: 112.1 pcf
Initial Moisture: 2.7%
Specific Gravity: 2.67
Initial Void Ratio: 0.486

Hydrocollapse: 1.2% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-4 @ 5'

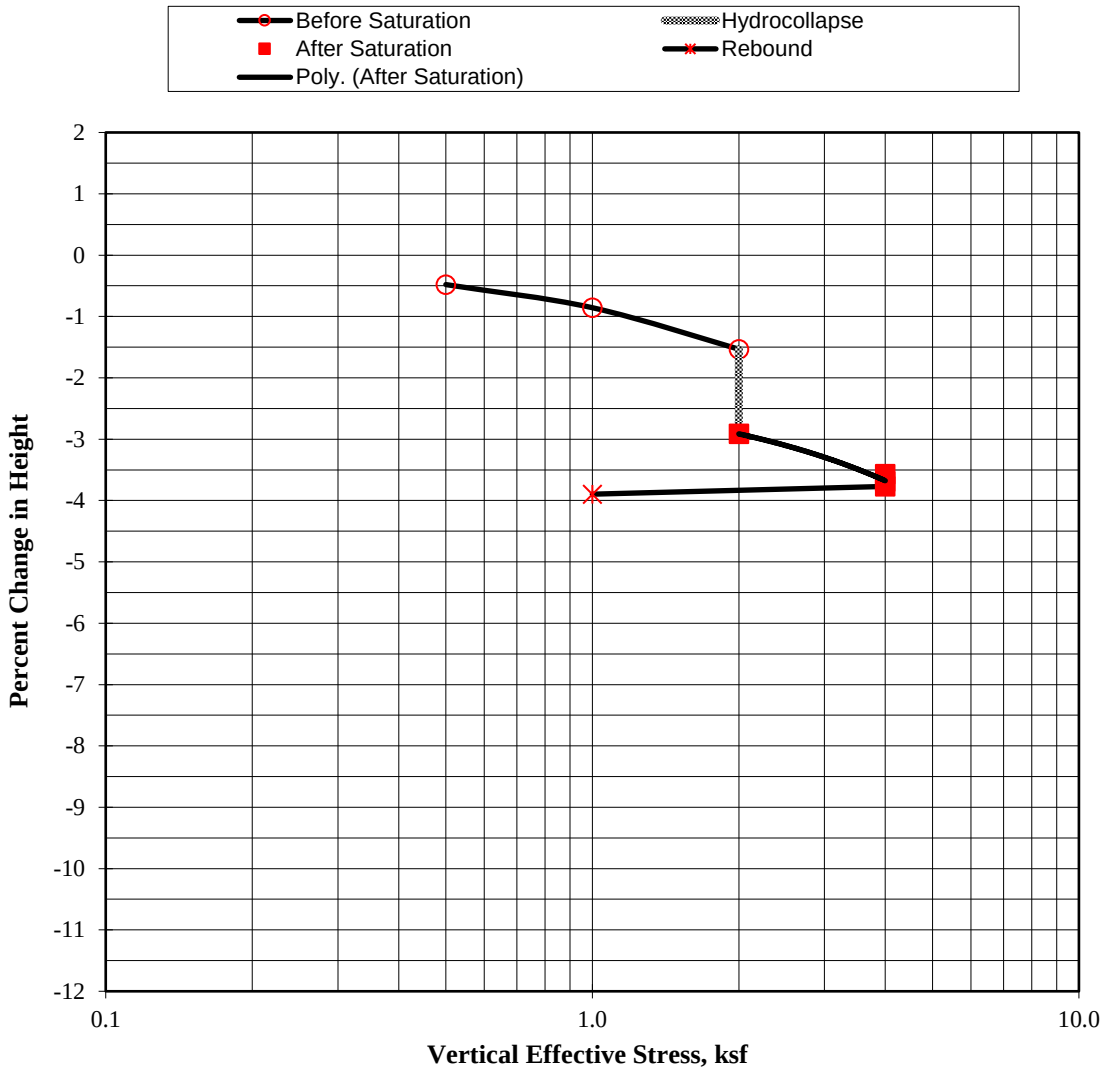
Sand (SP)

Ring Sample

Initial Dry Density: 110.7 pcf
Initial Moisture: 5.5%
Specific Gravity: 2.67
Initial Void Ratio: 0.505

Hydrocollapse: 1.4% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-4 @ 7.5'

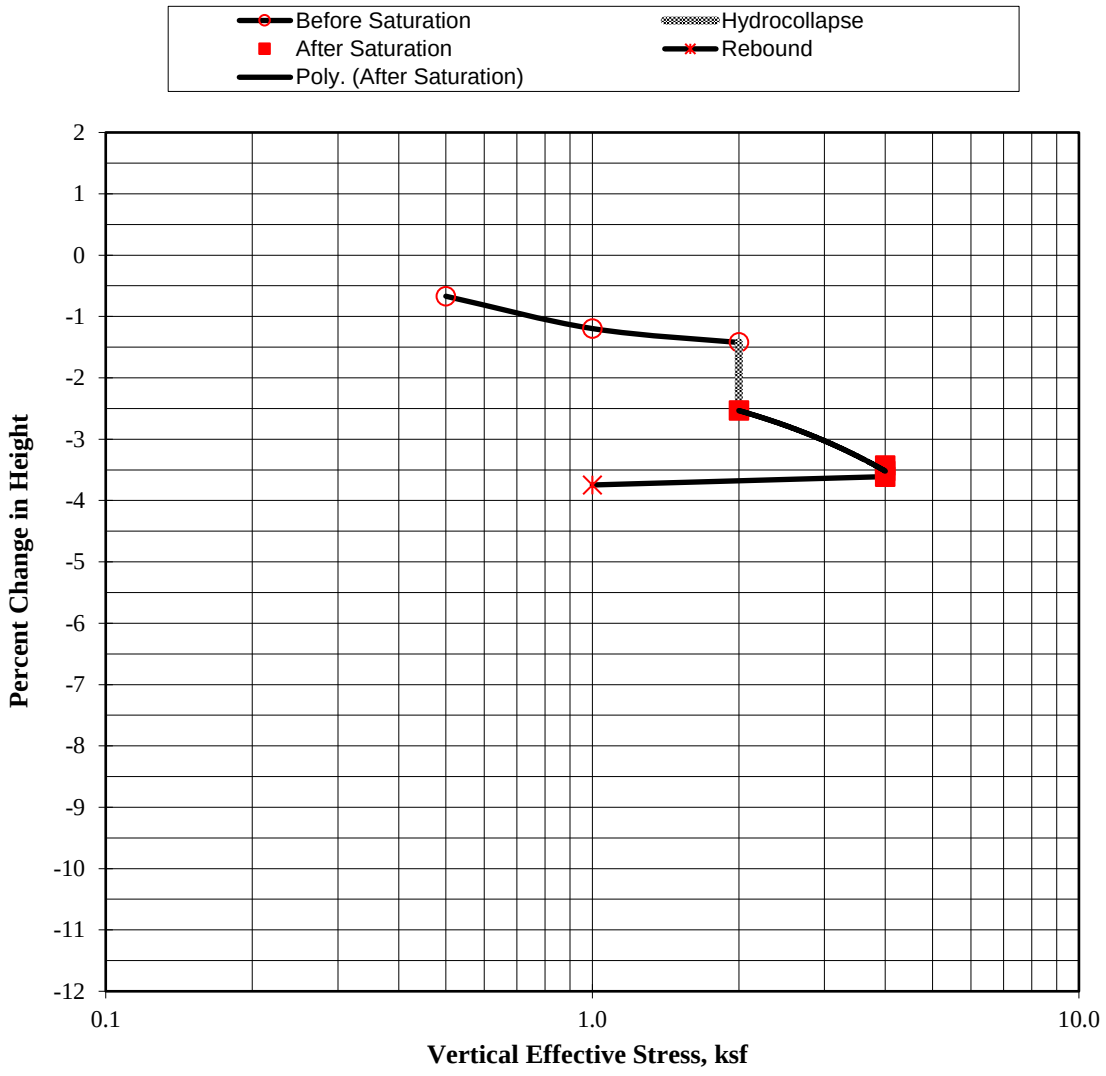
Sand (SP)

Ring Sample

Initial Dry Density: 113.5 pcf
Initial Moisture: 3.6%
Specific Gravity: 2.67
Initial Void Ratio: 0.469

Hydrocollapse: 1.1% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-4 @ 10'

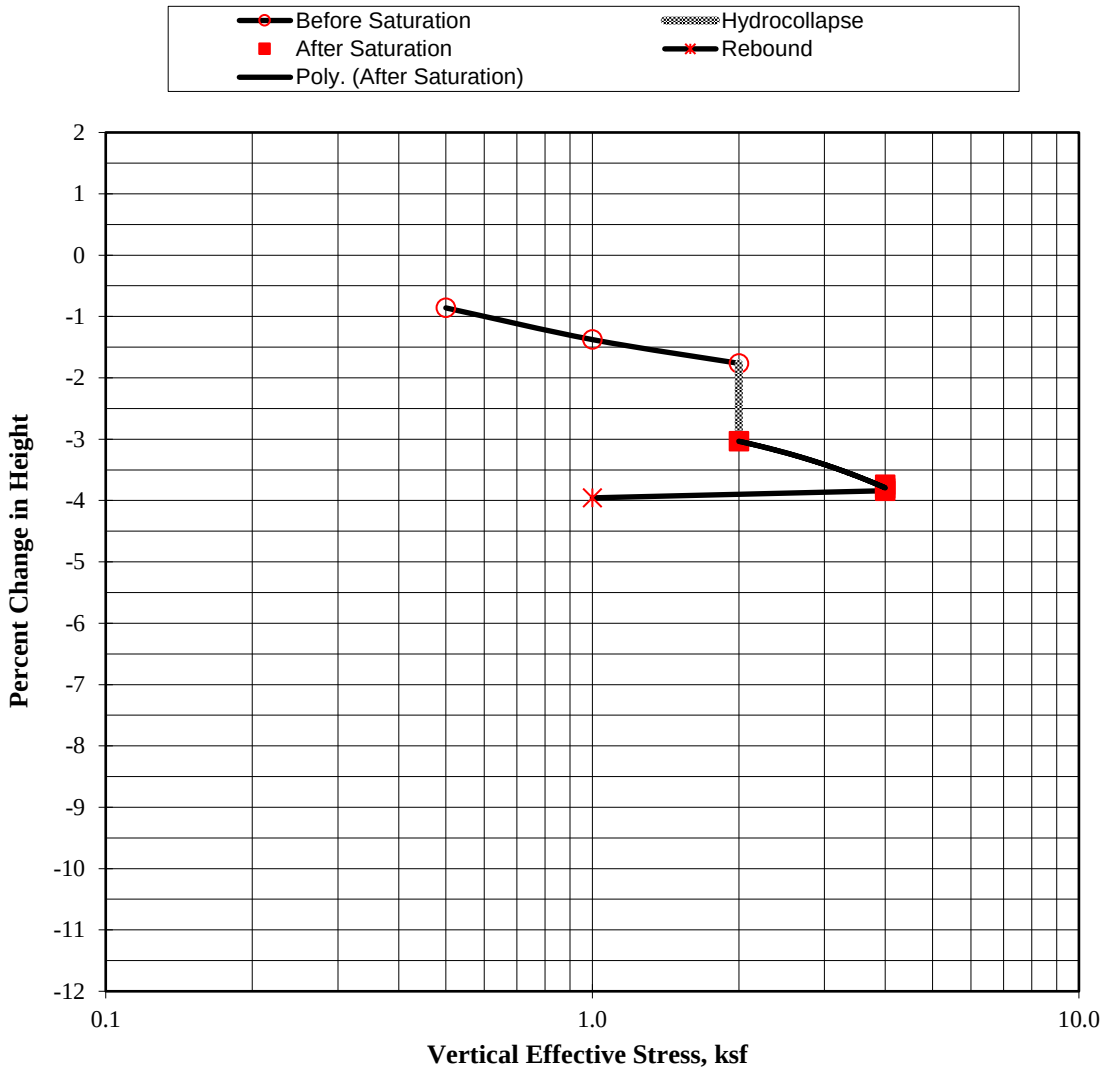
Sand (SP)

Ring Sample

Initial Dry Density: 115.1 pcf
Initial Moisture: 2.7%
Specific Gravity: 2.67
Initial Void Ratio: 0.448

Hydrocollapse: 1.3% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-5 @ 15'

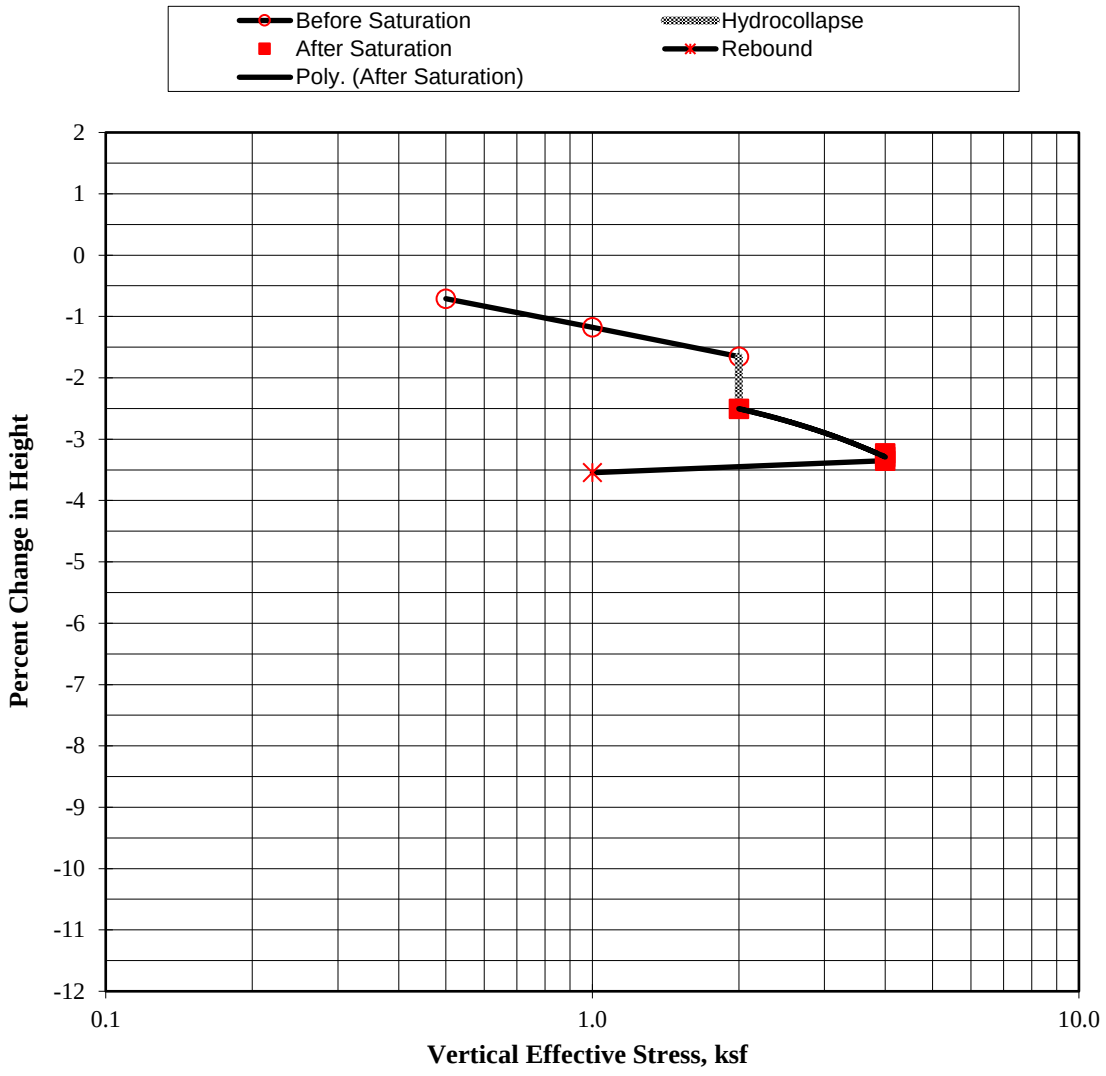
Silty Sand (SM)

Ring Sample

Initial Dry Density: 113.8 pcf
Initial Moisture: 2.8%
Specific Gravity: 2.67
Initial Void Ratio: 0.465

Hydrocollapse: 0.9% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Bubbling Wells Elementary School
B-5 @ 20'

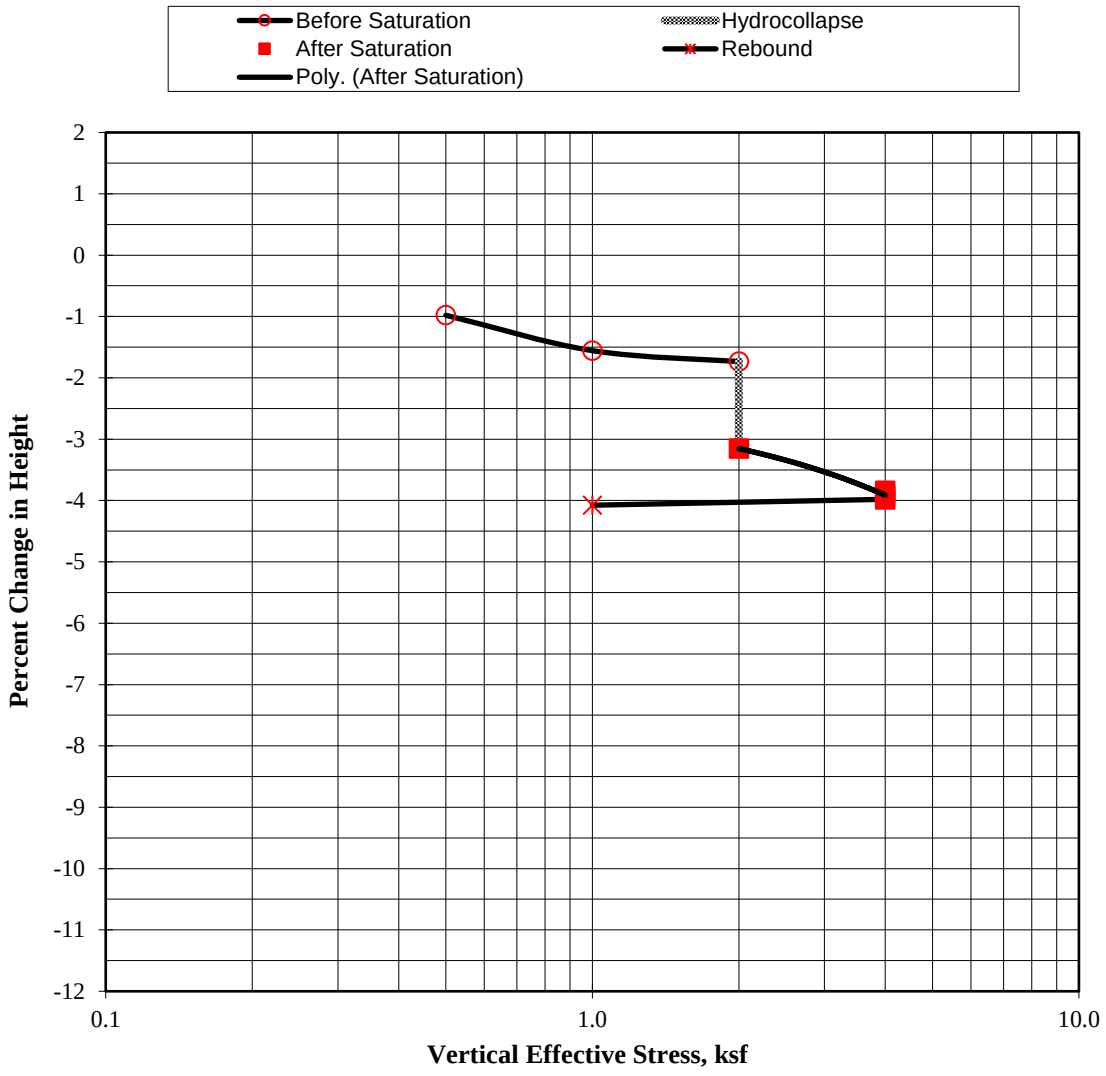
Gravelly Sand (SP-GP)

Ring Sample

Initial Dry Density: 114.0 pcf
Initial Moisture: 5.7%
Specific Gravity: 2.67
Initial Void Ratio: 0.463

Hydrocollapse: 1.4% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 307067-001 May 23, 2025
Lab No.: 25-116

EXPANSION INDEX **ASTM D-4829**

Job Name: Bubbling Wells Elementary School
Sample ID: B-8 @ 2.5'
Soil Description: Silty Sand (SM)

Initial Moisture, %:	9.8
Initial Compacted Dry Density, pcf:	109.6
Initial Saturation, %:	50
Final Moisture, %:	19.1
Volumetric Swell, %:	0.0

Expansion Index, EI: 0 Very Low

EI	ASTM Classification
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

File No.: 307067-001
Lab No.: 25-116

May 23, 2025

MAXIMUM DRY DENSITY / OPTIMUM MOISTURE

ASTM D 1557 (Modified)

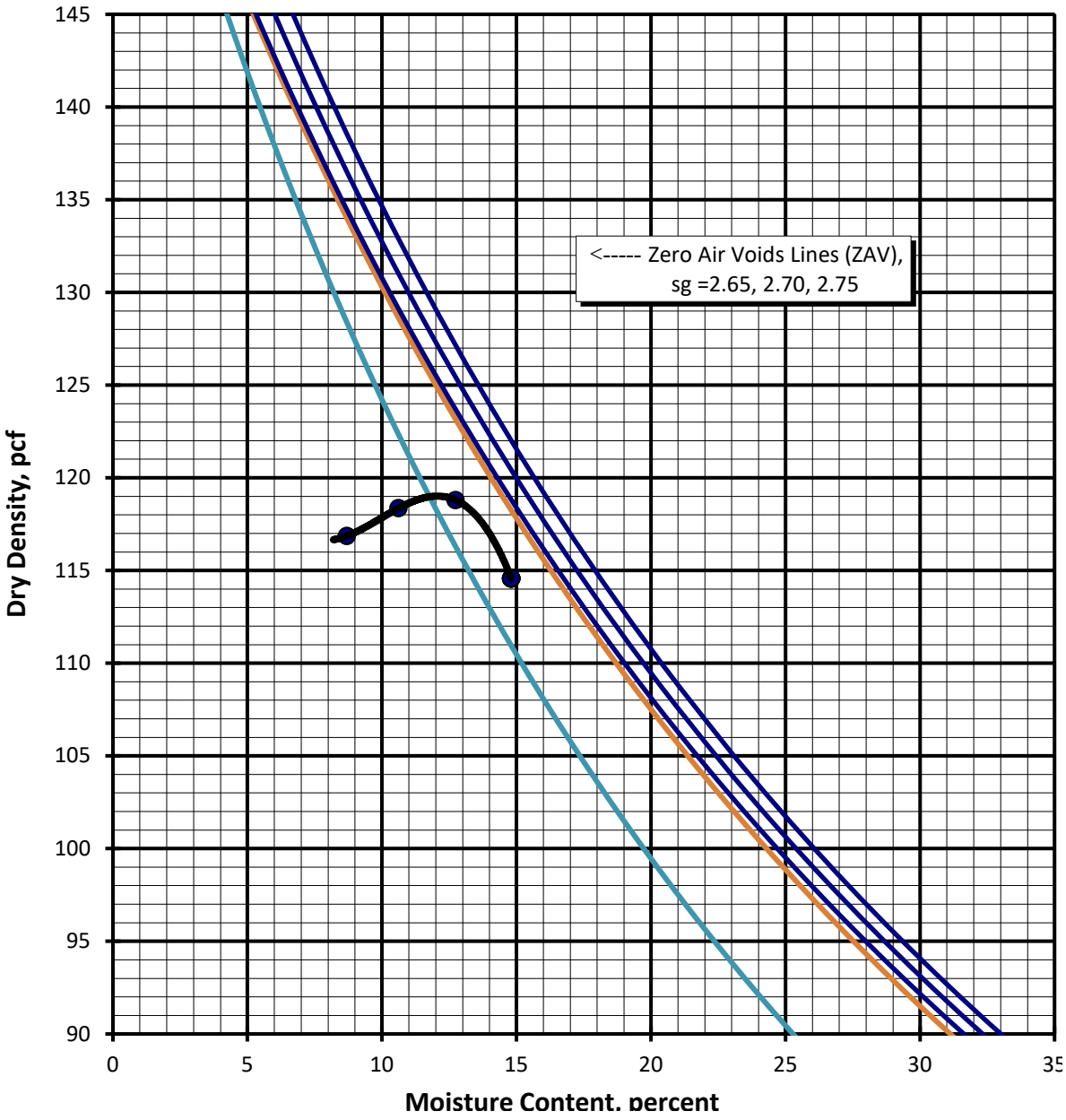
Job Name: Bubbling Wells Elementary School
Sample ID: 0
Location: B-4 @ 0-10'

Procedure Used: A
Preparation Method: Moist
Rammer Type: Mechanical

Description: Sand (SP)

Maximum Dry Density: **119 pcf**
Optimum Moisture: **12.1%**

Sieve Size	% Retained (Cumulative)
3/4"	0.1
3/8"	1.4
#4	2.2



File No.: 307067-001
Lab No.: 25-116

May 23, 2025

MAXIMUM DRY DENSITY / OPTIMUM MOISTURE

ASTM D 1557 (Modified)

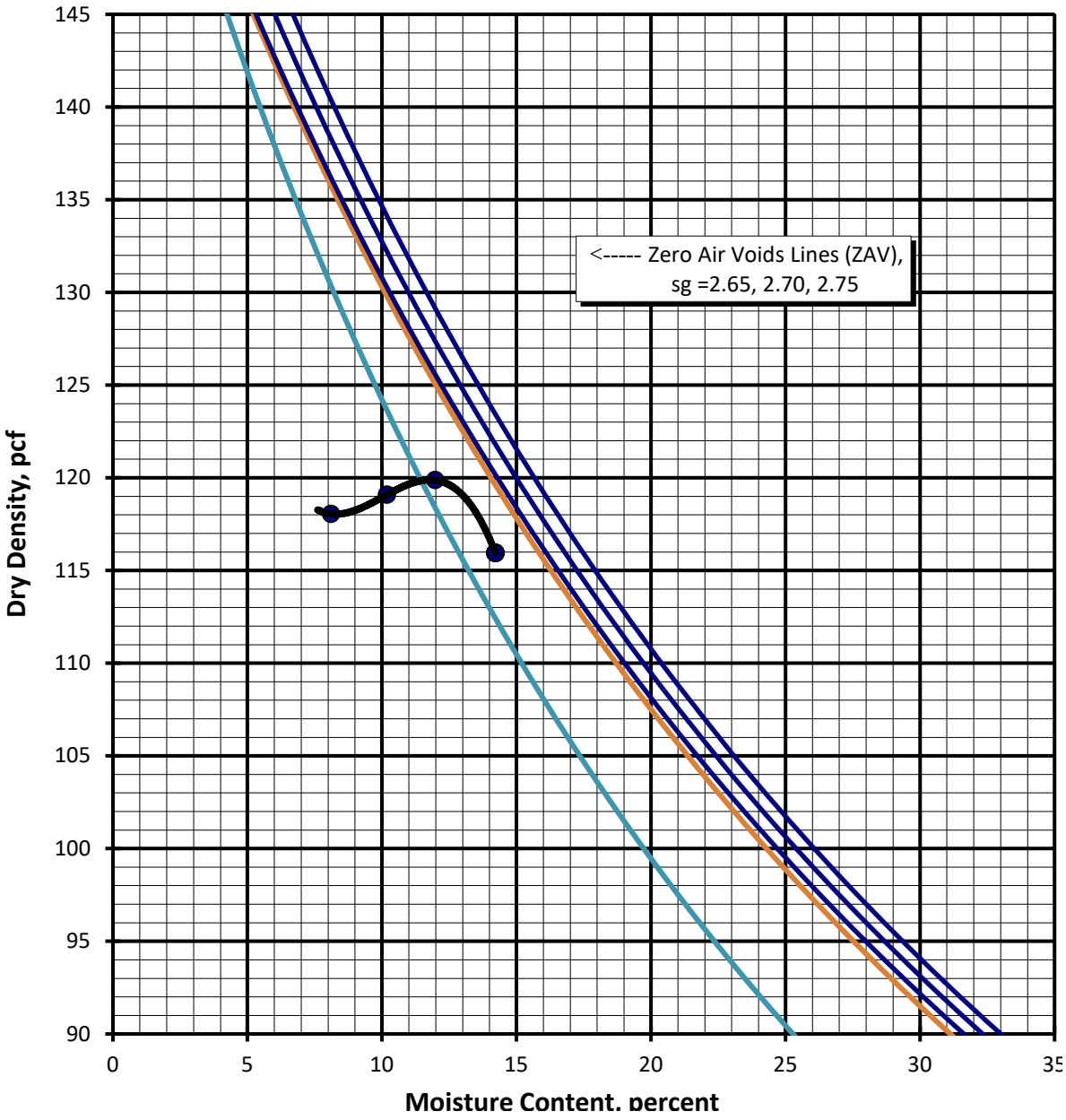
Job Name: Bubbling Wells Elementary School
Sample ID: 0
Location: B-6 @ 0-6'

Procedure Used: A
Preparation Method: Moist
Rammer Type: Mechanical

Description: Sand (SP)

Maximum Dry Density: **119.9 pcf**
Optimum Moisture: **11.8%**

Sieve Size	% Retained (Cumulative)
3/4"	0.2
3/8"	2.1
#4	2.6



File No.: 307067-001 5/23/2025

Lab No.: 25-116

SOIL CHEMICAL ANALYSES

Job Name:	Bubbling Wells Elementary School	
Job No.:	307067-001	
Sample ID:		
Sample Location:	B-6 @ 0-6'	B-7 @ 5'
Resistivity (Units)		
as-received (ohm-cm)	480,000	120,000
saturated (ohm-cm)	22,800	25,600
pH	8.2	8.9
Electrical Conductivity (mS/cm)	0.05	0.08
Chemical Analyses		
Cations		
calcium Ca^{2+} (mg/kg)	67	27
magnesium Mg^{2+} (mg/kg)	1	1
sodium Na^{1+} (mg/kg)	26	65
potassium K^{1+} (mg/kg)	7	7
ammonium NH41+ (mg/kg)	ND	ND
Anions		
carbonate CO_3^{2-} (mg/kg)	18	36
bicarbonate HCO_3^{1-}(mg/kg)	180	119
fluoride F^{1-} (mg/kg)	3	3
chloride Cl^{1-} (mg/kg)	ND	ND
sulfate SO_4^{2-} (mg/kg)	5	11
nitrate NO31- (mg/kg)	1	1
phosphate PO_4^{3-} (mg/kg)	3	3
Other Tests		
% moisture H_2O (%)	na	na
total acidity H^{1+} (mmol/kg)	na	na
sulfide S^{2-} (qual)	na	na
Redox (mV)	na	na

Note: Tests performed by Subcontract Laboratory:
HDR Engineering, Inc.
431 West Baseline Road
Claremont, California 91711 Tel: (909) 962-5485

mg/kg = milligrams per kilogram (parts per million) of dry soil.
Redox = oxidation-reduction potential in millivolts
ND = not detected
na = not analyzed
T.O.P. = top of pipe

Resistivity per ASTM G187, Cations per ASTM D6919, Anions per ASTM D4327, and Alkalinity per APHA 2320-B. Electrical conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.

General Guidelines for Soil Corrosivity

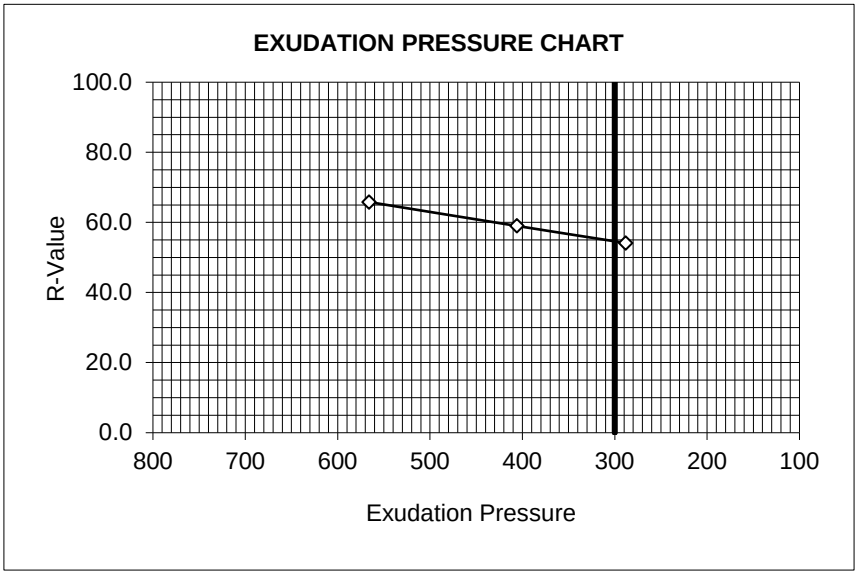
Chemical Agent	Amount in Soil	Degree of Corrosivity
Soluble Sulfates[1]	0 -1,000 mg/Kg (ppm) [0-.1%]	Low
	1,000 - 2,000 mg/Kg (ppm) [0.1-0.2%]	Moderate
	2,000 - 20,000 mg/Kg (ppm) [0.2-2.0%]	Severe
	> 20,000 mg/Kg (ppm) [>2.0%]	Very Severe
Resistivity[2] (Saturated)	0- 900 ohm-cm	Very Severely Corrosive
	900 to 2,300 ohm-cm	Severely Corrosive
	2,300 to 5,000 ohm-cm	Moderately Corrosive
	5,000-10,000 ohm-cm	Mildly Corrosive
	10,000+ ohm-cm	Progressively Less Corrosive

1 - General corrosivity to concrete elements. American Concrete Institute (ACI) Water Soluble Sulfate in Soil by Weight, ACI 318, Tables 4.2.2 - Exposure Conditions and Table 4.3.1 - Requirements for Concrete Exposed to Sulfate-Containing Solutions. It is recommended that concrete be proportioned in accordance with the requirements of the two ACI tables listed above (4.2.2 and 4.3.1). The current ACI should be referred to for further information.

2 - General corrosivity to metallic elements (iron, steel, etc.). Although no standard has been developed and accepted by corrosion engineering organizations, it is generally agreed that the classification shown above, or other similar classifications, reflect soil corrosivity. Source: Corrosionsource.com. The classification presented is excerpted from ASTM STP 1013 titled "Effects of Soil Characteristics on Corrosion" (February, 1989)

3 - Earth Systems does not practice corrosion engineering. Results should be reviewed by an engineer competent in corrosion evaluation, especially in regard to nitrites and ammonium.

May 23, 2025 **File No.: 307067-001**

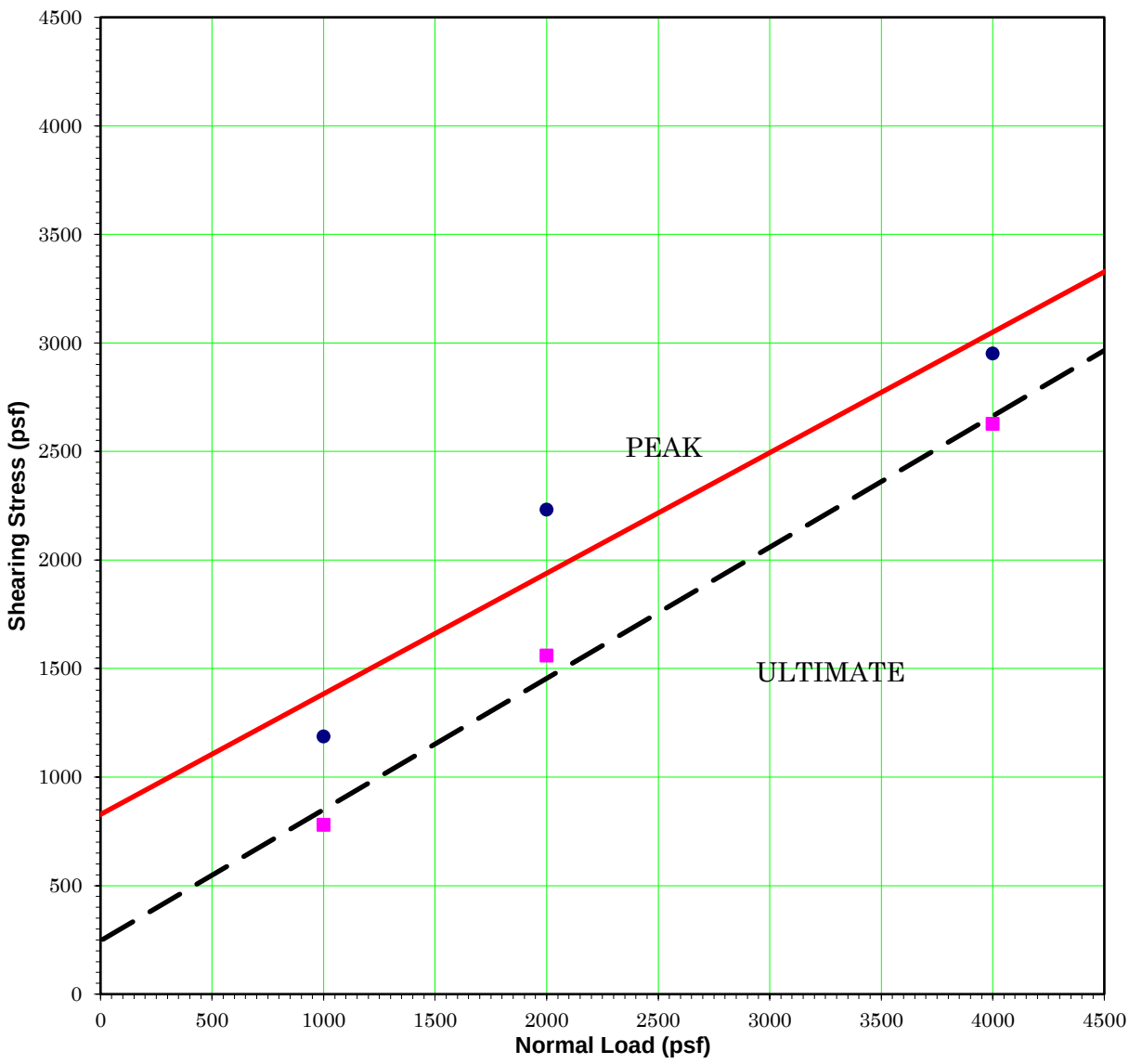


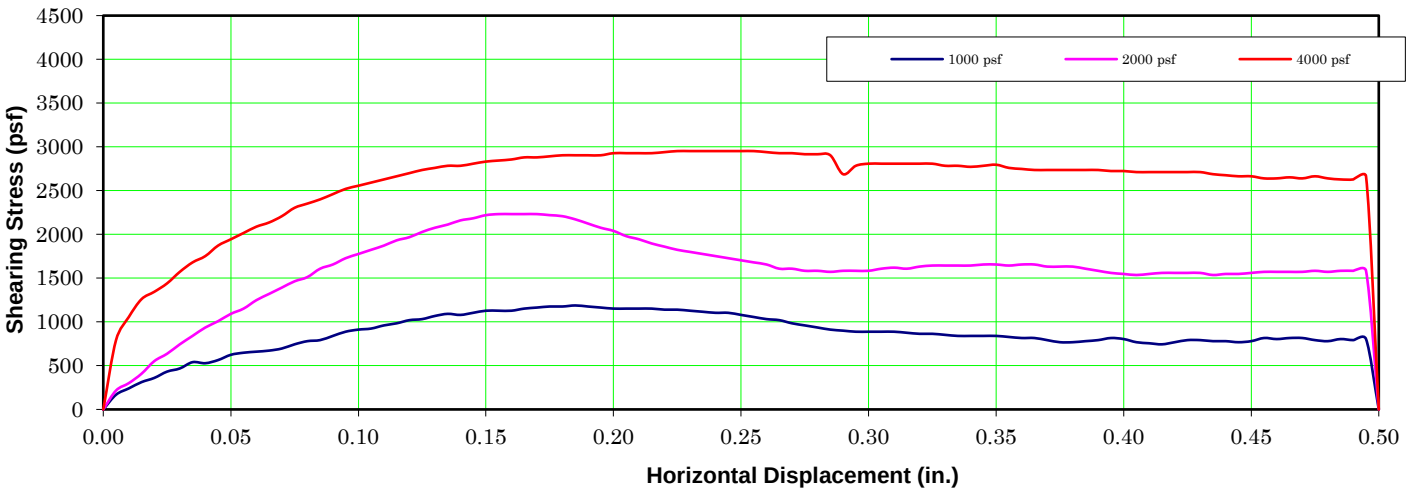
JOB NAME: Bubbling Wells Elementary School
SAMPLE I. D.: B-12 @ 0-5'
SOIL DESCRIPTION: Sand (SP)

SPECIMEN NUMBER	D	E	F
EXUDATION PRESSURE	566	406	288
RESISTANCE VALUE	65.8	59.0	54.1
EXPANSION DIAL(0.0001")	0	0	0
EXPANSION PRESSURE (PSF)	0.0	0.0	0.0
% MOISTURE AT TEST	9.7	10.4	10.9
DRY DENSITY AT TEST	122.5	122.8	120.6

R-VALUE @ 300 PSI EXUDATION **55**

**Based on Traffic Index = 8.00 & Gravel Factor = 1.34*





DIRECT SHEAR DATA*

Sample Location: B-4 @ 0-10'
Material: Sand (SP)
Dry Density (pcf): 119.0

	Initial	Final
Moisture Content (%):	12.1	18.8
Saturation (%):	81	100
	Peak	**Ultimate**
ϕ Angle of Friction (degrees):	29	31
c Cohesive Strength (psf):	820	240

Test Type: Peak and Ulitimate
Shear Rate (in/min): 0.005

* Test Method: ASTM D-3080

DIRECT SHEAR TEST

Bubbling Wells Elementary School

Desert Hot Springs, CA

Earth Systems Pacific

5/23/2025 | 307067-001

APPENDIX F

EDR Report

Bubbling Wells Elementary Modernization Project
67501 Camino Campanero
Desert Hot Springs, CA 92240

Inquiry Number: 7927323.2s
March 17, 2025

The EDR Radius Map™ Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	39
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

67501 CAMINO CAMPANERO
DESERT HOT SPRINGS, CA 92240

COORDINATES

Latitude (North):	33.9394240 - 33° 56' 21.92''
Longitude (West):	116.4857140 - 116° 29' 8.57''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	547528.2
UTM Y (Meters):	3755364.2
Elevation:	893 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	50004997 SEVEN PALMS VALLEY, CA
Version Date:	2021
West Map:	50004952 DESERT HOT SPRINGS, CA
Version Date:	2021

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20200416
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
67501 CAMINO CAMPANERO
DESERT HOT SPRINGS, CA 92240

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	BUBBLING WELLS ELEM	67501 CAMINO CAMPANE	FINDS		TP
A2	BUBBLING WELLS ELEME	67501 CAMINO CAMPANE	NPDES		TP
A3	DESERT HOT SPRINGS C	67501 CAMINO CAMPANE	HAULERS		TP
A4	BUBBLING WELLS ELEM	67501 CAMINO CAMPANE	ENF, WDS, CIWQS, CERS		TP
B5	ANITA SCHOLES	15500 BUBBLING WELLS	RCRA NonGen / NLR, E MANIFEST	Lower	563, 0.107, SSE
B6	15500 BUBBLING WELLS	15500 BUBBLING WELLS	RCRA NonGen / NLR, E MANIFEST	Lower	563, 0.107, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
BUBBLING WELLS ELEM 67501 CAMINO CAMPANE DESERT HOT SPRINGS, CA 92240	FINDS Registry ID:: 110066475610	N/A
BUBBLING WELLS ELEME 67501 CAMINO CAMPANE DESERT HOT SPRINGS, CA 92240	NPDES	N/A
DESERT HOT SPRINGS C 67501 CAMINO CAMPANE DESERT HOT SPRINGS, CA 92240	HAULERS Facility ID: 1879349	N/A
BUBBLING WELLS ELEM 67501 CAMINO CAMPANE DESERT HOT SPRINGS, CA 92262	ENF Status: Historical Status: Active Status: Active Facility Id: 210631 WDS Facility Status: A Facility Id: 7A331044001 CIWQS CERS	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

EXECUTIVE SUMMARY

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY---------- Federal Facility Site Information listing
SEMS---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG---------- RCRA - Large Quantity Generators
RCRA-SQG---------- RCRA - Small Quantity Generators
RCRA-VSQG---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS---------- Land Use Control Information System
US ENG CONTROLS---------- Engineering Controls Sites List
US INST CONTROLS---------- Institutional Controls Sites List

Federal ERNS list

ERNS---------- Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE---------- State Response Sites

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR---------- EnviroStor Database

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF---------- Solid Waste Information System

Lists of state and tribal leaking storage tanks

LUST---------- Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST---------- Leaking Underground Storage Tanks on Indian Land
CPS-SLIC---------- Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST---------- Underground Storage Tank Listing

UST ---- Active UST Facilities
AST ---- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---- Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP ---- Voluntary Cleanup Program Properties
INDIAN VCP ---- Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS ---- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---- Open Dump Inventory
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
CERS HAZ WASTE ---- California Environmental Reporting System Hazardous Waste
US CDL ---- National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST ---- SWEEPS UST Listing
HIST UST ---- Hazardous Substance Storage Container Database
CERS TANKS ---- California Environmental Reporting System (CERS) Tanks
CA FID UST ---- Facility Inventory Database

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System

CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
MINES MRDS	Mineral Resources Data System
ABANDONED MINES	Abandoned Mines
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
PFAS NPL	Superfund Sites with PFAS Detections Information
PFAS FEDERAL SITES	Federal Sites PFAS Information
PFAS TSCA	PFAS Manufacture and Imports Information
PFAS TRIS	List of PFAS Added to the TRI
PFAS RCRA MANIFEST	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR	PFAS Contamination Site Location Listing
PFAS WQP	Ambient Environmental Sampling for PFAS
PFAS PROJECT	NORTHEASTERN UNIVERSITY PFAS PROJECT
PFAS NPDES	Clean Water Act Discharge Monitoring Information
PFAS ECHO	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAIN	Facilities in Industries that May Be Handling PFAS Listing

EXECUTIVE SUMMARY

PFAS PT 139 AIRPORT - All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC - Aqueous Foam Related Incidents Listing
BIOSOLIDS - ICIS-NPDES Biosolids Facility Data
UST FINDER RELEASE - UST Finder Releases Database
UST FINDER - UST Finder Database
PFAS - PFAS Investigation Site Location Listing
AQUEOUS FOAM - Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN - Bond Expenditure Plan
CHROME PLATING - Chrome Plating Facilities Listing
Cortese - "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
EMI - Emissions Inventory Data
Financial Assurance - Financial Assurance Information Listing
ICE - Inspection, Compliance and Enforcement
HIST CORTESE - Hazardous Waste & Substance Site List
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
HWTS - Hazardous Waste Tracking System
HAZNET - Facility and Manifest Data
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
HAZMAT - Hazardous Material Facilities
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants
EDR Hist Auto - EDR Exclusive Historical Auto Stations
EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/17/2025 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ANITA SCHOLES EPA ID:: CAC003126998	***15500 BUBBLING WELLS***	***SSE 0 - 1/8 (0.107 mi.)***	***B5***	***30***
15500 BUBBLING WELLS EPA ID:: CAC003026000	***15500 BUBBLING WELLS***	***SSE 0 - 1/8 (0.107 mi.)***	***B6***	***34***

E MANIFEST: EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

A review of the E MANIFEST list, as provided by EDR, and dated 02/17/2025 has revealed that there are 2 E MANIFEST sites within approximately 0.25 miles of the target property.

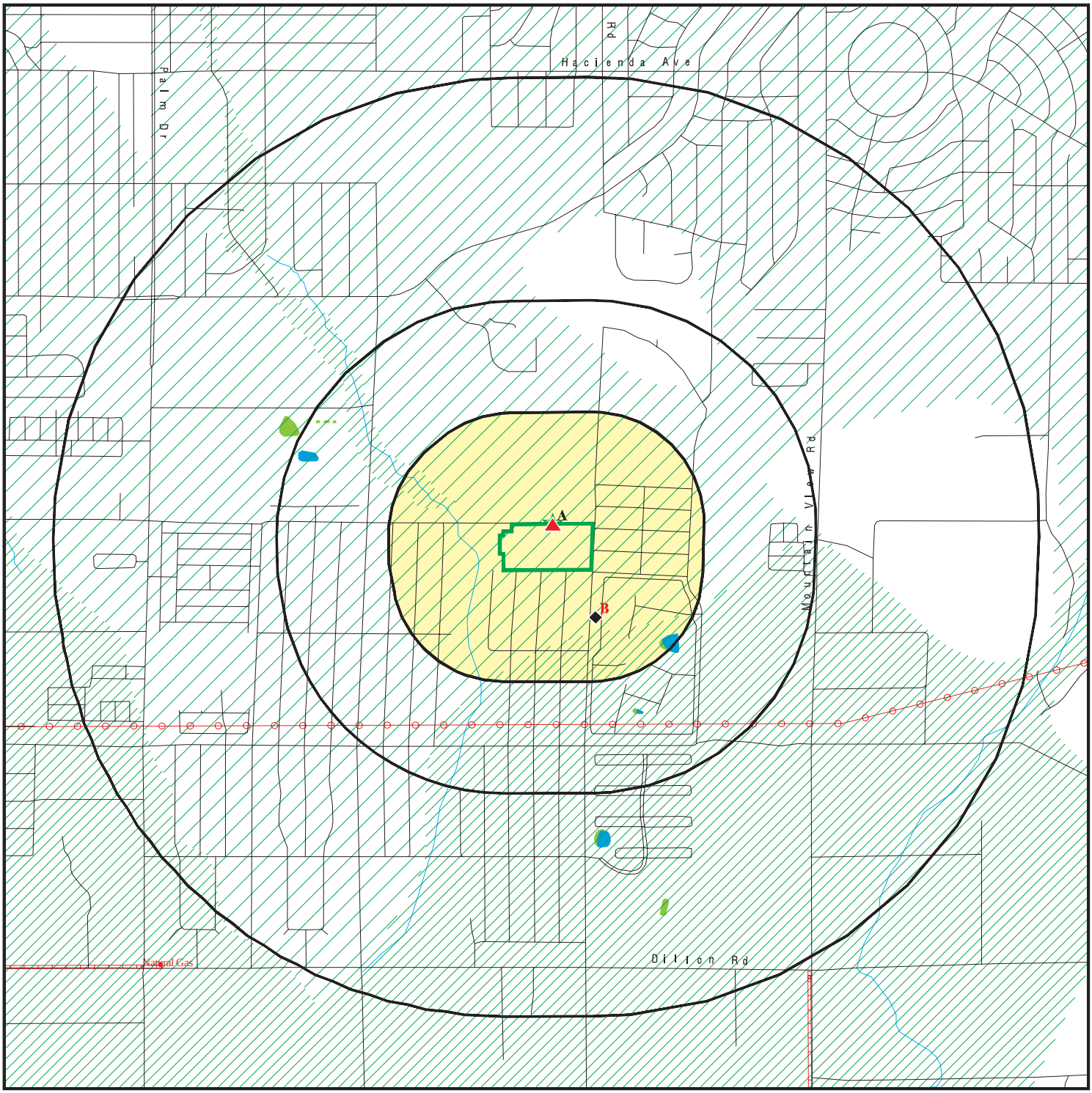
Lower Elevation	Address	Direction / Distance	Map ID	Page
ANITA SCHOLES	***15500 BUBBLING WELLS***	***SSE 0 - 1/8 (0.107 mi.)***	***B5***	***30***
15500 BUBBLING WELLS	***15500 BUBBLING WELLS***	***SSE 0 - 1/8 (0.107 mi.)***	***B6***	***34***

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
THRIFTY BEST SEVICES	CPS-SLIC

OVERVIEW MAP - 7927323.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Pipelines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

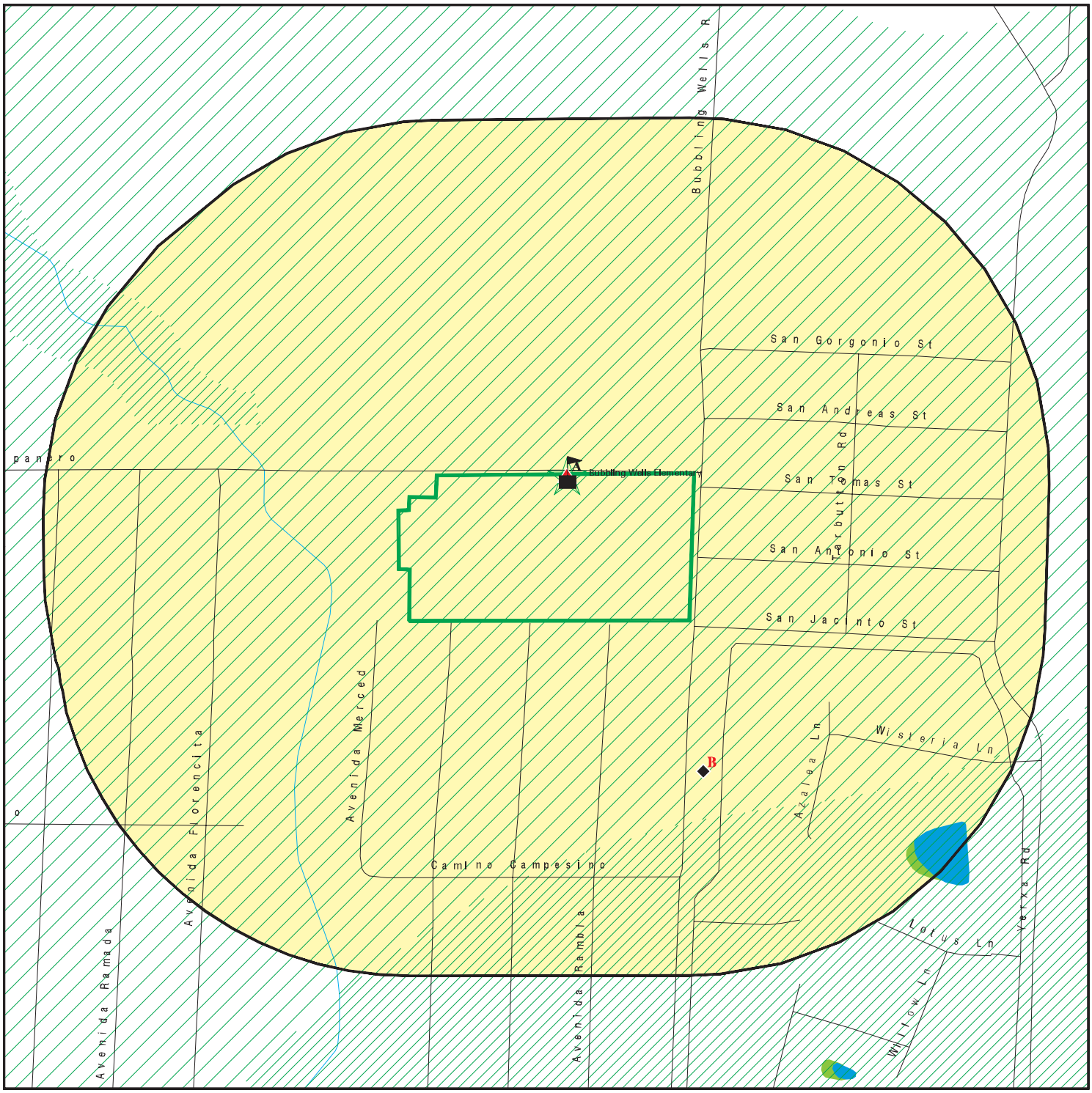
N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Bubbling Wells Elementary Modernization Project	CLIENT:	Meridian Consultants LLC
ADDRESS:	67501 Camino Campanero Desert Hot Springs CA 92240	CONTACT:	Monica Padilla
LAT/LONG:	33.939424 / 116.485714	INQUIRY #:	7927323.2s
		DATE:	March 17, 2025 2:03 pm

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DETAIL MAP - 7927323.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Bubbling Wells Elementary Modernization Project	CLIENT:	Meridian Consultants LLC
ADDRESS:	67501 Camino Campanero Desert Hot Springs CA 92240	CONTACT:	Monica Padilla
LAT/LONG:	33.939424 / 116.485714	INQUIRY #:	7927323.2s
		DATE:	March 17, 2025 2:07 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	0	NR	0
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	0	0	NR	0
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001	1	0	NR	NR	NR	NR	1
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		2	0	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001	1	0	NR	NR	NR	NR	1
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		0	0	NR	NR	NR	0
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS TSCA	0.250		0	0	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS PROJECT	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAIN	0.250		0	0	NR	NR	NR	0
PFAS PT 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
BIOSOLIDS	0.001		0	NR	NR	NR	NR	0
UST FINDER RELEASE	0.500		0	0	0	NR	NR	0
UST FINDER	0.250		0	0	NR	NR	NR	0
E MANIFEST	0.250		2	0	NR	NR	NR	2
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
CHROME PLATING	0.500		0	0	0	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001	1	0	NR	NR	NR	NR	1
Financial Assurance	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWTS	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001	1	0	NR	NR	NR	NR	1
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001	1	0	NR	NR	NR	NR	1
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001	1	0	NR	NR	NR	NR	1
CERS	0.001	1	0	NR	NR	NR	NR	1
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		7	4	0	0	0	0	11

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target
Property

BUBBLING WELLS ELEM 97-500135 — **FINDS** — **1023351182**
67501 CAMINO CAMPANERO — **N/A**
DESERT HOT SPRINGS, CA 92240

Site 1 of 4 in cluster A

Actual:
893 ft.

FINDS:
Registry ID: 110066475610

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS),EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), andToxic Release Inventory (TRI).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

A2
Target
Property

BUBBLING WELLS ELEMENTARY SCHOOL SOLAR AQMD — **NPDES** — **S122246803**
67501 CAMINO CAMPANERO — **N/A**
DESERT HOT SPRINGS, CA 92240

Site 2 of 4 in cluster A

Actual:
893 ft.

NPDES:

Name:	BUBBLING WELLS ELEMENTARY SCHOOL SOLAR AQMD
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92240
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	7 33W001909
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Expired
Status Date:	11/01/2014
Operator Name:	Palm Springs USD
Operator Address:	980 E Tahquitz Canyon Wy
Operator City:	Palm Springs
Operator State:	California
Operator Zip:	92262

A3 **DESERT HOT SPRINGS COUNTY CLEANUP EVENT** **HAULERS** **S127801888**
Target **67501 CAMINO CAMPANERO** **N/A**
Property **DESERT HOT SPRINGS, CA 92240**

Site 3 of 4 in cluster A

Actual: **893 ft.**

HAULERS:

Name:	DESERT HOT SPRINGS COUNTY CLEANUP EVENT
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92240
Facility ID:	1879349
Facility Phone:	(760) 578-2712
Business Email Address:	Jacosta@rivco.org
Contact Person:	Not reported
Mailing Address:	14310 Frederick Street
Mailing City:	Moreno Valley
Mailing State:	CA
Mailing Zip:	92553
Mailing County:	Not reported
Mailing Phone:	(951) 486-3248
Current Status:	Active
Current Hauler Status:	Not reported
Accepting Tires From Public:	Not reported
Regulatory Status Last Changed:	2017-02-22 00:00:00
Business Types:	Not reported

A4 **BUBBLING WELLS ELEM 97-500135** **ENF** **S104586832**
Target **67501 CAMINO CAMPANERO** **WDS** **N/A**
Property **DESERT HOT SPRINGS, CA 92262** **CIWQS**
CERS

Site 4 of 4 in cluster A

Actual: **893 ft.**

ENF:

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	232954
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	03/20/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	4/2/2001
Termination Date:	03/20/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	03/20/2001 Notice of noncompliance ltr issued for 2000 Annual M&R incomplete report. Request for M&I forms by 04/02/2001.
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	4/2/2001
# Of Programs1:	1

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	232667
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation
Effective Date:	01/30/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	3/15/2001
Termination Date:	01/30/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	Notice of Violation 01-043 issued for failure to submit 2000 Annual M&R
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	232572
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	07/24/2000
Adoption/Issuance Date:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Achieve Date:	8/25/2000
Termination Date:	07/24/2000
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	07/24/2000 Noncompliance ltr issued for inaccessible septic tank/seepage pits. Request work plan by 08/21/2000 to include time schedule for installation of risers and lids. One system should be in compliance by November 2000.
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	12/7/2000
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	366113
Region:	7
Order / Resolution Number:	Not reported
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	03/16/2009
Adoption/Issuance Date:	03/16/2009
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	SEL 03/16/09 for Palm Springs Unfied SD
Description:	03/16/2009 Notice of Noncompliance letter issued for incomplete report violation noted on Annual 2008 M&R
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0
Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Active
Enforcement Id(EID):	345995
Region:	7
Order / Resolution Number:	Not reported
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	05/07/2008
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	SEL 05/07/08 for Palm Springs USD
Description:	05/07/2008 Notice of Noncompliance letter issued for DCB violation noted on 2007 Annual M&R
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	251125
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice to Comply
Effective Date:	02/10/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	Enforcement - 7A331044001
Description:	02/10/2004 Notice of Noncompliance letter issued for 2003 Annual excess TKN. Request for complete pump-out and resample. Resampling results due by 03/10/2004
Program:	WDRMUNIOTH

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	250604
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation
Effective Date:	01/29/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/29/2004
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	01/29/2004 Notice of Violation No. R7-2004-0047 issued for failure to submit annual M&R
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	244756
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Effective Date:	02/04/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	02/04/2003 Notice of Violation No. R7-2003-0094 issued for failure to submit 2002 Annual M&R
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Region:	7
Facility Id:	210631
Agency Name:	Palm Springs Unified School District
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	Not reported
Place Longitude:	Not reported
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	0.011
Threat To Water Quality:	3
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMUNIOWTS

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	7A331044001
Reg Measure Id:	205678
Reg Measure Type:	Enrollee
Region:	7
Order #:	97-500
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	200
Status:	Active
Status Date:	02/18/2014
Effective Date:	06/30/2000
Expiration/Review Date:	06/29/2010
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Y
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	239529
Region:	7
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Notice of Violation
Effective Date:	02/01/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	02/01/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 7A331044001
Description:	02/01/2002 Notice of Violation R7-2002-0036 issued for failure to submit 2001 Annual M&R
Program:	WDRMUNIOTH
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

WDS:

Name: BUBBLING WELLS ELEM 97-500135

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Address:	67501 CAMINO CAMPANERO
City:	DESERT HOT SPRINGS
Facility ID:	West Colorado River 331044001
Facility Type:	Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day).
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	Not reported
Subregion:	7
Facility Telephone:	7604168306
Facility Contact:	JERRY GRENCE
Agency Name:	PALM SPRINGS UNIFIED SCH DIST
Agency Address:	980 TAHQUITZ WAY STE. 202
Agency City,St,Zip:	PALM SPRINGS 92262
Agency Contact:	JERRY GRENCE
Agency Telephone:	7604168306
Agency Type:	Special District (Includes districts established under general acts, sanitary districts, water districts irrigation districts, etc.)
SIC Code:	4952
SIC Code 2:	Not reported
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Primary Waste:	DOMEST
Waste Type2:	Not reported
Waste2:	Domestic Sewage
Primary Waste Type:	Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:

Name:	Bubbling Wells Elem 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Agency:	Palm Springs Unified School District
Agency Address:	150 District Center Drive, Palm Springs, CA 92262
Place/Project Type:	Other
SIC/NAICS:	4952
Region:	7
Program:	WDRMUNIOWTS
Regulatory Measure Status:	Active
Regulatory Measure Type:	Enrollee
Order Number:	97-500
WDID:	7A331044001
NPDES Number:	Not reported
Adoption Date:	Not reported
Effective Date:	06/30/2000
Termination Date:	Not reported
Expiration/Review Date:	06/29/2010
Design Flow:	0.011
Major/Minor:	Not reported
Complexity:	C
TTWQ:	3
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	Not reported
Longitude:	Not reported

CERS:

Name:	BUBBLING WELLS ELEM 97-500135
Address:	67501 CAMINO CAMPANERO
City,State,Zip:	DESERT HOT SPRINGS, CA 92262
Site ID:	100381
CERS ID:	210631
CERS Description:	Waste Discharge Requirements

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	09-30-2004
Violations Found:	No
Eval Type:	RWQCB Type B compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	WDRMUNIOWT
Eval Source:	CIWQS,

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-08-2006
Violations Found:	No
Eval Type:	RWQCB Type B compliance inspection
Eval Notes:	Not reported
Eval Division:	Water Boards
Eval Program:	WDRMUNIOWT
Eval Source:	CIWQS,

Eval General Type:	Compliance Followup Inspection
Eval Date:	12-07-2000
Violations Found:	No
Eval Type:	Follow-up Inspection (noncompliance)
Eval Notes:	Not reported
Eval Division:	Water Boards

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-20-2000
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-09-2001
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-28-2002
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-15-2003
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-16-2013
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 08-28-2015
Violations Found: No
Eval Type: RWQCB Type B compliance inspection
Eval Notes: Not reported
Eval Division: Water Boards
Eval Program: WDRMUNIOWT
Eval Source: CIWQS,

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Enforcement Action:

Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS
Site Zip:	92262
Enf Action Date:	01-23-2007
Enf Action Type:	Staff Enforcement Letter (Informal)
Enf Action Description:	Staff Enforcement Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,

Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS
Site Zip:	92262
Enf Action Date:	01-29-2004
Enf Action Type:	Notice of Violation (Water)
Enf Action Description:	Notice of Violation Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,

Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS
Site Zip:	92262
Enf Action Date:	01-30-2001
Enf Action Type:	Notice of Violation (Water)
Enf Action Description:	Notice of Violation Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,

Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS
Site Zip:	92262
Enf Action Date:	02-01-2002
Enf Action Type:	Notice of Violation (Water)
Enf Action Description:	Notice of Violation Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,

Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Site Zip: 92262
Enf Action Date: 02-04-2003
Enf Action Type: Notice of Violation (Water)
Enf Action Description: Notice of Violation Letter (Informal)
Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: WDRMUNIOWT
Enf Action Source: CIWQS,

Site ID: 100381
Site Name: Bubbling Wells Elem 97-500135
Site Address: 67501 CAMINO CAMPANERO
Site City: DESERT HOT SPRINGS
Site Zip: 92262
Enf Action Date: 02-10-2004
Enf Action Type: Notice to Comply (Minor Violations)
Enf Action Description: Notice to Comply for Minor Violations
Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: WDRMUNIOWT
Enf Action Source: CIWQS,

Site ID: 100381
Site Name: Bubbling Wells Elem 97-500135
Site Address: 67501 CAMINO CAMPANERO
Site City: DESERT HOT SPRINGS
Site Zip: 92262
Enf Action Date: 03-16-2009
Enf Action Type: Staff Enforcement Letter (Informal)
Enf Action Description: Staff Enforcement Letter (Informal)
Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: WDRMUNIOWT
Enf Action Source: CIWQS,

Site ID: 100381
Site Name: Bubbling Wells Elem 97-500135
Site Address: 67501 CAMINO CAMPANERO
Site City: DESERT HOT SPRINGS
Site Zip: 92262
Enf Action Date: 03-20-2001
Enf Action Type: Staff Enforcement Letter (Informal)
Enf Action Description: Staff Enforcement Letter (Informal)
Enf Action Notes: Not reported
Enf Action Division: Water Boards
Enf Action Program: WDRMUNIOWT
Enf Action Source: CIWQS,

Site ID: 100381
Site Name: Bubbling Wells Elem 97-500135
Site Address: 67501 CAMINO CAMPANERO
Site City: DESERT HOT SPRINGS
Site Zip: 92262
Enf Action Date: 05-07-2008
Enf Action Type: Staff Enforcement Letter (Informal)
Enf Action Description: Staff Enforcement Letter (Informal)
Enf Action Notes: Not reported

BUBBLING WELLS ELEM 97-500135 (Continued) **S104586832**

Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,
Site ID:	100381
Site Name:	Bubbling Wells Elem 97-500135
Site Address:	67501 CAMINO CAMPANERO
Site City:	DESERT HOT SPRINGS
Site Zip:	92262
Enf Action Date:	07-24-2000
Enf Action Type:	Staff Enforcement Letter (Informal)
Enf Action Description:	Staff Enforcement Letter (Informal)
Enf Action Notes:	Not reported
Enf Action Division:	Water Boards
Enf Action Program:	WDRMUNIOWT
Enf Action Source:	CIWQS,

B5 **ANITA SCHOLES** **RCRA NonGen / NLR 1026814379**
SSE **15500 BUBBLING WELLS ROAD** **E MANIFEST CAC003126998**
< 1/8 **DESERT HOT SPRINGS, CA 92240**
0.107 mi.
563 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**

Actual: **885 ft.**

RCRA Listings:

Date Form Received by Agency:		20210629
Handler Name:		Anita Scholes
Handler Address:		15500 Bubbling Wells Road
Handler City,State,Zip:		DESERT HOT SPRINGS, CA 92240
EPA ID:		CAC003126998
Contact Name:		ANITA SCHOLES
Contact Address:		15500 BUBBLING WELLS ROAD
Contact City,State,Zip:		DESERT HOT SPRINGS, CA 92240
Contact Telephone:		909-545-7990
Contact Fax:		Not reported
Contact Email:		IAMANITAHH@GMAIL.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		15500 BUBBLING WELLS ROAD
Mailing City,State,Zip:		DESERT HOT SPRINGS, CA 92240
Owner Name:	Anita Scholes	
Owner Type:		Other
Operator Name:	Anita Scholes	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No

ANITA SCHOLES (Continued) **1026814379**

Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20210630
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: ANITA SCHOLES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	15500 BUBBLING WELLS ROAD
Owner/Operator City,State,Zip:	DESERT HOT SPRINGS, CA 92240
Owner/Operator Telephone:	909-545-7990
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: ANITA SCHOLES	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	15500 BUBBLING WELLS ROAD
Owner/Operator City,State,Zip:	DESERT HOT SPRINGS, CA 92240
Owner/Operator Telephone:	909-545-7990

ANITA SCHOLES (Continued) **1026814379**

Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20210629
Handler Name: ANITA SCHOLES
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: All Other Waste Management Services

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E MANIFEST:
Manifest Tracking Number: 022172711JJK
Last Updated Date: 20210803
Shipped Date: 20210702
Received Date: 20210720
Manifest Status: Signed
Submission Type: DataImage5Copy
Origin Type: Web
Generator EPA ID: CAC003126998
Generator Name: Anita Scholes
Generator Location Street Number: Not reported
Generator Location Street 1: 15500 BUBBLING WELLS ROAD
Generator Location Street 2: SPACE 161
Generator Location City: DESERT HOT SPRINGS
Generator Location State: CA
Generator Location Zip: 92240
Generator Mail Street Number: Not reported
Generator Mail Street 1: 15500 BUBBLING WELLS ROAD
Generator Mail Street 2: SPACE 161
Generator Mail City: DESERT HOT SPRINGS
Generator Mail Zip: 92240
Generator Mail State: CA
Generator Contact Company Name: Not reported
Designated Facility EPA ID: AZR000520882
Designated Facility Name: La Paz County Landfill
Designated Facility Mail Street Number: Not reported

ANITA SCHOLES (Continued) **1026814379**

Designated Facility Mail Street 1: Not reported
Designated Facility Mail Street 2: 26999 HIGHWAY 95
Designated Facility Mail City: PARKER
Designated Facility Mail Zip: 85344
Designated Facility Mail State: AZ
Designated Facility Location Street Number: Not reported
Designated Facility Location Street 1: 26999 HIGHWAY 95
Designated Facility Location Street 2: Not reported
Designated Facility Location City: PARKER
Designated Facility Location Zip: 85344
Designated Facility Location State: AZ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

State Waste:
Manifest Tracking Number: 022172711JJK
Waste Line Number: 1
State Waste Code Owner: CA
State Waste Code: 151
State Waste: Asbestos-containing waste

Transporter:
Manifest Tracking Number: 022172711JJK
Transporter Line Number: 1
Transporter EPA ID: CAL000160111
Transporter Name: Alliance Evironmental Group

Manifest Tracking Number: 022172711JJK
Transporter Line Number: 2
Transporter EPA ID: CAR000049064
Transporter Name: E C T I

Manifest Tracking Number: 022172711JJK
Transporter Line Number: 3
Transporter EPA ID: CAR000217000
Transporter Name: La Chiquita Trucking

Waste Line:
Manifest Tracking Number: 022172711JJK
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA2212
U.S. DOT Description: Rq Na2212, Asbestos, 9, Pgiii
Non-Hazardous Waste Description: Not reported
Number of Containers: 12
Container Type Code: BA
Container Type Description: Burlap, cloth, paper, or plastic bags
Waste Quantity: 1
Quantity Unit of Measure Code: Y
Quantity Unit of Measure Description: Cubic Yards
Waste Quantity, in Tons: 0.84
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.84
Waste Quantity, in Kilograms: 761.9052
Acute Waste Quantity, in Kilograms: 0

ANITA SCHOLES (Continued) **1026814379**

Non-Acute Waste Quantity, in Kilorgrams:	761.9052
Management Method Code:	H132
Management Method Description:	LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N
Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N

B6 **15500 BUBBLING WELLS RD** **RCRA NonGen / NLR** **1025846224**
SSE **15500 BUBBLING WELLS RD** **E MANIFEST** **CAC003026000**
< 1/8 **DESERT HOT SPRINGS, CA 92240**
0.107 mi.
563 ft. **Site 2 of 2 in cluster B**

Relative: **Lower**

Actual: **885 ft.**

RCRA Listings:

Date Form Received by Agency:		20190726
Handler Name:		15500 Bubbling Wells Rd
Handler Address:		15500 Bubbling Wells Rd
Handler City,State,Zip:		DESERT HOT SPRINGS, CA 92240-9031
EPA ID:		CAC003026000
Contact Name:		CONNIE BROWN
Contact Address:		15500 BUBBLING WELLS RD
Contact City,State,Zip:		DESERT HOT SPRINGS, CA 92240-9031
Contact Telephone:		503-260-9172
Contact Fax:		Not reported
Contact Email:		TAMMYHURLEY@ALLIANCE-ENVIRO.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		15500 BUBBLING WELLS RD
Mailing City,State,Zip:		DESERT HOT SPRINGS, CA 92240-9031
Owner Name:	Connie Brown	
Owner Type:		Other
Operator Name:	Connie Brown	
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No

15500 BUBBLING WELLS RD (Continued) **1025846224**

Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
202 GPRA Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20241211
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name: CONNIE BROWN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	15500 BUBBLING WELLS RD
Owner/Operator City,State,Zip:	DESERT HOT SPRINGS, CA 92240-9031
Owner/Operator Telephone:	503-260-9172
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name: CONNIE BROWN	
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	15500 BUBBLING WELLS RD
Owner/Operator City,State,Zip:	DESERT HOT SPRINGS, CA 92240-9031
Owner/Operator Telephone:	503-260-9172

15500 BUBBLING WELLS RD (Continued) **1025846224**

Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20190726
Handler Name: 15500 BUBBLING WELLS RD
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: All Other Waste Management Services

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

E MANIFEST:
Manifest Tracking Number: 019651703JJK
Last Updated Date: 20190903
Shipped Date: 20190727
Received Date: 20190805
Manifest Status: Signed
Submission Type: DataImage5Copy
Origin Type: Web
Generator EPA ID: CAC003026000
Generator Name: Connie Brown
Generator Location Street Number: Not reported
Generator Location Street 1: 15500 BUBBLING WELLS RD
Generator Location Street 2: #55
Generator Location City: DESERT HOT SPRINGS
Generator Location State: CA
Generator Location Zip: 92240-9031
Generator Mail Street Number: Not reported
Generator Mail Street 1: 15500 BUBBLING WELLS RD
Generator Mail Street 2: #55
Generator Mail City: DESERT HOT SPRINGS
Generator Mail Zip: 92240-9031
Generator Mail State: CA
Generator Contact Company Name: Not reported
Designated Facility EPA ID: AZR000520882
Designated Facility Name: La Paz County Regional Landfill
Designated Facility Mail Street Number: Not reported

15500 BUBBLING WELLS RD (Continued) **1025846224**

Designated Facility Mail Street 1:	MILE POST 128
Designated Facility Mail Street 2:	26999 HIGHWAY 95
Designated Facility Mail City:	PARKER
Designated Facility Mail Zip:	85344
Designated Facility Mail State:	AZ
Designated Facility Location Street Number:	Not reported
Designated Facility Location Street 1:	26999 HIGHWAY 95
Designated Facility Location Street 2:	Not reported
Designated Facility Location City:	PARKER
Designated Facility Location Zip:	85344
Designated Facility Location State:	AZ
Designated Facility Contact Company Name:	Not reported
Manifest Residue Indicator:	N
Rejection Indicator:	N

State Waste:

Manifest Tracking Number:	019651703JJK
Waste Line Number:	1
State Waste Code Owner:	CA
State Waste Code:	151
State Waste:	Asbestos-containing waste

Transporter:

Manifest Tracking Number:	019651703JJK
Transporter Line Number:	1
Transporter EPA ID:	CAL000160111
Transporter Name:	Alliance Environmental Group Llc

Manifest Tracking Number:	019651703JJK
Transporter Line Number:	2
Transporter EPA ID:	CAR000049064
Transporter Name:	E C T I

Waste Line:

Manifest Tracking Number:	019651703JJK
Waste Line Number:	1
U.S. DOT Hazardous Indicator:	Y
U.S. DOT ID Number:	NA2212
U.S. DOT Description:	Rq Na2212 Asbestos,9, Pgiii
Non-Hazardous Waste Description:	Not reported
Number of Containers:	2
Container Type Code:	BA
Container Type Description:	Burlap, cloth, paper, or plastic bags
Waste Quantity:	1
Quantity Unit of Measure Code:	Y
Quantity Unit of Measure Description:	Cubic Yards
Waste Quantity, in Tons:	0.84
Acute Waste Quantity, in Tons:	0
Non-Acute Waste Quantity, in Tons:	0.84
Waste Quantity, in Kilograms:	761.9052
Acute Waste Quantity, in Kilograms:	0
Non-Acute Waste Quantity, in Kilorgrams:	761.9052
Management Method Code:	H132
Management Method Description:	LANDFILL (WITH PRIOR TREATMENT AND/OR STABILIZATION)
Waste Residue Indicator:	N
Quantity Discrepancy Indicator:	N

15500 BUBBLING WELLS RD (Continued) **1025846224**

Waste Type Discrepancy Indicator:	N
Waste Density:	Not reported
Waste Density Unit of Measure Code:	Not reported
Waste Density Unit of Measure Description:	Not reported
Form Code:	Not reported
Form Code Description:	Not reported
Source Code:	Not reported
Source Code Description:	Not reported
Waste Minimization Code:	Not reported
Waste Minimization Code Description:	Not reported
Consent Number:	Not reported
EPA Waste Indicator:	N

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
DESERT HOT SPRINGS	S106388941	THRIFTY BEST SEVICES	65350 SAN JACINTO	92240	CPS-SLIC

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 12/18/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 2

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 12/18/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/25/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 85

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 12/02/2024
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/06/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 86

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41
Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27
Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/07/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 08/12/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 76
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/25/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 11/26/2024
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 86

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/11/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 07/29/2024
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 05/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 90

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/11/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 03/03/2025
Number of Days to Update: 82

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/13/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 27

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 12/09/2024
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 03/21/2024
Date Made Active in Reports: 06/12/2024
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: California Environmental Reporting System Hazardous Waste

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/20/2024
Date Data Arrived at EDR: 08/19/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 51

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 07/29/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 10/17/2024
Number of Days to Update: 79

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76
Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 11/26/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 28
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19
Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/10/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/27/2025
Number of Days to Update: 78
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/01/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 11/12/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 70

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/03/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/06/2025
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/10/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/11/2025
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 7

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/29/2025
Date Data Arrived at EDR: 02/03/2025
Date Made Active in Reports: 02/27/2025
Number of Days to Update: 24

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 09/19/2023
Date Data Arrived at EDR: 10/03/2023
Date Made Active in Reports: 10/19/2023
Number of Days to Update: 16

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 100

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/12/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 33
Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 90
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 12/17/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/06/2024
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 93

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/07/2025
Number of Days to Update: 16

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 12/12/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 12/30/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 02/12/2025
Date Data Arrived at EDR: 02/12/2025
Date Made Active in Reports: 02/27/2025
Number of Days to Update: 15

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/19/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/03/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/01/2024
Date Data Arrived at EDR: 11/18/2024
Date Made Active in Reports: 02/11/2025
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/18/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 10/01/2024
Date Data Arrived at EDR: 10/02/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 7

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/02/2024
Date Data Arrived at EDR: 08/20/2024
Date Made Active in Reports: 10/09/2024
Number of Days to Update: 50

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/10/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 69

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System
Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/11/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 90

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 09/06/2023
Date Data Arrived at EDR: 09/13/2023
Date Made Active in Reports: 12/11/2023
Number of Days to Update: 89

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/21/2024
Date Data Arrived at EDR: 12/27/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 67

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/13/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020
Date Data Arrived at EDR: 03/17/2021
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 601

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/16/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/13/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/14/2025
Number of Days to Update: 12

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 05/19/2023
Date Data Arrived at EDR: 04/05/2024
Date Made Active in Reports: 06/06/2024
Number of Days to Update: 62

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 03/06/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/30/2024
Date Data Arrived at EDR: 01/02/2025
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 02/20/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data
The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 10/13/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 10/23/2024
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database
US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database
EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System
EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 02/17/2025
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/14/2025
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing
A listing of PFAS sites included in the Envirostor and GeoTracker databases. Locations of potential sources of per - and polyfluoroalkyl substances (PFAS). This does not mean that PFAS has been produced, used, or discharged at these sites.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHROME PLATING: Chrome Plating Facilities Listing

This listing represents chrome plating facilities the California State Water Resources Control Board staff identified as possibly being a source of Per- and polyfluoroalkyl substance (PFAS) contamination. Sites and locations were identified by staff with the Division of Water Quality in the California State Water Board. Data was collected from the CA Air Resources Board 2013 and 2018 - Cr VI emission survey, CA Emission Inventory, CA HAZ Waste discharge database and by reviewing storm water permits. Former chrome plating sites are also included that are open site investigation or remediation cases with the Regional Water Quality Control Boards and the Department of Toxic Substances Control.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/11/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 03/04/2025
Number of Days to Update: 83

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Quarterly

CUPA LIV-PLE: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 09/19/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87

Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

DRYCLEAN N COAST: North Coast Unified Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the North Coast Unified Air Quality Management District.

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1473
Source: North Coast Unified Air Quality Management District
Telephone: 707-443-3093
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SANTA BARB: Santa Barbara County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Santa Barbara County Air Pollution Control District.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1475
Source: Santa Barbara County Air Pollution Control District
Telephone: 805-961-8867
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN TEHAMA: Tehama County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Tehama County Air Pollution Control District.

Date of Government Version: 04/24/2019
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1468
Source: Tehama County Air Pollution Control District
Telephone: 530-527-3717
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/14/2024
Date Data Arrived at EDR: 11/15/2024
Date Made Active in Reports: 02/05/2025
Number of Days to Update: 82
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/28/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Annually

DRYCLEAN SHASTA: Shasta County Air Quality Management District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Shasta County Air Quality Management District.

Date of Government Version: 08/29/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69
Source: Shasta County Air Quality Management District
Telephone: 530-225-5674
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SONOMA: Norther Sonoma County County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sonoma County Air Pollution Control District.,

Date of Government Version: 08/23/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 71

Source: Santa Barbara County Air Pollution Control District
Telephone: 707-433-5911
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GRANT: Grant Recipients List

Assembly Bill 998 (AB 998) established the Non-Toxic Dry Cleaning Incentive Program to provide financial assistance to the dry cleaning industry to switch from systems using perchloroethylene (Perc), an identified toxic air contaminant and potential human carcinogen, to non-toxic and non-smog forming alternatives.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/26/2024
Date Made Active in Reports: 04/16/2024
Number of Days to Update: 81

Source: California Air Resources Board
Telephone: 916-323-0006
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

DRYCLEAN YOLO-SOLANO: Yolo-Solano Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Yolo-Solano Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/26/2024
Date Made Active in Reports: 11/06/2024
Number of Days to Update: 72

Source: Yolo-Solano Air Quality Management District
Telephone: 530-757-3650
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN LAKE: Lake County Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Lake County Air Quality Management District,

Date of Government Version: 02/15/2024
Date Data Arrived at EDR: 02/16/2024
Date Made Active in Reports: 05/02/2024
Number of Days to Update: 76

Source: Lake County Air Quality Management District
Telephone: 707-263-7000
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN DIEGO: San Diego County Air Pollution Control District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the San Diego County Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77

Source: San Diego County Air Pollution Control District
Telephone: 858-586-2616
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MENDOCINO: Mendocino County Air Quality Management District Drycleaner Facility Listing

A listing of drycleaner facility locations, for the Mendocino County Air Quality Management District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 09/03/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 71

Source: Mendocino County Air Quality Management District
Telephone: 707-463-4354
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SACRAMENTO: Sacramento Metropolitan Air Quality Management DistrictDrycleaner Facility Listing

A listing of drycleaner facility locations, for the Sacramento Metropolitan Air Quality Management District.

Date of Government Version: 09/03/2024
Date Data Arrived at EDR: 09/05/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 69

Source: Sacramento Metropolitan Air Quality Management District
Telephone: 916-874-3958
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN IMPERIAL: Imperial County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Imperial County Air Pollution Control District

Date of Government Version: 10/02/2024
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/20/2024
Number of Days to Update: 78

Source: Imperial County Air Pollution Control District
Telephone: 442-265-1800
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN LUIS OB: San Luis Obispo County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Luis Obispo County Air Pollution Control District.

Date of Government Version: 01/03/2024
Date Data Arrived at EDR: 01/04/2024
Date Made Active in Reports: 03/20/2024
Number of Days to Update: 76

Source: San Luis Obispo County Air Pollution Control District
Telephone: 805-781-5756
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN PLACER: Placer County Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Placer County Air Quality Management District.

Date of Government Version: 05/15/2023
Date Data Arrived at EDR: 05/17/2023
Date Made Active in Reports: 08/14/2023
Number of Days to Update: 89

Source: Placer County Air Quality Management District
Telephone: 530-745-2335
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BAY AREA: Bay Area Air Quality Management District Drycleaner Facility Listing
Bay Area Air Quality Management District Drycleaner Facility Listing.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 05/30/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1432

Source: Bay Area Air Quality Management District
Telephone: 415-516-1916
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN CALAVERAS: Calaveras County Environmental Management Agency Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Calaveras County Environmental Management Agency.

Date of Government Version: 06/17/2019
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 05/01/2023
Number of Days to Update: 1412

Source: Calaveras County Environmental Management Agency
Telephone: 209-754-6399
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

DRYCLEAN MOJAVE: Mojave Desert Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Mojave Desert Air Quality Management District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Mojave Desert Air Quality Management District
Telephone: 760-245-1661
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN N SIERRA: Northern Sierra Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Northern Sierra Air Quality Management District,

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75

Source: Northern Sierra Air Quality Management District
Telephone: 530-274-9350
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN MONTERY BAY: Monterey Bay Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Monterey Bay Air Quality Management District.

Date of Government Version: 09/09/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/26/2024
Number of Days to Update: 76
Source: Monterey Bay Air Quality Management District
Telephone: 831-647-9411
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AMADOR: Amador Air District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Amador Air Quality Management District

Date of Government Version: 04/26/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77
Source: Amador Air Quality Management District
Telephone: 209-257-0112
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN VENTURA: Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Ventura County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/14/2024
Number of Days to Update: 78
Source: Ventura County Air Pollution Control District
Telephone: 805-645-1421
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN EAST KERN: Eastern Kern Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Eastern Kern Air Pollution Control District.

Date of Government Version: 08/21/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75
Source: Eastern Kern Air Pollution Control District
Telephone: 661-862-9684
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN SAN JOAQUIN: San Joaquin Valley Air Pollution Control District District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the San Joaquin Valley Air Pollution Control District.

Date of Government Version: 08/22/2024
Date Data Arrived at EDR: 08/22/2024
Date Made Active in Reports: 11/05/2024
Number of Days to Update: 75
Source: San Joaquin Valley Air Pollution Control District
Telephone: 559-230-6001
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN GLENN: Glenn County Air Pollution Control District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Glenn County Air Pollution Control District.

Date of Government Version: 08/26/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 77
Source: Glenn County Air Pollution Control District
Telephone: 530-934-6500
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN BUTTE: Butte County Air Quality Management DistrictDrycleaner Facility Listing
Butte County Air Quality Management DistrictDrycleaner Facility Listing.

Date of Government Version: 09/10/2024
Date Data Arrived at EDR: 09/11/2024
Date Made Active in Reports: 11/25/2024
Number of Days to Update: 75
Source: Butte County Air Quality Management District
Telephone: 530-332-9400
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN FEATHER RVR: Feather River Air Quality Management District Drycleaner Facility Listing
A listing of drycleaner facility locations, for the Feather River Air Quality Management District.

Date of Government Version: 03/08/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 06/05/2023
Number of Days to Update: 88

Source: Feather River Air Quality Management District
Telephone: 530-634-7659
Last EDR Contact: 08/21/2024
Next Scheduled EDR Contact: 09/11/2023
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 05/29/2024
Date Data Arrived at EDR: 11/07/2024
Date Made Active in Reports: 11/22/2024
Number of Days to Update: 15

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 03/13/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 06/11/2024
Date Made Active in Reports: 09/03/2024
Number of Days to Update: 84

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/11/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/10/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 81

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/06/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 84

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Varies

ICE: Inspection, Compliance and Enforcement
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/08/2024
Date Data Arrived at EDR: 11/08/2024
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 87

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/11/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 12/27/2024
Date Data Arrived at EDR: 12/27/2024
Date Made Active in Reports: 03/13/2025
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 12/27/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Quarterly

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/19/2024
Date Data Arrived at EDR: 07/30/2024
Date Made Active in Reports: 08/28/2024
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 07/02/2024
Date Made Active in Reports: 09/25/2024
Number of Days to Update: 85

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/07/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 87
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/24/2025
Number of Days to Update: 83
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/05/2024
Date Data Arrived at EDR: 09/06/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 68
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82
Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/25/2025
Number of Days to Update: 84
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/02/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/02/2024
Date Data Arrived at EDR: 12/03/2024
Date Made Active in Reports: 02/25/2025
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System
The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data
The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)
Non-Case Information sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)
Other Oil & Gas Projects sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 02/24/2025
Date Data Arrived at EDR: 02/24/2025
Date Made Active in Reports: 02/26/2025
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 02/24/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks
Underground storage tank sites located in Alameda county.

Date of Government Version: 12/26/2023
Date Data Arrived at EDR: 12/26/2023
Date Made Active in Reports: 03/19/2024
Number of Days to Update: 84

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 04/27/2023
Date Data Arrived at EDR: 04/27/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 77

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/16/2024
Date Data Arrived at EDR: 12/18/2024
Date Made Active in Reports: 03/05/2025
Number of Days to Update: 77

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/21/2024
Date Data Arrived at EDR: 10/23/2024
Date Made Active in Reports: 01/13/2025
Number of Days to Update: 82

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 02/05/2024
Date Data Arrived at EDR: 02/08/2024
Date Made Active in Reports: 04/26/2024
Number of Days to Update: 78

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 12/19/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/29/2025
Date Made Active in Reports: 01/31/2025
Number of Days to Update: 2

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 11/01/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 77

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2024
Date Data Arrived at EDR: 10/01/2024
Date Made Active in Reports: 12/12/2024
Number of Days to Update: 72

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/04/2024
Date Data Arrived at EDR: 10/04/2024
Date Made Active in Reports: 12/23/2024
Number of Days to Update: 80

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/07/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 10/03/2024
Date Made Active in Reports: 12/17/2024
Number of Days to Update: 75

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 05/14/2024
Date Data Arrived at EDR: 07/09/2024
Date Made Active in Reports: 09/27/2024
Number of Days to Update: 80

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 03/04/2025
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 12/03/2024
Date Data Arrived at EDR: 12/11/2024
Date Made Active in Reports: 03/04/2025
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 12/11/2024
Next Scheduled EDR Contact: 03/31/2025
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation LA County List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/21/2024
Date Data Arrived at EDR: 07/16/2024
Date Made Active in Reports: 10/07/2024
Number of Days to Update: 83

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/17/2024
Date Made Active in Reports: 01/07/2025
Number of Days to Update: 82

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/08/2024
Date Data Arrived at EDR: 10/09/2024
Date Made Active in Reports: 10/31/2024
Number of Days to Update: 22

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/10/2025
Date Data Arrived at EDR: 01/14/2025
Date Made Active in Reports: 02/20/2025
Number of Days to Update: 37

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/27/2025
Date Data Arrived at EDR: 01/27/2025
Date Made Active in Reports: 02/03/2025
Number of Days to Update: 7

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Orange County
Petroleum and non-petroleum spills.

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/31/2024
Date Data Arrived at EDR: 10/31/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 85

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/05/2025
Date Data Arrived at EDR: 02/06/2025
Date Made Active in Reports: 03/14/2025
Number of Days to Update: 36

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/27/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/19/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 06/11/2024
Date Data Arrived at EDR: 06/12/2024
Date Made Active in Reports: 06/27/2024
Number of Days to Update: 15
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 12/05/2024
Date Data Arrived at EDR: 12/05/2024
Date Made Active in Reports: 12/31/2024
Number of Days to Update: 26
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 10/25/2024
Date Data Arrived at EDR: 10/29/2024
Date Made Active in Reports: 01/17/2025
Number of Days to Update: 80
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/12/2024
Date Data Arrived at EDR: 12/16/2024
Date Made Active in Reports: 03/05/2025
Number of Days to Update: 79

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/20/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/25/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2023
Date Data Arrived at EDR: 01/31/2024
Date Made Active in Reports: 04/17/2024
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/19/2025
Next Scheduled EDR Contact: 06/09/2025
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/21/2025
Number of Days to Update: 83

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 10/28/2024
Date Data Arrived at EDR: 10/30/2024
Date Made Active in Reports: 01/24/2025
Number of Days to Update: 86

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Quarterly

SAN FRANCISO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing
a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/15/2024
Date Data Arrived at EDR: 10/16/2024
Date Made Active in Reports: 01/06/2025
Number of Days to Update: 82

Source: San Francisco Planning
Telephone: 628-652-7483
Last EDR Contact: 01/14/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/05/2025
Next Scheduled EDR Contact: 06/23/2025
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/12/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 02/06/2025
Number of Days to Update: 85

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/06/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 02/26/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/18/2024
Date Data Arrived at EDR: 11/19/2024
Date Made Active in Reports: 02/12/2025
Number of Days to Update: 85
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SITE MIT SANTA CRUZ: Site Mitigation Santa Cruz County List
Sites may become contaminated with toxic chemicals through illegal dumping or disposal, from leaking underground storage tanks, or through industrial or commercial activities.The goal of the site mitigation program is to protect the public health and the environment while facilitating completion of contaminated site clean-up projects in a timely manner.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 06/23/2023
Date Made Active in Reports: 07/13/2023
Number of Days to Update: 20

Source: Santa Cruz Environmental Health Services
Telephone: 831-454-2761
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/12/2025
Next Scheduled EDR Contact: 06/30/2025
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/03/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/05/2024
Date Data Arrived at EDR: 11/20/2024
Date Made Active in Reports: 02/13/2025
Number of Days to Update: 85

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/12/2025
Next Scheduled EDR Contact: 06/02/2025
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 08/28/2024
Date Made Active in Reports: 11/12/2024
Number of Days to Update: 76

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 02/05/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 10/09/2024
Date Data Arrived at EDR: 10/11/2024
Date Made Active in Reports: 12/30/2024
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/22/2025
Next Scheduled EDR Contact: 05/12/2025
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/08/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/17/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 6

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/16/2024
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/30/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2024
Date Data Arrived at EDR: 07/18/2024
Date Made Active in Reports: 07/23/2024
Number of Days to Update: 5

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/13/2025
Next Scheduled EDR Contact: 04/28/2025
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/27/2024
Date Data Arrived at EDR: 09/04/2024
Date Made Active in Reports: 11/13/2024
Number of Days to Update: 70
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/04/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 09/18/2024
Date Data Arrived at EDR: 09/25/2024
Date Made Active in Reports: 12/13/2024
Number of Days to Update: 79
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 01/09/2025
Next Scheduled EDR Contact: 04/07/2025
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/17/2024
Date Data Arrived at EDR: 10/22/2024
Date Made Active in Reports: 01/10/2025
Number of Days to Update: 80
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/15/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/04/2024
Date Data Arrived at EDR: 11/05/2024
Date Made Active in Reports: 01/27/2025
Number of Days to Update: 83
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/04/2025
Next Scheduled EDR Contact: 05/19/2025
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 12/23/2024
Next Scheduled EDR Contact: 04/14/2025
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/23/2025
Next Scheduled EDR Contact: 05/05/2025
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2025
Next Scheduled EDR Contact: 04/21/2025
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/06/2025
Next Scheduled EDR Contact: 05/26/2025
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 02/26/2025
Next Scheduled EDR Contact: 06/16/2025
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX G

Construction Noise Worksheet

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/14/2025
Case Desc Bubbling Well Elementary - Demolition

---- Receptor #1 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Saw	No	20		89.6	80	0
Excavator	No	40		80.7	80	0
Excavator	No	40		80.7	80	0
Excavator	No	40		80.7	80	0
Dozer	No	40		81.7	80	0
Dozer	No	40		81.7	80	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	85.5	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.5	82.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Saw	No	20		89.6	25	0
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Dozer	No	40		81.7	25	0
Dozer	No	40		81.7	25	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	92.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Concrete Saw	No	20		89.6	25	0
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Dozer	No	40		81.7	25	0
Dozer	No	40		81.7	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	92.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/14/2025
Case Desc Bubbling Well Elementary - Phase 1 Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residentia	Residentia	80	80	80

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	80	0
Excavator	No	40		80.7	80	0
Grader	No	40	85		80	0
Dozer	No	40		81.7	80	0
Scraper	No	40		83.6	80	0
Scraper	No	40		83.6	80	0
Tractor	No	40	84		80	0
Tractor	No	40	84		80	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	80.9	76.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	79.5	75.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.9	84.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residentia	Residentia	80	80	80

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Grader	No	40	85		25	0
Dozer	No	40		81.7	25	0
Scraper	No	40		83.6	25	0
Scraper	No	40		83.6	25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0

Results

Equipment	Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	91	87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	89.6	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	89.6	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	91	94.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	25	0
Grader	No	40	85		25	0
Dozer	No	40		81.7	25	0
Scraper	No	40		83.6	25	0
Scraper	No	40		83.6	25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	91	87	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	89.6	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	89.6	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	91	94.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/14/2025
Case Desc Bubbling Well Elementary - Building Construction

---- Receptor #1 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No	16		80.6	80	0
Front End Loader	No	40		79.1	80	0
Front End Loader	No	40		79.1	80	0
Front End Loader	No	40		79.1	80	0
Generator	No	50		80.6	80	0
Tractor	No	40	84		80	0
Tractor	No	40	84		80	0
Tractor	No	40	84		80	0
Welder / Torch	No	40		74	80	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	76.5	68.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	75	71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	75	71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	75	71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	76.5	73.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	79.9	75.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	69.9	65.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.9	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No	16		80.6	25	0
Front End Loader	No	40		79.1	25	0
Front End Loader	No	40		79.1	25	0
Front End Loader	No	40		79.1	25	0
Generator	No	50		80.6	25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0
Welder / Torch	No	40		74	25	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	86.6	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	86.7	83.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Welder / Torch	80	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	90	92.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	25	0
Front End Loader	No	40		79.1	25	0
Front End Loader	No	40		79.1	25	0
Front End Loader	No	40		79.1	25	0
Generator	No	50		80.6	25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0
Tractor	No	40	84		25	0
Welder / Torch	No	40		74	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	86.6	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	85.1	81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	86.7	83.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	90	86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	80	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	90	92.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/14/2025
Case Desc Bubbling Well Elementary - Paving

---- Receptor #1 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	80	0
Paver	No	50		77.2	80	0
Paver	No	50		77.2	80	0
Paver	No	50		77.2	80	0
Roller	No	20		80	80	0
Roller	No	20		80	80	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	85.5	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	76.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.5	82.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Roller	No	20		80	25	0
Roller	No	20		80	25	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	86	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	86	79	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	86	87.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding

Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Paver	No	50		77.2	25	0
Roller	No	20		80	25	0
Roller	No	20		80	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	87.7	83.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	92.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 4/14/2025
Case Desc Bubbling Well Elementary - Architectural Coating

---- Receptor #1 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	80	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	73.6	69.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	73.6	69.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Residentia	Residentia	80	80	80

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

APPENDIX H

Construction Vibration Worksheet

Bubbling Wells School Modernization Project Site 1 - 80 feet Construction Vibration Model						
Equipment	**Pieces of Equipment**	**PPV at 25 feet (in/sec)**	**Distance from Equipment**	**PPV at adjusted distance**	**RMS velocity amplitude in in/sec at adjusted distance**	**RMS Vibration level in VdB at adjusted distance**
Caisson drilling	1	0.089	80.0	0.016	0.0	71.8
Jackhammer	1	0.035	80.0	0.006	0.0	63.7
Large bulldozer	1	0.089	80.0	0.016	0.0	71.8
Loaded trucks	1	0.076	80.0	0.013	0.0	70.4
Pile Drive (impact)	1	0.644	80.0	0.113	0.0	89.0
Vibratory Roller	1	0.210	80.0	0.037	0.0	79.2
Small bulldozer	1	0.003	80.0	0.001	0.0	42.3

Notes:
* Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment

Bubbling Wells School Modernization Project
Site 2 - 25 feet
Construction Vibration Model

Equipment	Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance	RMS Vibration level in VdB at adjusted distance
Caisson drilling	1	0.089	25.0	0.089	0.0	86.9
Jackhammer	1	0.035	25.0	0.035	0.0	78.8
Large bulldozer	1	0.089	25.0	0.089	0.0	86.9
Loaded trucks	1	0.076	25.0	0.076	0.0	85.6
Pile Drive (impact)	1	0.644	25.0	0.644	0.2	104.1
Vibratory Roller	1	0.210	25.0	0.210	0.1	94.4
Small bulldozer	1	0.003	25.0	0.003	0.0	57.5

Notes:
* Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment

Bubbling Wells School Modernization Project Site 3 - 25 feet Construction Vibration Model						
Equipment	**Pieces of Equipment**	**PPV at 25 feet (in/sec)**	**Distance from Equipment**	**PPV at adjusted distance**	**RMS velocity amplitude in in/sec at adjusted distance**	**RMS Vibration level in VdB at adjusted distance**
Caisson drilling	1	0.089	25.0	0.089	0.0	86.9
Jackhammer	1	0.035	25.0	0.035	0.0	78.8
Large bulldozer	1	0.089	25.0	0.089	0.0	86.9
Loaded trucks	1	0.076	25.0	0.076	0.0	85.6
Pile Drive (impact)	1	0.644	25.0	0.644	0.2	104.1
Vibratory Roller	1	0.210	25.0	0.210	0.1	94.4
Small bulldozer	1	0.003	25.0	0.003	0.0	57.5

Notes:
* Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment

APPENDIX I

AB 52 Notification Letters

August 21, 2025

Ms. Lucy Padilla
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA 92264-5970

SUBJECT: Bubbling Wells Elementary School Modernization Project

The Palm Springs Unified School District (PSUSD/District) is the Lead Agency as defined by the California Environmental Quality Act for the Bubbling Wells Elementary School Modernization Project (Project). PSUSD conducted preliminary review of this proposed Project consistent with Section 15060 of the California Environmental Quality Act Guidelines and determined preparation of a Mitigated Negative Declaration (MND) is appropriate.

Bubbling Wells Elementary School, located at 67501 Camino Campanero, is a 17.99-acre campus bounded by Camino Campanero to the north, Bubbling Wells Road the east, and Avenida Florencita to the west; and is bordered by existing single-family residences to the south and east, and vacant, undeveloped land to the north and west. Bubbling Wells Elementary School was originally developed in 1992. The proposed Project includes the phased removal and demolition of existing structures, the construction of permanent replacement classroom facilities, and the modernization of existing buildings. An aerial photograph of the existing campus and the proposed site plan are attached for your information.

The District is providing notification of the opportunity to consult on this proposed Project under AB 52 to ensure that any potential Tribal Cultural Resources (TCRs) defined in PRC Section 21074 (a) (1-2) that may be affected are appropriately addressed. Pursuant to PRC Section 21080.3.1 (b), the Tribe has 30 days from receipt of this letter to request consultation, in writing, with the District on this proposed Project.

Thank you for your participation in the District's review of this proposed Project. Please contact me with any questions regarding this Project.

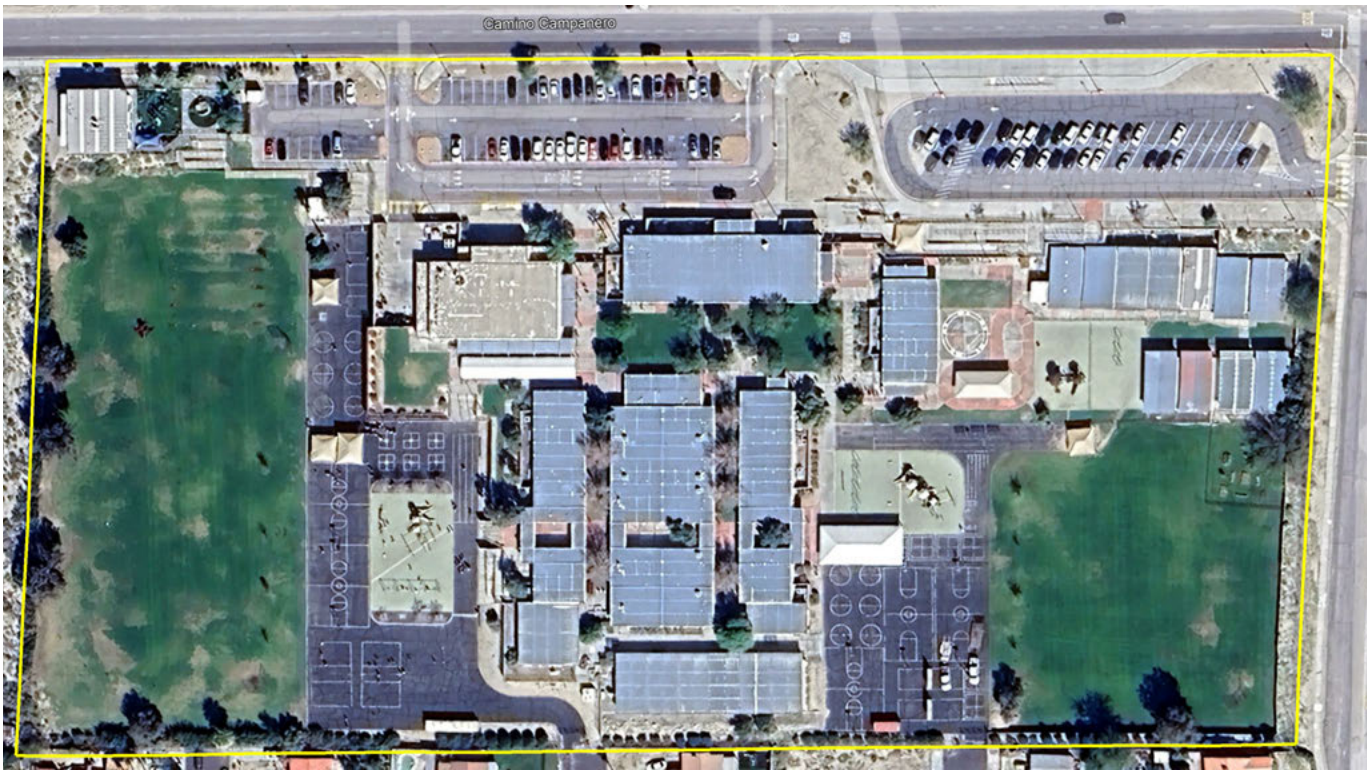
Sincerely,

Julie Arthur
Executive Director of Facilities Planning & Development
Palm Springs Unified School District
jarthur@psusd.us
(760)883-2710

BUBBLING WELLS ELEMENTARY

PALM SPRINGS UNIFIED SCHOOL DISTRICT

Existing Campus



Proposed Site Plan



August 21, 2025

Mr. Thomas Tortez, Jr.
Torres-Martinez Desert Cahuilla Indians
6725 Martinez Road
Thermal, CA 92273

SUBJECT: Bubbling Wells Elementary School Modernization Project

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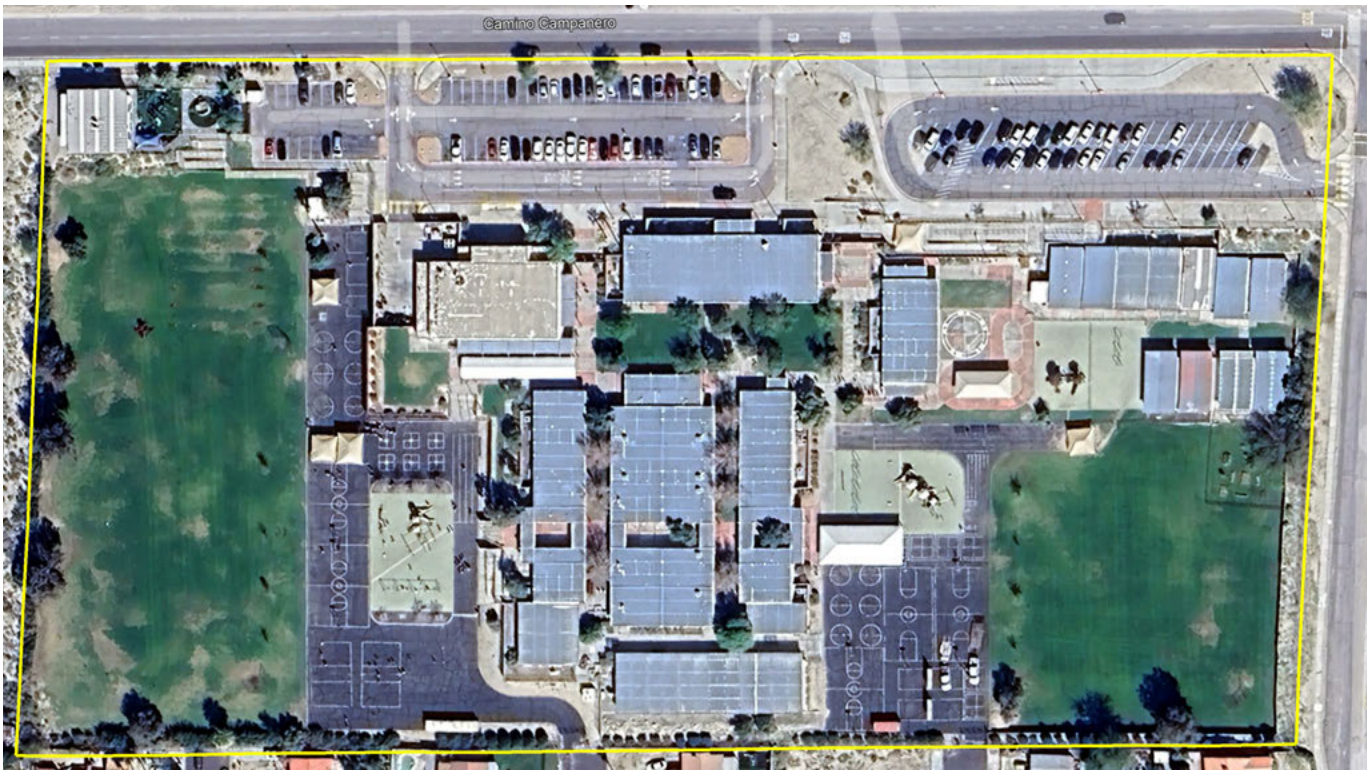
Sincerely,

Julie Arthur
Executive Director of Facilities Planning & Development
Palm Springs Unified School District
jarthur@psusd.us
(760)883-2710

BUBBLING WELLS ELEMENTARY

PALM SPRINGS UNIFIED SCHOOL DISTRICT

Existing Campus



Proposed Site Plan



AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-052-2025-001

September 23, 2025

[VIA EMAIL TO:jarthur@psusd.us]
Palm Springs Unified School District (PSUSD)
Ms. Julie Arthur
980 E Tahquitz Canyon Way, Suite 202
Rancho Mirage, CA 92262

Re: Bubbling Wells Elementary School Modernization

Dear Ms. Julie Arthur,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Bubbling Wells Elementary School Modernization project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*Formal government to government consultation under California Assembly Bill No. 52 (AB-52).

*Copies of any cultural resource documentation (report and site records) generated in connection with this project.

*A copy of the records search with associated survey reports and site records from the information center.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760) 883-1134. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Claritsa Duarte

Claritsa Duarte
Cultural Resources Analyst
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS