

Development Permit Application No. P22-04122

Appendix A

CalEEMod Output Sheets

Living Spaces Fresno Project Custom Report

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1.1. Basic Project Information

Data Field	Value
Project Name	Living Spaces Fresno Project
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	12.2
Location	7354 N Abby St, Fresno, CA 93720, USA
County	Fresno
City	Fresno
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2429
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

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
Home Improvement Superstore	104	1000sqft	5.30	104,867	36,648	—	—	—
Parking Lot	298	Space	2.70	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.50	39.9	29.1	0.07	1.12	7.76	8.88	1.02	3.96	4.98	6,679	0.22	0.59	6,870
Mit.	7.50	39.9	29.1	0.07	1.12	7.76	8.88	1.02	3.96	4.98	6,679	0.22	0.59	6,870
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.76	20.5	16.8	0.03	0.76	0.28	1.03	0.71	0.07	0.77	2,983	0.12	0.06	3,005
Mit.	8.76	20.5	16.8	0.03	0.76	0.28	1.03	0.71	0.07	0.77	2,983	0.12	0.06	3,005
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.58	9.16	7.15	0.01	0.31	0.55	0.86	0.28	0.25	0.53	1,425	0.06	0.05	1,441
Mit.	1.58	9.16	7.15	0.01	0.31	0.55	0.86	0.28	0.25	0.53	1,425	0.06	0.05	1,441
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	1.67	1.30	< 0.005	0.06	0.10	0.16	0.05	0.05	0.10	236	0.01	0.01	239

Mit.	0.29	1.67	1.30	< 0.005	0.06	0.10	0.16	0.05	0.05	0.10	236	0.01	0.01	239
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.16	39.9	29.1	0.07	1.12	7.76	8.88	1.02	3.96	4.98	6,679	0.22	0.59	6,870
2024	7.50	1.10	1.24	< 0.005	0.07	0.04	0.10	0.06	0.01	0.07	175	0.01	< 0.005	176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.77	19.4	15.7	0.02	0.69	0.24	0.93	0.64	0.06	0.70	2,820	0.12	0.06	2,842
2024	8.76	20.5	16.8	0.03	0.76	0.28	1.03	0.71	0.07	0.77	2,983	0.12	0.06	3,005
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.34	9.16	7.15	0.01	0.31	0.55	0.86	0.28	0.25	0.53	1,425	0.06	0.05	1,441
2024	1.58	3.42	2.82	< 0.005	0.13	0.04	0.17	0.12	0.01	0.13	490	0.02	0.01	494
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.06	1.67	1.30	< 0.005	0.06	0.10	0.16	0.05	0.05	0.10	236	0.01	0.01	239
2024	0.29	0.62	0.51	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	81.2	< 0.005	< 0.005	81.8

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.16	39.9	29.1	0.07	1.12	7.76	8.88	1.02	3.96	4.98	6,679	0.22	0.59	6,870
2024	7.50	1.10	1.24	< 0.005	0.07	0.04	0.10	0.06	0.01	0.07	175	0.01	< 0.005	176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.77	19.4	15.7	0.02	0.69	0.24	0.93	0.64	0.06	0.70	2,820	0.12	0.06	2,842
2024	8.76	20.5	16.8	0.03	0.76	0.28	1.03	0.71	0.07	0.77	2,983	0.12	0.06	3,005
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.34	9.16	7.15	0.01	0.31	0.55	0.86	0.28	0.25	0.53	1,425	0.06	0.05	1,441
2024	1.58	3.42	2.82	< 0.005	0.13	0.04	0.17	0.12	0.01	0.13	490	0.02	0.01	494
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.06	1.67	1.30	< 0.005	0.06	0.10	0.16	0.05	0.05	0.10	236	0.01	0.01	239
2024	0.29	0.62	0.51	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	81.2	< 0.005	< 0.005	81.8

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.44	1.29	12.9	0.02	0.04	0.51	0.55	0.04	0.09	0.13	3,385	63.9	0.14	5,030
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.53	1.40	7.53	0.02	0.03	0.51	0.54	0.03	0.09	0.12	3,225	63.9	0.15	4,866
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	3.92	1.35	9.66	0.02	0.04	0.51	0.54	0.04	0.09	0.13	3,274	63.9	0.14	4,916
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.71	0.25	1.76	< 0.005	0.01	0.09	0.10	0.01	0.02	0.02	542	10.6	0.02	814

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Area	3.14	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	4.44	1.29	12.9	0.02	0.04	0.51	0.55	0.04	0.09	0.13	3,385	63.9	0.14	5,030
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Area	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	3.53	1.40	7.53	0.02	0.03	0.51	0.54	0.03	0.09	0.12	3,225	63.9	0.15	4,866

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.14	1.05	7.18	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,605	0.09	0.09	1,638
Area	2.76	0.02	2.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.25	< 0.005	< 0.005	9.28
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	3.92	1.35	9.66	0.02	0.04	0.51	0.54	0.04	0.09	0.13	3,274	63.9	0.14	4,916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271
Area	0.50	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54
Energy	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	166	0.02	< 0.005	168
Water	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4
Waste	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08
Total	0.71	0.25	1.76	< 0.005	0.01	0.09	0.10	0.01	0.02	0.02	542	10.6	0.02	814

2.6. Operations Emissions by Sector, Mitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Area	3.14	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1

Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	4.44	1.29	12.9	0.02	0.04	0.51	0.55	0.04	0.09	0.13	3,385	63.9	0.14	5,030
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Area	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	3.53	1.40	7.53	0.02	0.03	0.51	0.54	0.03	0.09	0.12	3,225	63.9	0.15	4,866
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.14	1.05	7.18	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,605	0.09	0.09	1,638
Area	2.76	0.02	2.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.25	< 0.005	< 0.005	9.28
Energy	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	1,006	0.14	0.01	1,013
Water	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Waste	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	3.92	1.35	9.66	0.02	0.04	0.51	0.54	0.04	0.09	0.13	3,274	63.9	0.14	4,916
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271
Area	0.50	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54
Energy	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	166	0.02	< 0.005	168
Water	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4
Waste	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08

Total	0.71	0.25	1.76	< 0.005	0.01	0.09	0.10	0.01	0.02	0.02	542	10.6	0.02	814
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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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2

Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.05	0.78	0.00	0.00	0.10	0.10	0.00	0.02	0.02	111	0.01	< 0.005	113
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.18	< 0.005	< 0.005	4.25
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.69	< 0.005	< 0.005	0.70
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
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

3.2. Site Preparation (2023) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,295	0.21	0.04	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.64	1.16	< 0.005	0.05	—	0.05	0.04	—	0.04	218	0.01	< 0.005	218
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.16	0.16	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.30	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	36.0	< 0.005	< 0.005	36.2
Dust From Material Movement	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.05	0.78	0.00	0.00	0.10	0.10	0.00	0.02	0.02	111	0.01	< 0.005	113
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

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.18	< 0.005	< 0.005	4.25
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.69	< 0.005	< 0.005	0.70
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
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,968
Dust From Material Movement	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.95	0.73	< 0.005	0.03	—	0.03	0.03	—	0.03	122	< 0.005	< 0.005	122
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	20.1	< 0.005	< 0.005	20.2
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.04	0.67	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.9	0.01	< 0.005	96.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	4.47	1.07	0.05	0.07	0.93	0.99	0.07	0.25	0.32	3,626	0.08	0.57	3,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.58	< 0.005	< 0.005	3.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	149	< 0.005	0.02	156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.59	< 0.005	< 0.005	0.60

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
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.7	< 0.005	< 0.005	25.9

3.4. Grading (2023) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,968
Dust From Material Movement	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.95	0.73	< 0.005	0.03	—	0.03	0.03	—	0.03	122	< 0.005	< 0.005	122
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	20.1	< 0.005	< 0.005	20.2

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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.04	0.67	0.00	0.00	0.08	0.08	0.00	0.02	0.02	94.9	0.01	< 0.005	96.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.08	4.47	1.07	0.05	0.07	0.93	0.99	0.07	0.25	0.32	3,626	0.08	0.57	3,805
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.58	< 0.005	< 0.005	3.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	149	< 0.005	0.02	156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.59	< 0.005	< 0.005	0.60
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
Hauling	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.7	< 0.005	< 0.005	25.9

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	6.20	4.70	0.01	0.23	—	0.23	0.21	—	0.21	788	0.03	0.01	791
Onsite truck	0.00	0.00	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	1.13	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	130	0.01	< 0.005	131
Onsite truck	0.00	0.00	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	0.17	0.09	1.49	0.00	0.00	0.18	0.18	0.00	0.04	0.04	212	0.01	0.01	216
Vendor	0.01	0.39	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	234	0.01	0.03	245
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	1.20	0.00	0.00	0.18	0.18	0.00	0.04	0.04	188	0.02	0.01	191

Vendor	0.01	0.41	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	234	0.01	0.03	245
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.40	0.00	0.00	0.06	0.06	0.00	0.01	0.01	64.1	< 0.005	< 0.005	65.2
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.9	< 0.005	0.01	80.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.6	< 0.005	< 0.005	10.8
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.7	< 0.005	< 0.005	13.3
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

3.6. Building Construction (2023) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.20	6.20	4.70	0.01	0.23	—	0.23	0.21	—	0.21	788	0.03	0.01	791
Onsite truck	0.00	0.00	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	1.13	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	130	0.01	< 0.005	131
Onsite truck	0.00	0.00	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	0.17	0.09	1.49	0.00	0.00	0.18	0.18	0.00	0.04	0.04	212	0.01	0.01	216
Vendor	0.01	0.39	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	234	0.01	0.03	245
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	1.20	0.00	0.00	0.18	0.18	0.00	0.04	0.04	188	0.02	0.01	191
Vendor	0.01	0.41	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	234	0.01	0.03	245
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.40	0.00	0.00	0.06	0.06	0.00	0.01	0.01	64.1	< 0.005	< 0.005	65.2
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	76.9	< 0.005	0.01	80.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.6	< 0.005	< 0.005	10.8
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	12.7	< 0.005	< 0.005	13.3
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	2.77	2.10	< 0.005	0.10	—	0.10	0.09	—	0.09	352	0.01	< 0.005	353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.51	0.38	< 0.005	0.02	—	0.02	0.02	—	0.02	58.3	< 0.005	< 0.005	58.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	1.10	0.00	0.00	0.18	0.18	0.00	0.04	0.04	184	0.01	0.01	187
Vendor	0.01	0.40	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	231	0.01	0.03	241

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	28.0	< 0.005	< 0.005	28.5
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	33.8	< 0.005	< 0.005	35.3
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.64	< 0.005	< 0.005	4.72
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.60	< 0.005	< 0.005	5.85
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

3.8. Building Construction (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	2.77	2.10	< 0.005	0.10	—	0.10	0.09	—	0.09	352	0.01	< 0.005	353
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.51	0.38	< 0.005	0.02	—	0.02	0.02	—	0.02	58.3	< 0.005	< 0.005	58.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	1.10	0.00	0.00	0.18	0.18	0.00	0.04	0.04	184	0.01	0.01	187
Vendor	0.01	0.40	0.18	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	231	0.01	0.03	241
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	28.0	< 0.005	< 0.005	28.5
Vendor	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	33.8	< 0.005	< 0.005	35.3
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.64	< 0.005	< 0.005	4.72
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.60	< 0.005	< 0.005	5.85
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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	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	0.36	0.29	< 0.005	0.02	—	0.02	0.01	—	0.01	41.4	< 0.005	< 0.005	41.6
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	82.4	< 0.005	< 0.005	83.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.34	< 0.005	< 0.005	2.38
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

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.39	< 0.005	< 0.005	0.39
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
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

3.10. Paving (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,512	0.06	0.01	1,517
Paving	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	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	0.36	0.29	< 0.005	0.02	—	0.02	0.01	—	0.01	41.4	< 0.005	< 0.005	41.6
Paving	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.86	< 0.005	< 0.005	6.88
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.49	0.00	0.00	0.08	0.08	0.00	0.02	0.02	82.4	< 0.005	< 0.005	83.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.34	< 0.005	< 0.005	2.38
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.39	< 0.005	< 0.005	0.39
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
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134

Architectura Coatings	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	25.6	< 0.005	< 0.005	25.7
Architectura I Coatings	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	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	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.24	< 0.005	< 0.005	4.25
Architectura I Coatings	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.6	< 0.005	< 0.005	42.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.9	< 0.005	< 0.005	37.4
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.33	< 0.005	< 0.005	7.45
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.21	< 0.005	< 0.005	1.23
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
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

3.12. Architectural Coating (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectural Coatings	7.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.21	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	25.6	< 0.005	< 0.005	25.7
Architectural Coatings	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	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	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.24	< 0.005	< 0.005	4.25
Architectural Coatings	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.27	0.00	0.00	0.04	0.04	0.00	0.01	0.01	41.6	< 0.005	< 0.005	42.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.9	< 0.005	< 0.005	37.4
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.33	< 0.005	< 0.005	7.45
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.21	< 0.005	< 0.005	1.23
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
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271

4.1.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.28	0.98	8.14	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,707	0.08	0.09	1,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Home Improvement Superstore	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.12	1.12	7.30	0.02	0.01	0.51	0.52	0.01	0.09	0.10	1,565	0.10	0.10	1,596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.21	0.19	1.31	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	266	0.02	0.02	271

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	619	0.10	0.01	625
Parking Lot	—	—	—	—	—	—	—	—	—	—	57.6	0.01	< 0.005	58.1
Total	—	—	—	—	—	—	—	—	—	—	676	0.11	0.01	683
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	619	0.10	0.01	625
Parking Lot	—	—	—	—	—	—	—	—	—	—	57.6	0.01	< 0.005	58.1

Total	—	—	—	—	—	—	—	—	—	—	676	0.11	0.01	683
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	102	0.02	< 0.005	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	9.53	< 0.005	< 0.005	9.63
Total	—	—	—	—	—	—	—	—	—	—	112	0.02	< 0.005	113

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	619	0.10	0.01	625
Parking Lot	—	—	—	—	—	—	—	—	—	—	57.6	0.01	< 0.005	58.1
Total	—	—	—	—	—	—	—	—	—	—	676	0.11	0.01	683
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	619	0.10	0.01	625
Parking Lot	—	—	—	—	—	—	—	—	—	—	57.6	0.01	< 0.005	58.1
Total	—	—	—	—	—	—	—	—	—	—	676	0.11	0.01	683
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	102	0.02	< 0.005	103
Parking Lot	—	—	—	—	—	—	—	—	—	—	9.53	< 0.005	< 0.005	9.63

Total	—	—	—	—	—	—	—	—	—	—	112	0.02	< 0.005	113
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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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.5	< 0.005	< 0.005	54.6
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.5	< 0.005	< 0.005	54.6

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.28	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	329	0.03	< 0.005	330
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.5	< 0.005	< 0.005	54.6
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.5	< 0.005	< 0.005	54.6

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

Consumer Products	2.25	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.75	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Total	3.14	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.25	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54
Total	0.50	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54

4.3.1. Mitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	2.25	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.75	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Total	3.14	0.04	4.56	< 0.005	0.01	—	0.01	0.01	—	0.01	18.8	< 0.005	< 0.005	18.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.25	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.40	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54
Total	0.50	< 0.005	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.53	< 0.005	< 0.005	1.54

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4

4.4.1. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	32.4	1.52	0.04	81.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	5.36	0.25	0.01	13.4

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360

4.5.1. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	622	62.1	0.00	2,175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	103	10.3	0.00	360

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	------

4.6.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Home Improvement Superstore	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
----------------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-----	-----	------

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

4.7.2. Mitigated

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

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

4.8.2. Mitigated

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

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

4.9.2. Mitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/5/2023	6/23/2023	5.00	15.0	—
Grading	Grading	6/26/2023	7/14/2023	5.00	15.0	—
Building Construction	Building Construction	7/17/2023	3/15/2024	5.00	175	—
Paving	Paving	3/18/2024	3/29/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	1/1/2024	4/5/2024	5.00	70.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37

Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	4.00	HHDT,MHDT
Grading	Hauling	50.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	33.6	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	17.2	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.71	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	4.00	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	7.70	LDA,LDT1,LDT2
Site Preparation	Vendor	—	4.00	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	7.70	LDA,LDT1,LDT2
Grading	Vendor	—	4.00	HHDT,MHDT
Grading	Hauling	50.0	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	33.6	7.70	LDA,LDT1,LDT2
Building Construction	Vendor	17.2	4.00	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	7.70	LDA,LDT1,LDT2
Paving	Vendor	—	4.00	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.71	7.70	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	4.00	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	0.00	0.00	157,301	52,434	7,057

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	22.5	0.00	—
Grading	0.00	5,999	15.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.70

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Home Improvement Superstore	0.00	0%
Parking Lot	2.70	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	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VM/Weekday	VM/Saturday	VM/Sunday	VM/Year
Home Improvement Superstore	311	311	311	113,500	1,830	1,830	1,830	667,848
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VM/Weekday	VM/Saturday	VM/Sunday	VM/Year
Home Improvement Superstore	311	311	311	113,500	1,830	1,830	1,830	667,848
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	157,301	52,434	7,057

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Home Improvement Superstore	1,107,404	204	0.0330	0.0040	1,026,894
Parking Lot	103,028	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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)
Home Improvement Superstore	1,107,404	204	0.0330	0.0040	1,026,894
Parking Lot	103,028	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Home Improvement Superstore	7,703,542	503,075
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Home Improvement Superstore	7,703,542	503,075
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Home Improvement Superstore	1,153	0.00
Parking Lot	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Home Improvement Superstore	1,153	0.00
Parking Lot	0.00	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
Home Improvement Superstore	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Home Improvement Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Home Improvement Superstore	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Home Improvement Superstore	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

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

5.16.1. Emergency Generators and Fire Pumps

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

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

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

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

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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8. User Changes to Default Data

Screen	Justification
Land Use	Project would include a 104,867 sf furniture retail store in an 8-acre project site
Construction: Construction Phases	Construction would start in June 2023 and occur for 10 months. Overlap of building construction and architectural coating.
Construction: Off-Road Equipment	Default construction equipment with Tier 2 engine
Operations: Vehicle Data	Based on a trip generation of 311 ADT

Development Permit Application No. P22-04122

Appendix B

Biological Resources Assessment



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

March 8, 2023

Brian Saltikov, Senior Project Manager
Real Estate Development
14501 Artesia Boulevard
La Mirada, California 90638

Subject: Biological Resources Assessment for the Proposed Living Spaces Project located in City of Fresno, Fresno County, California

Dear Mr. Saltikov,

The purpose of this Biological Resources Assessment is to describe and document potential impacts to biological resources associated with the proposed Living Spaces Project (project) located at 3457 North Abby Street, southeast of the intersection of East Minarets/East Alluvial Avenue and North Abby Street, in the City of Fresno (City), Fresno County, California (refer to Figure 1; all figures provided in Attachment A). This technical information is provided for project review under the California Environmental Quality Act (CEQA) and other pertinent environmental regulations. This letter report provides a biological resources impact analysis that reflects the current environmental setting, project design, and regulatory context.

PROJECT DESCRIPTION

Based on the site plan prepared by Ktgy Architecture and Planning, dated January 18, 2023, the project involves the construction and operation of an approximately 104,867-square-foot furniture retail store in the eastern portion of the site, associated, parking on the western portion and along the northeastern boundary of the site, and utility infrastructure. Access to the site would be provided from North Abby Street. In addition, the proposed project includes a potential access connection to the project site through the adjacent Kohl's parking lot to East Alluvial Avenue which would require a cross-access covenant/agreement between the property owners of both parcels. The "project site" discussed in this report refers to all areas within the 7.75-acre property where temporary and permanent ground disturbance would occur.

PROJECT SETTING

The project site is located along the eastern portion of the San Joaquin Valley floor in Fresno County. Specifically, the project site is located on Assessor's Parcel Number 303-201-27 in the northern quarter of the United States Geological Survey (USGS) *Fresno North, California*, 7.5-minute topographic quadrangle map (refer to Figure 1).

The project site is currently undeveloped and contains one transformer/pad and a fire hydrant from the previous development (refer to Figure 2). According to historic aerial imagery, the project site was previously developed as Boomers Park (a family entertainment park) from approximately 1998 to 2017. In 2017, Boomers Park was demolished/cleared and the site has remained in its current condition since 2017. Adjacent parcels consist of North Abby Street to the west, a Kohl's department store to the north, State Route (SR 41) to the east, and a Home Depot store to the south. Some

lands in the vicinity of the project site are fallow/vacant lots; however, most of the lands are developed with a mixture of commercial developments, schools, and residential uses. There are no undisturbed open spaces in the vicinity of the project site.

The project site is located within the San Joaquin Valley Sub-region of the California Floristic Province (Baldwin, et al. 2012) and within the Gates Lake watershed (Hydrologic Unit Code # 180300090701). The project site is flat with little topographic variation and is at approximately 352 feet (107 meters) above mean sea level in elevation. There are no drainage features, depressional wetlands, or riparian areas present in the project site or immediate surroundings.

METHODS

Literature Review and Records Search

LSA Biologist Kelly McDonald conducted a literature review and records search on January 18, 2023, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species¹ in the project vicinity. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Data Base information (CNDDDB – RareFind 5)**, which is administered by the California Department of Fish and Wildlife (CDFW), formerly known as the California Department of Fish and Game. This database covers sensitive plant and animal species, as well as sensitive natural communities that occur in California. Records from nine USGS quadrangles surrounding the project area (*Gregg, Lanes Bridge, Friant, Herndon, Fresno North, Clovis, Malaga, Fresno South and Kearney Park*), along with a query of records within a 5-mile radius of the project site, were obtained from this database to inform the field survey.
- **California Native Plant Society’s (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants**, which uses four specific categories or “lists” of sensitive plant species to assist with the conservation of rare or endangered botanical resources. Records from the nine USGS quadrangles surrounding the project site were obtained from this database to inform the field survey.
- **United States Fish and Wildlife Service’s (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all designated critical habitats, national wildlife

¹ For the purposes of this report, the term “special-status species” refers to those species that are listed or proposed for listing under the California Endangered Species Act (CESA) and/or the Federal Endangered Species Act (FESA), California Fully Protected Species, and California Species of Special Concern. It should be noted that “Species of Special Concern” is an administrative designation made by the CDFW and carries no formal legal protection status. However, Section 15380 of the CEQA Guidelines indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report (USFWS 2023a) was generated for the project site.

- **Designated and Proposed USFWS Critical Habitat Polygons** were reviewed to determine whether critical habitat has been designated or proposed within or in the vicinity of the project site (USFWS 2023b).
- **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously identified in the survey area (USFWS 2023c).
- **eBird:** eBird is a real-time, online checklist program launched in 2002 by the Cornell Lab of Ornithology and National Audubon Society. It provides rich data sources for basic information on bird abundance and distribution at a variety of spatial and temporal scales. eBird occurrence records within the project sites and a 5-mile radius around the project site were reviewed in January 2023 (eBird 2023).

In addition to the databases listed above, historic and current aerial imagery, and local land use policies related to biological resources were reviewed.

Field Survey

A general biological survey of the project site was conducted by LSA Biologist Kelly McDonald on January 19, 2023. The project site was surveyed on foot, and all biological resources observed were noted and mapped. Suitable habitat for any species of interest or concern was duly noted, and general site conditions were photographed (Attachment B, Site Photos). The field survey took place on an overcast morning with weather conditions conducive to the detection of plant and animal species. A series of rain events passed through the region in the weeks prior to the site survey.

RESULTS

This section summarizes the environmental setting and provides further analysis of the data collected in the field. Discussions regarding the existing project site conditions, soils, vegetation communities, potentially occurring special-status biological resources, and habitat connectivity are presented below.

The project site consists of a flat area supporting disturbed non-native grassland. The vegetation existing on the site appears to be regularly maintained. There are a few small and immature Mexican fan palm (*Washingtonia robusta*; non-native species) and interior live oak (*Quercus wislizeni*) trees located along the fence line of the southern perimeter of the project site. Much of the soil and vegetation within the project site is disturbed from the demolition of Boomers Park in 2017. Worn foot paths, litter, vehicle tracks, and trampling are evident throughout the project site.

No riparian habitat exists in the project site or on adjacent parcels and there are no depressional wetlands (e.g., vernal pools) or natural drainage features within the project site. The project site does not serve as a wildlife nursery or as a wildlife migration corridor. Further details regarding specific biological resources are provided in the following sections.

Vegetation and Land Cover Types

The project site is strictly upland in nature with dominant vegetation consisting of disturbed non-native grassland. Ongoing soil disturbance and the resulting competitive exclusion by invasive nonnative plants limit the potential for native flora to occur in the project site. No native or special-status vegetation communities exist in the project site. The acreages of each vegetation community and land cover type occurring in the project site are shown in Table A, below. Representative photographs of the project site are presented in Attachment B, and Figure 3 provides a map of these vegetation and land cover types within the project site.

Table A: Vegetation and Land Cover Types Within the Project Site

Vegetation / Land Cover Type	Acreage ¹
Developed	0.001
Disturbed/Barren	2.12
Disturbed Non-Native Grassland	5.63
Total Acres	7.75

¹ All presented acreages are approximate and based on geographic information system measurements.

A total of 25 vascular plant species were identified within the project site during the January 2023 field survey. See Attachment C for a complete list of species identified on the project site. The following describes the vegetation and land cover types occurring within the project site:

Developed: Developed areas consist of paved areas, buildings, and other areas that are cleared or graded for anthropogenic purposes. The transformer/pad and fire hydrant are the only developed features within the site.

Disturbed/Barren: Based on an analysis of historical aerial imagery and observations during the survey, vehicles regularly park and drive throughout the site as evinced by tire tracks and ruts. These disturbed areas lacked vegetation or supported a sparse cover of ruderal vegetation, with nonnative grasses and Russian thistle (*Salsola tragus*) being the most frequently encountered plant species. Several other invasive, pioneering plant species were also observed in these areas.

Disturbed Non-Native Grassland: This area classifies as disturbed non-native grassland due to evidence of litter, off-road vehicle tracks, worn foot paths, and previously graded areas from the demolition of the existing Boomers Park. Vegetation associated with disturbed non-native grassland consist of nonnative grasses and pioneering herbaceous plants that readily colonize disturbed ground. Nonnative grasses are present which include brome grasses (*Bromus sp.*), ripgut brome (*Bromus diandrus*), wild oats (*Avena fatua*), and Dallis grass (*Paspalum dilatatum*). Other dominant plants within this area include weedy or pioneering species such as: prickly lettuce (*Sonchus asper*), Russian thistle, Musky stork's bill (*Erodium moschatum*), and Shepherd's purse (*Capsella bursa-pastoris*). A few small and immature Mexican fan palm (*Washingtonia robusta*; non-native species) and interior live oak (*Quercus wislizeni*) occur along the fence line of the southern perimeter of the project site.

Soils

According to the Natural Resource Conservation Service (NRCS) online soil survey of Eastern Fresno County, the project site is composed of San Joaquin loam, shallow, 0 to 3 percent slopes as shown on Figure 4 and described in Table B below.

Table B: Soil Type Information

Map Unit Symbol	Map Unit Name	Parent Material	Drainage Class	Hydric
SgA	San Joaquin loam, shallow, 0 to 3 percent slopes	Alluvium derived from granite	Moderately well drained	No

Compiled: NRCS (January 2023)

Wildlife

A total of seven wildlife species were observed on or near the project site during the January 2023 survey, including: American crow (*Corvus brachyrhynchos*), house finch (*Haemorrhous mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*), California scrub jay (*Aphelocoma californica*), European starling (*Sturnus vulgaris*; nonnative species), and California ground squirrel (*Otospermophilus beecheyi*). Each of the wildlife species observed commonly occur in and around developed areas throughout the San Joaquin Valley.

Migratory bird species may utilize the project site for foraging; however, the usage is likely transient and limited to species that forage over open areas. The project site does not possess any characteristics that would indicate a locally significant stopover point for migratory species including raptors or waterfowl. No known wildlife movement corridors occur within the project site or in the immediate vicinity.

SPECIAL-STATUS BIOLOGICAL RESOURCES

The Fresno region supports various special-status natural communities, plants, and animals. Attachment D provides tables that identify those special-status plant and animal species known to occur or that potentially occur in the vicinity of the project site (based on the literature review and experience in the region) and includes detailed information about each species’ habitat and distribution, State and Federal status designations, and probability of occurrence within the project site. As stated in the methodology section above, the background research included occurrence records from nine USGS topographic quadrangles surrounding the survey area. A nine USGS quadrangle search covers a large, variable geographic and topographic area containing numerous habitat types not found within or around the project site. The following species are not included in Attachment D because suitable nesting habitat does not occur in the project site or in the immediate vicinity, or the project site is outside of the species’ known current range: great egret (*Ardea alba*; nesting colonies), snowy egret (*Egretta thula*; nesting colonies), double-crested cormorant (*Nannopterum auritum*; nesting colonies), and black-crowned night heron (*Nycticorax nycticorax*; nesting colonies).

The following subsections provide specific discussions for special-status natural communities, plant and animal species, and habitats of concern (including critical habitat, jurisdictional aquatic resources, wildlife movement corridors, and regional and local habitat conservation plans).

Special-Status Natural Communities

The CNDDDB search identified occurrences of four special-status natural (i.e., plant) communities, Great Valley mixed Riparian Forest, Northern Claypan Vernal Pool, Northern Hardpan Vernal Pool, and Sycamore Alluvial Woodland, within the nine-quad search area.¹ These habitat types do not occur within the project site or in the immediate vicinity.

No special-status natural communities or conservation areas exist within the project site or in adjacent parcels. The project site is completely isolated and distant from all special-status natural communities that occur in the region.

Special-Status Plants

Attachment D contains tables that identify special-status species known to occur or that potentially occur in the vicinity of the project site and include detailed information about each species' habitat and distribution, activity period, listing/status designations, and probability of occurrence within the project site boundaries. These species were compiled from the CNPS, CNDDDB, and IPaC records searches from a 5-mile radius around the project site and from LSA's extensive knowledge and experience in the region.

The literature review identified 14 special-status plant species that are known to occur within a nine-quad radius of the project site (refer to Attachment D). The majority of the rare plant species that were identified in the databases have specialized habitat requirements (i.e., they occur on predominantly alkaline soils, vernal pools, riparian, or wetland habitats, etc.) that do not occur within the project site.

Historic anthropogenic disturbances have greatly altered the natural hydrologic regimes and have either eliminated or greatly impacted the pre-settlement habitats needed to support the special-status plant species identified in the CNDDDB and CNPS queries. As such, the specific habitats, soil substrates or "micro-climates" necessary for special-status plant species to occur are absent within the boundaries of the project site. Based on site observations coupled with the habitat suitability analysis, no special-status plant species are expected to occur within the project site. It is also unlikely that any source populations exist in adjacent or nearby parcels.

Special-Status Animals

The historic anthropogenic disturbances in the project site and adjacent parcels (i.e., urban development, roads and highways, etc.) have greatly altered, eliminated, or impacted the pre-settlement habitats needed to support most of the special-status animal species identified in the CNDDDB and USFWS queries (refer to Attachment D). There are no known occurrences of any special-status animal species in the project site, and none were observed during the January 2023 field survey. Nonetheless, marginally suitable, isolated habitat for several regionally occurring special-status species is present in the project site and those species are discussed in further detail below.

¹ The CNDDDB uses sensitive vegetation community names described in the Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986). No new sensitive natural community records have been added to the CNDDDB since the 1990s. Therefore, natural communities mapped by the CNDDDB are limited.

One special-status animal species, burrowing owl (*Athene cunicularia*) has low potential to occur in the project site due to the presence of potentially suitable habitat and/or known records in the project vicinity. However, no sign which would indicate occupation or use by this species (e.g., scat, tracks, whitewash, prey remains, or any other sign) was identified. Several small mammal burrows, including active California ground squirrel burrows were observed within the disturbed non-native grassland habitats in the project site. None of the small mammal burrows observed in the project site exhibited features typical of occupied burrowing owl burrows, although the species is highly mobile and there is some potential for use by these species in the future.

The project site contains marginal foraging habitat for certain raptors such as the Swainson's hawk (*Buteo swainsoni*), although suitable tree-nesting habitat for this species is absent from the project site. The Mexican fan palms and interior live oaks trees are immature and small in stature and do not provide conducive nesting habitat for Swainson's hawk or other raptor species. Suitable avian nesting habitat in the project site is mostly limited to that which supports ground-nesting species such as California horned lark (*Eremophila alpestris actia*) and other birds that may nest on the ground or in the annual herbaceous cover. Mature Palm and oak trees in the vicinity and along the perimeter outside of the site in the adjacent parcels could be used by raptors and other tree-nesting species. Overall, the project site and immediate surroundings contain foraging and nesting habitat for a variety of bird species that are protected while nesting under the Migratory Bird Treaty Act and California Fish and Game Code.

The evaluation of special-status animal species occurrence within the project site was based on a habitat suitability analysis. It did not include exhaustive surveys to determine their presence or absence, but did include direct observation of on-site and off-site conditions and a review of the available recorded occurrence data from the area to conclude whether or not a particular species could be expected to occur. Based on this analysis, it is unlikely that the remaining special-status wildlife species listed in Attachment D would occupy or otherwise utilize the habitat present within the project site. Significant adverse impacts to special-status wildlife species are not anticipated with the implementation of the recommended impact avoidance, minimization, and mitigation measures described in further detail below.

Critical Habitat

The project site is not located within designated critical habitat for any species.

Wetlands and Potential Jurisdictional Aquatic Resources

The project site is strictly upland in nature with moderately well-drained soils. Based on historical aerial imagery, an irrigation ditch was historically located on the western side of the site. However, the ditch was either placed underground or rerouted prior to 1998. There are no wetlands, riparian areas, or potential jurisdictional drainage features currently present within the project site.

Wildlife Movement and Habitat Connectivity

The project site is isolated from natural areas and it is unlikely that the site serves as an important corridor for animals moving locally, regionally, or in broader migrations. Migratory bird species may utilize the project site for foraging; however, the usage is likely transient and limited to species that

forage over open grassland areas. The project site does not possess any characteristics that would indicate a locally significant stopover point for migratory species including raptors or waterfowl.

No known wildlife movement corridors occur within the project site or in the immediate vicinity.

Regional Habitat Conservation Plans and Local Policies

The City of Fresno and Fresno County currently does not have a regional Natural Community Conservation Plan (NCCP) or Habitat Conservation Plan (HCP). The 2030 General Plan for the City of Fresno outlines local relevant policies related to biological resources. Below is the list of relevant policies from the City of Fresno General Plan:

- Parks Open Space and Schools (POSS)-5-a Habitat Area Acquisition. Support federal, State, and local programs to acquire significant habitat areas for permanent protection and/or conjunctive educational and recreational use.
- POSS-5-b Habitat Conservation Plans. Participate in cooperative, multijurisdictional approaches for area-wide habitat conservation plans to preserve and protect rare, threatened, and endangered species.
- POSS-5-c Buffers for Natural Areas. Require development projects, where appropriate and warranted, to incorporate natural features (such as ponds, hedgerows, and wooded strips) to serve as buffers for adjacent natural areas with high ecological value.
- POSS-5-d Guidelines for Habitat Conservation. Establish guidelines for habitat conservation and mitigation programs, including:
 - Protocols for the evaluation of a site's environmental setting and proposed design and operating parameters of proposed mitigation measures.
 - Methodology for the analysis depiction of land to be acquired or set aside for mitigation activities.
 - Parameters for specification of the types and sources of plant material used for any re-vegetation, irrigation requirements, and post-planting maintenance and other operational measures to ensure successful mitigation.
 - Monitoring at an appropriate frequency by qualified personnel and reporting of data collected to permitting agencies.
- POSS-5-e Pursue development of conjunctive habitat and recreational trail uses in flood control and drainage projects.
- POSS-5-f Regional Mitigation and Habitat Restoration. Coordinate habitat restoration programs with responsible agencies to take advantage of opportunities for a coordinated regional mitigation program.

- POSS-5-g Assistance in Valley Arboretum Master Planning. Assist community organizations that have raised grant funds to pursue the preparation of a Valley Arboretum Master Plan and Implementation Program, including funding, to be coordinated with community groups, as well as related plans and policies for established neighborhoods and other areas with park deficiencies.
- POSS-6-a San Joaquin River Parkway Master Plan. Support the San Joaquin River Conservancy in its efforts to update the San Joaquin River Parkway Master Plan by working with the other jurisdictions and the River Conservancy to create a comprehensive and feasible plan for preservation, conservation, and Parkway development.
- POSS-6-b Effects of Stormwater Discharge. Support efforts to identify and mitigate cumulative adverse effects on aquatic life from stormwater discharge to the San Joaquin River.
 - Avoid discharge of runoff from urban uses to the San Joaquin River or other riparian corridors.
 - Approve development on sites having drainage (directly or indirectly) to the San Joaquin River or other riparian areas only upon a finding that adequate measures for preventing pollution of natural bodies of water from their runoff will be implemented.
 - Periodically monitor water quality and sediments near drainage outfalls to riparian areas. Institute remedial measures promptly if unacceptable levels of contaminant(s) occur.

According to the Landscape Plan, two trees located outside the project site will be removed as part of the connection to the proposed driveways along East Alluvial Avenue. The current landscaping along the southern perimeter of the project site will remain in place. However, the two trees proposed to be removed might be subject to the City of Fresno's tree removal permit as described the City of Fresno *Municipal Code Article 23 Landscape* (City of Fresno 2023). If the trees to be removed are fruit trees and trees of the genus Myrtaceae with a 12-inch diameter or 38-inch circumference, those trees are considered protected. The applicant would follow the guidelines outlined in *Article 23 Landscape, Section 15-2308, D. Tree Removal Permit/Application Requirements*.

IMPACT FINDINGS

Special-Status Natural Communities

The project site does not contain any special-status natural communities and such habitats would not be impacted by the proposed project. No mitigation is required.

Special-Status Species

No special-status plant species are expected to occur within the project site or to be adversely affected by the proposed project, and no mitigation is required.

While no special-status animal species (or signs of such species) were observed on site during the January 2023 survey, California ground squirrel burrows that could be used by burrowing owl were observed in portions of the project site. None of the California ground squirrel burrows observed in the project site exhibited features typical of occupied burrowing owl burrows at the time of the survey, although there is some potential for use by this species in the future. Potentially significant direct and/or indirect impacts, including mortality, harassment, or other forms of incidental take, could occur if construction-related ground disturbance occurs in or around an occupied burrow.

While suitable habitat for shrub and tree nesting birds is almost absent on the project site (only small immature Mexican fan palm and interior live oaks occur along the perimeter of the site), the project site and immediate surroundings that could be subjected to indirect disturbances during construction do contain suitable nesting habitat for a variety of tree and ground-nesting birds and for other birds that could nest in the annual herbaceous vegetation. Nesting birds are protected under the California Fish and Game Code. Construction activities that occur during the nesting bird season (typically February 15 through September 15) have potential to result in the direct or indirect take of nesting birds.

If unmitigated or avoided, these potential direct and indirect impacts on special-status wildlife species and nesting birds could be considered potentially significant. However, implementation of Mitigation Measures BIO-1 through BIO-2, as summarized below, would effectively mitigate any impacts on special-status wildlife species to less-than-significant levels.

Critical Habitat

The project would not result in any impacts to designated critical habitat, and no additional mitigation is required.

Wetlands and other Aquatic Resources

The project would not result in any impacts to jurisdictional aquatic resources, and no mitigation is required.

Wildlife Movement

The proposed project would not place any barriers within any known wildlife movement corridors or interfere with habitat connectivity, and no mitigation related to wildlife movement is required.

Regional Habitat Conservation Plans and Local Policies

Because the project would not impact any sensitive biological resources, special-status species, or jurisdictional aquatic features, the project would not conflict with any local policies or ordinances protecting biological resources. If any tree removal is expected to occur, the applicant would be subject to the *Article 23 Landscape, Section 15-2308, D. Tree Removal Permit/Application Requirements*, therefore making the project not conflict any tree removal policies.

RECOMMENDED IMPACT AVOIDANCE AND MINIMIZATION MEASURE

The following measure is recommended to be implemented to avoid, minimize, and/or mitigate impacts on nesting birds.

Mitigation Measure BIO-1: Conduct Preconstruction Clearance Surveys for Burrowing Owl. A preconstruction clearance survey is required for burrowing owl no more than 30 calendar days prior to initiation of project activities. All survey results must be delivered to the City of Fresno. If an active burrowing owl burrow is found within the project site, the applicant must coordinate with CDFW to obtain applicable agency approval/direction prior to any ground disturbance activities on the site. Specific avoidance, den excavation, passive relocation, and compensatory mitigation activities shall be performed as required by CDFW. If no active burrowing owl burrows are identified, project activities may proceed as planned following the preconstruction survey.

Mitigation Measure BIO-2: Nesting Bird Surveys and Avoidance. If vegetation removal, construction, or grading activities are planned to occur within the active nesting bird season (February 15 through September 15), a qualified biologist shall conduct a preconstruction nesting bird survey no more than 5 days prior to the start of such activities. The nesting bird survey shall include the project site and areas immediately adjacent to the site that could potentially be affected by project-related activities such as noise, vibration, increased human activity, and dust, etc. For any active nest(s) identified, the qualified biologist shall establish an appropriate buffer zone around the active nest(s). The appropriate buffer shall be determined by the qualified biologist based on species, location, and the nature of the proposed activities. Project activities shall be avoided within the buffer zone until the nest is deemed no longer active by the qualified biologist. Documentation of all survey results shall be provided to the City.

CONCLUSION

Based on field observations coupled with the habitat suitability analysis conducted for this assessment, the project is not expected to impact regionally occurring special-status plant or wildlife species. The project would not impact any special-status natural communities, jurisdictional aquatic features, or other habitats of concern. Successful implementation of the recommended avoidance measures defined above (BIO-1 and BIO-2) would avoid impacts on burrowing owl and nesting birds and ensure compliance with the Migratory Bird Treaty Act and applicable provisions of the California Fish and Game Code.

If you have any questions regarding this letter report, please contact Kelly McDonald at (805) 782-0745.

Sincerely,
LSA Associates, Inc.

Kally McDonald

- Attachments:
- A: Figures 1-4
 - B: Representative Site Photographs
 - C: Vascular Plant Species Observed
 - D: Summary of Special-Status Species

REFERENCES

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, eds. 2012. *The Jepson Manual: Vascular Plants of California*, second edition. University of California Press, Berkeley.
- California Department of Fish and Wildlife (CDFW). 2023a. California Natural Diversity Database (CNDDDB). Special Animals List. January 2023. Periodic publication.
- _____. 2023b. State of California, Department of Fish and Wildlife Biogeographic Data Branch. California Natural Diversity Database (CNDDDB). Rarefind Version 5. January 2023. Rarefind query of the USGS 7.5-minute quads nine-quad review area – *Gregg, Lanes Bridge, Friant, Herndon, Fresno North, Clovis, Malaga, Fresno South and Kearney Park* and GIS query of occurrences within a 5-mile buffer (project vicinity).
- California Native Plant Society (CNPS). 2023. *Inventory of Rare and Endangered Plants (online edition v8)*. Available at: <http://cnps.org/cnps/rareplants/inventory/>. January 2023.
- City of Fresno. 2014. City of Fresno General Plan, *Parks, Open Space, and Schools*.
- _____. 2023. City of Fresno Municipal Code *Article 23 Landscape*. January 2023.
- eBird. 2022. eBird: An online database of bird distribution and abundance. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available at: <http://www.ebird.org> (accessed January 2023).
- Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE)). 2023. "Current Implementation of Waters of the United States Section 401. Website: <https://www.epa.gov/wotus/current-implementation-waters-united-states>.
- Google Earth. 2023. Aerial images of the project site and environs from August 1998, July 2002, December 2002, May 2004, July 2004, August 2005, August 2006, June 2009, September 2010, April 2011, August 2012, August 2017, February 2018, September 2019, May 2020, July 2020, August 2020, September 2020, November 2020, January 2021, April 2021, June 2021, March 2022, and June 2022.
- Holland. 1986. California Department of Fish and Game: Preliminary Descriptions of the Terrestrial Natural Communities of California.
- Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. Website: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- Sawyer, J., T. Keeler-Wolf, and J. Evans. 2009. *A Manual of California Vegetation*. 2nd edition. California Native Plant Society, Sacramento, California. 1,300 pp.
- State Water Resources Control Board (SWRCB). 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* [For Inclusion in the Water

- Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California]. Adopted April 2, 2019. Effective May 28, 2020. Website: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conform.pdf.
- United States Fish and Wildlife Service (USFWS). 2015. USFWS Critical Habitat Mapper. Available at: <http://ecos.fws.gov/crithab/> (accessed January 2023).
- _____. 2023a. Environmental Conservation Online System (ECOS). Information for Planning and Conservation (IPaC) Trust Resources Report. January 2023. Available at: <http://ecos.fws.gov/ecp/>.
- _____. 2023b. USFWS Critical Habitat Polygons. Available at: <http://ecos.fws.gov/crithab/>. January 2023.
- _____. 2023c. USFWS National Wetlands Inventory (NWI), Online Mapper Tool. Available at: <https://www.fws.gov/wetlands/data/mapper.html>.

ATTACHMENT A

FIGURES 1-4

Figure 1: Regional and Project Location

Figure 2: Project Site

Figure 3: Vegetation and Land Cover

Figure 4: Soils

ATTACHMENT B

REPRESENTATIVE SITE PHOTOGRAPHS

ATTACHMENT C

VASCULAR PLANT SPECIES OBSERVED

VASCULAR PLANT SPECIES OBSERVED

The following vascular plant species were observed in the project site by LSA biologist Kelly McDonald on January 19, 2023.

- * introduced species not native to California

EUDICOTS	
Asteraceae	Sunflower Family
<i>Amsinckia intermedia</i>	Common fiddleneck
<i>Centaurea solstitialis</i> *	Yellow-star thistle
<i>Erigeron canadensis</i>	Canada horseweed
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Senecio vulgari</i> *	Common groundsel
<i>Sonchus asper</i> *	Prickly sow thistle
Brassicaceae	Mustard Family
<i>Capsella bursa-pastoris</i> *	Shepherd's purse
<i>Lepidium didymium</i> *	Lesser swine cress
Caryophyllaceae	Pink Family
<i>Stellaria media</i> *	Chickweed
Chenopodiaceae	Goosefoot Family
<i>Salsola tragus</i> *	Russian thistle
Fabaceae	Pea Family
<i>Trifolium sp.</i> *	Clover
Fagaceae	Beech Family
<i>Quercus wislizeni</i>	Interior live oak
Geraniaceae	Geranium Family
<i>Erodium botrys</i> *	Broad leaf filaree
<i>Erodium moschatum</i> *	Musky stork's bill
Lamiaceae	Mint Family
<i>Rosmarinus officinalis</i> *	Rosemary
Oleaceae	Olive Family
<i>Ligustrum lucidum</i> *	Glossy privet
Rosaceae	Rose Family
<i>Heteromeles arbutifolia</i>	Toyon
Solanaceae	Nightshade family
<i>Datura wrightii</i>	Jimsonweed
<i>Solanum americanum</i>	American black nightshade
MONOCOTS	
Arecaceae	Palm Family
<i>Washingtonia robusta</i> *	Mexican fan palm
Poaceae	Grass Family
<i>Avena fatua</i> *	Wild oat
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus sp.</i> *	Brome grass
<i>Paspalum dilatatum</i> *	Dallis grass

ATTACHMENT D

SUMMARY OF SPECIAL-STATUS SPECIES

Development Permit Application No. P22-04122

Appendix C

Cultural Resources Survey



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

March 7, 2023

Brian Saltikov, Senior Project Manager
Living Spaces Real Estate Development
14501 Artesia Boulevard
La Mirada, California 90638

Subject: Cultural Resources Survey Study for the Living Spaces Project in Fresno, Fresno County, California (LSA Project No. LSP2201)

Dear Mr. Saltikov:

LSA conducted a cultural resources survey study (study) for the proposed Living Spaces Project (project) in Fresno, Fresno County, California. Study work (which consisted of background research and a field survey) was completed per the requirements of the California Environmental Quality Act of 1970 (CEQA).

This study was prepared to: (1) identify archaeological deposits that may meet the CEQA definition of a historical resource (California Public Resources Code [PRC] Section 21084.1) or a unique archaeological resource (PRC Section 21083.2) and that may be impacted by the proposed project; (2) assess the potential for human remains; and (3) recommend best practices and procedures that may be utilized with respect to archaeological resources, if warranted. This report has been prepared by Associate/Senior Cultural Resources Manager Kerrie Collison, M.A., Registered Professional Archaeologist (RPA) 28731436.

PROJECT LOCATION AND DESCRIPTION

The approximately 8-acre project site is depicted on the United States Geological Survey (USGS) *Fresno North, California* 7.5-minute topographic quadrangle map in Section 33 of Township 12 South, Range 20 East, Mount Diablo Baseline and Meridian (USGS 1981; Figure 1 [all figures are provided in Attachment B]). It consists of the entirety of Assessor's Parcel Number 303-201-27, southeast of the intersection of East Minarets/East Alluvial Avenue and North Abby Street (Figure 2).

The proposed project involves the construction and operation of a furniture retail store in the eastern portion of the project site, associated parking on the western portion and along the northeastern boundary of the project site, and utility infrastructure. Access to the project site would be provided from North Abby Street. In addition, the proposed project includes a potential access connection to the project site through the adjacent Kohl's parking lot to East Alluvial Avenue, which would require a cross-access covenant/agreement between the property owners of both parcels.

BACKGROUND RESEARCH

Southern San Joaquin Valley Information Center

On January 23, 2023, Celeste M. Thomson (Coordinator at the Southern San Joaquin Valley Information Center [SSJVIC]) conducted a record search at the SSJVIC of the California Historical Resources Information System at California State University, Bakersfield. The SSJVIC, an affiliate of

the California Office of Historic Preservation, is the official repository of cultural resource records and reports for Fresno County. The record search included a review of all recorded historic-period and prehistoric cultural resources within a 0.5-mile radius of the project site, as well as a review of known cultural resource surveys and excavation reports.

The record search results (SSJVIC File No. 23-017; Attachment C) indicate that two previous cultural resources studies included a portion or the entirety of the project site and that six previous cultural resources studies have included a portion of the 0.5-mile search radius. The previous cultural studies that included a portion and the entirety of the project site (FR-00384 and FR-00577, respectively) were both surveys. The six previous studies (FR-00383, FR-00398, FR-01572, FR-01685, FR-02568, and FR-02955) were also surveys. An estimated 50 percent of the project site and 0.5-mile radius has been studied. As a result of previous cultural resources studies, no cultural resources have been recorded in the project site or within 0.5 mile.

Aerial Photographs and Maps

Aerial photographs and historic maps that include the project site were also reviewed (USGS n.d.; NETR n.d.). The results of the review are presented in Table A.

Table A: Aerial Photograph and Historic Map Review

Map/Photograph	Results
1921 <i>Bullard, California</i> map (Scale 1:31,680)	The project site is not developed with any buildings.
1946 <i>Fresno North, California</i> map (Scale 1:24,000)	The project site is not developed with any buildings.
1955 <i>Fresno, California</i> map (Scale 1:250,000)	The project site is not developed with any buildings.
1957 aerial photograph	The project site not developed with any buildings. A seeming man-made irrigation channel transects the project site.
1962 aerial photograph	No change from the 1957 aerial photograph.
1965 <i>Herndon, California</i> map (Scale 1:62,500)	The project site is not developed with any buildings.
1972 and 1984 aerial photographs	No change from the 1957 aerial photograph.
1998 aerial photograph	The project site has been developed as a Boomers Park (a family entertainment park).
2016 aerial photograph	The project site remains a Boomers Park.
2018 aerial photograph	Boomers Park has been demolished, and the project site has been cleared of all buildings and parking lots.

Compiled by LSA (2023) from United States Geological Survey (n.d.) and National Environmental Title Research (n.d.).

Native American Heritage Commission

LSA submitted a request to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF) for the presence of Native American cultural resources that the proposed project might impact. The NAHC maintains the SLF database and is the official State repository of Native American sacred-site location records in California.

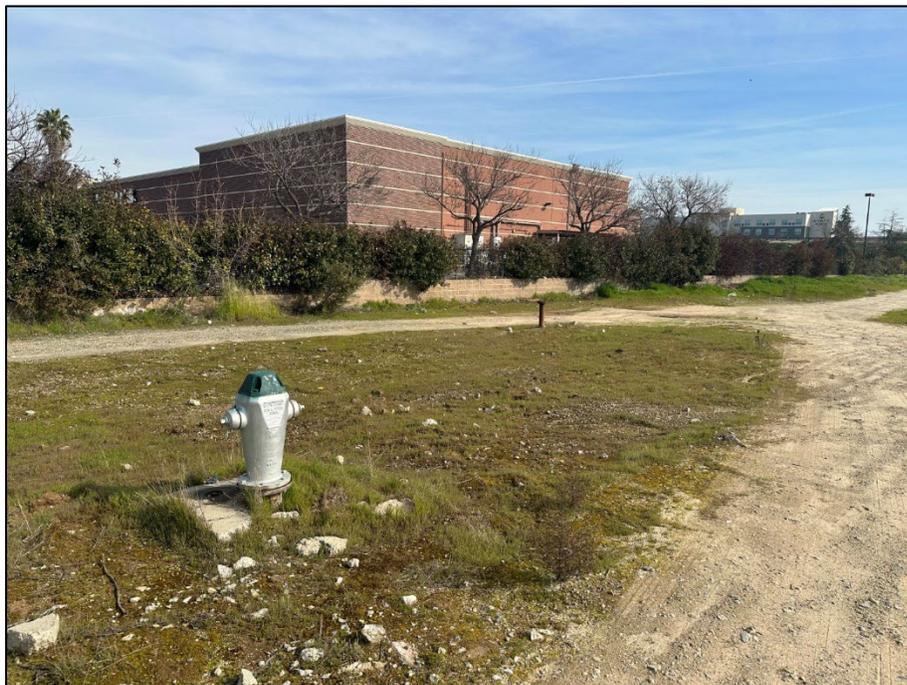
Cameron Vela, NAHC Cultural Resources Analyst, responded on February 7, 2023, that the SLF search resulted in negative findings for sacred lands in the vicinity of the project site (Attachment D).

Additional Background Research

Soil surveys (USDA n.d.) indicate that near surficial natural sediments within the project site are entirely San Joaquin loam, which typically consist of loam from 0 to 18 inches deep, clay from 18 to 22 inches deep, cemented material from 22 to 36 inches deep, and coarse sandy loam from 36 to 60 inches deep. Geologic deposits exist under surficial sediments of the project site, specifically older alluvium, lake, playa, and terrace deposits that date to the Pleistocene (2.58 million to 11,700 years ago) (CGS 2015). While not mapped by soil surveys, artificial fill is also likely present on the project site as a result of the prior construction of Boomers Park and associated infrastructure.

ARCHAEOLOGICAL FIELD SURVEY

On February 10, 2023, LSA archaeologist Kerrie Collison conducted a pedestrian survey of the project site. The survey was conducted utilizing transects spaced fewer than 10 meters apart and included the entire project site, with special attention paid to rodent burrow holes and aprons. It was noted that the project site mainly consists of gravel, maintained nonnative grasses, and bladed dirt and gravel roads. Existing infrastructure (such as a hydrant; Photograph 1) and a utility access box were observed, both of which indicate the occurrence of previous ground disturbance for installation of utility lines. Ground visibility was approximately 40 percent overall due to gravel and grass ground cover (Photograph 2). No archaeological cultural resources were identified during the field survey.



Photograph 1: Existing hydrant in center of project site. View northeast.



Photograph 2: Example ground cover within project site. View west.

SUMMARY AND RECOMMENDATIONS

This study consisted of background research and a field survey. No human remains or archaeological resources were identified within the project site as a result of the cultural resources survey study. Given the heavy previous disturbance of the project site (evidenced by aerial photograph records of the construction of Boomers Park between 1984 and 1998 and the remnant hydrants and utility access boxes), it is unlikely that construction activities associated with project implementation will impact cultural resources.

Given the above factors, the potential for the project to impact cultural resources is low, and no further cultural studies are recommended for this project. However, LSA recommends the following steps be implemented to address the inadvertent discovery of prehistoric (Native American) or historic-period archaeological resources and to address the inadvertent discovery of human remains:

- In the event that archaeological resources are identified during project activities, work shall be halted immediately within 25 meters of the find until a qualified professional archaeologist is contacted to assess the nature and significance of the find and determine if any additional study or treatment of the find is warranted. The archaeologist shall develop proper mitigation measures required for the discovery per California Code of Regulations [CCR], Title 14, Chapter 3, Section 15064.5(f)). Additional studies could include, but would not be limited to, collection and documentation of artifacts, documentation of the cultural resources on State of California Department of Parks and Recreation Series 523 forms, or subsurface testing. If determined appropriate by the qualified archaeologist, archaeological monitoring shall commence and

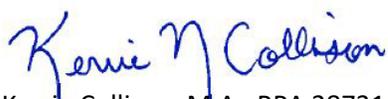
continue until grading and excavation are complete or until the monitoring archaeologist determines, based on field observations and in consultation with the qualified archaeologist, that there is little likelihood of encountering additional archaeological cultural resources. Archaeological monitoring may be reduced from full-time to part-time or spot-checking if determined appropriate by the qualified archaeologist based on monitoring results. Upon completion of any monitoring activities, the archaeologist shall prepare a report to document the methods and results of monitoring activities. The final version of this report shall be submitted to the SSJVIC.

- In the event that human remains are encountered at any time during project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Fresno County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the NAHC within 24 hours, which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD's recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

If you have any questions concerning the content of this letter report, please contact me at kerrie.collison@lsa.net.

Sincerely,

LSA Associates, Inc.



Kerrie Collison, M.A., RPA 28731436
Associate/Senior Cultural Resources Manager

Attachments: A—References
B—Figures 1 and 2
C—Record Search Results
D—Sacred Lands File Search Results

ATTACHMENT A

REFERENCES

California Geological Survey (CGS)

- 2015 Geologic Map of California. Website: <https://maps.conservation.ca.gov/cgs/gmc/> (accessed March 2, 2023).

National Environmental Title Research (NETR)

- n.d. Historic Aerials. Website: <http://www.historicaerials.com> (accessed March 2, 2023).

United States Department of Agriculture Natural Resources Conservation Service (USDA)

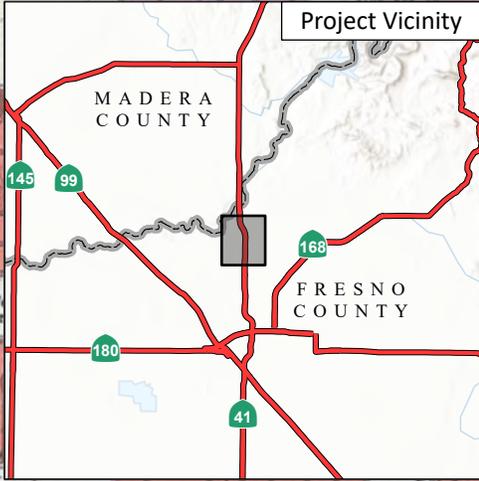
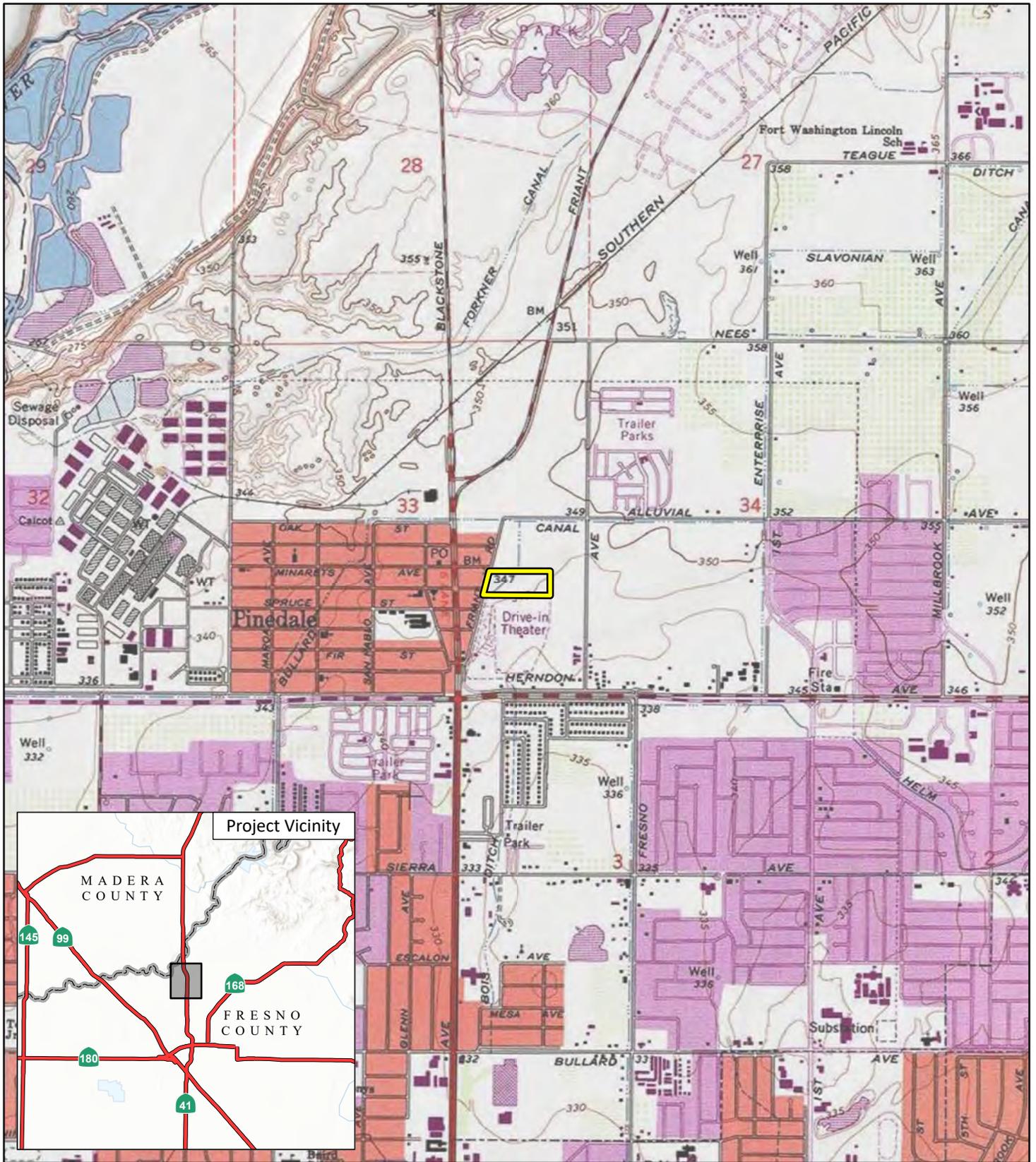
- n.d. Web Soil Survey. Website: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> (accessed March 2, 2023).

United States Geological Survey (USGS)

- 1981 *Fresno North, California* 7.5-minute topographic quadrangle. Prepared in 1965. Photorevised in 1981. Denver, Colorado.
- n.d. USGS topoView. Website: <https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-100.02> (accessed March 2, 2023).

ATTACHMENT B

FIGURES 1 AND 2



 Project Location

FIGURE 1

LSA



0 1000 2000
FEET

SOURCE: USGS Fresno North (1981), CA

J:\LSP2201\GIS\Pro\Living Spaces Fresno Project\Living Spaces Fresno Project.aprx (1/13/2023)

Living Spaces Fresno Project
Project Location

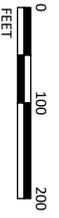


LSA



Project Location

FIGURE 2



SOURCE: Google Imagery (2020)

J:\ISP2201\GIS\Pro\Living Spaces Fresno Project\Living Spaces Fresno Project.aprx (1/13/2023)

ATTACHMENT C

RECORD SEARCH RESULTS



1/23/2023

Kerrie Collison
LSA
285 South Street, Suite P
San Luis Obispo, CA 93401

Re: Living Spaces Fresno Project (LSP2201)
Records Search File No.: 23-017

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Fresno North USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.5 mile 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

Resources within project area:	None
Archaeological resources within 0.5 mile radius:	None
Reports within project area:	FR-00384, 00577
Reports within 0.5 mile radius:	FR-00383, 00398, 01572, 01685, 02568, 02955

- Resource Database Printout (list):** enclosed not requested nothing listed
- Resource Database Printout (details):** enclosed not requested nothing listed
- Resource Digital Database Records:** enclosed not requested nothing listed
- Report Database Printout (list):** enclosed not requested nothing listed
- Report Database Printout (details):** enclosed not requested nothing listed
- Report Digital Database Records:** enclosed not requested nothing listed
- Resource Record Copies:** enclosed not requested nothing listed
- Report Copies:** enclosed not requested nothing listed
- OHP Built Environment Resources Directory:** enclosed not requested nothing listed
- Archaeological Determinations of Eligibility:** enclosed not requested nothing listed
- CA Inventory of Historic Resources (1976):** enclosed not requested nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see
<https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels>

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see
<http://historicalmaps.arcgis.com/usgs/>

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see
<http://www.glorerecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1> and/or
<http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items>

Shipwreck Inventory: Not available at SSJVIC; please see
<https://www.slc.ca.gov/shipwrecks/>

Soil Survey Maps: Not available at SSJVIC; please see
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Please forward a copy of any resulting reports from this project to the office as soon as possible. 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, 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 CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

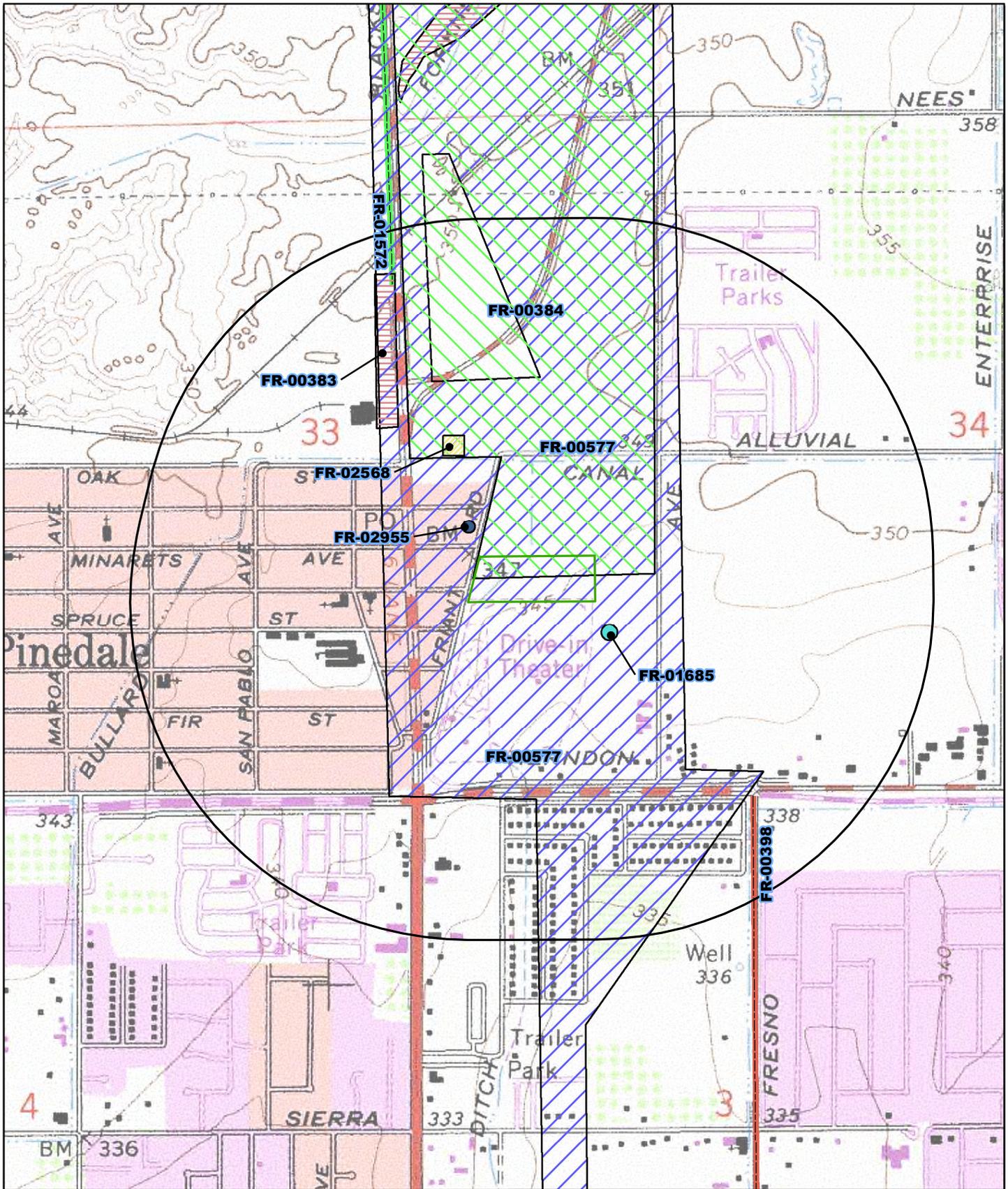
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

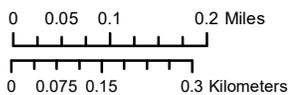
Sincerely,



Celeste M. Thomson
Coordinator



May depict confidential cultural resource locations.
Do not distribute.



- Project Area
- Record Search radius

SSJV Information Center Record Search 23-017
 Requester: Kerrie Collison, LSA
 Project Name: Living Spaces Fresno Project (LSP2201)
 USGS 7.5' Quad(s): Fresno North
 County: Fresno

Report List

SSJVIC Record Search 23-017

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
FR-00383		1980	Cursi, Kathleen L. and Varner, Dudley M.	Archaeological Reconnaissance for the Friant Road Realignment, Fresno County, California	California State University, Fresno	
FR-00384		1980	Cursi, Kathleen L. and Varner, Dudley M.	Archaeological Reconnaissance for the Riverpark Properties, Fresno County, California	California State University, Fresno	
FR-00398		1983	Granskog, Jane	Archaeological and Historical Survey for Fresno Street Widening - West Bullard t West Herndon Avenue - An Interim Capacity Project	California State University, Bakersfield	
FR-00577	Caltrans - 06-FRE-41 PM 29.5/33.02 EA 06100-025650	1980	O'Connor, Denise	Archaeological Survey Report for a Proposed Extension of Route 41; 06-Fre-41, 29.5/33.02; 06100-025650	California Department of Transportation	
FR-01572	Caltrans - 06-Fre-41, P.M. 31.3/33.4; 06-Mad-41 P.M. 0.0/10.4; EA 06-263200	1994	Unknown	Supplemental Historic Proerpty Survey Report Corridor Study and Route Adoption in Norhtern Fresno County and Southern Madera County	California Department of Transportation	
FR-01685		2000	Peak, Melinda A.	Cultural Resources Assessment of the Pacific Bell Site, CV-604-02, and Pinedale Site, City of Fresno, Fresno County, California	Peak & Associates, Inc.	
FR-02568	Submitter - Project Name: Blackstone Avenue & Alluvial Avenue; Submitter - Project Number: CN2711	2013	Billat, Lorna	New Tower Submission Packet, FCC Form 620, for Blackstone Avenue & Alluvial Avenue, CN2711	EarthTouch, Inc.	
FR-02955	OHP PRN - FCC_2018_0503_003	2018	Davis, Shane K. and Wills, Carrie D.	Cultural Resource Records Seaarch and Site Visit Results for Cellco Partnership and their Controlled Affiliates doing Business as Verizon Wireless Candidate Abbt & Spruce-E, 75 E. Pinedale Avenue, Fresno, Fresno County, California (EBI Project # 6118001727)	Heliz Environmental Planning	

ATTACHMENT D

SACRED LANDS FILE SEARCH RESULTS

NATIVE AMERICAN HERITAGE COMMISSION

February 7, 2023

Kerrie Collison
LSA

Via Email to: Kerrie.Collison@lsa.net

Re: Living Spaces Fresno Project, Fresno County

Dear Ms. Collison:

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

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

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

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

Sincerely,

Cameron Vela

Cameron Vela
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
[Vacant]

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

**Native American Heritage Commission
Native American Contact List
Fresno County
2/7/2023**

Big Sandy Rancheria of Western Mono Indians
Elizabeth Kipp, Chairperson
P.O. Box 337
Auberry, CA, 93602
Phone: (559) 374 - 0066
Fax: (559) 374-0055
lkipp@bsrnation.com

Western Mono

North Valley Yokuts Tribe
Timothy Perez,
P.O. Box 717
Linden, CA, 95236
Phone: (209) 662 - 2788
huskanam@gmail.com

Costanoan
Northern Valley
Yokut

Cold Springs Rancheria of Mono Indians
Carol Bill, Chairperson
P.O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
coldsprgstribe@netptc.net

Mono

Picayune Rancheria of Chukchansi Indians
Claudia Gonzales, Chairwoman
P.O. Box 2226
Oakhurst, CA, 93644
Phone: (559) 412 - 5590
cgonzales@chukchansitribe.net

Foothill Yokut

Cold Springs Rancheria of Mono Indians
Jared Aldern,
P. O. Box 209
Tollhouse, CA, 93667
Phone: (559) 855 - 5043
Fax: (559) 855-4445
csrepa@netptc.net

Mono

Picayune Rancheria of Chukchansi Indians
Heather Airey, Tribal Historic
Preservation Officer
P.O. Box 2226
Oakhurst, CA, 93644
Phone: (559) 795 - 5986
hairey@chukchansi-nsn.gov

Foothill Yokut

Dumna Wo-Wah Tribal Government
Robert Ledger, Chairperson
2191 West Pico Ave.
Fresno, CA, 93705
Phone: (559) 540 - 6346
ledgerrobert@ymail.com

Foothill Yokut
Mono

Table Mountain Rancheria
Brenda Lavell, Chairperson
P.O. Box 410
Friant, CA, 93626
Phone: (559) 822 - 2587
Fax: (559) 822-2693
rpennell@tmr.org

Yokut

Kings River Choinumni Farm Tribe
Stan Alec,
3515 East Fedora Avenue
Fresno, CA, 93726
Phone: (559) 647 - 3227

Foothill Yokut

Table Mountain Rancheria
Bob Pennell, Cultural Resource
Director
P.O. Box 410
Friant, CA, 93626
Phone: (559) 325 - 0351
Fax: (559) 325-0394
rpennell@tmr.org

Yokut

North Valley Yokuts Tribe
Katherine Perez, Chairperson
P.O. Box 717
Linden, CA, 95236
Phone: (209) 887 - 3415
canutes@verizon.net

Costanoan
Northern Valley
Yokut

Traditional Choinumni Tribe
David Alvarez, Chairperson
2415 E. Houston Avenue
Fresno, CA, 93720
Phone: (559) 217 - 0396
Fax: (559) 292-5057
davealvarez@sbcglobal.net

Foothill Yokut

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 Living Spaces Fresno Project, Fresno County.

Development Permit Application No. P22-04122

Appendix D

Greenhouse Gas Reduction Plan Project Consistency Checklist

Fresno Greenhouse Gas (GHG) Reduction Plan Update – CEQA Project Consistency Checklist

INTRODUCTION

The City of Fresno updated its 2014 Greenhouse Gas (GHG) Reduction Plan (the Plan) in the year 2021 to conform with existing applicable State climate change policies and regulations. The GHG Plan Update outlines strategies that the City will undertake to achieve its proportional share of GHG emission reductions. The purpose of this GHG Reduction Plan Update Consistency Checklist (Checklist) is to help the City provide a streamlined review process for new development projects that are subject to discretionary review pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15183.5.

This Checklist has been developed as part of the GHG Plan Update implementation and monitoring process and will support the achievement of individual GHG reduction strategies as well as the City's overall GHG reduction goals. In addition, this Checklist will further the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water. Projects that meet the requirements of this Checklist will be deemed to be consistent with the Fresno GHG Reduction Plan Update and will be found to have a less than significant contribution to cumulative GHG (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b). Projects that do not meet the requirements in this Checklist will be deemed to be inconsistent with the Fresno GHG Reduction Plan Update and must prepare a project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. This GHG Checklist can be updated to reflect adoption of new GHG reduction strategies or to comply with any changes and updates in the Plan or local, State or federal regulations. Note that not all the measures in the checklist are applicable to all projects. The projects should comply with applicable measures from the checklist.

1. Project Information	
Contact Information	
Project No./Name:	Living Spaces Fresno Project
Address:	7354 N. Abby Street, Fresno CA 93720
Applicant Name/Co:	Living Spaces
Contact Information:	Robert Holt, Planner III
	Planning and Development Department
	(559) 621-8056
Project Information	
1. What is the Site acreage of the Project?	8.0
2. Identify all Applicable Proposed Land uses:	Furniture Retail Store
a. Residential (Indicate number of single-family units)	
b. Residential (Indicate number of multi-family units)	
c. Commercial (total square footage)	104,867 square feet
d. Industrial (total square footage)	
e. Other (describe)	298 parking stalls, including 30 EV stalls, 7 ADA stalls, 36 clean air/vanpool stalls, and 8 bicycle stalls.
3. Is the project or a portion of the project located in a transit priority area? (Y/N)	No
4. Provide a brief description of the project proposed:	Development Permit Application No. P22-04122 was filed on behalf of Living Spaces (Project Applicant). The Project Applicant proposes to construct a 104,867 square foot furniture retail store with 298 parking stalls and associated utility infrastructure on the approximately 8.0-acre project site.

2. Determining Land Use Consistency		
Checklist Item		
<p>As the first step in determining the consistency with the GHG Reduction Plan for discretionary development projects, this section allows the City to determine the project’s consistency with the land use assumptions used in the GHG Reduction Plan.</p>		
	Yes	No
<p>1. Is the proposed project consistent with the approved General Plan, Specific Plan, and Community Plan planned land use and zoning designations?</p> <p>If the answer is Yes, then proceed to the GHG Plan Update Consistency Checklist.</p> <p>If the answer is No, then proceed to question 2.</p>	<p>X</p>	
<p>2. If the proposed project is not consistent with the approved planned land use and zoning designation(s), then provide estimated GHG project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation with the maximum buildout of the proposed designation.</p> <p>If the estimated project emissions at maximum buildout of the proposed designation(s) is equivalent to or less than the estimated project emissions at maximum buildout of the existing designation(s), then in accordance with the City’s Significance Determination Thresholds, the project’s GHG impact is less than significant. If there is a proposed development project associated with this plan amendment and or rezone then complete the GHG Plan Update Consistency Checklist and incorporate applicable measures, otherwise there is no further step required.</p> <p>If the estimated project emission at maximum buildout of the proposed designation(s) is greater than the estimated project emissions at maximum buildout of the existing designation(s), then in accordance with the City’s Significance Determination Thresholds, the project’s GHG impact is significant. The project must either show consistency with applicable GP objectives and policies (provide applicable GP objectives and policies here) or provide analysis and measures to incorporate into the project to bring the GHG emissions to a level that is less than or equal to the estimated project emission at maximum buildout of the existing designation(s) unless the decision-maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. If there is a proposed development project associated with this plan amendment and or rezone then complete the GHG Plan Update Consistency Checklist and incorporate applicable measures, otherwise there is no further step required.</p>		

3. Greenhouse Gas (GHG) Reduction Plan Update - CEQA Project Consistency Checklist

GHG Reduction Plan Update consistency review involves the evaluation of project consistency with the applicable strategies of the GHG Reduction Plan Update. The GHG reduction strategies identified in the GHG Reduction Plan Update relies upon the General Plan and additional local measures as the basis of the development related strategies to reduce GHG emissions. This checklist is developed based on the key local GHG reduction strategies and actions identified in the GHG Reduction Plan Update that are applicable to proposed development projects. Note that not all strategies listed below will apply to all projects. For example, not all projects will meet mixed-use related policies of the General Plan, because not all projects are required to be mixed use.

Checklist Item (Check the appropriate box and provide an explanation for your answer)	Relevant General Plan Policy	Yes	No	Not Applicable (NA)	Explanation
1: Land Use and Transportation Demand Strategies					
a. Does the project include mixed-use, development? For GHG Reduction Plan consistency, mixed-use development is defined as pedestrian-friendly development that blends two or more residential, commercial, cultural, or institutional, uses, one of which must be residential	Policy UF-1-c, LU-3-b, Objective-UF 12, UF-12-a, UF-12-b, UF-12-d, Policy RC-2-a			X	The proposed project does not include mixed-use development and does not include residential uses.
b. Is the project high density? For GHG Reduction Plan consistency, is the project developed at 12 units per acre or higher?	LU-5-f			X	The proposed project does not include residential uses.
c. Is the project infill development, pursuant to the General Plan definition of location within the City limits as of December 31, 2012?	LU-2-a, Objective-12, UF-12-a, UF-12-b, UF-12-d	X			The project site is within City limits surrounded by commercial and residential uses.
d. Does the project implement pedestrian bicycle, and transit linkages with surrounding land uses and neighborhoods? For GHG Reduction Plan consistency, the project must include all sidewalks, paths, trails, and facilities required by the General Plan and Active Transportation Plan, as implemented through the Fresno Municipal Code and project conditions of approval.	Policy UF-1-c, UF-12-e, Policy RC-2-a, Objective MT-4,5,6, Policy MT-4-c, Policy MT-6-a, Policy POSS-7-h Objective MT 8, Policies MT-8-a, MT-8-b			X	The project would not include roadway improvements. However, the proposed project would improve vehicular access to the project site.
e. If the project includes mixed-use or high density development, is it located within ½ mile of a High Quality Transit Area as defined in the City's CEQA Guidelines for Vehicle Miles Traveled? Or, is the project located within 500 feet of an existing or planned transit stop?	Policy UF-12-a, UF-12-b, LU-3-b, Objective MT 8, Policies MT-8-a, MT-8-b			X	The proposed project does not include mixed-use or high density development.
f. Will the project accommodate a large employer (over 100 employees) and will it implement trip reduction programs such as increasing transit use, carpooling, vanpooling, bicycling, or other measures to reduce vehicle miles traveled pursuant to San Joaquin Valley Air Pollution Control District Rule 9410? See the SJVAPCD website for details: https://www.valleyair.org/rules/curnrules/r9410.pdf	Policy MT-8-b, Objective MT-9, Policy MT-10-c, San Joaquin Valley Air Pollution Control District Rule 9410			X	The project would not have over 100 employees.

Checklist Item (Check the appropriate box and provide an explanation for your answer)	Relevant General Plan Policy	Yes	No	Not Applicable (NA)	Explanation
g. If the project includes modifications to the transportation network, do those improvements meet the requirements of the City of Fresno's Complete Streets Policy, adopted in October 2019? According to the policy, a complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users - including bicyclists, pedestrians, transit vehicles, trucks, and motorists - appropriate to the function and context of the facility while connecting to a larger transportation network. See City of Fresno website for details: https://www.fresno.gov/publicworks/wp-content/uploads/sites/17/2019/10/Complete-Streets-091119.pdf	MT-1-g, MT-1-h			X	The project would not include roadway improvements.
h. Does the project have a less than significant VMT impact, either through satisfying screening criteria or mitigating VMT impacts, pursuant to the City's adopted VMT thresholds? See City of Fresno website for details: https://www.fresno.gov/darm/wp-content/uploads/sites/10/2021/01/CEQA-Guidelines-for-Vehicle-Miles-Traveled-Final-Adopted-Version.pdf	MT-2-b, MT-2-c	X			The proposed project has a less than significant VMT impact.
2: Electric Vehicle Strategies					
a. For new multi-family dwelling units with parking, does the project provide EV charging spaces capable of supporting future EV supply equipment (EV capable) at 10% of the parking spaces per 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 4.106.4	Policy RC-8-j			X	The proposed project would not include multi-family residential uses.
b. For new commercial buildings, does project provide EV charging spaces capable of supporting EV capable spaces at 4% to 10% of the parking spaces per 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 5.106.5.3	Policy RC-8-j	X			The proposed project would include 30 electric vehicle stalls.
3: Energy Conservation Strategies					
a. Does the project meet or exceed mandatory state building energy codes? If yes, does the project follow any other GreenPoint ratings such as LEED, Energy Star or others? If yes, indicate level of certification-Silver, gold, platinum if applicable?	Policy RC-5-c, Objective RC-8, Policy RC 8-a	X			The project would meet the latest CalGreen standards but would not follow other GreenPoint ratings.
b. For commercial projects, does the project achieve net zero emissions electricity? Mark NA if project will be permitted before 2030. Mark Yes if voluntary. Add source and capacity in explanation.	Additional Recommended GHG Plan Measure, supports Objective RC-8			X	The project would be permitted before 2030.

Checklist Item (Check the appropriate box and provide an explanation for your answer)	Relevant General Plan Policy	Yes	No	Not Applicable (NA)	Explanation
4: Water Conservation Strategies					
a. Does the project meet or exceed the mandatory outdoor water use measures of the 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 4.304? If the project exceeds CalGreen Code mandatory measures provide methods in excess of requirements in the explanation. Examples include outdoor water conservation measures such as; drought tolerant landscaping plants, compliant irrigation systems, xeriscape, replacing turf etc. Provide the conservation measure that the project will include in the explanation.	Objective RC-7, Policy RC-7-a, RC-7-h	X			The project would meet the latest CalGreen standards.
b. Does the project meet or exceed the mandatory indoor water use measures of the 2019 California Green Building Standards Code (CALGREEN, Title 24, Part 11), Section 4.303? If the project exceeds CalGreen Code, mandatory measures provide methods in excess of requirements in the explanation. Examples may include water conserving devices and systems such as water leak detection system, hot water pipe insulation, pressure reducing valves, energy efficient appliances such as Energy Star Certified dishwashers, washing machines, dual flush toilets, point of use and/or tankless water heaters.	Objective RC-7, Policy RC-7-a, RC-7-e	X			The project would meet the latest CalGreen standards.
5: Waste Diversion and Recycling Strategies					
a. Does the project implement techniques of solid waste segregation, disposal and reduction, such as recycling, composting, waste to energy technology, and/or waste separation, to reduce the volume of solid wastes that must be sent to landfill facilities?	Policy PU-9-a, RC-11-a	X			The proposed project would be consistent with the CalRecycle Waste Diversion and Recycling Mandate.
b. During construction will the project recycle construction and demolition waste?	Policy RC-11-a	X			The proposed project would recycle construction waste.
c. Does the project provide recycling canisters in public areas where trashcans are also provided?	Policy RC-11-a	X			The proposed project would provide recycling canisters.

Note: The GHG reduction strategies included in this checklist are based on the GHG reduction strategies identified in the Chapter 5 of the GHG Reduction Plan Update.

Development Permit Application No. P22-04122

Appendix E

Vehicle Miles Traveled Analysis Memorandum

MEMORANDUM

DATE: March 3, 2023
To: Lamis Youssef, City of Fresno
FROM: Ambarish Mukherjee, P.E., AICP
SUBJECT: Fresno Living Spaces Vehicle Miles Traveled (VMT) Analysis Memorandum

LSA has prepared this Trip Generation and Vehicle Miles Traveled (VMT) Analysis Memorandum (Memo) for the proposed Fresno Living Spaces (project) in the City of Fresno (City). The project includes development of 104,867 SF of furniture store and will be located at the southeast corner of East Alluvial Avenue and North Abby Street in the City.

The objectives of this Memo are as follows:

- To estimate the trip generation for the proposed project and determine whether a Levels of Service based Traffic Impact Study (TIS) will be required for the project; and
- To determine whether the project will have any VMT impact.

TRIP GENERATION ANALYSIS

Trip generation for the project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition) for Land Use 890 – “Furniture Store”. Table A summarizes the project trip generation and shows that the proposed project is anticipated to generate 27 trips in the a.m. peak hour, 54 trips in the p.m. peak hour, and 661 gross daily trips.

Retail projects typically draw significant amount trips from the traffic passing the site on an adjacent street. These trips are not “new” trips made for the sole purpose of visiting the site, but are trips made as an intermediate stop en-route to final destination. Trips from traffic passing the site on an adjacent street are referred to as “pass-by” trips. Pass-by trip percentage for the project land use was obtained from the ITE Trip Generation Manual (11th Edition). The pass-by trips were subtracted from the gross trip generation trips to obtain the net primary trips for the project. As shown in Table A, the project is anticipated to generate 27 net trips in the a.m. peak hour, 25 net trips in the p.m. peak hour, and 311 net daily trips.

As recommended in the City of Fresno *Traffic Impact Study Report Guidelines*, dated February 2009, a detailed LOS based Traffic Impact Study (TIS) shall not be required for a project if it generates less than 100 peak hour trips. Since the anticipated number of peak hour trips generated by the proposed project is lower than the 100-trip threshold established by the City’s Guidelines, a TIS may not be required for this project.

VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

As mentioned above, the project is located within the jurisdiction of City of Fresno. The City has adopted City's CEQA Guidelines for Vehicle Miles Traveled Thresholds (Guidelines), dated June 2020. Therefore, the City's guidelines were used to determine the project's VMT impact. The City's guidelines include multiple screening criteria for land use projects. Also, an excel based VMT calculator tool is available from Fresno Council of Governments (Fresno COG) that can be used to conduct VMT analysis for small land use projects that are consistent with City's General Plan (GP). However, given the project type (retail) and size, the project does not meet screening criteria identified in the guidelines and the excel based VMT calculator tool is not applicable for evaluation of retail projects. Therefore, Fresno COG's Activity-Based Model (ABM) was used to evaluate the project VMT impact.

METHODOLOGY

The VMT Guidelines suggest use of total VMT as the metric to evaluate retail land uses. The project consists of only retail land use and hence total VMT was used as the VMT metric. Therefore, if there is a net increase in total regional VMT for the "with project" scenario compared to the "no project" scenario, the project constitutes a significant VMT impact. Total VMT for the "no project" scenario was obtained using a separate no project model run.

Project Traffic Analysis Zone Update

The first step in the preparation of this analysis was to update the traffic analysis zones (TAZs) in the model that includes the project area. Fresno COG ABM includes ability to add or split zones. In order to isolate the project VMT, a new zone was created in the model. The project description included the number of employees for the project (85 employees) which was included in the newly created zone for modeling purposes. No project specific network modifications were required for the model run. Model run was conducted for the existing/base scenario with updated model inputs. The outputs from this updated model run were used to calculate the total regional VMT for the "with project" scenario.

Project Impact Determination

Based on the City's VMT Guidelines, the project will have a significant VMT impact if there is a net increase in total regional VMT for the "with project" compared to the "no project" scenario. As shown in Table B, the total regional VMT for the "with project" scenario is less than the total regional VMT for the "no project" scenario. Therefore, as per the City's VMT Guidelines, the project will not have a significant VMT impact.



Table A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Furniture Store	104.867 TSF							
Trips/Unit ¹		0.18	0.08	0.26	0.24	0.28	0.52	6.30
Trip Generation		19	8	27	25	29	54	661
Pass-by Trips ²		0	0	0	(13)	(15)	(29)	(350)
Net New Trips		19	8	27	12	14	25	311

Notes:

TSF = Thousand Square Feet

¹ Rates from Institute of Transportation Engineers (ITE) *Trip Generation Manual*, (11th Edition) Land Use 890 - "Furniture Store", Setting/Location - 'General Urban/Suburban'.

² Pass-by rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 890 - 'Furniture Store.' A pass-by rate of 53% was used for the p.m. peak hour. Since daily pass-by rates are not available for this land use in the ITE *Trip Generation Manual*, the p.m. pass-by rate was used as the daily pass-by rate.

Table B: Total Regional VMT – With Project and No Project Scenarios

	With Project	No Project	Difference
Total Roadway VMT (Within Entire Fresno County)	23,240,962	23,241,062	(100)

Source: Fresno COG Activity Based Model (ABM)

*: VMT for the "no project" scenario was obtained from LSA "no project" model run