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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Silver Eagle 18
Construction Start Date	9/5/2023
Operational Year	2025
Lead Agency	City of Sacramento
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	35.4
Location	38.63003023641696, -121.46380269081672
County	Sacramento
City	Sacramento
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	523
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.12

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

Single Family Housing	18.0	Dwelling Unit	2.23	35,100	35,100	—	50.0	—
Other Asphalt Surfaces	15.3	1000sqft	0.35	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.	1.62	33.5	11.4	12.4	0.02	0.46	0.15	0.54	0.42	0.04	0.44	—	2,333	2,333	0.10	0.03	0.71	2,344
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.01	2.02	31.3	21.4	0.10	0.95	8.86	9.81	0.88	3.89	4.77	—	9,146	9,146	0.75	1.07	0.36	9,483
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	1.56	5.41	5.91	0.01	0.22	0.17	0.27	0.20	0.07	0.21	—	1,108	1,108	0.05	0.02	0.13	1,113
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.28	0.99	1.08	< 0.005	0.04	0.03	0.05	0.04	0.01	0.04	—	183	183	0.01	< 0.005	0.02	184
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	—	85.0	—	—	—	—	80.0	—	—	82.0	—	—	—	—	—	—	—
Unmit.	—	—	No	—	—	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	85.0	—	—	—	—	80.0	—	—	82.0	—	—	—	—	—	—	—
Unmit.	—	—	No	—	—	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	14.6	—	—	15.0	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.62	33.5	11.4	12.4	0.02	0.46	0.15	0.54	0.42	0.04	0.44	—	2,333	2,333	0.10	0.03	0.71	2,344
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	3.01	2.02	31.3	21.4	0.10	0.95	8.86	9.81	0.88	3.89	4.77	—	9,146	9,146	0.75	1.07	0.36	9,483
2024	1.61	1.34	11.4	12.3	0.02	0.46	0.08	0.54	0.42	0.02	0.44	—	2,324	2,324	0.10	0.03	0.01	2,335
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.31	0.25	2.37	2.27	0.01	0.09	0.17	0.27	0.09	0.07	0.16	—	515	515	0.03	0.02	0.13	522
2024	0.77	1.56	5.41	5.91	0.01	0.22	0.04	0.26	0.20	0.01	0.21	—	1,108	1,108	0.05	0.01	0.10	1,113

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.06	0.05	0.43	0.41	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	—	85.3	85.3	< 0.005	< 0.005	0.02	86.5
2024	0.14	0.28	0.99	1.08	< 0.005	0.04	0.01	0.05	0.04	< 0.005	0.04	—	183	183	0.01	< 0.005	0.02	184

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.	0.95	1.72	0.71	7.74	0.01	0.01	0.45	0.46	0.01	0.08	0.09	7.69	1,611	1,618	0.71	0.06	5.64	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.77	1.54	0.82	5.73	0.01	0.01	0.45	0.46	0.01	0.08	0.09	7.69	1,484	1,491	0.72	0.07	0.39	1,530
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.82	1.59	0.76	6.20	0.01	0.01	0.44	0.45	0.01	0.08	0.09	7.69	1,481	1,489	0.71	0.07	2.53	1,529
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15	0.29	0.14	1.13	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.02	1.27	245	247	0.12	0.01	0.42	253
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	65.0	65.0	—	—	—	—	80.0	—	—	82.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	65.0	65.0	—	—	—	—	80.0	—	—	82.0	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	14.6	—	—	15.0	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	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	0.85	0.79	0.70	6.72	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,440	1,440	0.06	0.06	5.39	1,465
Area	0.10	0.94	0.01	1.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.73	2.73	< 0.005	< 0.005	—	2.74
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	165	165	0.01	< 0.005	—	165
Water	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Waste	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.95	1.72	0.71	7.74	0.01	0.01	0.45	0.46	0.01	0.08	0.09	7.69	1,611	1,618	0.71	0.06	5.64	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.77	0.70	0.82	5.73	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,316	1,316	0.07	0.07	0.14	1,338
Area	0.00	0.84	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	165	165	0.01	< 0.005	—	165
Water	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Waste	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.77	1.54	0.82	5.73	0.01	0.01	0.45	0.46	0.01	0.08	0.09	7.69	1,484	1,491	0.72	0.07	0.39	1,530
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.69	0.75	5.50	0.01	0.01	0.44	0.45	0.01	0.08	0.09	—	1,312	1,312	0.07	0.06	2.28	1,334
Area	0.07	0.91	0.01	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.87	1.87	< 0.005	< 0.005	—	1.88
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	165	165	0.01	< 0.005	—	165
Water	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Waste	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	0.82	1.59	0.76	6.20	0.01	0.01	0.44	0.45	0.01	0.08	0.09	7.69	1,481	1,489	0.71	0.07	2.53	1,529
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.13	0.14	1.00	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.02	—	217	217	0.01	0.01	0.38	221
Area	0.01	0.17	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	27.3	27.3	< 0.005	< 0.005	—	27.3
Water	—	—	—	—	—	—	—	—	—	—	—	0.22	0.46	0.68	< 0.005	< 0.005	—	0.85
Waste	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.10	0.00	—	3.67
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Total	0.15	0.29	0.14	1.13	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.02	1.27	245	247	0.12	0.01	0.42	253

3. Construction Emissions Details

3.1. Site Preparation (2023) - 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	1.63	1.37	13.7	11.6	0.03	0.60	—	0.60	0.55	—	0.55	—	2,716	2,716	0.11	0.02	—	2,725
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
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	0.11	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.3	22.3	< 0.005	< 0.005	—	22.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.70	3.70	< 0.005	< 0.005	—	3.71
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	78.5	78.5	< 0.005	< 0.005	0.01	79.4
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
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	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.67
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	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
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

3.3. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.12	1.78	17.5	16.3	0.02	0.83	—	0.83	0.77	—	0.77	—	2,453	2,453	0.10	0.02	—	2,462

Dust From Material Movement	—	—	—	—	—	—	7.14	7.14	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.3	40.3	< 0.005	< 0.005	—	40.5
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	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	0.01	0.01	0.05	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.51	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.01	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	0.85	0.20	13.7	4.64	0.08	0.11	1.62	1.74	0.11	0.43	0.55	—	6,588	6,588	0.65	1.04	0.35	6,915

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
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	0.22	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	0.01	0.02	0.10	114
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
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	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.02	18.8

3.5. Building Construction (2023) - 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	1.66	1.38	11.7	12.0	0.02	0.50	—	0.50	0.46	—	0.46	—	2,201	2,201	0.09	0.02	—	2,209
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	0.24	0.20	1.72	1.77	< 0.005	0.07	—	0.07	0.07	—	0.07	—	323	323	0.01	< 0.005	—	324
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	0.04	0.31	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	53.5	53.5	< 0.005	< 0.005	—	53.7
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	0.03	0.03	0.03	0.33	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.8	67.8	< 0.005	< 0.005	0.01	68.6
Vendor	0.01	< 0.005	0.12	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	57.7	57.7	< 0.005	0.01	< 0.005	60.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.02	10.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.47	8.47	< 0.005	< 0.005	0.01	8.87
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	—	1.69	1.69	< 0.005	< 0.005	< 0.005	1.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.40	1.40	< 0.005	< 0.005	< 0.005	1.47
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 (2024) - 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	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
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	1.58	1.32	11.2	11.9	0.02	0.46	—	0.46	0.42	—	0.42	—	2,201	2,201	0.09	0.02	—	2,209
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	0.72	0.60	5.14	5.47	0.01	0.21	—	0.21	0.19	—	0.19	—	1,008	1,008	0.04	0.01	—	1,011
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	0.13	0.11	0.94	1.00	< 0.005	0.04	—	0.04	0.04	—	0.04	—	167	167	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	0.02	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	75.0	75.0	< 0.005	< 0.005	0.31	76.2
Vendor	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.15	59.5
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	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.6	66.6	< 0.005	< 0.005	0.01	67.4
Vendor	0.01	< 0.005	0.12	0.04	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	56.7	56.7	< 0.005	0.01	< 0.005	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.3	31.3	< 0.005	< 0.005	0.06	31.7
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.03	27.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.18	5.18	< 0.005	< 0.005	0.01	5.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.30	4.30	< 0.005	< 0.005	< 0.005	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2024) - 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	0.89	0.75	6.44	8.26	0.01	0.31	—	0.31	0.29	—	0.29	—	1,244	1,244	0.05	0.01	—	1,248
Paving	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.1	34.1	< 0.005	< 0.005	—	34.2
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64	5.64	< 0.005	< 0.005	—	5.66
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.97	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	174	174	0.01	0.01	0.71	176
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.33	4.33	< 0.005	< 0.005	0.01	4.40
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	—	0.72	0.72	< 0.005	< 0.005	< 0.005	0.73
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 (2024) - 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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	33.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	< 0.005	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.0	15.0	< 0.005	< 0.005	0.06	15.2
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	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	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.85	0.79	0.70	6.72	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,440	1,440	0.06	0.06	5.39	1,465
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.85	0.79	0.70	6.72	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,440	1,440	0.06	0.06	5.39	1,465
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.77	0.70	0.82	5.73	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,316	1,316	0.07	0.07	0.14	1,338
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.77	0.70	0.82	5.73	0.01	0.01	0.45	0.46	0.01	0.08	0.09	—	1,316	1,316	0.07	0.07	0.14	1,338
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.14	0.13	0.14	1.00	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.02	—	217	217	0.01	0.01	0.38	221
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	0.14	0.13	0.14	1.00	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.02	—	217	217	0.01	0.01	0.38	221

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.01	< 0.005	—	165
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.01	< 0.005	—	165
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.01	< 0.005	—	165
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	165	165	0.01	< 0.005	—	165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	27.3	27.3	< 0.005	< 0.005	—	27.3

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	0.01	1.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.73	2.73	< 0.005	< 0.005	—	2.74
Total	0.10	0.94	0.01	1.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.73	2.73	< 0.005	< 0.005	—	2.74
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.84	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.31
Total	0.01	0.17	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.31	0.31	< 0.005	< 0.005	—	0.31

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.36	2.75	4.11	< 0.005	< 0.005	—	5.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.22	0.46	0.68	< 0.005	< 0.005	—	0.85
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.22	0.46	0.68	< 0.005	< 0.005	—	0.85

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	6.34	0.00	6.34	0.63	0.00	—	22.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.10	0.00	—	3.67
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.10	0.00	—	3.67

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.25	0.25
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Site Preparation	Site Preparation	10/4/2023	10/8/2023	5.00	3.00	—
Grading	Grading	10/9/2023	10/17/2023	5.00	6.00	—
Building Construction	Building Construction	10/18/2023	8/21/2024	5.00	220	—
Paving	Paving	8/22/2024	9/5/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	9/6/2024	9/20/2024	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Backh	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	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	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT

Grading	Hauling	85.5	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	6.48	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	1.92	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1.30	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	71,078	23,693	0.00	0.00	921

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	4.50	0.00	—
Grading	—	4,100	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.55

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.20	0%
Other Asphalt Surfaces	0.35	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	375	0.01	< 0.005
2024	0.00	375	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Single Family Housing	170	172	154	61,279	1,610	1,627	1,458	580,506
Other Asphalt Surfaces	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

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	18
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
71077.5	23,693	0.00	0.00	921

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	160,348	375	0.0129	0.0017	0.00
Other Asphalt Surfaces	0.00	375	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	634,662	599,156
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	11.8	—
Other Asphalt Surfaces	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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.4	annual days of extreme heat
Extreme Precipitation	5.75	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

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

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	53.7
AQ-PM	35.7
AQ-DPM	40.6
Drinking Water	16.8
Lead Risk Housing	58.9
Pesticides	0.24
Toxic Releases	24.0
Traffic	83.7
Effect Indicators	—
CleanUp Sites	46.6
Groundwater	47.4

Haz Waste Facilities/Generators	83.4
Impaired Water Bodies	72.2
Solid Waste	35.7
Sensitive Population	—
Asthma	96.8
Cardio-vascular	97.0
Low Birth Weights	83.5
Socioeconomic Factor Indicators	—
Education	82.5
Housing	79.1
Linguistic	55.1
Poverty	90.1
Unemployment	65.6

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	5.607596561
Employed	5.41511613
Median HI	9.200564609
Education	—
Bachelor's or higher	7.635057103
High school enrollment	18.45245733
Preschool enrollment	36.99473887
Transportation	—
Auto Access	21.12151931

Active commuting	62.73578853
Social	—
2-parent households	11.06120878
Voting	15.7577313
Neighborhood	—
Alcohol availability	97.0101373
Park access	57.38483254
Retail density	36.09649686
Supermarket access	26.5622995
Tree canopy	80.00769922
Housing	—
Homeownership	38.44475812
Housing habitability	15.42409855
Low-inc homeowner severe housing cost burden	6.249197998
Low-inc renter severe housing cost burden	10.30411908
Uncrowded housing	19.18388297
Health Outcomes	—
Insured adults	24.03438984
Arthritis	24.0
Asthma ER Admissions	7.0
High Blood Pressure	9.4
Cancer (excluding skin)	77.2
Asthma	2.1
Coronary Heart Disease	21.3
Chronic Obstructive Pulmonary Disease	3.6
Diagnosed Diabetes	10.1
Life Expectancy at Birth	5.4

Cognitively Disabled	36.6
Physically Disabled	22.7
Heart Attack ER Admissions	2.3
Mental Health Not Good	4.8
Chronic Kidney Disease	14.8
Obesity	10.9
Pedestrian Injuries	85.0
Physical Health Not Good	7.5
Stroke	5.6
Health Risk Behaviors	—
Binge Drinking	92.7
Current Smoker	0.9
No Leisure Time for Physical Activity	7.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	12.4
Elderly	85.6
English Speaking	27.7
Foreign-born	67.9
Outdoor Workers	10.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	74.2
Traffic Density	81.8
Traffic Access	23.0
Other Indices	—
Hardship	89.7

Other Decision Support	—
2016 Voting	3.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	85.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Studio 81 International, Architectural Site Plan, March 22, 2023.
Construction: Construction Phases	no demolition
Operations: Energy Use	no natural gas

Appendix B – Biological Resources Assessment
(38 pages)

Date: June 19, 2022

To: Mark DiMercurio
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From: Becky Rozumowicz-Kodsuntie
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Subject: Biological Resource Technical Memorandum for Sliver Eagle Road, Sacramento, California

This biological resource technical memorandum describes environmental conditions and biological resources at the Silver Eagle Road Project (Project).

1.0 PROJECT LOCATION AND DESCRIPTION

The Project is located on Assessor's Parcel Numbers 250-0172-005, -006, and -007 in Sacramento, Sacramento County, California approximately 1.20 miles south of Interstate 80 (I-80) (Figure 1). The Project site is found on the U.S. Geological Survey (USGS) topographic map, Rio Linda quadrangle, Section 17, Township 9 North, Range 5 East (Figure 2). The northeast corner is located at latitude 38.630175, longitude -121.464972 and the southwest corner is located at latitude 38.628734, longitude -121.465915. The Project is in an urban area, surrounded on the south and east by single-family homes and undeveloped lots to the north and west (Figure 3).

The Project proposes to subdivide three parcels totaling 3.30 acres into 23 parcels including two lots for the existing residential homes, one lot for a new private drive, and 20 lots for new single-unit dwellings ranging from approximately 1,342 square feet to 2,198 square feet, with optional accessory dwelling units on 12 of the lots (Figure 4). These parcels are located within the Single-Family Residential zone of the City of Sacramento.

2.0 STUDY OBJECTIVE

The primary objective of this study is to assess the biological resources and resource value of the Project site, determine the presence or presumed absence of sensitive biological resources (i.e., special-status species and sensitive plant communities or habitats occurring at the Project site, assess potential Project impacts, and recommend mitigation strategies for potential impacts from the proposed Project.

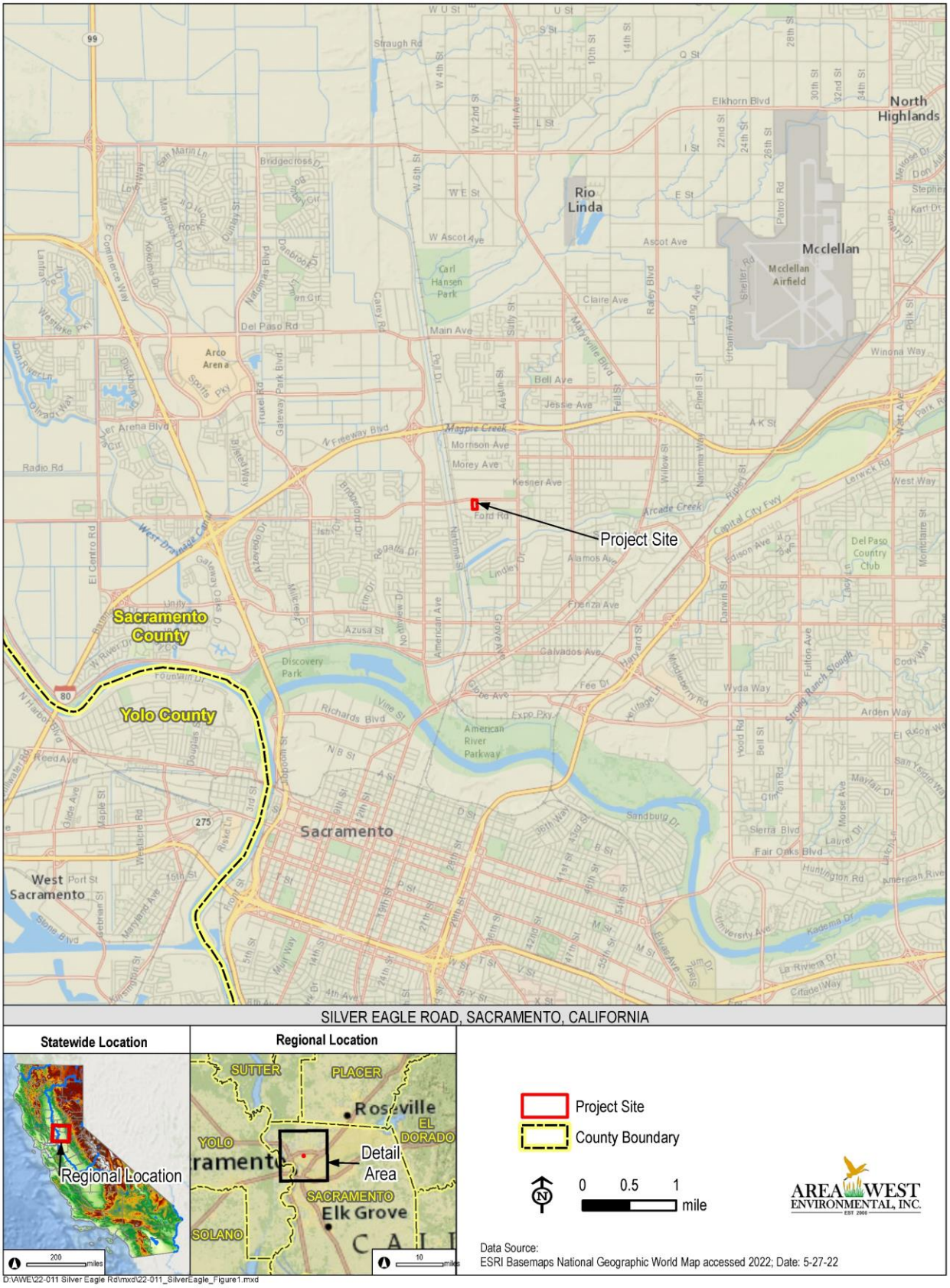


Figure 1. Project Vicinity

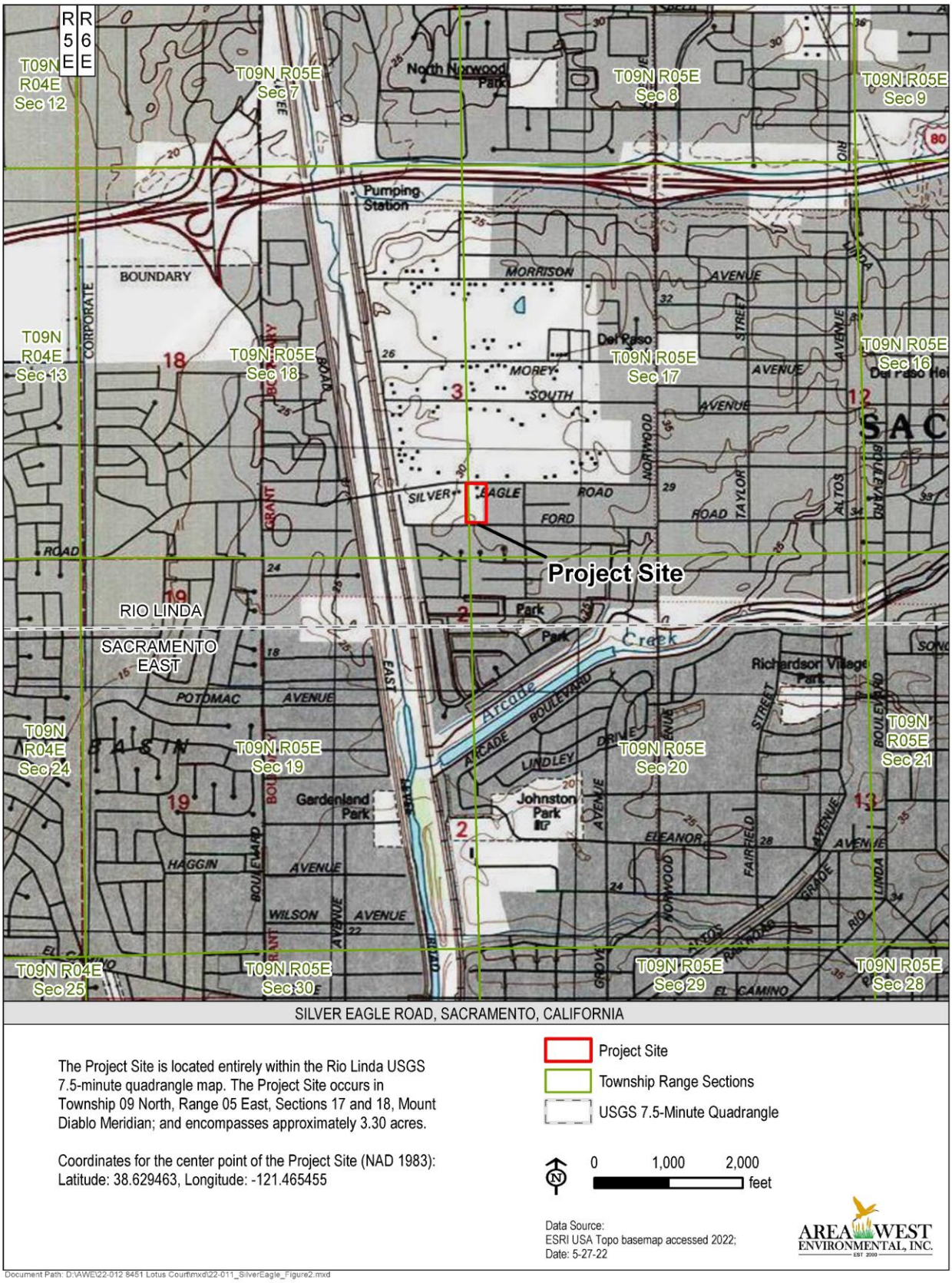


Figure 2. Project Location



Figure 3. Aerial Photograph of Project



PRELIMINARY ARCHITECTURAL SITE PLAN (20 - UNITS)

SCALE: 1" = 20'

*MAP IS PRELIMINARY . CIVIL ENGINEER TO PREPARE TENTATIVE MAP AND IMPROVEMENT PLANS AS REQUIRED.

Figure 4. Development Plan

3.0 REGULATORY SETTING

3.1 Clean Water Act Sections 401, 402, and 404

Section 404 of the Clean Water Act (CWA) protects waters of the U.S., including wetlands and drainages, by requiring projects that would discharge dredge or fill material into them to obtain a permit or authorization from the U.S. Army Corps of Engineers (Corps). The permitting program is designed to minimize the fill of waters of the U.S. and when impacts cannot be avoided, require compensatory mitigation.

Section 401 of the CWA requires any applicant for a federal license or permit that could result in any discharge into waters of the U.S. (i.e., Corps permit to fill wetlands), to obtain water quality certification from the Regional Water Quality Control Board (RWQCB).

Section 402 of the CWA requires projects that disturb 1 acre or more or are part of a larger project to notify the State Water Resources Control Board (SWRCB) and to prepare a Storm Water Pollution Prevention Plan (SWPPP) that will minimize construction and storm water related impacts to waterways.

3.2 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act extends the RWQCB jurisdiction over waters of the State, which defines waters of the State as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code Section 13050[e]). In the absence of CWA Section 404 jurisdiction over isolated waters or other waters of the State, California retains authority to regulate discharges of wastes into any waters of the State.

3.3 California Department of Fish and Game Code Sections 1600-1610

Under California Fish and Game Code (CFGC) Sections 1600–1610 CDFW may enter into a Streambed Alteration Agreement (SAA) with an applicant if a project would divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake.

3.4 Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3513

The federal Migratory Bird Treaty Act (MBTA) (16 United State Code [USC], Sec. 703, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. The MBTA is administered by the U.S. Fish and Wildlife Service (USFWS) and special permits from the agency are generally required for the take of any migratory birds. This act applies to all persons and agencies in the U.S., including federal agencies. Under CFGC, eggs and nests of all birds are protected from take under CFGC Section 3503. Raptors and raptor nests or eggs are protected from take under CFGC Section 3503.5. Migratory birds are expressly prohibited from take under CFGC Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGC Sections 3511, 4700, 5050, and 5515.

3.5 State Endangered Species Acts

The CDFW is the state agency responsible for the protection of endangered and threatened plants, fish, and wildlife and for the regulation of activities that could affect those species. The regulatory vehicle that protects sensitive species administered by this agency is the California Endangered Species Act.

3.6 Sensitive Natural Communities

Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by CDFW. Natural Communities are evaluated using NatureServe's Heritage Methodology, the same system used to assign global and state rarity ranks for plant and animal species in the California Natural Diversity Database (CNDDB). Threat scope (typically assessed within a 20-year timeframe for vegetation) and severity are used to calculate an overall threat score, which is added to the overall rarity score for a single rank of 1 through 5. Evaluation is done at both the Global (full natural range within and outside of California) and State (within California) levels resulting in a single G (global) and S (state) rank ranging from 1 (very rare and threatened) to 5 (demonstrably secure). CNDDB vegetation alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. (CDFW 2022b)

Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or USFWS must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act.

3.7 Special-status Species

For the purpose of this technical memorandum, special-status species are generally defined as follows:

- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380).
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (Lists 1B and 2B [CNPS 2022).
- Plants listed or proposed for listing by the State of California as threatened or endangered under California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5).
- Plants listed under the California Native Plant Protection Act (CFGC 1900 et seq.).
- Wildlife species that are listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (ESA).
- Wildlife species that are listed or proposed for listing under CESA (CFGC 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.).
- Wildlife species that are designated as Species of Special Concern by California Department of Fish and Wildlife (CDFW).
- Wildlife species that are designated as Fully Protected by CDFW (CFGC, Sections 3511, 4700, 5050, and 5515).
- Wildlife species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380).

3.8 City of Sacramento

The City of Sacramento's 2035 General Plan was written to serve as a guide for future development and growth in the City of Sacramento. Included in the General Plan is guidance pertaining to environmental resources. The City also prepared the 2035 General Plan Master Environmental Impact Report (EIR) (City of Sacramento 2014). Biological policies included in the 2035 General Plan EIR applicable to the Project are provided below.

Policy ER 2.1.1: Resource Preservation. The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character. Policy ER 2.1.4: Retain Habitat Areas. The City shall retain plant and wildlife habitat areas where there are known sensitive resources (e.g., sensitive habitats, special-status, threatened, endangered, candidate species, and species of concern). Particular

attention shall be focused on retaining habitat areas that are contiguous with other existing natural areas and/or wildlife movement corridors.

Policy ER 2.1.7: Annual Grasslands. The City shall preserve and protect native grasslands and vernal pools that provide habitat for rare and endangered species. If not feasible, the mitigation of all adverse impacts on annual grasslands shall comply with State and Federal regulations protecting foraging habitat for those species known to utilize this habitat.

Policy ER 2.1.10: Habitat Assessments and Impact Compensation. The City shall consider the potential impact on sensitive plants and wildlife for each project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the project site. Survey Reports shall be prepared and submitted to the City and the CDFW or the USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

3.9 City of Sacramento Protection of Trees Ordinance

City of Sacramento Municipal Code 12.56 protects trees on public property, maintenance easements, or city streets from injury or destruction (Sacramento City Code 12.56, 2016). According to the City's ordinance, a permit is required to perform regulated work on "City Trees" or "Private Protected Trees" (which includes trees formerly referred to as "Heritage Trees"). City trees are characterized as trees partially or completely located in a City park, on City owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley". Private protected trees are:

- A tree that is designated by city council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
- Any native Valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*), or California sycamore (*Platanus racemosa*), that has a DBH (diameter at breast height) of 12 inches or more, and is located on private property;
- A tree that has a DBH of 24 inches or more located on private property that:

A. is an undeveloped lot; or

B. does not include any single unit or duplex dwellings; or

- A tree that has a DBH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

4.0 METHODS

This section describes the methods used in the preparation of this technical memorandum and includes a list of resources reviewed, field survey dates and personnel, and problems and limitations encountered during the study that may influence the conclusions reached in this technical memorandum.

4.1 Project Site

The limits of the Project site are the Project site boundary as shown on Figure 3. The biological study area (BSA) is the Project site plus a 250-foot buffer to account for indirect impacts to potential adjacent biological resources. The boundary of the BSA is also shown on Figure 3. The Project site is approximately 3.30 acres and the BSA is approximately 16.98 acres

4.2 Pre-field Survey Investigation

Prior to conducting field surveys, available information regarding biological resources with potential to occur within the Project site was gathered and reviewed, including information on special-status plant and wildlife species with potential to occur on the site. Several data sources were reviewed, including:

- general topography obtained from the Rio Linda USGS 7.5-minute topographic quadrangle map (Figure 2);
- a records search of the CNDDB for the Project site and surrounding 1-mile buffer (CNDDB 2022) (Appendix A);
- a search of the CNPS Inventory of Rare and Endangered Plants Database for the Rio Linda USGS quadrangle (CNPS 2022) (Appendix A); and
- a species list from the USFWS Information for Planning and Consultation (IPaC) tool for the Project site (USFWS 2022) (Appendix A).

A list of special-status plant and wildlife species known from the vicinity of the Project area was developed based on the review of existing information. This list was used to focus the site investigation on the special-status species and associated habitats with potential to be present at the Project site and are described below.

To assess the site for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2022a). Additionally, aerial imagery from Google Earth dated May 14, 2021 was reviewed for the local area to assess if local core habitat areas were present within, or connected to the BSA. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife

movement, as well as on-site and off-site barriers to connectivity. The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species (such as for monarch butterfly).

4.3 Field Surveys

A biological survey (field survey) was conducted on May 30, 2022, by Area West Environmental, Inc. biologists Samantha Morford and Mikhela Aiken. Appendix B provides representative photographs of the Project site taken during the survey.

Field surveys focused on:

- describing and mapping vegetation communities (common and sensitive);
- identifying special-status and common plant and wildlife species' occurrences; and
- conducting an assessment of vegetation community suitability to support special-status species.

The specific methods employed for each of these elements is described below.

Vegetation Community and Tree Mapping

Community types were delineated on a 1 inch = 150 feet aerial photograph (Figure 3). Biologists walked meandering transects throughout the entire Project site and delineated all community types, including aquatic resources. All vegetation communities were noted, mapped, and evaluated. Upland community types were based on observed dominant vegetation composition and density, in contrast to wetland community types which were based primarily on hydrology and soils, correlated to observed dominant vegetation composition and density. Upland habitat types were classified using the CNPS A Manual of California Vegetation, online edition (CNPS 2022). Tree locations were collected with a GPS and the diameter at breast height (dbh) and species was noted.

Special-status Species Surveys and Assessment

The field survey of the Project site was conducted to assess habitat quality for special-status plant and wildlife species identified during the pre-survey investigation (Appendix A).

No protocol-level plant or wildlife surveys have been conducted within the Project area to date. A list of all plant and wildlife species observed during the May 30, 2022, field survey is included in Appendix C.

5.0 RESULTS

The following sections provide a summary of the field survey results.

5.1 Environmental Setting

The Project is located in the City of Sacramento on the fringe of an urban residential neighborhood between Silver Eagle Road and Ford Road. Elevation within the Project area is approximately 34 feet above mean sea level (amsl) (Figure 2).

The Project site consists of non-native grassland habitat with two existing residential properties occurring on the northeastern portion of the site. The majority of the Project site had been recently altered by disking. The vacant lot to the north and west of the Project site also consists of non-native grassland. Residential neighborhoods surround the Project area on the southern and eastern sides. Representative photographs of the Project site are provided in Appendix B.

The BIOS searches for wildlife connectivity resulted in identifying the Project site as a large natural habitat area corridor, however review of aerial imagery identified significant impediments (Appendix D). Google Earth imagery shows significant barriers to wildlife movement from development immediately south, 0.1 mile east, and approximately 0.5 mile north of the Project site. Wildlife may move east ant then follow either north or south along Steelhead Creek.

5.2 Vegetation Communities

Field surveys identified the following generalized vegetation communities are present at the Project site (Figure 5):

- Urban
- Wild oats and annual brome grassland

Acreages of each community within the Project site and within the BSA are provided in Table 1. No sensitive natural communities were identified within the Project site.

Table 1. Vegetation Communities in the Project Site and BSA

Vegetation Community	Acreage within the Project site	Acreage within the BSA
Urban	0.63	9.54
Wild oats and annual brome grassland	2.67	7.44

Urban

Urban portions of the Project site included the existing residential properties and their associated landscaping and driveways in the northeastern section of the Project site.

Wild Oats and Annual Brome Grassland

The wild oats and annual brome grasslands community occurs throughout the entire Project site and is the dominant habitat. The majority of this habitat consists of non-native herbaceous species and is characterized by a Semi-natural Alliance between *Avena* spp. and *Bromus* spp.

Within the Project site, this vegetation community was disturbed from the recent disking and the dumping of trash within the Project site. The plant species were difficult to identify as a result of the disking. Identifiable grass species included slender oat, perennial ryegrass (*Festuca perennis*), ripgut grass. Additional herbaceous species included stork's bill (*Erodium botrys*), field bindweed (*Convolvulus arvensis*), field mustard (*Brassica rapa*), dock (*Rumex* sp.), and yellow star thistle (*Centaurea solstitialis*). Four tree species were present within the Project site boundary; these were valley oak, black walnut (*Juglans hindsii*), almond (*Prunus dulcis*), and Chinese tallow (*Triadica sebifera*).

5.3 Trees

Four tree species were present within the Project site boundary; valley oak, black walnut, almond, and Chinese tallow (Table 2and Figure 5). Of the 11 trees at the Project site, 5 native valley oak trees and one non-native almond tree would qualify for protection under the City of Sacramento Tree Preservation Ordinance as private protected trees.

Table 2. Trees Identified at the Project Site

Tree #	Species	Common Name	DBH*	Protected? (Yes/No)
1	*Quercus lobata*	Valley oak	9.6	No
2	*Triadica sebifera*	Chinese tallow	4	No
3	*Quercus lobata*	Valley oak	20, 20	Yes
4	*Quercus lobata*	Valley oak	22, 18, 18, 4	Yes
5	*Juglans hindsii*	Black walnut	10	No
6	*Quercus lobata*	Valley oak	14, 16, 16	Yes
7	*Quercus lobata*	Valley oak	8, 10, 8	Yes
8	*Prunus dulcis*	Almond	7, 6, 4	No
9	*Prunus dulcis*	Almond	9, 4, 4, 6, 8, 5, 5,	Yes
10	*Prunus dulcis*	Almond	6, 5, 4, 4,	No
11	*Quercus lobata*	Valley oak	12.7	Yes

*The dbh of each trunk is listed in the table above and separated by commas for each multi-trunk tree. The dbh of each trunk on muti-trunk trees was added together to determine if the tree would be considered a protected tree by the City.



Figure 5. Vegetation Communities in BSA

5.4 Special-status Species

A preliminary review of CNPS, CNDDB, and USFWS species lists identified 4 special-status plants and 10 special-status wildlife species with potential to be present within the geographic region (Appendix A). The special-status plant and wildlife with potential to occur onsite are discussed below.

Special-status Plants

Of the four special-status plant species listed in Appendix A, none are not expected to occur in the Project site or have the potential to be affected by the Project because the BSA lacks suitable habitat for the species. The plant species listed in Appendix A all require wetland habitats, which do not exist in the BSA. A list of all plant species encountered during the field surveys is provided in Appendix C.

Special-status Wildlife

Of the seven federally listed wildlife species identified in the USFWS "list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project" letter (Appendix A) and the special-status wildlife species that have been previously been identified within 1 mile of the site by CNDDB (Appendix A), only burrowing owl (*Athene cunicularia*) has a moderate potential to occur at the Project site. The remaining species have a low potential of being present because the BSA lacks suitable habitat for the species. The site supports annual grassland and developed areas. No wetlands, drainages, or host plants for valley elderberry longhorn beetle or Monarch butterfly were observed.

While Swainson's hawk was not listed in the species lists in Appendix A, a specific CNDDB search for Swainson's hawk nests that have been active in the last 5 years within a 10-mile radius was conducted per the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFW 1994). Several occurrences were identified during this search and suitable habitat is present within the BSA and Project site, therefore there is a moderate potential for Swainson's hawk to occur.

Trees in and adjacent to the project site provide potential nesting habitat for migratory birds and raptors and roosting habitat for special-status bats.

Burrowing Owl

Burrowing owl is a CDFW Species of Special Concern. Burrowing owl are small, ground-dwelling owls found throughout most of the western U.S. Burrowing owl occur as a year-round resident and winter visitor in much of California's lowlands, inhabiting open areas with sparse or non-existent tree or shrub canopies. Their territories tend to be very localized, with most owls hunting within

600 meters of their burrows during the breeding season (Shufford et. al. 2008). They forage primarily in grasslands and agricultural fields, where they prey upon large insects, rodents, small birds, reptiles, and frogs at night and sometimes during the day (Shufford et. al. 2008). Typical habitat is annual or perennial grassland, although human-modified areas such as agricultural lands are also used. Burrowing owl use a variety of habitat characterized by low-growing vegetation. This species is dependent on burrowing mammals to provide the burrows that are characteristically used for shelter and nesting, and in northern California, it is typically found in close association with California ground squirrels (*Otospermophilus beecheyi*). Humanmade substrates such as pipes or debris piles may also be occupied in place of burrows

Burrowing owl may utilize a site for breeding, foraging, overwintering, or transient/migration stops; therefore, a site that is utilized by BUOW may only be occupied for a short duration of a year. Burrowing owl are dependent upon burrows created by other animals (burrowing mammals) or suitable surrogate burrows (e.g. rock/concrete piles, culverts). The breeding season in California is March to August, but can begin as early as February and extend into December (Shufford et. al. 2008).

The wild oats and annual brome grasslands community at the Project site provides suitable foraging habitat for burrowing owl. No burrows were observed within the BSA, however, Project site was recently plowed. The grassland within and adjacent to the Project site could provide suitable habitat. Per CNDDB, there is one occurrence within 1 mile, 17 occurrences within 5 miles, and 36 occurrences within 10 miles of the Project site. None of the occurrences identify an active reporting of burrowing owl within last 5 years. There is a moderate potential for burrowing owl to occur within the Project site and the BSA.

Swainson's Hawk

Swainson's hawk is listed as threatened under the CESA. Swainson's hawk was historically adapted to open grasslands and prairies, but it has become increasingly dependent on agriculture as native plant communities have been converted to agricultural lands (CDFG 1993). They require large open areas of suitable foraging habitat with abundant and available prey base in association with suit able nesting habitat (CDFW 2016). Suitable foraging habitats include a variety of agriculture crops, grassland, and pasture. Swainson's hawks nest on a platform of sticks, bark and fresh leaves in a tree, bush or utility pole. Suitable nesting trees range from trees within mature riparian forest or corridors, lone oak trees, oak groves, and mature roadside trees.

This species breeds in the western U.S. and winters in isolated areas of California, Mexico, Central America, through South America (CDFG 1993; Bechard et al. 2010; Kochert et al. 2011). Swainson's hawks typically arrive at their breeding sites between March and April (Bechard et al. 2010). These hawks show a high degree of site fidelity, returning to the same territory year after year (England et al. 1995; Bechard et al. 2010). They begin building nests soon after arriving at breeding sites and begin laying eggs between late-March and early-April (England et al. 1995).

Incubation lasts 34-35 days (Bechard et al. 2010). Young generally fledge about 6 weeks after hatching (CDFW 2016). In the Central Valley most young fledge during the first part of July (CDFW 2016). Migration back to the wintering grounds begins mid-August, and by October most hawks have left California (Kochert et al. 2011).

Suitable Swainson's hawk foraging habitat includes open fields and pastures within an energetically efficient flight distance from active nest sites. The wild oats and annual brome grasslands community at the Project site provides suitable foraging habitat for Swainson's hawk. CDFW considers impacts to foraging habitat greater than five acres within 10 miles of an active nest (used during one or more of the last 5 years).

No nests were observed within the BSA, however, the grassland within and adjacent to the Project site could provide suitable foraging ground and large trees within the BSA could provide suitable nesting habitat. There are three occurrences of active nests in the last 5 years within a 10-mile radius (CNDDB occurrence # 2675, 500, and 2756). There is a moderate potential for Swainson's hawk to occur within the Project site and the BSA.

Other Migratory Birds and Raptors

No nests were observed during onsite surveys. Trees and shrubs within and adjacent to the Project site, however, may provide nesting habitat for migratory birds and raptors.

Bats

Trees in and adjacent to the project site provide roosting habitat for special-status bats and bats protected by California Fish and Game Code Section 4150.

6.0 POTENTIAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

This biological resources assessment has been prepared in support of CEQA, therefore potential adverse impacts on biological resources are evaluated in the context of the State CEQA Guidelines and the City of Sacramento Master Plan EIR.

The project site does not contain riparian habitats or other sensitive natural communities and does not contain federally protected wetlands or other features regulated under Section 404 of the Clean Water Act. The project site does not support any wetlands or waters regulated by other agencies. The project site does not serve as an important migration or movement corridor for any wildlife species. These issues are not addressed further.

The following discussion provides an analysis of potential impacts on sensitive biological resources from development of the Project site and recommended avoidance and minimization measures and/or compensatory mitigation to minimize these potential impacts or reduce them to

less-than significant. For purposes of the impact analysis, it was assumed that all vegetation within the Project site will be removed, and the existing habitat graded. Five of the trees identified within the Project site will require mitigation efforts as they qualify as private protected trees.

6.1 Special-status Wildlife

After completion of the wildlife habitat assessment and review of existing information on special-status wildlife in the Project region, only one special-status wildlife species was determined to have potential to occur at the Project site, Swainson's hawk. In addition, other migratory birds and raptors have potential to occur at the Project site. These are discussed below.

Burrowing Owl

Though no sign of burrowing owls or suitable burrows was found during the site visit, Project implementation may result in the loss of this species through destruction of active nesting sites and/or incidental burial of adults, young, and eggs, should they become established on-site. The grassland within the Project site and immediately adjacent to the Project site provides suitable foraging and nesting habitat for burrowing owl. The noise associated with construction activities involving heavy equipment operation that occur during the breeding season (generally between February 1 and August 31) could disturb any active burrowing owl nests located near these activities. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests located at or near the construction work area would violate CFGC Sections 3503 or 3503.5 and the MBTA.

Potential nest abandonment and mortality to burrowing owl individuals would be a significant impact on a special-status species.

Implementation of Mitigation Measure BIO-1 would reduce impacts to nesting burrowing owl to a less-that-significant level.

Mitigation Measures

The following mitigation measures would be implemented prior to and during Project activities to avoid and minimize potential impacts to burrowing owl.

Mitigation Measure BIO-1: Conduct Pre-construction Burrowing Owl Surveys

- If possible, vegetation removal would be implemented outside of the avian breeding season, which generally extends from February through August.
- If vegetation removal must occur during the avian breeding season, a qualified biologist shall conduct focused surveys for burrowing owls on and within 1,650 feet adjacent to the Project site.
- Surveys shall be conducted within 7 days prior to commencement of construction activities including removal of trees and clearing and grubbing and again within 48 hours prior to

the initiation of any Project work during the bird nesting season (between February 1 and August 31), including vegetation removal, equipment staging, and construction.

- For surveys outside the Project site where property access has not been granted, the surveying biologist shall use binoculars to scan any suitable habitat for burrowing owls or their sign (e.g., pellets, feathers, appropriately sized burrows).
- Surveys shall be conducted in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (Staff Report), published March 7, 2012. Surveys will be done within 14 days prior to construction activities and will be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If no burrowing owls are detected, no further mitigation is required.
- If an active burrow is found during the nonbreeding season, the qualified biologist will consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion and relocation plan will be developed according to guidance provided in Appendix E of CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). Owls will be relocated outside of the impact area using passive or active methods developed in consultation with CDFW and may include active relocation to preserve areas if approved by CDFW and the preserve managers. No burrowing owls will be excluded from occupied burrows until the burrowing owl exclusion and relocation plan is approved by CDFW.
- If an active burrow is found during the breeding season, occupied burrows will not be disturbed and will be provided with a 50 to 500 meter protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The appropriate size of the buffer will depend on the time of year and level of disturbance as outlined in the CDFW Staff Report (2012).
- A report shall be prepared and submitted to the City following the surveys to document the results.
- If a lapse in construction activities for one week or longer occurs during the avian breeding season, another survey shall be performed prior to work re-initiation.

Swainson's Hawk

CDFW considers 5 acres or more of annual grassland as suitable foraging habitat for Swainson's hawk (CDFW 1994). While the Project site is less than 5 acres of wild oats and annual brome grasslands (aka annual grassland), in combination with adjacent open areas, approximately 30 acres of habitat is present in the Project area. The grassland and trees within the Project site and immediately adjacent to the Project site provide suitable foraging and nesting habitat for Swainson's hawk. Removal of the annual grassland and trees could directly affect Swainson's

hawk foraging and/or nesting. The noise associated with construction activities involving heavy equipment operation that occur during the breeding season (generally between February and August) could disturb any active Swainson's hawk nests located near these activities. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests located at or near the construction work area would violate CESA as well as CFGC Sections 3503 or 3503.5 and the MBTA.

Mitigation recommendations are divided between active nests within 1 mile, between 1 and 5 miles, and between 5 and 10 miles of suitable foraging habitat. Project development will impact 2.67 acres of suitable Swainson's hawk foraging habitat. According to CNDDB records, there are no active (within the last five years) Swainson's hawk nests within 1 mile of the Project site, two active nests within 5 miles from the Project site, and three active nests within 10 miles of the Project site, occurring along the Sacramento River, American River bike trail, and within Downtown Sacramento near the intersection of 21st street and Fat Alley. While the removal of 2.67 acres of Swainson's hawk foraging habitat is not a potentially significant impact alone, because it is within a larger foraging complex and could lead to fragmentation of the foraging habitat, it may be cumulatively significant unless mitigation is implemented.

Implementation of Mitigation Measure BIO-2 would reduce impacts to Swainson's hawk nesting and BIO-3 would reduce impacts to foraging habitat to less-that-significant level.

Mitigation Measures

The following mitigation measures would be implemented prior to and during Project activities to avoid and minimize potential impacts to Swainson's hawk.

Mitigation Measure BIO-2: Conduct Preconstruction Swainson's Hawk, and other Nesting Bird and Raptor Surveys

If possible, vegetation removal would be implemented outside of the avian breeding season, which generally extends from February through August. If vegetation removal must occur during the avian breeding season, a qualified biologist shall conduct a preconstruction nesting bird and raptor survey prior to the start of vegetation removal.

- Removal or disturbance of trees shall occur during periods outside the bird nesting season (September 16 to January 31), to the extent feasible. For any construction activities that will occur between February 1 and September 15, the applicant shall obtain a qualified biologist to conduct pre-construction surveys in suitable nesting habitat within 0.25 miles for Swainson's hawk nests, 500 feet of the construction area for other nesting raptors, and 100 feet for migratory birds. Surveys shall be conducted within 7 days prior to commencement of construction activities including removal of trees and clearing and grubbing and again within 48 hours prior to the initiation of any Project work during the bird nesting season (between February 1 and August 31), including vegetation removal, equipment staging, and construction. The survey methods should follow those for

Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000).

- If an active Swainson's hawk nest is identifies, the qualified biologist with coordinate with CDFW.
- For raptor surveys outside the Project Area where property access has not been granted, the surveying biologist shall use binoculars to scan any suitable nesting substrate for potential raptor nests.
- A report shall be prepared and submitted to the City following the preconstruction survey to document the results. If no active nests are found during the pre-construction survey, no additional mitigation measures are required.
- If an active bird or raptor nest is identified within the construction work area or an active raptor nest is identified within the appropriate survey buffers from the construction work area, a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist (coordinating with CDFW, as applicable) and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographic or artificial barriers. In addition to the establishment of buffers, other avoidance measures (determined in coordination with CDFW, as applicable) may include monitoring of the nest during construction and restricting the type of work that can be conducted near the nest site. If no active nests are found during the preconstruction surveys, then no additional mitigation is required.
- Depending on conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the buffer without impacting the breeding effort. In this case (to be determined on an individual basis), the nest(s) shall be monitored by a qualified biologist during construction within the buffer. If, in the professional opinion of the monitor, the project would impact the nest, the biologist shall have the authority to halt construction activities within the buffer until the nest is no longer active or until the biologist has determined that construction activities have been modified to eliminate impacts to the nest. Construction activities may re-commence once the biological monitor determines that the nest is no longer occupied, or the modifications have eliminated impacts. Modifications associated with eliminating impacts to the nest may be removed once the biological monitor determines that the nest is no longer active and the monitor is no longer needed.
- If a lapse in construction activities for one week or longer occurs during the avian breeding season, another pre-construction survey shall be performed prior to work re-initiation.

Mitigation Measure BIO-3: Purchase Swainson's Hawk Foraging Habitat Credits

To compensate for the loss of Swainson's hawk foraging habitat, mitigation credits will be purchased from a bank approved by CDFW prior to the start of construction. For every acre of habitat authorized for disturbance, 0.75 acre of mitigation credits will be purchased (0.75:1 ratio). Proof of purchase will be provided to the City prior to the start of construction.

Other Migratory Birds and Raptors

The grassland and trees within the Project site and immediately adjacent to the Project site provide suitable nesting habitat for a number of migratory birds and raptors. Removal of the annual grassland and trees could directly affect ground and tree nesting bird species. The noise associated with construction activities involving heavy equipment operation that occur during the breeding season (generally between February and August) could disturb nesting migratory birds and raptors if an active nest is located near these activities. Any disturbance that causes migratory bird or raptor nest abandonment and subsequent loss of eggs or developing young at active nests located at or near the construction work area would violate CFGC Sections 3503 or 3503.5 and the MBTA.

Implementation of Mitigation Measure BIO-2 would reduce impacts to nesting migratory birds and raptors to a less-that-significant level (described above).

Bats

Trees in and adjacent to the project site provide roosting habitat for special-status bats and bats protected by California Fish and Game Code Section 4150. Bats may be adversely affected if roosting sites are physically disturbed or are exposed to a substantial increase in noise or human presence during project activities while bats are present. Bat maternity colonies (April 1 to August 31) could be adversely affected if construction activities cause roost site abandonment. This would be a potentially significant impact. Implementation of Mitigation Measure BIO–4 would minimize potential direct and indirect impacts to bat maternal roosts by requiring pre-construction surveys to identify maternity roosting in the trees within and adjacent to the project site. As a result, this impact would be reduced to a less-than-significant level

Mitigation Measure BIO-4: Conduct Preconstruction Bat Survey

Prior to the start of construction a qualified biologist will conduct a pre-construction roost survey. Field surveys shall be conducted early in the breeding season before any construction activities begin, when bats are establishing maternity roosts but before pregnant females give birth (April through early May). If no roosting bats are found, then no further mitigation is required. If a bat maternity roost is found, then disturbance of the roost shall be avoided by establishing a minimum 250-foot avoidance buffer around the roost until it is no longer occupied, as determined by the qualified biologist. The avoidance buffer may be reduced if a qualified biologist monitors the construction activities and determines that the roost is not being disturbed. Reduction of the buffer depends on the species of bat, the location of the roost relative to project activities, activities during the time the roost is active, and other project-specific conditions. No work shall occur in the buffer

until it is determined that the bats have left on their own, or until the end of the maternity season. Alternatively, a qualified bat biologist may exclude the roosting bats in consultation with the CDFW, thereby allowing construction to continue after successful exclusion activities. Removal of a bat roost tree outside of the maternity season shall be conducted in two phases: day 1 will include liming the tree and on day 2 the tree shall be removed.

6.2 Protected Trees

Mature native trees provide habitat and food for numerous bird and wildlife species. Tree species are protected by a local ordinance described under Section 3.3 City of Sacramento Protection of Trees Ordinance. The goal of this ordinances is to encourage conservation practices in the management of native trees and their habitat within the City. When circumstances do not allow for retention of trees, permits are required to remove heritage trees or trees that are within the City's jurisdiction, including City street trees. Removal of, or construction around, trees that are protected by the tree ordinance requires permission and inspection by City arborists.

Implementation of Mitigation Measure BIO-5 and BIO-6 would reduce impacts to protected trees to less-that-significant level.

Mitigation Measures

The following mitigation measures would be implemented prior to and during Project activities to avoid impacts to protected trees (BIO-5) and to compensate for protected trees that are impacted (BIO-6).

Mitigation Measure BIO-5: Fence Protected Trees to be Avoided

Before any ground-disturbing activity occurs within the Project site, including construction staging, the applicant shall implement the following tree protection measures:

- A Tree Protection Zone (TPZ) shall be established around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a certified arborist.

- The TPZ of any protected trees shall be marked with temporary fencing which should remain in place for the duration of construction activities in the area. No ground disturbance or vegetation removal activity shall be allowed until this condition is satisfied. The fencing will be checked regularly and maintained until all work is complete. For construction, any required barrier fencing and a note reflecting this condition shall be shown on the final construction documents.

- Construction-related activities, including grading, trenching, construction, demolition or other work shall be prohibited within the TPZ. No heavy equipment or machinery should be operated within the TPZ. No construction materials, equipment, machinery, or other supplies shall be stored within a TPZ. No wires or signs shall be attached to any tree. Any modifications should be approved and monitored by a certified arborist.

- Trees shall be pruned according to the standards set forth by the American National Standard Institute (ANSI) for Tree Care Operations (Pruning) (ANSI A300).

Mitigation Measure BIO-6: Compensate for Permanent Impacts to Protected Trees

Prior to removal of a protected tree, the applicant shall obtain a City of Sacramento tree removal permit and compensate by paying into the City's tree mitigation fund or plant a minimum of one native tree for each tree removed.

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Appendix A.

Special-status Species Lists

(CNDDB, CNPS, USFW)

CNDDB Species List with Map

Appendix B. Representative Project Photographs



Center of Project site, facing south



Center of Project site, facing northeast



Center of project site, facing northwest



Center of Project site, facing southwest



Southeast corner of Project site, facing northwest



Southeast corner of Valley Oak Woodland area, facing northeast

Appendix C.

Plant and Wildlife Species Observed at the Project Site

Plant Species Observed at the Silver Eagle Site

Scientific Name[1]	Common Name	Family	Nativity	Wetland Indicator Status[2]
Trees				
Juglans hindsii	Northern California black walnut	Juglandaceae	Native	FAC
Prunus dulcis	Domestic almond	Rosaceae	Naturalized	--
Quercus lobata	Valley oak, roble	Fagaceae	Native	FACU
Herbaceous				
Avena barbata	Slender oat	Poaceae	Naturalized	--
Brassica rapa	Field Mustard	Brassicaceae	Naturalized	FACU
Bromus diandrus	Ripgut grass	Poaceae	Naturalized	--
Centaurea solstitialis	Yellow star-thistle	Asteraceae	Naturalized	--
Convolvulus arvensis	Bindweed, orchard morning-glory	Convolvulaceae	Naturalized	--
Erodium botrys	Long-beak Stork's-bill	Geraniaceae	Naturalized	FACU
Festuca perennis	Perennial rye grass, Italian ryegrass	Poaceae	Naturalized	FAC
Rumex sp.	Dock	Polygonaceae	Naturalized	FAC

1 Jepson Flora Project (eds.) 2022, Jepson eFlora, https://ucjeps.berkeley.edu/eflora/, accessed on June 2, 2022.

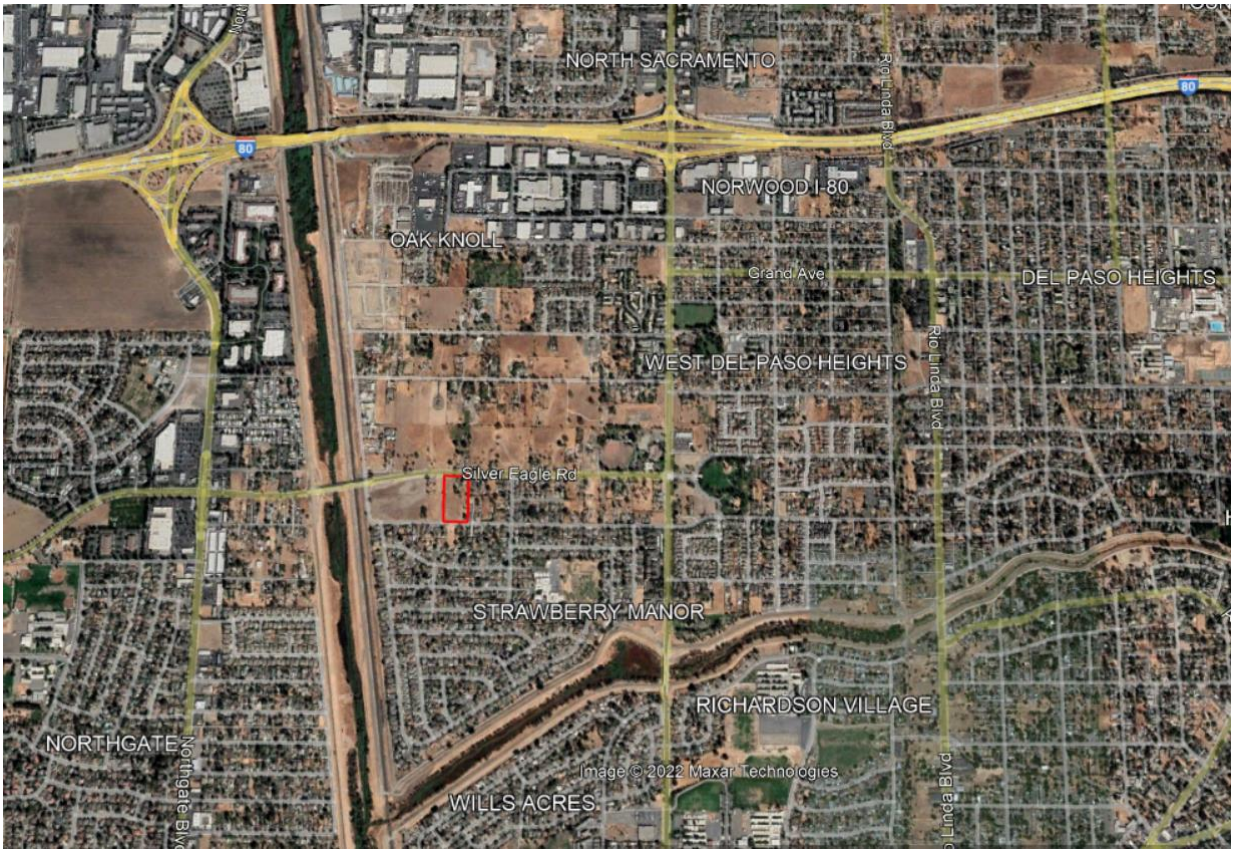
2 U.S. Army Corps of Engineers 2022. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/. Accessed June 2, 2022.
OBL = Obligate wetland
FACW = Facultative wetland
FAC = Facultative
FACU = Facultative upland
UPL = Upland obligate
-- = No indicator status listed on 2022 National Wetland Plant List

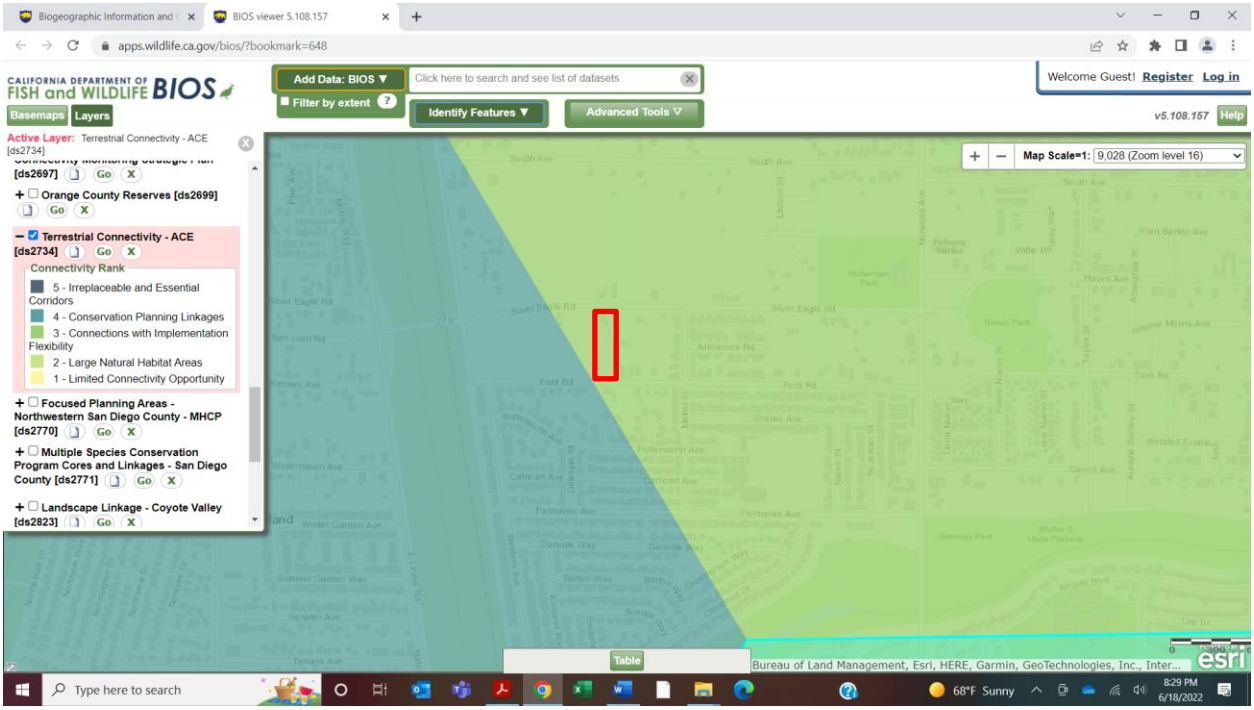
Wildlife Species Observed at the Silver Eagle Site

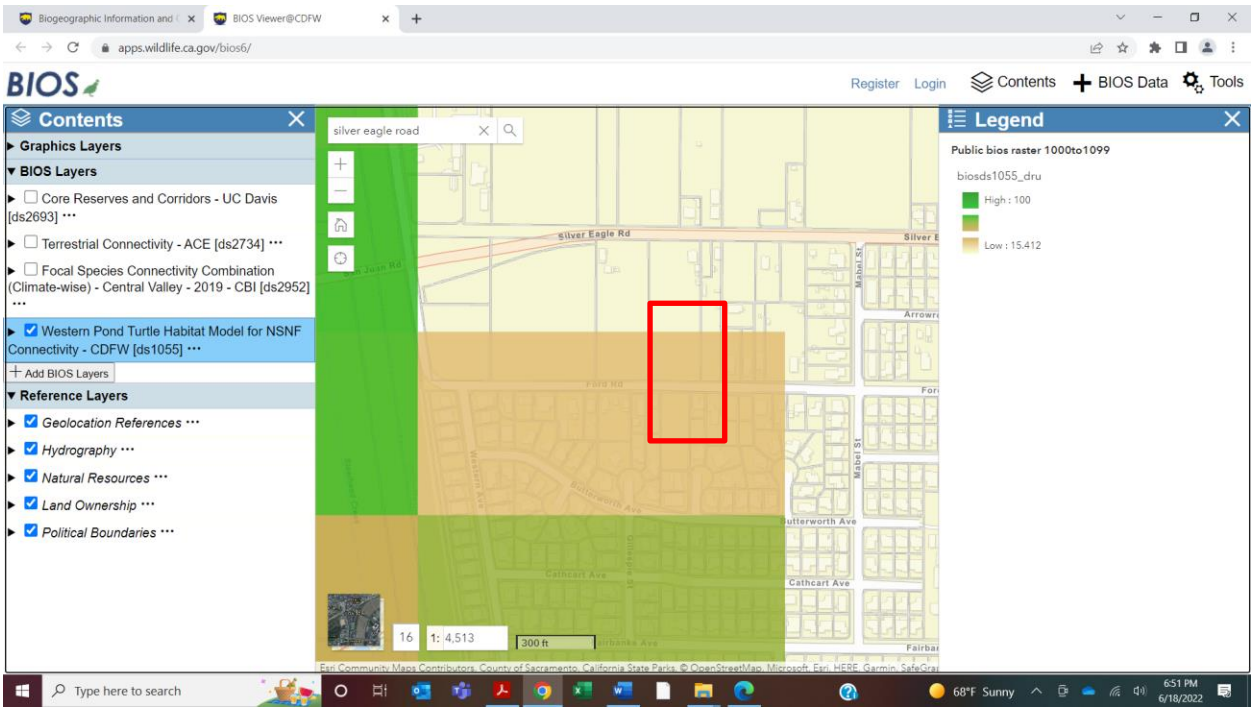
Common Name	Scientific Name
Birds	
House finch	*Haemorhous mexicanus*
Barn swallow	*Hirundo rustica*
Mammals	
Black-tailed jack rabbit	*Lepus californicus*

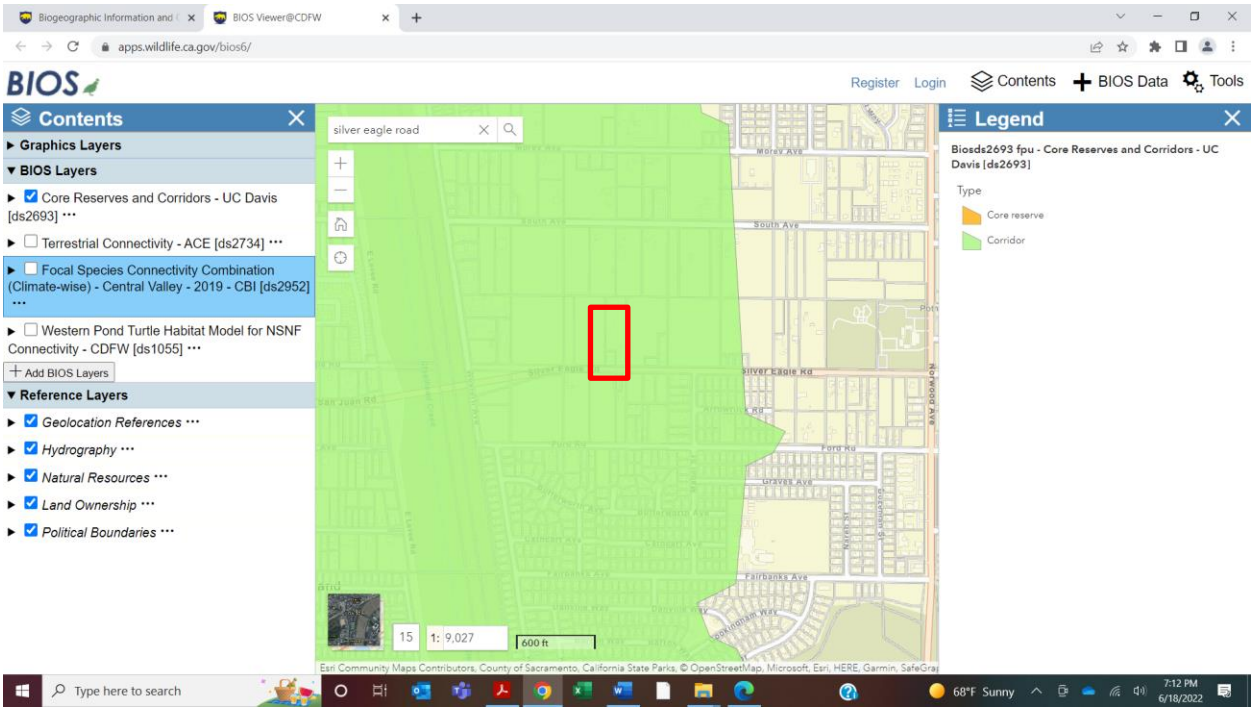
Appendix D.

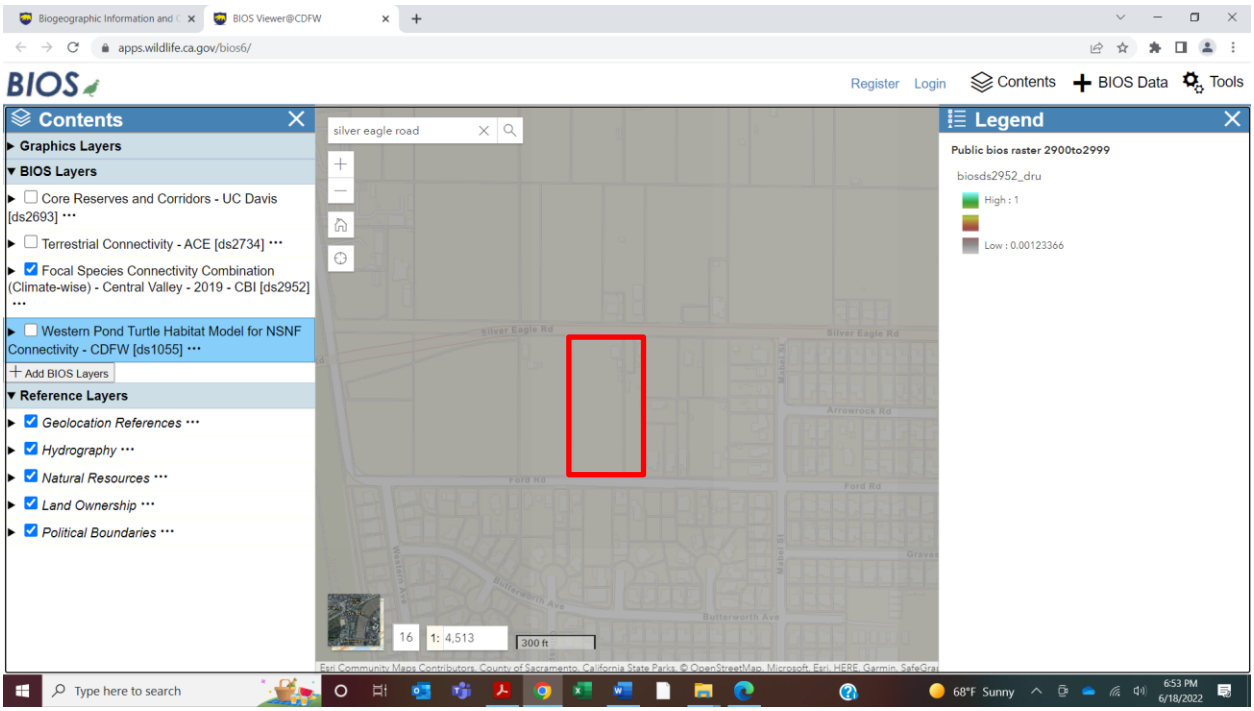
BIOS Connectivity Data for the Project Site


NORTH SACRAMENTO
NORWOOD I-80
OAK KNOLL
Grand Ave
DEL PASO HEIGHTS
WEST DEL PASO HEIGHTS
Rio Linda Blvd
Silver Eagle Rd
STRAWBERRY MANOR
RICHARDSON VILLAGE
NORTHGATE
Image © 2022 Maxar Technologies
WILLS ACRES
80


Biogeographic Information and
BIOS viewer 5.108.157
apps.wildlife.ca.gov/bios/?bookmark=648
CALIFORNIA DEPARTMENT OF FISH and WILDLIFE BIOS
Add Data: BIOS
Click here to search and see list of datasets
Filter by extent
Identify Features
Advanced Tools
Welcome Guest! Register Log in
v5.108.157
Help
Basemaps
Layers
Active Layer: Terrestrial Connectivity - ACE [ds2734]
Map Scale=1: 9,028 (Zoom level 16)
Orange County Reserves [ds2699]
Terrestrial Connectivity - ACE [ds2734]
Connectivity Rank
5 - Irreplaceable and Essential Corridors
4 - Conservation Planning Linkages
3 - Connections with Implementation Flexibility
2 - Large Natural Habitat Areas
1 - Limited Connectivity Opportunity
Focused Planning Areas - Northwestern San Diego County - MHCP [ds2770]
Multiple Species Conservation Program Cores and Linkages - San Diego County [ds2771]
Landscape Linkage - Coyote Valley [ds2823]
Table
Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., Inter...
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6/18/2022


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Core Reserves and Corridors - UC Davis [ds2693]
Terrestrial Connectivity - ACE [ds2734]
Focal Species Connectivity Combination (Climate-wise) - Central Valley - 2019 - CBI [ds2952]
Western Pond Turtle Habitat Model for NSNF Connectivity - CDFW [ds1055]
Add BIOS Layers
Reference Layers
Geolocation References
Hydrography
Natural Resources
Land Ownership
Political Boundaries
silver eagle road
Legend
Public bios raster 1000to1099
biosds1055_dru
High : 100
Low : 15,412
16
1: 4,513
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Land Ownership
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Corridor
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Esri Community Maps Contributors, County of Sacramento, California State Parks, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph
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7:12 PM
6/18/2022


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Add BIOS Layers
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Geolocation References
Hydrography
Natural Resources
Land Ownership
Political Boundaries
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High : 1
Low : 0.00123366
16
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6/18/2022

Appendix C – Cultural Resources Inventory
(62 pages)

CULTURAL RESOURCES INVENTORY FOR THE SILVER EAGLE – 18 PROJECT (Z22-013), APN 250-0172-005, 006, 007, SACRAMENTO COUNTY, CALIFORNIA

Prepared for:

MARK DIMERCURIO
207 Candlewood Court
El Dorado Hills, CA 95762

Prepared by:

PAR ENVIRONMENTAL SERVICES, INC.
P. O. Box 160756
1906 21st Street
Sacramento, CA 95816

April 2023

CULTURAL RESOURCES INVENTORY FOR THE SILVER EAGLE – 18 PROJECT (Z22-013), APN 250-0172-005, 006, 007, SACRAMENTO COUNTY, CALIFORNIA

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April 29, 2023

EXECUTIVE SUMMARY

The Silver Eagle – 18 Project proposes to subdivide and develop 3.3 acres on three parcels in North Sacramento. The work would include building an access road from Ford Road, dividing the land into 18 single family residential lots, and a retention basin. The project is located within Township 9 North, Range 5 East, Section 17 as shown on the *Rio Linda,* California, United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The project is subject to permits and approvals from the City of Sacramento (City), requiring compliance with the California Environmental Quality Act (CEQA) and various City ordinances and planning conditions.

In April, 2023, PAR Environmental Services, Inc. (PAR) was contracted to provide cultural resources services in support of the Project. The scope of work included a records search, an archaeological and architectural surveys of the three parcels, and report preparation. Survey investigations identified no archaeological resources within the project, other than displaced pieces of concrete and a water pipe. Two single family residences, built in the 1930s, and associated outbuildings were identified, recorded on California Department of Parks and Recreation 523 forms, and evaluated for inclusion in the California Register of Historical Resources (CRHR). These houses have been modified, updated, are not the best example of a minimal traditional style house built in the 1930s, and do not qualify for inclusion in the CRHR under any criteria.

The City contacted four tribes in compliance with AB 52. The United Auburn Indian Community (UAIC) responded, requesting consultation. The City has been consulting with the UAIC for this Project and will provide them with a copy of this report for comment. To date, there are no specific sites or resources known only to UAIC present within the ADI for this project. Other tribes contacted by the City for this Project in compliance with CEQA have not responded.

CEQA Guidelines, Section 15064.6 (f) requires the lead agency for a project to ensure that provisions are made for accidentally discovered resources. Upon accidental discovery of an archaeological deposit, it is recommended that work be halted within 100 ft. (30 m) of the discovery until a professional archaeologist has evaluated the find.

According to Section 7050.5 of the California Health and Safety Code, in the event human remains are discovered during excavation, work must stop immediately and the county coroner must be contacted. Section 5097.94 and 5097.98 of the Public Resources Code require consultation with the Native American Heritage Commission, protection of Native American remains, and notification of most likely descendants. SB 447 (Chapter 404, Statutes of 1987) also protects Native American remains or associated grave goods.

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INTRODUCTION

The Proposed Silver Eagle – 18 Project (Project) is located on Assessor's Parcel Numbers (APN) 250-0172-005, -006, and -007 in Sacramento, Sacramento County, California approximately 1.20 miles south of Interstate 80 (I-80) (Figure 1). The Project site is found on the U.S. Geological Survey (USGS) topographic map, *Rio Linda* quadrangle, Section 17, Township 9 North, Range 5 East (Figure 2). The northeast corner is located at latitude 38.630175, longitude -121.464972 and the southwest corner is located at latitude 38.628734, longitude -121.465915. The Project is in an urban area, surrounded on the south and east by single-family homes and undeveloped lots to the north and west (Figure 3).

Currently, the three parcels include open land and two single family residential structures. The proposed project consists of subdividing the three parcels into 18 new residential lots and one lot for a detention basin. Eighteen new single-family residential dwellings are planned for the new residential lots. The project is subject to permits and approvals from the City of Sacramento; thus, compliance with the California Environmental Quality Act (CEQA) and the California Register of Historical Resources is required.

In 2023, Mark DiMercurio, the property owner, contracted with PAR Environmental Services, Inc. (PAR) to provide cultural resources services in support of the proposed project. The scope of work included a records search of the project area, a cultural resources survey of the three-acre project, Native American Heritage Commission coordination, and report preparation.

The cultural resources inventory was completed by Mary Maniery (PAR Principal Investigator) and Andrea E. Maniery (Field Director). Mary Maniery holds B.A. degrees in History and Anthropology and an M.A. degree in Anthropology. She is a Registered Professional Archaeologist (RPA) with over 40 years of professional experience and meets Secretary of Interior Professional Standards in Archaeology, History, and Architectural History. Andrea Maniery holds both a B.A. and M.A in Anthropology and is an RPA with twelve years of experience. She meets Secretary of Interior Standards for Archaeology.

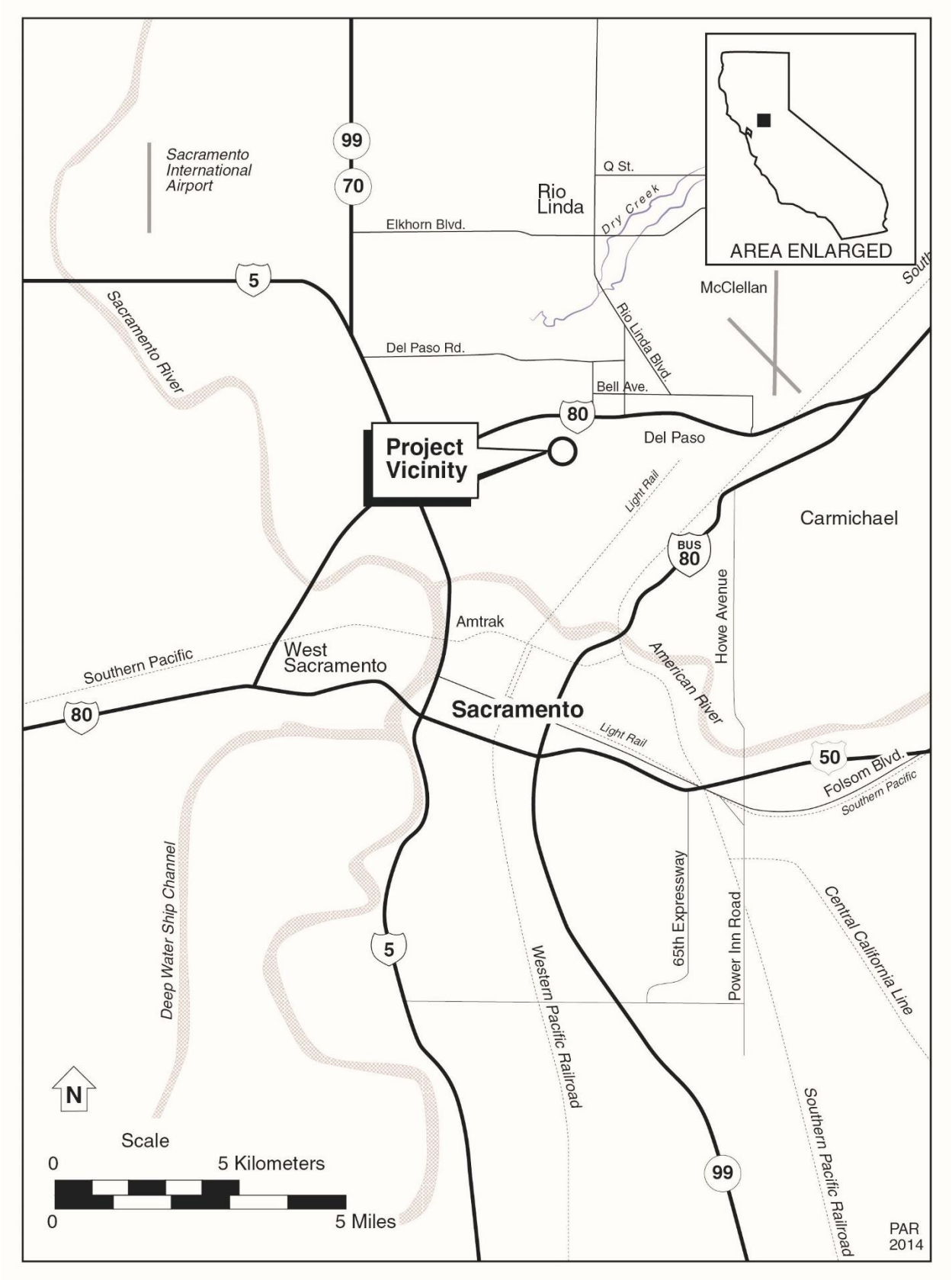


Figure 1. Project Vicinity Map

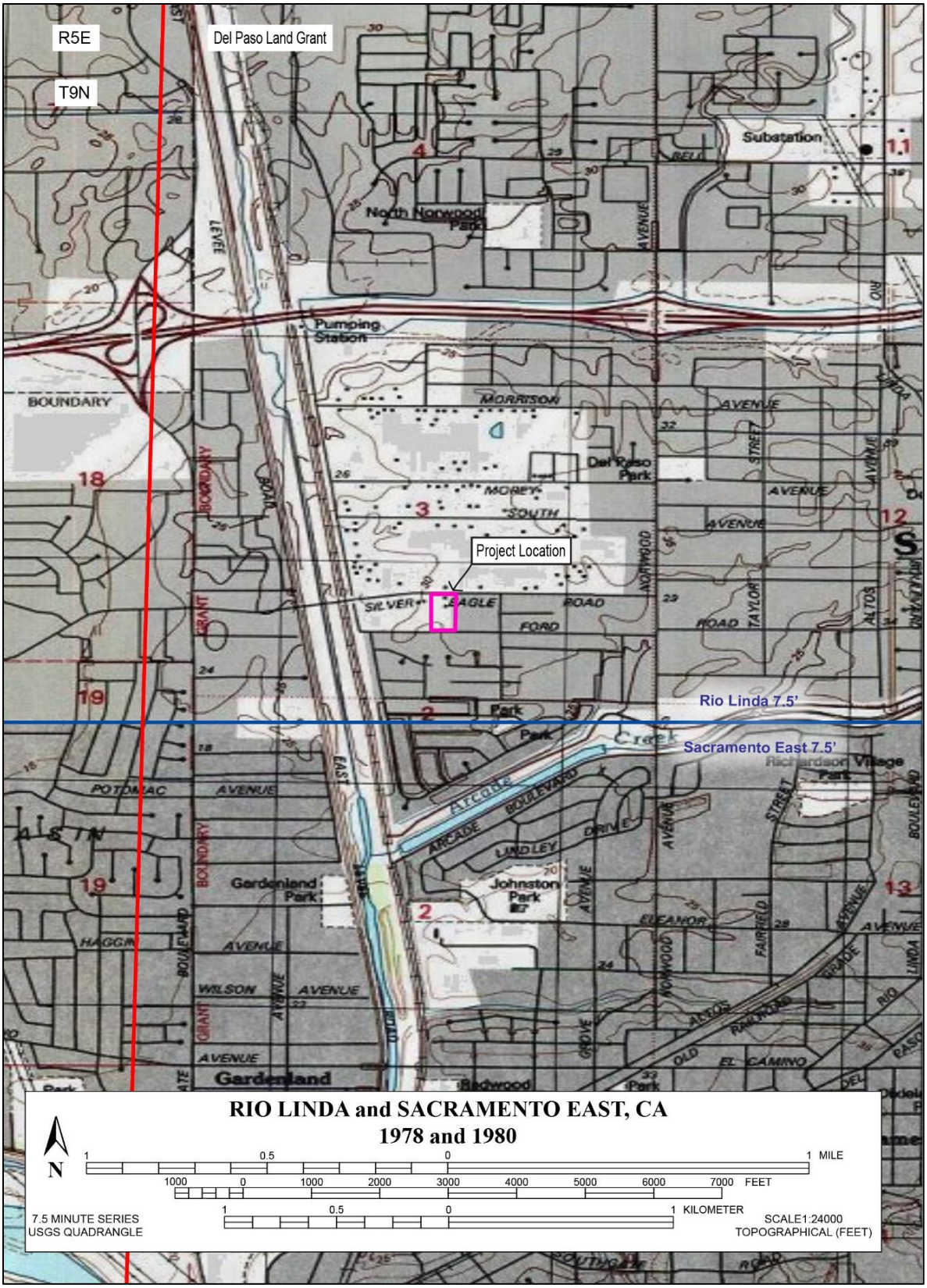


Figure 2. Project Location Map

Project Description

The Project proposes to subdivide three parcels totaling 3.30 acres into 19 new lots (18 residential lots and one lot for a stormwater detention basin) to facilitate the development of 18 single-family residences. The new single-family residences would range from 1,342 square feet (sf) to 2,198 sf. Optional 460 sf accessory dwelling units (ADUs) are proposed on 12 of the residential lots. The two existing single-family residences onsite would remain. (Figure *3*). These parcels are located within the Single-Family Residential zone of the City of Sacramento (Rozumowicz-Kodsuntie 2022). The parcels are south of Silver Eagle Road and north of Ford Road and include street addresses 132, 150, and 156 Silver Eagle Road.

Area of Potential Impacts (API)

The current API encompasses the parcels defined by APN 250-0172-005, -006, and -007. All work will occur within the boundaries of these parcels, as depicted on Figure 3. Access to the new lots will occur from Ford Road to the south of the parcels. Based on current engineering estimates, the project would require an average depth of 1.2 feet below existing grade to achieve the final grades as shown on the preliminary grading plan.

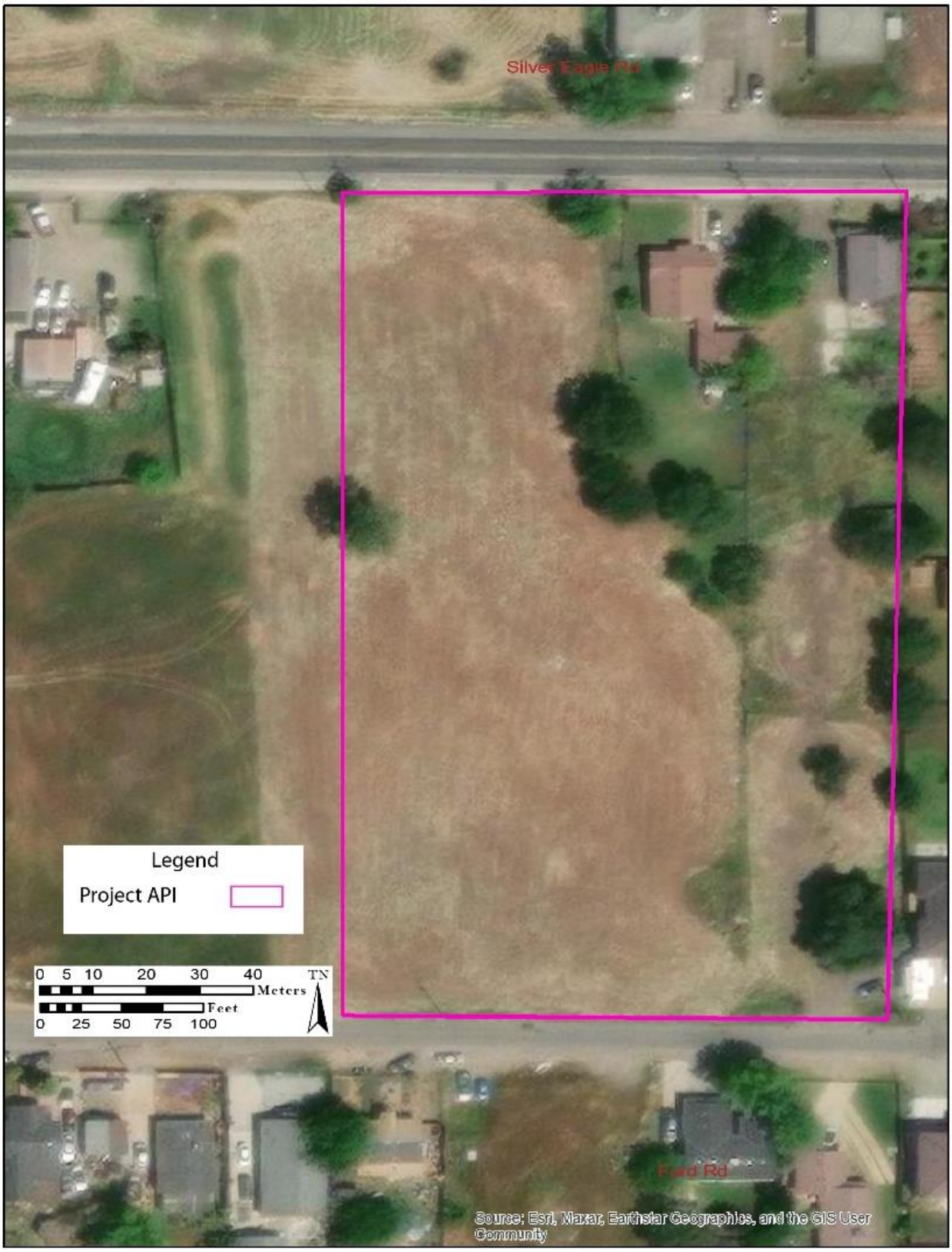


Figure 3. Area of Potential Impacts

ENVIRONMENTAL SETTING

The Project is located within the Great valley geomorphic province, an alluvial plan that drains via the Sacramento and San Joaquin rivers. The parcels are on the outskirts of an urban residential neighborhood at an elevation of 34 feet above mean sea level.

Currently the Project supports non-native grassland habitat. According to the biological resources report prepared for the project, no sensitive natural communities are present. The parcels contain an urban and wild oats grassland vegetation cover. Four tree species are also present, including five valley oaks, one black walnut, three almond, and one Chinese tallow (Rozumowicz-Kodsuntie 2022). The nut trees represent remnants of the orchards present on the property in the 1940s.

Geology

The project area is characterized primarily as Quaternary-age alluvium of the Riverbank Formation (Wagner et al. 1981). According to Youngdahl (2020), this formation is Middle to Late Pleistocene in age and consists of Arkosic alluvium that form alluvial terraces, increasing in topographic position with age. In general, most of the area that surrounds the project consists of the Riverbank Formation alluvium.

Soils

According to the United States Department of Agriculture Natural Resources Conservation Service, (USDA) 2023] soils on site are attributed to San Juaquin Fine Sandy Loam. The parent material is alluvium derived from granite; the unit is moderately well-drained, has a high runoff class, and is not prime farmland. (USDA 2023; Youngdahl 2020).



Figure 4. Southeast corner of Project site, facing northwest after discing of field, 2022
Rozumowicz-Kodsuntie 2022



Figure 5. Overview of Project facing south taken from west of 132 Silver Eagle Road, 2023

CULTURAL SETTING

Prehistory

The prehistory of California is known to include the entire span of currently identified prehistory in North America. An abbreviated summary of archaeological periods recognized in Central California is presented below (Table 1). Terms used in the summary table are those used in Rosenthal et al. (2007). It should be noted that this summary is not a comprehensive list of known archaeological components in the region, nor does it reflect the full complexity of the archaeological literature. Various authors, notably Beardsley (1954), Chartkoff and Chartkoff (1984), Moratto (1984), Fagan (2003), and Jones and Klar (2007) have provided summaries of California archaeology and prehistory in extensive detail. These sources should be consulted for further information. The discussion below synthesizes information from each of these sources.

Archaeological evidence dating from the late Pleistocene (between 10,000 and perhaps as early as 16,000 years ago) through the protohistoric and ethnographic periods of the 18th and 19th centuries has been recognized throughout the state. A Uranium-series date was acquired on human bone from an early site (CA-KIN-32) from King County within the San Joaquin Valley and yielded an estimated age of 15,696 years (+/- 370 years). A second set of Uranium-series dates, also on human bone from the same site, yielded ages of 11,379 and 11,380 years; (Rosenthal et al. 2007:151). These dates represent some of the oldest dates on human remains in the Americas.

Table 1 Central Californian Archaeological Periods

Period	Cultural Patterns	Age Range (cal BCE/cal CE)
Upper and Lower Emergent	Augustine Phase I II	1100 cal CE-Historic
Upper Archaic	Berkeley Pattern	550 cal BCE-1100 cal CE
Middle Archaic	Windmiller Pattern (Early Horizon) and earlier unnamed components	5500 cal BCE-550 cal BCE
Lower Archaic	Western Pluvial Lake Tradition	8550 cal BCE-5550 cal BCE
Paleoindian	Various isolated regional artifact finds	11,500 cal BCE-8550 cal BCE

Paleoindian (11,500 – 8550 cal BCE)

The earliest recognized cultural artifacts found in California are of Paleoindian origin (ca. 11,500 to 8550 cal BCE) and include Clovis-like fluted points estimated to be from 11,000 to 12,000 years in age. Fluted points are thought to be the product of small, band-level societies that hunted now-extinct large Pleistocene mammals including elephant, mammoth, mastodon and bison, in addition to the common small and large game that still lives in the state. These artifacts have usually been found as scattered, isolated fragments and have been identified throughout California. They are rare in archaeological contexts. The best-known examples were found at the Borax Lake Site near Clear Lake in Lake County (Moratto 1984), though numerous

additional examples have been recovered on the edges of pluvial lakes in the Central Valley and elsewhere.

Lower Archaic (8550-5550 cal BCE)

Scattered Early Holocene discoveries, typologically similar to the Western Pluvial Lake Tradition (WPLT) from the Great Basin form the Lower Archaic between 8550-5550 cal BCE. The only archaeological deposit from the Lower Archaic identified in the Central Valley is located at Buena Vista Lake (Fredrickson and Grossman 1977). The relationship to the WPLT tradition is formed primarily through projectile point typologies. Foothill sites from this time period have a large number of milling features which may have been associated with a reliance on acorns or other nuts (Jones and Klar 2007).

Middle and Upper Archaic through Emergent (5500 cal BCE –historic period)

The Middle and Upper Archaic archaeological periods, (5500 to 1,110 cal BCE) and Emergent (Recent Prehistoric I and II [see Table 1]) archaeological periods (the last 1,100 years) are also well represented throughout the state. Reasonably unambiguous archaeological antecedents of the native, ethnographic cultures of California first appear in a recognizable form during the Emergent period. The bow and arrow, bedrock mortar, and identifiable symbols of ethnographic religious practices are first noted in the archaeological record during this span (Moratto 1984:181-216). A growing economic emphasis on the acorn as a staple food, fishing for anadramous species such as salmon, and the management of biological resources and landscapes through seasonal burning is also noted (Bean and Lawton 1993; Moratto 1984). The concurrent technological changes may or may not have accompanied population movements throughout the region. Economic systems become elaborate and the exchange networks that first appeared during the Late Archaic continue and appear to become more geographically complex. Shell beads, thought of by many researchers to be prehistoric currency, can be confidently identified in the archaeological record by the beginning of the Emergent. Craft specialization and social stratification also appear or become more evident in the archaeological record (Moratto 1984:201-216, 294-304).

Regional Archaeology

The prehistory of the project region has a diversity of artifacts and features, particularly along Dry Creek. In the 1960s, the area along Dry Creek was surveyed by Patti Palumbo at Sac State (Dougherty and Baker 2015). This study resulted in the recordation of 31 sites and the evaluation of three of these. Her evaluations of sites revealed a prehistoric presence primarily from the Middle and Late Archaic, approximately 3500-1500 rcy BP at CA-SAC-237 near Elverta Road. Later research conducted by PAR extended this particular site's boundaries and overlapped the site occupation with Palumbo's time frame, as PAR analysis revealed obsidian hydration dates between 3000-2000 BP (Dougherty and Baker 2015).

Ethnography and Ethnohistory

The Native Americans who occupied the project vicinity at the time of Euroamerican contact (ca. 1850s) were speakers of a Maiduan language known as the Nisenan (Beals 1933; Kroeber 1929; Powers 1976:313-345). As a people, they are also referred to as the Southern Maidu (Dixon 1905; Faye 1923; Kroeber 1976; Wilson and Towne 1978:387). Several ethnographers, including Beals (1933), Faye (1923), Gifford (1927), Kroeber (1976), Powers (1976) and Wilson and Towne (1978), have studied the Maiduan speaking peoples and generally agree that Nisenan territory included the drainages of the Bear, American, Yuba and southern Feather rivers. Their permanent settlements were in the foothills and mountains and were "…generally on the ridges that separated parallel streams, either on crests or on knolls or terraces part way up" (Kroeber 1976:395). Valley dwelling Nisenan tribes tended to occupy high ground near the major streams. Their houses were constructed partially underground with earth or occasionally had tule covered roofs (Kroeber 1929:259-260).

Valley Nisenan lived on the plain between the Sacramento River and foothills, and major villages were concentrated along the Sacramento River ethnographically (Wilson and Towne 1978). They traded actively with foothill Nisenan, as well as for shell beads with the Wintun (Kroeber 1976). Smaller villages were spread throughout the valley along streams and rivers "on gentle slopes with a southern exposure" (Wilson and Towne 1978:388). According to Wilson and Towne (1978:388), the nearest ethnographic villages in the Rio Linda area were *Totola* and *Pusune*. These villages are not indicated on Kroeber's (1976: Plate 37) map of village locations. The only village expressed in the Rio Linda area on Kroeber's map is called *Sutamasina.* Wilson and Towne (1978:388) do not plot *Sutamasina* on their map. The lower foothills and Great Valley were rich in natural resources and the Maidu took advantage of many available foods. Acorns were important to their diet and were supplemented with seeds, nuts, berries, herbs, and fruit. A large variety of animal was hunted and/or trapped, including lizards, snakes, and grizzly bears. Maidu were nomadic throughout much of the year, moving from place to place following game and gathering plants (Wilson and Towne 1978).

The Nisenan hunting and gathering cycle was altered drastically with the discovery of gold in Coloma in 1848. As miners poured into the Roseville and Auburn areas and adjacent streams and tributaries, the Native Americans were forced out of their winter villages, land was fenced, streams were silted, and food resources became increasingly difficult to procure. Stephen Powers, after traveling through the region in the 1870s, noted that the "Nishinam [sic] had the misfortune to occupy the heart of the Sierra mining region, in consequence of which they have been miserably corrupted and destroyed" (Powers 1976:317). By the time of his visit, Nisenan were surviving as best they could, working for whites in mines or on ranches, panning for gold, or adopting even more abstract forms of survival (Wilson and Towne 1978:396-397).

Historic Context

This property was included in Rancho del Paso, a 44,000+ acre land grant issued by the Mexican government to Elijah Grimes in 1844. Initially, the land was used as a cattle ranch. In 1852 the entire ranch was sold to Samuel Norris. For many years Norris worked with lawyers James Ben Ali Haggin and Lloyd Tevis to claim the land from the US government. After he gained title to the land in 1860 he was deeply in debt to his lawyers. He sold the Rancho to Haggin and Tevis in 1862 (Beck and Haase 1972; Reed 1923)).

Haggin and Tevis grew Rancho del Paso into a nationally known horse breeding and training facility. They established a race track and by the 1880s, the Del Paso horses became known and coveted internationally. The horse ranch shut down in 1905, as Haggin transferred his horse business to his new farm in Lexington, Kentucky. By the end of his tenure in Sacramento, home building was exploding. Haggin formed the Rancho del Paso Land Company in 1891 and began selling plots of land. In 1910 the majority of the ranch was sold in bulk to the Sacramento Valley Colonization Company (SVCC). The SVCC began to subdivide the acreage into neighborhoods, creating small parcels (one to 20 acres each) for sale (Reed 1923). Sales were slow, however, due to the annual flooding of the area.

Between the 1860s and 1910 the area was frequently inundated by the Sacramento River. Reclamation District 1000 was formed after a 50-year movement to control flooding in the Sacramento Valley, natural events that frequently turned the Sacramento Valley into a shallow lake every winter and spring. In 1911, the SAFCA passed legislation to create RD 1000, at the time one of the first and the largest reclamation efforts in the United States (Bradley and Corbett 1996; Dougherty 1999). The district included levees, pump stations, canals, and roads. The creation of these features influenced the future layout of the Natomas and Rio Linda areas. The Natomas east Main Drainage Canal, located west of the project, was constructed by 1914 and is considered a major contributor to RD 1000. It will not be impacted by the project (Bradley and Corbett 1996).

While some parcels and lots sold after the completion of the RD 1000 system, sales remained slow until after World War II. During the 1920s and 1930s the Project area was use for agriculture (Dougherty and Baker 2015). A 1937 aerial photograph depicts the project as agricultural land. By 1947 the row crops are no longer visible and a small orchard was present on site, as well as two structures. Silver Eagle Road and Ford Road were both in place by 1947, providing access to the Project. The aerial photographs from the mid-1950s and after depict continued development of the Project vicinity, likely in response to the growth explosion that occurred in the Sacramento City and County following World War II (NETRonline 2023). This population increase was associated with the expansion of McClellan Air Force Base, founding of Aerojet, and other major businesses that found a home in Sacramento after 1950. The area's crops and orchards were slowly replaced with single family homes, surrounded by open land, similar to what is seen today.

METHODS

Record Search

A records search pertaining to the proposed project area and a one-quarter-mile radius was conducted by the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) on April 13, 2023. The NCIC records search included a review of the following sources (Appendix A):

- NCIC resource records on file as of April 2023;
- NCIC reports on file as of April 2023;
- Office of Historic Property Data File as of April 2023
- California Inventory of Historic Resources (1976 – obsolete);
- *California State Historical Landmarks* (1996 and updates as of April 2023);
- *California Points of Historical Interest* (1992 and updates as of April 2023);
- Historical Maps including United States Geological Survey (USGS) 1911, 1950, and 1967 7.5' Rio Linda, and 1871 Government Land Office plat maps (US Department of Interior [USDI]);
- Historical Aerials 1937-2023 (NETRonline.com);
- *California Register of Historical Resources* (CRHR). (1996 and Updates as of April 2023); and
- *National Register of Historic Places* (NRHP). (1996 and Updates as of April 2023).

The record search revealed five resources and one district within one-quarter-mile of the Project (Table 2). The Project is within the boundaries of the historical Reclamation District (RD) 1000 (Bradley and Corbett 1996). RD 1000 is a historic property encompassing over 55,000 acres of land and is listed in the California Register with a period of significance between 1911 and 1939. The Natomas East Drainage Canal, a significant feature within the District built in 1914 and still in use, was identified within one-quarter-mile of the Project, but is not within or adjacent to the APE. A single-family residence, built in 1939 and located just east of the API was evaluated in 2018 as not eligible for the California Register. Finally, the bridge crossing the canal has been evaluated by Caltrans as not-eligible and is within the one-quarter mile buffer area. The abutments from the old bridge over the canal have also been recorded as a site (Appendix A).

Seventeen projects with reports are documented at the NCIC within or within a one-quarter-mile of the Project. The earliest of these occurred in 1981; the latest in 2016. The majority of these projects (n=11) are associated with the RD 1000 work and subsequent improvements of the canal levee. Work associated with converting the old Western Pacific Railway line to a bicycle trail and monitoring realignment of Silver Eagle Road to accommodate the bridge bult in 1984 are also documented. A list of the reports, authors, and dates is provided in Appendix A.

Table 2. Resources within or adjacent to the API (one-quarter mile buffer zone)

Primary No	Trinomial No	Other ID	Age	Notes
P-34-00490	CA-SAC-00463H	RD 1000 Natoma East Drainage Canal Levee	1914-present	Part of RD 1000 District
P-34-00491	CA-SAC-00464H	Western Pacific Railway	ca. 1914-?	Located on Natomas East Drainage Canal levee
P-34-005251	-	HAER CA-187 for RD 1000	1911-1939	Documented district
P-34-005509		160 Silver Eagle Road	1939	Evaluation of house for HUD; not eligible
P-34-000642	CA-SAC-0005	Old bridge abutments	ca 1914-1983	
-	-	Bridge 24C0133 over East Drainage Canal	1984	Category 5 not eligible

Native American Coordination

As part of the effort to identify potentially significant historical and traditional resources that may fall within the project area, on February 13, 2023, the City notified all tribes that requested notification on City projects subject to CEQA in compliance with AB 52. The list included the United Auburn Indian Community (UAIC), Shingle Springs Band of MiWok Indians, Wilton Rancheria, and Buena Vista Rancheria Me-Wuk Indian Tribe. The United Auburn Indian Tribe responded to the City's notification with a request to consult on March 1, 2023. They requested a copy of the cultural report for review and asked for inclusion of Project overview photographs in the report. The City will continue consulting with the UAIC for this project.

In addition to the City's consultation efforts, PAR submitted a form on April 11, 2023 to the Native American Heritage Commission (NAHC) requesting a search of the sacred lands file (Appendix B). As of the end of April, 2023 no response has come from the NAHC. Any response will be included in a brief letter addendum to this report once it is received.

Field Methods

An archaeological survey of the API was completed on April 13, 2023 by Andrea E. Maniery, PAR's Principal Investigator. Intensive survey using 15-20 meter (m)-wide transects was employed for the majority of the API (Figure 6). Fenced private residential areas were not surveyed. The area along Silver Eagle Road by the residences was given a cursory survey, given the landscaped and paved nature of the API in these areas. The entire Project is covered with non-Native vegetation, interspersed with bare mineral soil. Overall, ground visibility was between 50 and 70-percent.

An architectural survey of the API was completed concurrent with the archaeology work on April 13, 2023 by Mary L. Maniery, PAR Principal and Architectural Historian. Buildings and

structures over 50 years of age were photographed, mapped, and described. These data were used to prepare California Department of Parks and Recreation (DPR) 523 primary and BSO record forms and appropriate attachments. The California DPR 523 forms are attached as Appendix C.



Figure 6. Survey Coverage

REGULATORY BACKGROUND

For the purposes of identification and mitigation of the effects of projects upon the environment, cultural resources are defined by state statutes, namely CEQA. As part of this process, inventories of cultural resources are conducted where proposed projects may alter or otherwise affect the environment. In California, resources that are identified are then evaluated using the criteria of CEQA to determine whether they may be regarded as potentially eligible for listing as an historical resource for the purposes of CEQA. Resources that appear to be potentially eligible for listing in either place may require further work to mitigate the project's effects upon the resource.

California Environmental Quality Act (CEQA)

The California State Public Resources Code (PRC) Section 5024.1 establishes a CRHR that is to maintain a list of historic resources identified within the state. The section further sets out criteria to determine the significance of properties and defines how to determine if a property is eligible. Further, PRC Section 5024.1, paragraphs (b) and (c) explicitly identify the NRHP criteria as the means for determining eligibility of historic properties for listing on the CRHR.

These criteria are enumerated in PRC 5024.1 Section (c) as follows:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
(2) Is associated with lives of persons important in our past;
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; and
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA, PRC Division 13 Sections 21083.2 and 21084.1, and the CEQA Guidelines, California Code of Regulations (CCR), Title 14, Chapter 3, Section 15064.5 further regulate and clarify California law respecting historic and archaeological cultural resources.

In addition, historic resources must retain integrity. This property is discussed in CCR Title 14, Division 3, Chapter 11.5, Section 4852 (c) as follows:

> (c) Integrity. Integrity is the authenticity of an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described in http://ccr.oal.ca.gov/cgi-bin/om_isapi.dll?clientID=139553&hitsperheading=on&infobase=ccr&jump=14%

3a4852&softpage=Document42 - JUMPDEST 14:4852 section 4852 (b) of this chapter and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.

The California Register used National Register definitions of integrity to summarize a National Park Service (NPS) bulletin entitled *How to Apply the National Register Criteria for Evaluation* (Shrimpton 2002), the types of integrity are defined as follows:

- Location is the place where the historic property was constructed or the place where the historic event occurred;
- Design is the combination of elements that create the form, plan, space, structure, and style of a property;
- Setting is the physical environment of the historic property;
- Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- Feeling is a property's expression of the aesthetic or historic sense of a particular period of time; and
- Association is the direct link between an important historic even or person and a historic property.

Integrity is based on significance: why, where and when a property is important. Only after significance is fully established is the issue of integrity addressed. Ultimately, the question of integrity is answered by whether or not the property retains the identity for which it is significant. A resource must have at least two types of integrity and meet one of the four criteria lists above in order to qualify for the CRHP. Integrity is also important in all evaluations under CEQA.

RESULTS

Two single-family dwellings are within the API. Both were built in the 1930s with minimal architectural detailing and have been altered. They are described below and documented in the California DPR 523 forms found in Appendix C.

APN 250-0172-005; 132 Silver Eagle Road

This is a Minimal Traditional one-story, single-family dwelling built around 1930 with a square footprint and concrete foundation. The main façade faces Silver Eagle Road. The house has a cross gable roof clad with composition shingles. Vents are in the gable ends. The house originally had horizontal channel siding; it has been covered with asbestos shingle siding. The side gable entry is on the north façade facing Silver Eagle Road and includes a centered door with a shed roof portico supported on two square posts and vertical railings. The door is accessed by a concrete riser and is flanked with two aluminum slider windows, both protected by metal awnings. Fenestration on the remainder of the house is symmetrical and consists of replacement vinyl or aluminum sash double hung windows. A secondary entry door is on the south façade.

The garage has a hipped roof covered by composition shingles and horizontal wood channeled siding now covered with asbestos single siding. The north façade has double garage doors; a pedestrian entry door is on the south end of the west façade. A gable roof open-sided portico connects the rear house entry with the garage.

A small gable roof shed is located south of the garage, accessed by a double wide swinging door on the west façade. This shed is clad with plywood and originally had a tar paper and asbestos shingle roof, now partially covered with corrugated metal sheets. The rear of the property south of the shed and garage is fenced and used as a dog run and kennel. Several portable plastic shelters are present for the dogs.

According to title search results, this house was constructed in 1930. Aerial photographs dated 1937 indicate that the parcel contained row crops and was used for agriculture. By 1947, the agricultural land is no longer present but the house is visible. Local residential directories and assessment records provide information on the residents beginning in 1947. In that year Paul A. Austin and his wife, Kathryn, along with their four children, owned the house (Youngdahl 2020). Paul worked as a welder for Southern Pacific Railroad. He and Kathryn lived out their lives on the property. Paul passed away in his home on November 11, 2006 of heart failure. Kathryn also passed away in the house a few months after Paul, on February 10, 2007. The Austin's were married for 70 years when they passed away (ancestry.com). After their deaths the property was sold and has since passed hands several times.



Figure 7. 132 Silver Eagle Road, west and south facades. April 13, 2023

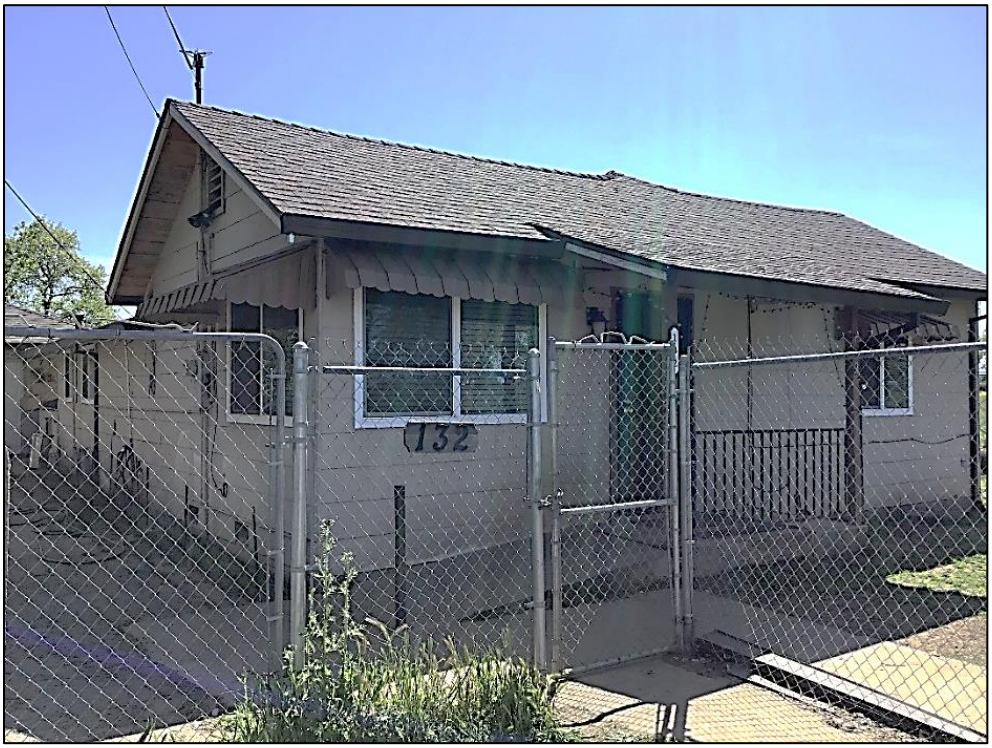


Figure 8. 132 Silver Eagle Road, north and east facades. April 13, 2023

Evaluation

The property is located in an area with a long history of agricultural use. Situated within the Reclamation District 1000 boundaries, it was one of many fields used for agriculture in the late 19th and early 20th century and is not significant. The Austin's used the property as a residence and did not engage in farming. The Austins were not important in local history. Therefore, the property does not qualify for the California Register of Historic Resources under Criteria 1 and 2.

The house was built in a basic vernacular style with some Minimal Traditional elements. Since its construction, all the windows have been replaced and a few have been resized. The original siding has been covered with asbestos siding. There are other houses of similar design on Silver Eagle and Ford Roads and this is not the best example of a simple depression-era house in the neighborhood. It does not meet Criterion 3 for its architectural design. There are no archaeological components found on the property and it does not qualify under Criterion 4. It is not eligible for inclusion in the California Register and is not considered a historical resource for the purposes of CEQA.

APN 250-0172-006; 150 Silver Eagle Road

This is a single-family dwelling with a square footprint. The main façade faces Silver Eagle Road. The house has a medium pitched gable roof clad with composition shingles. Vents are in the gable ends. The gable ends are clad in horizontal board siding; the body of the house is coated with stucco. The entry is in the north gable end and includes an offset door on the west side of the façade accessed by two concrete risers and a concrete landing. The door is protected by a shed roof portico supported by two square posts with square capitals. A vinyl framed window is to the east of the door.

The west facing façade has one original double pane window, two modern vinyl casement windows, and a small window under the overhanging eave, likely for venting a bathroom. The south façade contains a modern double hung vinyl sash window on the west and an entry door, accessed by one concrete riser and a landing on the west. A concrete slab, likely used for vehicle parking, is south of the house. The property is surrounded on the west and south by a chain link fence.

According to title search results, this house was constructed in 1935. Aerial photographs dated 1937 indicate that the area contained row crops and was used for agriculture. The house is depicted on a 1951 topographic map and on a 1957 aerial photograph. Local residential directories and assessment records provide information on the residents beginning in 1959. In that year Wayne Metcalf and his wife, Shirley, were living on the property. The Metcalf's lived there until 1964. The house was vacant for several years after that date. By 1969 it was occupied by Charles Sherron and his wife, Evelyn. The Sherron's lived there until 1978 or 1979. The house

was again vacant in 1980. Morris Lee Rosborough and his wife, Bernice, occupied the house from the mid-1990s until 2011 before moving to Oregon. They sold the property to Jacob and Loretta Cabrera, who occupied the house as late as 2017 (ancestry.com 2023; Youngdahl 2020).



Figure 9. 150 Silver Eagle Road, north and west facades. April 13, 2023



Figure 10. 150 Silver Eagle Road, west and south facades. April 13, 2023

Evaluation

The property is located in an area with a long history of agricultural use. Located within the RD 1000 boundaries, it was one of many fields used for agriculture in the late 19th and early 20th century and is not significant. None of the former residents associated with 150 Silver Eagle Road were important in local history. Therefore, the property does not qualify for the California Register of Historic Resources under Criteria 1 and 2.

The house was built in a basic vernacular style. Since its construction, all the windows have been replaced with vinyl sash and some of the fenestration openings have been reconfigured. The original siding has been covered with stucco. There are other houses of similar design on Silver Eagle and Ford Roads and this is not the best example of a simple depression-era house in the neighborhood. It does not meet Criterion 3 for its architectural design. There are no archaeological components found on the property and it does not qualify under Criterion 4. It is not eligible for inclusion in the California Register and is not considered a historical resource for the purposes of CEQA

Other Resources

In addition to the existing houses, the open field west of 132 Silver Eagle Road contains some scattered concrete rubble, a one inch pipe (water?; designated SE-1 in Figure 6) extending vertically from the ground, and modern plastic containers. According to Youngdahl (2020), a structure is visible on aerial photographs at this location in 1957 until 1993, when it appears to have been removed. Since its removal the field has been graded and disced numerous times and no other signs of the structure, other than the vertical pipe and bits of scattered and broken concrete, are present.

Just south of the south fence line for 132 Silver Eagle Road is a refuse disposal area (SE-2) that consists primarily of modern vehicle tires (at least 13), a few large drums, and five-to-10-gallon buckets. Discarded boards are also present at this location and include several railroad ties, two with spikes dated to 1930. These are out of context and their original location is unknown. An aerial photograph from the early 2020s depict a large vehicle disposal site at this location. The tires and debris may be from this storage site. The original wood grape stake and/or picket fence between 132 and 150 Silver Eagle Road has been replaced with a wire fence; the older wooden fence has been left in place along the property line.



Figure 11. Overview facing north of SE-1 vertical pipe west of 132 Silver Eagle Road, 2023



Figure 12. Overview of refuse disposal area SE-2 south of 132 Silver Eagle Road, facing northeast, 2023



Figure 13. Old wooden and newer wire fence dividing 132 and 150 Silver Eagle Road, view southeast, 2023



Figure 14. Overview of Project, circa 2022, depicting disced fields and vehicle storage area in lower right

CONCLUSIONS

In April, 2023, PAR Environmental Services, Inc. (PAR) was contracted to provide cultural resources services in support of the Silver Eagle – 18 Project. The Project proposes to split 3.3 acres on three parcels in North Sacramento into 18 new residential lots and one lot for a detention basin, and construct new single-family residential dwellings on the new residential lots. The project is subject to permits and approvals from the City of Sacramento, requiring compliance with the California Environmental Quality Act (CEQA) and various City ordinances and planning conditions.

The scope of work included a records search, archaeological and architectural surveys of the three parcels, and report preparation. Survey investigations identified no archaeological resources within the project, other than displaced pieces of concrete and a water pipe. Two single family residences, built in the 1930s, and associated outbuildings were identified, recorded on California Department of Parks and Recreation 523 forms, and evaluated for inclusion in the California Register of Historical Resources (CRHR). These houses have been modified, updated, are not the best example of a minimal traditional style house built in the 1930s, and do not qualify for inclusion in the CRHR under any criteria.

The Native America Heritage Commission Sacred Lands Search revealed the Project is within areas of concern to the United Auburn Indian Community (UAIC). The City has been coordinating with the UAIC for this Project and will provide them with a copy of this report for comment. To date, there are no specific sites or resources known only to UAIC present within the API for this project. Other tribes contacted by the City for this Project in compliance with CEQA have not responded.

Unanticipated Discoveries

While an archaeological survey is designed to detect resources with surface manifestations, there is always a potential for unidentified subsurface deposits. If archaeological deposits or artifacts (e.g., beads, stone or bone tools, or human remains) are noted, work should stop until a qualified archaeologist can evaluate the find.

CEQA Guidelines, Section 15064.6 (f) requires the lead agency for a project to ensure that provisions are made for accidentally discovered resources. These requirements include preserving the find until an archaeologist can evaluate the discovery, providing for the immediate evaluation of the find by an archaeologist, and contingency planning for the time and funding to mitigate project effects upon such accidental discoveries. Upon accidental discovery of an archaeological deposit it is recommended that work be halted within 100 ft. (30 m) of the discovery until a professional archaeologist has evaluated the find.

Human Remains

According to Section 7050.5 of the California Health and Safety Code, in the event human remains are discovered during excavation, work must stop immediately and the county coroner must be contacted. Section 5097.94 and 5097.98 of the Public Resources Code require consultation with the Native American Heritage Commission, protection of Native American remains, and notification of most likely descendants. SB 447 (Chapter 404, Statutes of 1987) also protects Native American remains or associated grave goods.

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2020 Phase I Environmental Site Assessment, Silver Eagle Road (132 & 150), Sacramento County, CA.

APPENDIX A

Record Search Results

California Historical Resources Information System

NORTH CENTRAL INFORMATION CENTER

AMADOR
EL DORADO
NEVADA
PLACER
SACRAMENTO
YUBA

California State University, Sacramento
6000 J Street, Folsom Hall, Suite 2042
Sacramento, California 95819-6100
phone: (916) 278-6217
fax: (916) 278-5162
email: ncic@csus.edu

4/12/2023 NCIC File No.: SAC-23-79

Ellie Maniery
PAR Environmental Services, Inc.
1906 21st Street
Sacramento, CA 95811

Re: Silver Eagle Road (PAR Ref. No.: 23-0001)

The North Central Information Center (NCIC) received your records search request for the project area referenced above, located on the Rio Linda USGS 7.5' quad. The following reflects the results of the records search for the project area and a ¼-mi radius.

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Recorded resources within project area:	None
Recorded resources outside project area, within radius:	P-34-490 P-34-491 P-34-642 P-34-5251 P-34-5509
Known reports within project area:	None
Known reports outside project area, within radius:	631 1749 3853 6390 6452 8966 9423 11138 13135

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed/NA
Resource Database Printout (details):	☐ enclosed	☐ not requested	☒ nothing listed/NA
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed/NA
Report Database Printout (details):	☐ enclosed	☐ not requested	☒ nothing listed/NA
Report Digital Database Records:	☐ enclosed	☐ not requested	☒ nothing listed/NA
Resource Record Copies:	☐ enclosed	☐ not requested	☒ nothing listed/NA
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Built Environment Resources Directory:	☒ enclosed	☐ not requested	☐ nothing listed/NA
Archaeological Resources Directory:	☒ enclosed	☐ not requested	☐ nothing listed/NA
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed/NA

Caltrans Bridge Survey:	☒ enclosed	☐ not requested	☐ nothing listed/NA
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Local Inventories:	☐ enclosed	☐ not requested	☒ nothing listed/NA
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed/NA
Shipwreck Inventory:	☐ enclosed	☐ not requested	☒ nothing listed/NA
Soil Survey Maps:	☐ enclosed	☒ not requested	☐ nothing listed/NA

Please forward a copy of any resulting reports and resource records from this project to NCIC as soon as possible. The lead agency/authority and cultural resources consultant should coordinate sending documentation to NCIC. Digital materials are preferred and can be sent to our office via our file transfer system. Please contact NCIC for instructions. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, it is possible that not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the records search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Sincerely,

Paul Rendes, Coordinator
North Central Information Center

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
000631		1981	Dondero, Steven B.	An Archaeological Records Search and Field Reconnaissance of the West Silver Eagle Road Project, Sacramento County, California.		
001749		1990	Peggy Scully and Douglas Davy	Archaeological Survey of Silver Eagle Road Reconstruction Project.	Ebasco Environmental	
003853		2000	Nelson, Wendy, Maureen Carpenter, and Kimberley L. Holanda	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WP04: Sacramento to Redding	Far Western Anthropological Research Group, Inc.	34-000121, 34-000122, 34-000238, 58-000045
003853A		2000	Ann Munns, Rhonda R. Turner, and Dustin Kay	Cultural Resources Records Search and Literature Review Report, Level (3) Long Haul Fiber Optic Project: WS04 Sacramento to Cosumnes River, California	Chambers Group, Inc.	
003853B		2001	Denise Furlong and Kim Tremaine	Archaeological Monitoring for WS04 Long Haul Fiber Optic Segment, Between Sacramento and Bakersfield, California	Tremaine & Associates, LLC	
006390		1981	Jones and Stokes Associates, Inc.	Historic Propert Survey Report West Silver Eagle Road Realignment and Bridge Crossing Project	Jones & Stokes, Inc.; Historic Environment Consultants; Archeology Study Center, Foundation of CSU Sacramento	
006390B		1981	Historic Environment Consultants	Historic Property Survey and Evaluation West Silver Eagle Road Project Sites	Historic Environment Consultants	
006452		2002	Windmiller, Ric	Historic Property Survey Report and Finding of Effect for Ueda Parkway project		34-000490, 34-000491, 34-000522, 34-000640, 34-000641, 34-000642, 34-000643, 34-000644, 34-000645, 34-000646, 34-000647, 34-001436, 34-005505, 34-005506
006452B		2001	Ric Windmiller	Archaeological Survey Report and Historic Study Report UEDA Parkway Project, Sacramento		
006452C		2001	Donald S. Napoli	Bridge Evaluation Report UEDA Parkway Project, Sacramento County, California		
006452D		2001	Donald Napoli	Historic Architectural Survey Report, UEDA Parkway Project		
006452E		2002	Andrew Hope	Supplement to the Historic Property Survey Report for the UEDA Parkway bike trail project	Caltrans	
006452F		2002	Dr. Knox Mellon and Michael Ritchie	UEDA Parkway Bike Trail (FHWA020425C)	OHP; Federal Highway Administration	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
008966		2007		Cultural Resources Report for Geotechnical Evaluations Along the Natomas East Main Drainage Canal	URS	
009423		2008	Joanne S. Grant	Cultural Resources Survey for the Urban Levee Project	URS	
011138		1995	Denise Bradley and Michael Corbett	Rural Historic Landscape Report for Reclamation District 1000 for the Cultural Resources Inventory and Evaluations for the American River Watershed Investigation, Sacramento and Sutter Counties, California	Dames & Moore, Inc	34-005251
013135		2016	Barry Scott	Cultural Resources Inventory and Evaluation Report, North Sacramento Streams Levee Improvements Project	GEI Consultants, Inc.; AECOM	34-000491, 34-000522, 34-005397

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-34-000490	CA-SAC-000463H	Other - WAPA 11, 14; Other - REF 18-H, 20-H, 22-H, 23-H, 24-H, 25-H, 26-H, 27-H; Resource Name - River Levee; Other - River Levee - Sacramento River (Reclamation District 1000); Resource Name - Reclamation District 1000 East Levee; Other - East Levee Road; Other - Ueda Parkway Bike Trail; Other - River Levee-Sacramento River (Reclamation District 1000); Other - REF 20-H; Other - 5311-5445 Garden Hwy. Segment; Other - RWCA-01-UP Site 04; Other - East Levee of the Natomas East Main Drainage Canal; Other - East Levee & Natomas East Main Drainage Canal; Other - COE120203C	Structure, Site, District, Element of district	Historic	AH08; HP11; HP19; HP20	1993 (Eleanor H. Derr, Cultural Resources Unlimited); 1993 (Eleanor H. Derr, Cultural Resources Unlimited); 1993 (Kathy Kelly); 1994 (M. Hale, Dames & Moore); 1995 (S. Flint, D. Bradley, Dames & Moore); 2001 (Ric Windmiller, Consulting Archaeologist); 2001 (Ric Windmiller, Cunsulting Archaeologist); 2001 (Rand Herbert, Amanda Blosser, JRP Historical Consulting Services); 2002 (Amanda Blosser, Andy Walters, JRP Historical Consulting Services); 2004 (Neal Kaptain, LSA); 2013 (A. Hallock and J. Baker, Cardno ENTRIX and Parus Consulting); 2017 (Joseph Freeman and Samuel Skow, JRP Historical Consulting, LLC); 2017; 2021 (Julianne Polanco, Daniel Artho, OHP, USACE Sacramento District); 2022 (D. Stapleton, Natural Investigations Company)	003446, 004181, 004197, 004455, 004456, 004463, 004464, 004465, 004466, 006446, 006452, 007130, 009188, 010351, 011464, 012568, 012643, 013058, 013059, 014101, 014142

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-34-000491	CA-SAC-000464H	Resource Name - Western Pacific Railway; Other - Map Reference #1; Other - Union Pacific Railroad; Other - LAR-12; Other - AMR-1; Other - WPRR Segment MR #24; Other - Western Pacific Railroad; Other - Point D; Other - SVS-3; Other - WPRR Segment (MR#23); Other - Campbell Property Siding; Other - REF 38-H, 44-H; Other - WAPA 8, 10, 16; Other - REF 29-H; Other - UP-1; Other - Western Pacific Railroad Segment; Other - Western/Union Pacific Railroad	Structure, Object, Site	Historic	AH07; HP11; HP18; HP19; HP37; HP39	1992 (Eleanor H. Derr, Paula Boghosian, Cultural Resources Unlimited); 1994 (M Hale, Dames & Moore); 1995 (Flint M. Kelly, Dames & Moore); 1995 (Barry G. Scott, William Norton, Jones & Stokes Associates Inc); 1995 (Eleanor H. Derr, Cultrual Resources Unlimited); 2000 (Brian Hatoff, URS Corporation); 2001 (Ric Windmiller, Consulting Archaeologist); 2001 (David Byrd, Jones and Stokes); 2001 (Rand Herbert, Amanda Blosser, JRP); 2002 (Amanda Blosser, Andy Walters, JRP); 2002 (Amanda Blosser, Andy Walters, JRP); 2002 (Toni Webb & Amander Blosser, JRP Historical Consulting Services); 2005 (Cynthia Toffelmier, Audrey Rishel, JRP Historical Consulting); 2005 (Neal Kaptain &Kate Shantry, LSA Associates Inc); 2006 (Richard Deis, EDAW, Inc); 2006 (Richard Deis, EDAW Inc); 2006 (Will Shapiro, Brandon Moya, Marlene Calicher, Scott Davis, Pacific Legacy, Inc); 2007 (Tim Carpenter, ArchaeoMetics, Inc); 2014 (C. Arrington, P. Hanes, Natural Investigations Company); 2014 (Patricia Ambacher, AECOM)	002729, 003346, 003400, 004181, 004197, 004463, 004464, 004465, 004466, 006112, 006452, 006937, 007012, 007130, 008240, 008967, 009188, 009201, 009989, 011447, 011456, 011497, 012126, 013135
P-34-000642	CA-SAC-000518H	Other - RWCA-01-UP Site 03; Other - Site 3	Site	Historic	AH02	2001 (F.A. Riddell, Ric Windmiller Consulting Archaeologist)	006452

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-34-005251		HAER - HAER No. CA-187; Resource Name - Reclamation District 1000; Other - COE120203C	District	Historic	AH01	1997 (Melinda A. Peak, Peak & Associates); 2019 (Coleman, Talcott, Wolpert, Solano Archaeological Services); 2021 (Julianne Polanco, Daniel Artho, OHP, USACE Sacramento District); 2022 (D. Stapleton, Natural Investigations Company)	006830, 011138, 013237, 013792, 013849, 013909, 014101, 014142
P-34-005509		Resource Name - 160 Silver Eagle Road; Agency Nbr - HUD051123F; OHP Property Number - 156843	Building	Historic	HP02	2005 (Joan Grahanm, Community Resource Project)	

Structure Maintenance & Investigations



Historical Significance - Local Agency Bridges

March 2019

District 03

Sacramento County

Bridge Number	Bridge Name	Location	Historical Significance	Year Built
24C0085	CRIPPLE CREEK	0.1 MI N ANTELOPE RD	5. Bridge not eligible for NRHP	1965
24C0089	AMERICAN RIVER (WATT AVE)	0.6 MI N OF S.R. 50	5. Bridge not eligible for NRHP	1961
24C0090	AMERICAN RIVER DRIVE UC	AMERICAN RIVER DR	5. Bridge not eligible for NRHP	1960
24C0091	UNION HOUSE CREEK	0.3 MI S OF MACK RD	5. Bridge not eligible for NRHP	1924
24C0092	ELDER CREEK	0.1 MI S OF GERBER RD	5. Bridge not eligible for NRHP	1924
24C0093	ELDER CREEK	0.3 MI N OF MACK RD	5. Bridge not eligible for NRHP	1958
24C0094	SOUTH BRANCH FLORIN CREEK	50' S OF ORANGE AVE	5. Bridge not eligible for NRHP	1924
24C0095	FLORIN CREEK	50' N OF ORANGE AVE	5. Bridge not eligible for NRHP	1924
24C0096	MORRISON CREEK TRIBUTARY	0.1 MI S OF FOWLER AVE	5. Bridge not eligible for NRHP	1924
24C0097	MORRISON CREEK	0.1 MI N OF FOWLER AVE	5. Bridge not eligible for NRHP	1924
24C0099	NATOMAS EAST MAIN DRAIN CANAL	0.1 MI S OF GARDEN HWY	5. Bridge not eligible for NRHP	1970
24C0100	AMERICAN RIVER (HAZEL AVENUE)	0.5 MI N OF S.R. 50	5. Bridge not eligible for NRHP	1966
24C0105	EAST DRAINAGE CANAL	1.8 MI E OF SR 99	5. Bridge not eligible for NRHP	1968
24C0106	NATOMAS EAST MAIN DRAIN CANAL	1.6 MI W RIO LINDA BLVD	5. Bridge not eligible for NRHP	1968
24C0107L	AMERICAN RIVER (HOWE AVE)	0.4 MI N/O SR 50	5. Bridge not eligible for NRHP	1969
24C0107R	AMERICAN RIVER (HOWE AVE)	0.4 MI N/O SR 50	5. Bridge not eligible for NRHP	1969
24C0108	K STREET MALL-DOWNTOWN PLAZA	5TH AND K STS	5. Bridge not eligible for NRHP	1963
24C0112	MARCONI AVENUE OH	0.2 MI W OF SR 51	5. Bridge not eligible for NRHP	1984
24C0113	MORRISON CREEK	0.3 MI S OF FLORIN RD	5. Bridge not eligible for NRHP	1955
24C0114	NORTH FORK ELDER CREEK	0.5 MI NORTH OF MACK RD	5. Bridge not eligible for NRHP	1987
24C0116	LAGUNA CREEK	0.1 MI S OF CALVINE ROAD	5. Bridge not eligible for NRHP	1992
24C0118	MORRISON CREEK	0.5 MI N OF ELDER CREEK	5. Bridge not eligible for NRHP	1972
24C0121	MORRISON CREEK	0.3 MI W OF FRANKLIN BLVD	5. Bridge not eligible for NRHP	1977
24C0122	DOUGLAS DRAIN	2.1 MI W/O RTE 5	5. Bridge not eligible for NRHP	1974
24C0124L	EAST DRAINAGE CANAL	0.24mi e/o Truxel Rd.	5. Bridge not eligible for NRHP	1960
24C0124R	EAST DRAINAGE CANAL	0.24mi e/o Truxel Rd.	5. Bridge not eligible for NRHP	1986
24C0126	ARCADE CREEK	0.1 MI N OF HUDSON WAY	5. Bridge not eligible for NRHP	1994
24C0127	HAGGINWOOD CREEK	AT ACACIA AVE	5. Bridge not eligible for NRHP	1940
24C0128	ARCADE CREEK	0.1 MI N ARCADE BLVD	5. Bridge not eligible for NRHP	1989
24C0129	MAGPIE CREEK	0.92 MI N. OF FAI 880	5. Bridge not eligible for NRHP	1937
24C0132	EAST DRAINAGE CANAL	0.1 MI E AIRPORT RD	5. Bridge not eligible for NRHP	1965
24C0133	SILVER EAGLE ROAD BOH	BTWN NORTHGATE & NORWOOD	5. Bridge not eligible for NRHP	1984
24C0135	MAGPIE CREEK	0.1 MI E OF NORWOOD AVE	5. Bridge not eligible for NRHP	1941
24C0136	RIO LINDA CREEK	1.8 MI N OF I-80	5. Bridge not eligible for NRHP	1990
24C0142L	LA RIVIERA DRIVE UC	0.25 MI N/O US HWY 50	5. Bridge not eligible for NRHP	1969
24C0142R	LA RIVIERA DRIVE UC	0.25 MI N/O US HWY 50	5. Bridge not eligible for NRHP	1969
24C0143L	UNIVERSITY AVENUE UC	0.6 MI N/O SR. 50	5. Bridge not eligible for NRHP	1969
24C0143R	UNIVERSITY AVENUE UC	0.6 MI N/O SR. 50	5. Bridge not eligible for NRHP	1969
24C0144	ELKHORN BLVD OVERHEAD	AT ROSEVILLE RD	5. Bridge not eligible for NRHP	1970
24C0145	THIRD STREET PUC	K ST PD PATH UNDER 3RD ST	5. Bridge not eligible for NRHP	1968
24C0149	AIR BASE DRIVE OH	AT ROSEVILLE RD	5. Bridge not eligible for NRHP	1973
24C0150	WATT AVENUE POC	.05 MI N. OF POPLAR BLVD	5. Bridge not eligible for NRHP	1974
24C0151	DRAINAGE DITCH	50' N LAMBERT RD	5. Bridge not eligible for NRHP	1925

APPENDIX B

Coordination

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Silver Eagle Road (PAR Ref #22-0001)

County: Sacramento

USGS Quadrangle

Name: Rio Linda 7.5-minute

Township: N/A Range: N/A Section(s): Del Paso Land Grant

Company/Firm/Agency:

PAR Environmental Services, Inc.

Contact Person: Andrea E. Maniery

Street Address: 1906 21st Street

City: Sacramento Zip: 95811

Phone: (916) 287-9118 Extension: 20

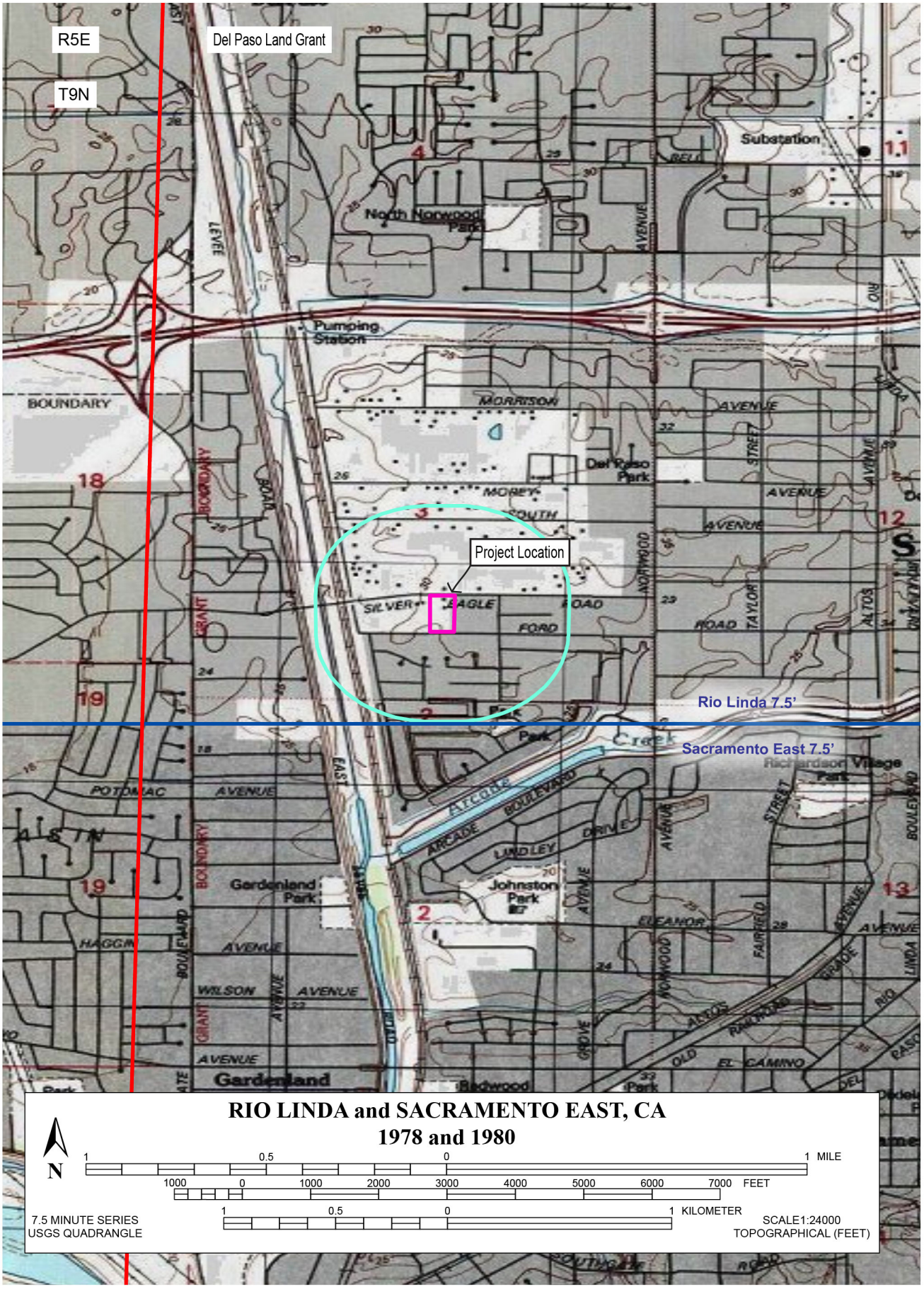
Fax:

Email: aemaniery@parenvironmental.com

Project Description:

Small parcel split project in Sacramento County.

☑ Project Location Map is attached



RIO LINDA and SACRAMENTO EAST, CA
1978 and 1980

APPENDIX C

California DPR 523 Forms

State of California - The Resources Agency	Primary #	P –
DEPARTMENT OF PARKS AND RECREATION	HRI#	
PRIMARY RECORD	Trinomial	
	NRHP Status Code	6Z
Other Listings		
Review Code	Reviewer	Date

Page 1 **of** 6 ***Resource Name or #: (Assigned by recorder)** 132 Silver Eagle Rd

P1. Other Identifier: 132 Silver Eagle Road

***P2. Location:** ☐ Not for Publication ☒ Unrestricted *a. County Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** **Date** **T1S R7E** ; ¼ of ¼ ; Sec. MDM

c. Address 132 Silver Eagle Road **City** Sacramento **Zip**

d. UTM: (Give more than one for large and/or linear resources) **Zone** 10 ; **mE/** **mN NAD 83**

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN 250-0172-005

***P3a. Description:** (Describe resource and its major elements. Include design, materials condition, alterations, size, setting and boundaries)

This is a Minimal Traditional one story, single family dwelling with a square footprint and concrete foundation. The main façade faces Silver Eagle Road. The house has a gross gable roof clad with composition shingles. Vents are in the gable ends. The house originally had horizontal channel siding; it has been covered with asbestos shingle siding, The side gable entry is on the north façade and incudes a centered door with a shed roof portico supported on two square posts and vertical railings. The door is accessed by a concrete riser and is flanked with two aluminum slider windows, both protected by metal awnings. (continued)

***P3b. Resource Attributes: (List attributes and codes)** HP2: single family property

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures and objects.)



P5b. Description of Photo:(View date,, accession #) View southwest of north and east facades, IMG1949 04-13-2023

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

1930 (title search records)

***P7. Owner and Address:**

Mark DeMercurio
207 Candlewood Court
El Dorado Hills, CA 95762

***P8. Recorded by: (Name, affiliation and address)**

M. Maniery
PAR Environmental Services, Inc
1906 21st St
Sacramento, CA 95811

***P9. Date Recorded:**

***P10. Survey Type: (Describe)**

Intensive Reconnaissance

***P11. Report Citation: (Cite survey report and other sources, or enter "None")**

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List)

P3a. Description (Cont).

The east face has a single aluminum slider under the gable and two smaller aluminum double hung windows at the south end of the façade. The west façade has a vent in the gable end and three aluminum sliding windows, all protected with metal awnings. The south façade has vinyl sash windows, one large and one small, on either side. A door is present on the east end of the south façade and is protected by a gable roof portico. This portico is supported on posts and covers a walkway between the house and the detached on story garage.

The garage has a hipped roof covered the composition shingles and horizontal wood channeled siding now covered with asbestos single siding. The north façade has double garage doors; a pedestrian entry door is on the south end of the west façade.

A small gable roof shed is located south of the garage, accessed by a double wide swinging door on the west façade. This shed is clad with plywood and originally had a tar paper and asbestos shingle roof, now partially covered with corrugated metal sheets.

P5a. Photos: (Continued)



132 Silver Eagle Road, west and south facades. April 13, 2023, IMG_1904



132 Silver Eagle Road, west façade of garage and shed, view east. April 13, 2023 IMG_1916



132 Silver Eagle Road, view north of house (left), garage, and shed. April 13, 2023 IMG_1923

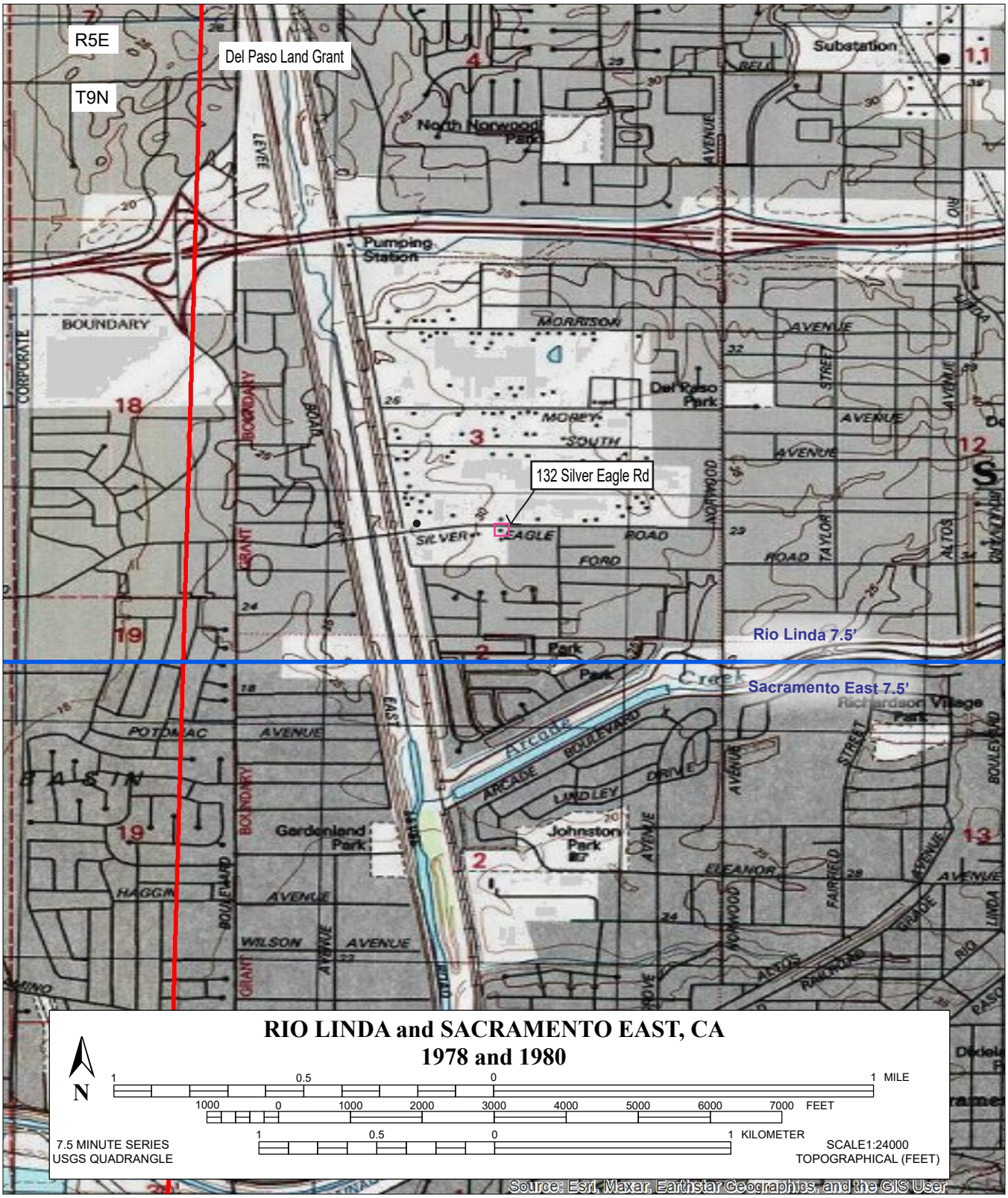
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

* Resource Name or # (Assigned By Recorder) 132 Silver Eagle Road

Map Name Rio Linda and Sacramento East 7.5min *Scale 1:24000 *Date of Map 1978 and 1980



*Required Information

B1. Historic Name: Austin Home
B2. Common Name: 132 Silver Eagle Road, APN 250-0172-005
B3. Original Use: Residential **B4. Present Use:** Residential
***B5. Architectural Style:** Vernacular with Minimal Traditional elements
***B6. Construction History:** (Construction date, alterations, and date of alterations) original windows replaced with vinyl and/or aluminum; asbestos siding added (dates unknown)
***B7. Moved?** x No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:** Garage, shed, chain link fencing
B9a. Architect: Unknown **b. Builder** Unknown
***B10. Significance: Theme** N/A **Area** N/A
Period of Significance N/A **Property Type** N/A **Applicable Criteria** none
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity).

This property was included in Ranch del Paso, a 44,000+ acre land grant issued by the Mexican government to Elijah Grimes in 1844. Initially, the land was used as a cattle ranch. In 1852 the entire ranch was sold to Samuel Norris. For many years Norris worked with lawyers James Ben Ali Haggin and Lloyd Tevis to claim the land from the US government. After he gained title to the land in 1860 he was deeply in debt to his lawyers. He sold the Rancho to Haggin and Tevis in 1862 (Beck and Haase 1972; Reed 1923)).

Haggin and Tevis grew Rancho del Paso into a nationally known horse breeding and training facility. They established a race track and by the 1880s, the Del Paso horses became known and coveted internationally. The horse ranch shut down in 1905, as Haggin transferred his horse business to his new farm in Lexington, Kentucky. By the end of his tenure in Sacramento, home building was exploding. Haggin formed the Rancho del Paso Land Company in 1891 and began selling plots of land. In 1910 the majority of the ranch was sold in bulk to the Sacramento Valley Colonization Company (SVCC). The SVCC began to subdivide the acreage into neighborhoods, creating small parcels (one to 20 acres each) for sale. This trend continued into the mid-twentieth century (Reed 1923).

According to title search results, this house was constructed in 1930. Aerial photographs dated 1937 indicate that the area contained row crops and was used for agriculture. By 1947 the agricultural land is no longer present but the house is visible. Local residential directories and assessment records provide information on the residents beginning in 1947. In that year Paul A. Austin and his wife, Kathryn, along with their four children, owned the house (Youngdahl 2020). Paul worked as a welder for Southern Pacific Railroad. He and Kathryn lived out their lives on the property. Paul passed away in his home on November 11, 2006 of heart failure. Kathryn also passed away in the house a few months after Paul, on February 10, 2007. The Austin's were married for 70 years when they passed away (ancestry.com).

Evaluation

The property is located in an area with a long history of agricultural use. Located within the Reclamation District 1000 boundaries, it was one of many fields used for agriculture in the late 19th and early 20th century and is not significant. The Austin's used the property as a residence and did not engage in farming. Paul Austin was not important in local history. Therefore, the property does not qualify for the California Register of Historic Resources under Criteria 1 and 2.

The house was built in a basic vernacular style with some Minimal Traditional elements. Since its construction, all the windows have been replaced and a few have been resized. The original siding has been covered with asbestos siding. There are other houses of similar design on Silver Eagle and Ford Roads and this is not the best example of a simple depression-era house in the neighborhood. It does not meet Criterion 3 for its architectural design. There are no archaeological components found on the property and it does not qualify under Criterion 4. It is not eligible for inclusion in the California Register and is not considered a historical resource for the purposes of CEQA.

B11. Additional Resource Attributes: NONE

***B12. References:**

Ancestry.com
2023 Paul A. Austin ancestry search. www.ancestry.com.

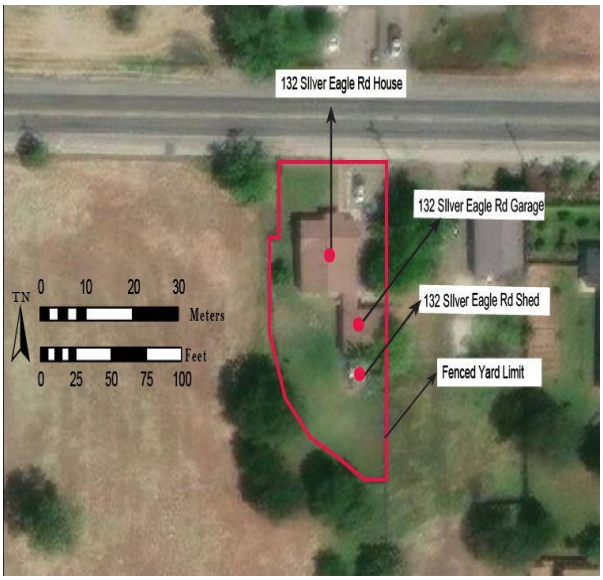
Beck, Warren A., and Ynez D. Haase
1974 Historical Atlas of California. University of Oklahoma Press, Norman, OK.

Reed, G. Walter
1923 History of Sacramento County, CA. On file, California State Library, Sacramento.

Youngdahl Consulting Group, Inc.
2020 Phase I Environmental Site Assessment, Silver Eagle Road (132 & 150), Sacramento County, CA.

B13. Remarks:
None

(Sketch Map with north arrow required.)



***B14. Evaluator:** Mary L. Maniery
PAR Environmental Services, Inc.
1906 21st Street
Sacramento, CA 95816
Date of Evaluation: April 17, 2023

(This space reserved for official comments.)

State of California - The Resources Agency	Primary #	P –
DEPARTMENT OF PARKS AND RECREATION	HRI#	
PRIMARY RECORD	Trinomial	CA –
	NRHP Status Code	6Z
Other Listings		
Review Code	Reviewer	Date

Page 1 **of** 5 ***Resource Name or #: (Assigned by recorder)** 150 Silver Eagle Rd

P1. Other Identifier: 150 Silver Eagle Road; APN 250-0172-006

***P2. Location:** ☐ Not for Publication ☒ Unrestricted *a. County Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** **Date** **T1S R7E** ; ¼ of ¼ ; Sec. MDM

c. Address 150 Silver Eagle Road **City** Sacramento **Zip**

d. UTM: (Give more than one for large and/or linear resources) **Zone** 10 ; **mE/** **mN NAD 83**

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

APN 250-0172-006

***P3a. Description:** (Describe resource and its major elements. Include design, materials condition, alterations, size, setting and boundaries)

This is a single family dwelling with a square footprint. The main façade faces Silver Eagle Road. The house has a medium pitched gable roof clad with composition shingles. Vents are in the gable ends. The gable ends are clad in horizontal board siding; the body of the house is coated with stucco. The entry is in the north gable end and includes an offset door on the west side of the façade accessed by two concrete risers and a concrete landing. The door is protected by a shed roof portico supported by two square posts with square capitals. A vinyl framed window is to the east of the door. (continued)

***P3b. Resource Attributes: (List attributes and codes)** HP2: single family property

***P4. Resources Present:** ☐ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures and objects.)



P5b. Description of Photo:(View date,, accession #) View southeast of north and west facades, IMG1943 04-13-2023

***P6. Date Constructed/Age and Sources:** ☒Historic ☐Prehistoric ☐Both

1935 (title search records)

***P7. Owner and Address:**

Mark DeMercurio

207 Candlewood Court

El Dorado Hills, CA 95762

***P8. Recorded by: (Name, affiliation and address)**

M. Maniery

PAR Environmental Services, Inc

1906 21st St

Sacramento, CA 95811

***P9. Date Recorded:**

***P10. Survey Type: (Describe)**

Intensive Reconnaissance

***P11. Report Citation: (Cite survey report and other sources, or enter "None")**

Maniery, A.E., and M. L. Maniery 2023

Cultural Resources Inventory for the Silver Eagle-18 Project (Z22-013), APN 250-0172-005, -006, -007, Sacramento County, CA.

***Attachments:** ☐ NONE ☐ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (List)

P3a. Description (Cont).

The west facing façade has one original double pane window, two modern vinyl casement windows, and a small window under the overhanging eave, likely for venting a bathroom. The south façade contains a modern double hung vinyl sash window on the west and an entry door, accessed by one concrete riser and a landing on the west. A concrete slab, likely used for vehicle parking, is south of the house. The property is surrounded on the west and south by a chain link fence.

P5a. Photos: (Continued)



150 Silver Eagle Road, west and south facades. April 13, 2023, IMG_1935

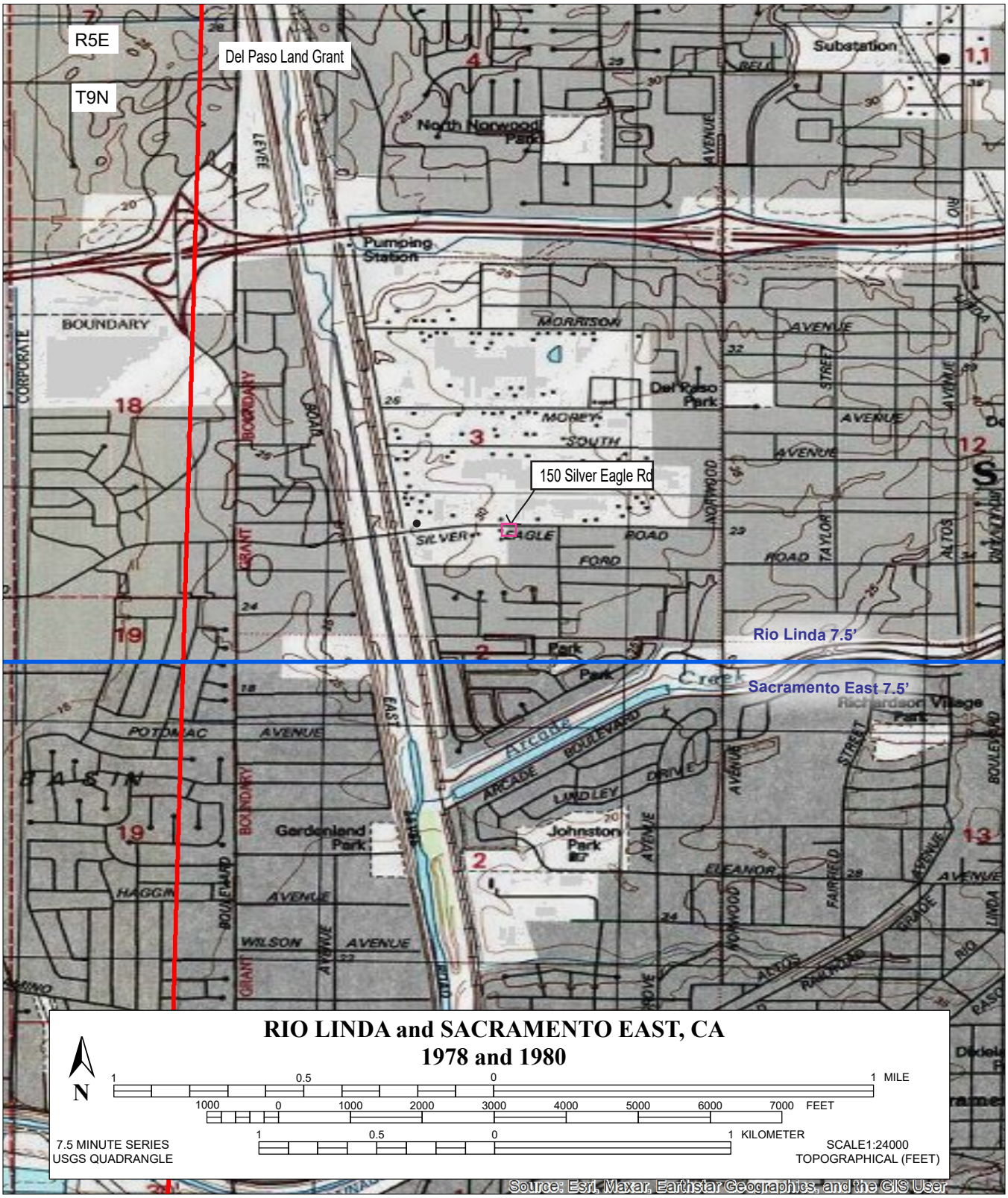
State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

*Resource Name or # (Assigned By Recorder) 150 Silver Eagle Road

Map Name Rio Linda and Sacramento East 7.5min *Scale 1:24000 *Date of Map 1978 and 1980



*Required Information

B1. Historic Name:

B2. Common Name: 150 Silver Eagle Road, APN 250-0172-006

B3. Original Use: Residential **B4. Present Use:** Residential

***B5. Architectural Style:** Vernacular with Minimal Traditional elements

***B6. Construction History:** (Construction date, alterations, and date of alterations) Original windows replaced with vinyl and/or aluminum; interior remodeled, new roof, stucco coating on exterior (since 2010)

***B7. Moved?** x No ☐Yes ☐Unknown **Date:** **Original Location:**

***B8. Related Features:** Chain link fencing

B9a. Architect: Unknown **b. Builder** Unknown

***B10. Significance: Theme** N/A **Area** N/A

Period of Significance N/A **Property Type** N/A **Applicable Criteria** none

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity).

This property was included in Ranch del Paso, a 44,000+ acre land grant issued by the Mexican government to Elijah Grimes in 1844. Initially, the land was used as a cattle ranch. In 1852 the entire ranch was sold to Samuel Norris. For many years Norris worked with lawyers James Ben Ali Haggin and Lloyd Tevis to claim the land from the US government. After he gained title to the land in 1860 he was deeply in debt to his lawyers. He sold the Rancho to Haggin and Tevis in 1862 (Beck and Haase 1972; Reed 1923)).

Haggin and Tevis grew Rancho del Paso into a nationally known horse breeding and training facility. They established a race track and by the 1880s, the Del Paso horses became known and coveted internationally. The horse ranch shut down in 1905, as Haggin transferred his horse business to his new farm in Lexington, Kentucky. By the end of his tenure in Sacramento, home building was exploding. Haggin formed the Rancho del Paso Land Company in 1891 and began selling plots of land. In 1910 the majority of the ranch was sold in bulk to the Sacramento Valley Colonization Company (SVCC). The SVCC began to subdivide the acreage into neighborhoods, creating small parcels (one to 20 acres each) for sale. This trend continued into the mid-twentieth century (Reed 1923).

According to title search results, this house was constructed in 1935. Aerial photographs dated 1937 indicate that the area contained row crops and was used for agriculture. The house is depicted on a 1951 topographic map and on a 1957 aerial photograph. Local residential directories and assessment records provide information on the residents beginning in 1959. In that year Wayne Metcalf and his wife, Shirley, were living on the property. The Metcalf's lived there until 1964. The house was vacant for several years after that date. By 1969 it was occupied by Charles Sherron and his wife, Evelyn. The Sherron's lived there until 1978 or 1979. The house was again vacant in 1980. Morris Lee Rosborough and his wife, Bernice, occupied the house from the mid-1990s until 2011 before moving to Oregon. They sold the property to Jacob and Loretta Cabrera, who occupied the house as late as 2017 (ancestry.com; Youngdahl 2020).

Evaluation

The property is located in an area with a long history of agricultural use. Located within the Reclamation District 1000 boundaries, it was one of many fields used for agriculture in the late 19th and early 20th century and is not significant. The Austin's used the property as a residence and did not engage in farming. None of the former residents associated with 150 Silver Eagle Road were important in local history. Therefore, the property does not qualify for the California Register of Historic Resources under Criteria 1 and 2.

The house was built in a basic vernacular style. Since its construction, all the windows have been replaced with vinyl sash and some of the fenestration openings have been reconfigured. The original siding has been covered with stucco. There are other houses of similar design on Silver Eagle and Ford Roads and this is not the best example of a simple depression-era house in the neighborhood. It does not meet Criterion 3 for its architectural design. There are no archaeological components found on the property and it does not qualify under Criterion 4. It is not eligible for inclusion in the California Register and is not considered a historical resource for the purposes of CEQA.

B11. Additional Resource Attributes: NONE

***B12. References:**

Ancestry.com
2023 Paul A. Austin ancestry search. www.ancestry.com.

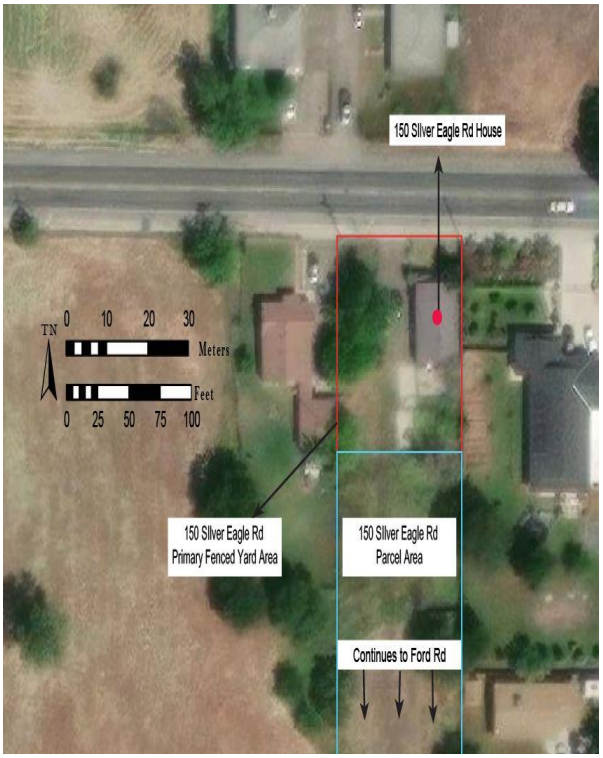
Beck, Warren A., and Ynez D. Haase
1974 Historical Atlas of California. University of Oklahoma Press, Norman, OK.

Reed, G. Walter
1923 History of Sacramento County, CA. On file, California State Library, Sacramento.

Youngdahl Consulting Group, Inc.
2020 Phase I Environmental Site Assessment, Silver Eagle Road (132 & 150), Sacramento County, CA.

B13. Remarks:
None

(Sketch Map with north arrow required.)



***B14. Evaluator:** Mary L. Maniery
PAR Environmental Services, Inc.
1906 21st Street
Sacramento, CA 95816
Date of Evaluation: April 17, 2023

(This space reserved for official comments.)

PAR ENVIRONMENTAL SERVICES, INC.
Cultural Resource Management ■ Biology ■ Environmental Planning
ESTABLISHED 1982

May 08, 2023

Mark DiMercurio
150 Silver Eagle Road
Sacramento, CA

RE: Amendment: Cultural Studies for Three Parcels on Silver Eagle Road, Sacramento (PAR Ref 130-23-11)

Dear Mr. DiMercurio:

On April 11, 2023 we submitted a request for a sacred lands file search to the Native American Heritage Commission (NAHC) for the Silver Eagle-18 Project. The NAHC responded to our request today, May 08, 2023. The NAHC indicated that the results of the Sacred Lands File search were POSITIVE. They also included a list of Native American tribes who may have knowledge of cultural resources in the project area.

I am attaching the letter and tribal list to this report amendment letter. Please forward this information on to the City of Sacramento and include it as an amendment to the CEQA report we submitted to you on May 1, 2023.

Please let me know if you have any questions.

Cordially
PAR Environmental Services, Inc.

Mary L. Maniery, MA, RPA
Principal

P.O. Box 160756 ■ Sacramento, California 95816-0756 ■ (916) 739-8356 ■ FAX (916) 739-0626
http://www.PARenvironmental.com

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
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COMMISSIONER
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Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[VAVANT]

COMMISSIONER
[VACANT]

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 8, 2023

Ellie Maniery
PAR Environmental Services, Inc.

Via Email to: aemaniery@parenvironmental.com

Re: Silver Eagle Road (PAR Ref #22-0001) Project, Sacramento County

Dear Ms. Maniery:

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 positive. Please contact the tribes on the attached list for more information. 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: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Sacramento County
5/8/2023

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk
Sacramento, CA, 95811
Phone: (916) 491 - 0011
Fax: (916) 491-0012
rhonda@buenavistatribe.com

Ione Band of Miwok Indians
Sara Dutschke, Chairperson
9252 Bush Street — Miwok
Plymouth, CA, 95669
Phone: (209) 245 - 5800
consultation@ionemiwok.net

Shingle Springs Band of Miwok Indians
Regina Cuellar, Chairperson
P.O. Box 1340 — Maidu
Shingle Springs, CA, 95682 — Miwok
Phone: (530) 387 - 4970
Fax: (530) 387-8067
rcuellar@ssband.org

Tsi Akim Maidu
Grayson Coney, Cultural Director
P.O. Box 510 — Maidu
Browns Valley, CA, 95918
Phone: (530) 383 - 7234
tsi-akim-maidu@att.net

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn, CA, 95603 — Miwok
Phone: (530) 883 - 2390
Fax: (530) 883-2380
bguth@auburnrancheria.com

Wilton Rancheria
Dahlton Brown, Director of Administration
9728 Kent Street — Miwok
Elk Grove, CA, 95624
Phone: (916) 683 - 6000
dbrown@wiltonrancheria-nsn.gov

Wilton Rancheria
Jesus Tarango, Chairperson
9728 Kent Street — Miwok
Elk Grove, CA, 95624
Phone: (916) 683 - 6000
Fax: (916) 683-6015
jtarango@wiltonrancheria-nsn.gov

Wilton Rancheria
Steven Hutchason, THPO
9728 Kent Street — Miwok
Elk Grove, CA, 95624
Phone: (916) 683 - 6000
Fax: (916) 863-6015
shutchason@wiltonrancheria-nsn.gov

Colfax-Todds Valley Consolidated Tribe
Clyde Prout, Chairperson
P.O. Box 4884 — Maidu
Auburn, CA, 95604 — Miwok
Phone: (916) 577 - 3558
c.prout@colfaxrancheria.com

Colfax-Todds Valley Consolidated Tribe
Pamela Cubbler, Vice Chairperson
P.O. Box 4884 — Maidu
Auburn, CA, 95604 — Miwok
Phone: (530) 320 - 3943
pcubbler@colfaxrancheria.com

Colfax-Todds Valley Consolidated Tribe
CTVCT Preservation, Cultural Preservation Dept.
P.O. Box 4884 — Maidu
Auburn, CA, 95604 — Miwok
Phone: (530) 320 - 6032
ctvctpreservation@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Silver Eagle Road (PAR Ref #22-0001) Project, Sacramento County.

Appendix D – VMT Technical Memorandum (3 pages)

City of SACRAMENTO
Department of Public Works

Transportation Division

City Hall
915 I Street, 2nd Floor
Sacramento, CA
95814-2604
916-808-8502

VMT TECHNICAL MEMORANDUM

DATE: April 27, 2023

TO: Ron Bess, Community Development Department

FROM: Matthew Ilagan, Public Works – Transportation

CC: Pelle Clarke, Public Works - Transportation

SUBJECT: **Z22-013 Silver Eagle 20**

Public Works has reviewed the application for the above referenced project. The project proposes to subdivide 3 parcels totaling 3.03 acres into 23 residential lots located at 132, 150, & 156 Silver Eagle Road bounded by Silver Eagle Road and Ford Road. The site is currently existing with 2 residential homes and the remainder of the area vacant.

Vehicle Miles Traveled Thresholds

Based on current practice of the City of Sacramento for residential projects, transportation impacts for CEQA purposes are considered significant if the proposed project would generate Household VMT per capita figures that exceed 85% of the regional average for Household VMT per capita, consistent with technical advisory guidance published by the Governor's Office of Planning and Research (OPR) in 2018.

VMT Screening Criteria

Based on current practice of the City of Sacramento, several "screening thresholds" are used to quickly determine whether a project may be presumed to have a less-than-significant VMT impact without conducting a detailed projected generated VMT analysis. For residential projects, screening criteria include:

- Small Projects – Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.
- Map-Based Screening – Maps created with VMT data can illustrate areas that are currently below threshold VMT. Output from the SACOG regional travel demand model may be generalized to simplify project VMT estimates as well as producing screening maps. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis.

Transportation Division

City Hall
915 I Street, 2nd Floor
Sacramento, CA
95814-2604
916-808-8502

- Near Transit Stations – presumption that certain projects proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT. Additionally, the project would need to have a floor area ratio of at least 0.75, without excessive parking, is consistent with the adopted regional SCS, and does not result in a reduction of citywide affordable housing.
- Affordable Residential Development – adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT.

VMT Screening Evaluation

The project was evaluated against the following screening criteria to determine if it could be presumed to have a less-than-significant VMT impact:

- Map-Based Screening – The proposed project's VMT was determined using the residential VMT SACOG maps derived from the traffic analysis zone results from SACOG's travel demand model, known as SACSIM. These maps use hexagonal shaped geographic areas (HEX) to establish a uniform grid of Household VMT per capita by tallying all household VMT's generated by residents within the HEX and dividing by the total population in the HEX. As evidenced in Figure 1, the proposed project falls within a HEX calculated to produce between 50% to 85% of the Regional Average which is less than the average household VMT per capita for the region.

Because of the project meeting screening criteria using the Map-Based screening, a VMT analysis for the proposed project is not required.

If you have any questions, please call me at (916) 808-8502, or contact me via e-mail at Mllagan@cityofsacramento.org.

Transportation Division

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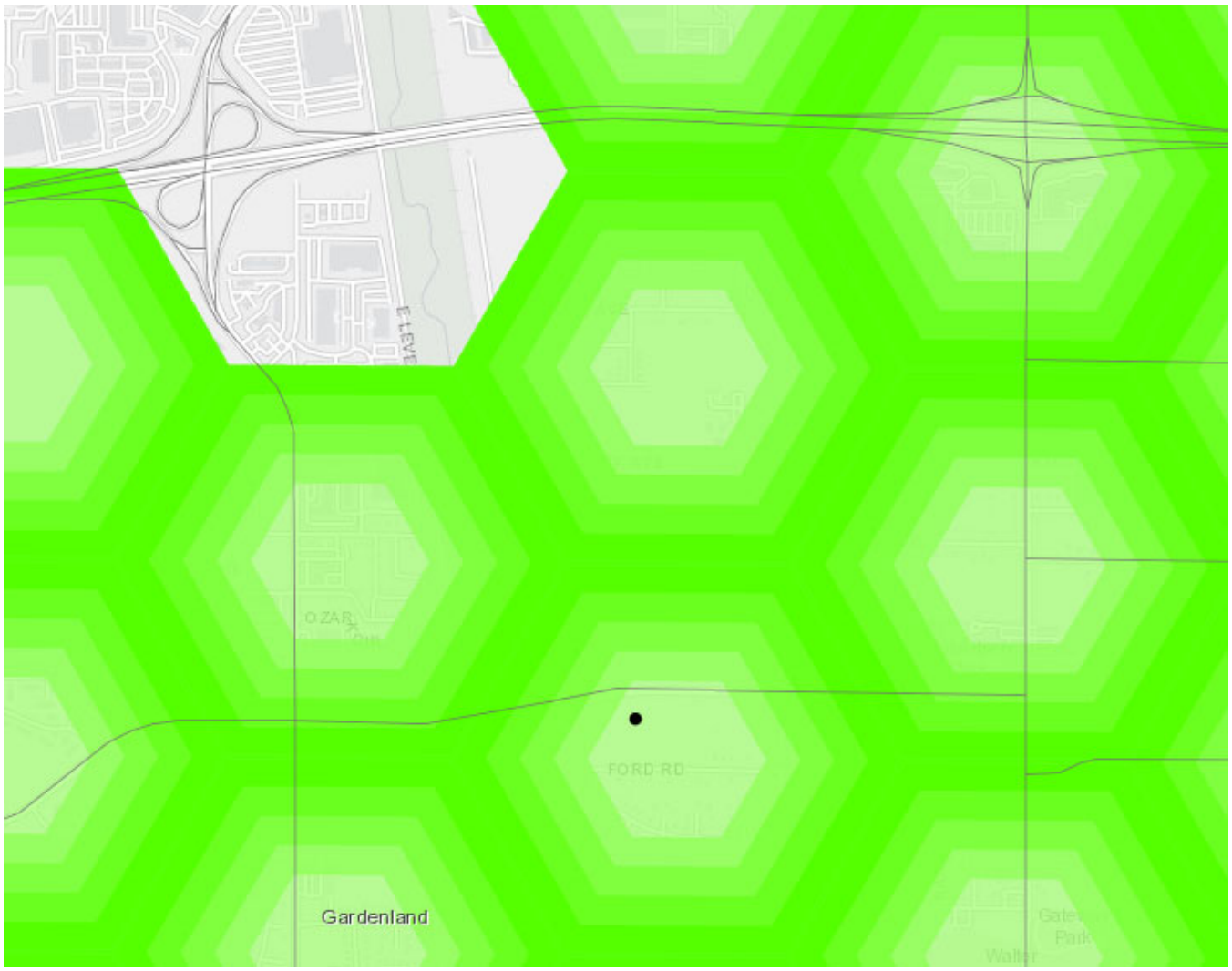


Figure 1 – SACOG VMT Residential Screening Map