Attachment A

CalEEMod Outputs

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - AQ

Santa Barbara County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	8.60	1000sqft	2.35	8,600.00	0
Parking Lot	15.00	Space	0.13	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Start of Construction based on applicant response - "begin in summer 2027"

Land Use - Square footage of Fire Station and parking spaces given from applicant.

Construction Phase - Based off the applicant informaiton. Preliminary construction for grading and site preparation for 4 months and 12-14 months of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

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Architectural Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Vehicle Trips - Trips generation rates for the fire station land use.

Area Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Construction Off-road Equipment Mitigation - SBCAPCD Rule 345 - Control of Fugitive Dust From Construction and Demolition Activities

Area Mitigation - Based on SBCAPCD Rule 323.1

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Proposed use of a standard emergency diesel generator. operational assurance testing of the generator for 0.5 hour/week and two 2-hour test/year (30 total hours for testing)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	262.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	43.00
tblLandUse	LotAcreage	0.20	2.35
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	30.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	WD_TR	33.98	4.80

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0845	0.7827	0.7049	1.5800e-003	0.1899	0.0303	0.2201	0.0782	0.0283	0.1065	0.0000	135.9369	135.9369	0.0364	1.8000e-004	136.9005
2028	0.2080	1.4065	1.6819	3.0100e-003	8.6300e-003	0.0554	0.0640	2.2900e-003	0.0529	0.0552	0.0000	252.2537	252.2537	0.0472	6.4000e-004	253.6244
2029	6.8600e-003	2.2900e-003	3.6500e-003	1.0000e-005	1.0000e-005	1.0000e-004	1.2000e-004	0.0000	1.0000e-004	1.1000e-004	0.0000	0.5190	0.5190	3.0000e-005	0.0000	0.5198
Maximum	**0.2080**	**1.4065**	**1.6819**	**3.0100e-003**	**0.1899**	**0.0554**	**0.2201**	**0.0782**	**0.0529**	**0.1065**	**0.0000**	**252.2537**	**252.2537**	**0.0472**	**6.4000e-004**	**253.6244**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0845	0.7827	0.7049	1.5800e-003	0.0873	0.0303	0.1176	0.0357	0.0283	0.0640	0.0000	135.9367	135.9367	0.0364	1.8000e-004	136.9003
2028	0.2080	1.4065	1.6819	3.0100e-003	8.6300e-003	0.0554	0.0640	2.2900e-003	0.0529	0.0552	0.0000	252.2534	252.2534	0.0472	6.4000e-004	253.6241
2029	6.8600e-003	2.2900e-003	3.6500e-003	1.0000e-005	1.0000e-005	1.0000e-004	1.2000e-004	0.0000	1.0000e-004	1.1000e-004	0.0000	0.5190	0.5190	3.0000e-005	0.0000	0.5198
Maximum	**0.2080**	**1.4065**	**1.6819**	**3.0100e-003**	**0.0873**	**0.0554**	**0.1176**	**0.0357**	**0.0529**	**0.0640**	**0.0000**	**252.2534**	**252.2534**	**0.0472**	**6.4000e-004**	**253.6241**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.68**	**0.00**	**36.08**	**52.82**	**0.00**	**26.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2027**	**9-30-2027**	0.4151	0.4151
2	**10-1-2027**	**12-31-2027**	0.4478	0.4478
3	**1-1-2028**	**3-31-2028**	0.4426	0.4426
4	**4-1-2028**	**6-30-2028**	0.4425	0.4425
5	**7-1-2028**	**9-30-2028**	0.4473	0.4473
6	**10-1-2028**	**12-31-2028**	0.2888	0.2888
7	**1-1-2029**	**3-31-2029**	0.0065	0.0065
		Highest	0.4478	0.4478

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	21.2912	21.2912	2.3800e-003	4.1000e-004	21.4724
Mobile	9.4700e-003	9.4900e-003	0.0719	1.3000e-004	0.0151	1.0000e-004	0.0152	4.0500e-003	9.0000e-005	4.1400e-003	0.0000	12.1786	12.1786	1.0000e-003	7.0000e-004	12.4113
Stationary	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Waste						0.0000	0.0000		0.0000	0.0000	10.1797	0.0000	10.1797	0.5048	0.0000	22.7991
Water						0.0000	0.0000		0.0000	0.0000	0.6045	1.1944	1.7989	2.2700e-003	1.3400e-003	2.2544
Total	**0.0532**	**0.0302**	**0.0905**	**1.9000e-004**	**0.0151**	**1.3500e-003**	**0.0165**	**4.0500e-003**	**1.3400e-003**	**5.3900e-003**	**10.7841**	**36.9609**	**47.7450**	**0.5108**	**2.4500e-003**	**61.2419**

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	21.2912	21.2912	2.3800e-003	4.1000e-004	21.4724
Mobile	9.4700e-003	9.4900e-003	0.0719	1.3000e-004	0.0151	1.0000e-004	0.0152	4.0500e-003	9.0000e-005	4.1400e-003	0.0000	12.1786	12.1786	1.0000e-003	7.0000e-004	12.4113
Stationary	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Waste						0.0000	0.0000		0.0000	0.0000	10.1797	0.0000	10.1797	0.5048	0.0000	22.7991
Water						0.0000	0.0000		0.0000	0.0000	0.4836	1.0234	1.5069	1.8300e-003	1.0700e-003	1.8720
Total	**0.0532**	**0.0302**	**0.0905**	**1.9000e-004**	**0.0151**	**1.3500e-003**	**0.0165**	**4.0500e-003**	**1.3400e-003**	**5.3900e-003**	**10.6632**	**36.7898**	**47.4530**	**0.5103**	**2.1800e-003**	**60.8595**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.12**	**0.46**	**0.61**	**0.09**	**11.02**	**0.62**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2027	8/30/2027	5	43	
2	Grading	Grading	8/31/2027	10/28/2027	5	43	

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3	Building Construction	Building Construction	10/29/2027	10/30/2028	5	262	
4	Paving	Paving	10/31/2028	11/30/2028	5	23	
5	Architectural Coating	Architectural Coating	12/1/2028	1/4/2029	5	25	

Acres of Grading (Site Preparation Phase): 64.5

Acres of Grading (Grading Phase): 43

Acres of Paving: 0.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 12,900; Non-Residential Outdoor: 4,300; Striped Parking Area: 360 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	5.00	2.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0342	0.0000	0.0342	3.6900e-003	0.0000	3.6900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0236	0.2364	0.1919	5.3000e-004		8.8000e-003	8.8000e-003		8.1000e-003	8.1000e-003	0.0000	46.2780	46.2780	0.0150	0.0000	46.6522
Total	**0.0236**	**0.2364**	**0.1919**	**5.3000e-004**	**0.0342**	**8.8000e-003**	**0.0430**	**3.6900e-003**	**8.1000e-003**	**0.0118**	**0.0000**	**46.2780**	**46.2780**	**0.0150**	**0.0000**	**46.6522**

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3.2 Site Preparation - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.1000e-004	2.5600e-003	1.0000e-005	1.0600e-003	0.0000	1.0700e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.7460	0.7460	2.0000e-005	2.0000e-005	0.7530
Total	**3.5000e-004**	**2.1000e-004**	**2.5600e-003**	**1.0000e-005**	**1.0600e-003**	**0.0000**	**1.0700e-003**	**2.8000e-004**	**0.0000**	**2.9000e-004**	**0.0000**	**0.7460**	**0.7460**	**2.0000e-005**	**2.0000e-005**	**0.7530**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0154	0.0000	0.0154	1.6600e-003	0.0000	1.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0236	0.2364	0.1919	5.3000e-004		8.8000e-003	8.8000e-003		8.1000e-003	8.1000e-003	0.0000	46.2779	46.2779	0.0150	0.0000	46.6521
Total	**0.0236**	**0.2364**	**0.1919**	**5.3000e-004**	**0.0154**	**8.8000e-003**	**0.0242**	**1.6600e-003**	**8.1000e-003**	**9.7600e-003**	**0.0000**	**46.2779**	**46.2779**	**0.0150**	**0.0000**	**46.6521**

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3.2 Site Preparation - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.1000e-004	2.5600e-003	1.0000e-005	1.0600e-003	0.0000	1.0700e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.7460	0.7460	2.0000e-005	2.0000e-005	0.7530
Total	**3.5000e-004**	**2.1000e-004**	**2.5600e-003**	**1.0000e-005**	**1.0600e-003**	**0.0000**	**1.0700e-003**	**2.8000e-004**	**0.0000**	**2.9000e-004**	**0.0000**	**0.7460**	**0.7460**	**2.0000e-005**	**2.0000e-005**	**0.7530**

3.3 Grading - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1523	0.0000	0.1523	0.0736	0.0000	0.0736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2671	0.1826	4.4000e-004		0.0107	0.0107		9.8100e-003	9.8100e-003	0.0000	38.9270	38.9270	0.0126	0.0000	39.2417
Total	**0.0256**	**0.2671**	**0.1826**	**4.4000e-004**	**0.1523**	**0.0107**	**0.1630**	**0.0736**	**9.8100e-003**	**0.0834**	**0.0000**	**38.9270**	**38.9270**	**0.0126**	**0.0000**	**39.2417**

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3.3 Grading - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3300e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9326	0.9326	3.0000e-005	3.0000e-005	0.9413
Total	**4.3000e-004**	**2.6000e-004**	**3.2000e-003**	**1.0000e-005**	**1.3300e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**0.9326**	**0.9326**	**3.0000e-005**	**3.0000e-005**	**0.9413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0685	0.0000	0.0685	0.0331	0.0000	0.0331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2671	0.1826	4.4000e-004		0.0107	0.0107		9.8100e-003	9.8100e-003	0.0000	38.9269	38.9269	0.0126	0.0000	39.2417
Total	**0.0256**	**0.2671**	**0.1826**	**4.4000e-004**	**0.0685**	**0.0107**	**0.0792**	**0.0331**	**9.8100e-003**	**0.0429**	**0.0000**	**38.9269**	**38.9269**	**0.0126**	**0.0000**	**39.2417**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3300e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9326	0.9326	3.0000e-005	3.0000e-005	0.9413
Total	**4.3000e-004**	**2.6000e-004**	**3.2000e-003**	**1.0000e-005**	**1.3300e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**0.9326**	**0.9326**	**3.0000e-005**	**3.0000e-005**	**0.9413**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.2765	0.3222	5.8000e-004		0.0108	0.0108		0.0104	0.0104	0.0000	47.7791	47.7791	8.7600e-003	0.0000	47.9982
Total	**0.0343**	**0.2765**	**0.3222**	**5.8000e-004**		**0.0108**	**0.0108**		**0.0104**	**0.0104**	**0.0000**	**47.7791**	**47.7791**	**8.7600e-003**	**0.0000**	**47.9982**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.0500e-003	6.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7754	0.7754	4.0000e-005	1.1000e-004	0.8106
Worker	2.3000e-004	1.4000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4988	0.4988	1.0000e-005	1.0000e-005	0.5035
Total	**2.8000e-004**	**2.1900e-003**	**2.4000e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2742**	**1.2742**	**5.0000e-005**	**1.2000e-004**	**1.3141**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.2765	0.3222	5.8000e-004		0.0108	0.0108		0.0104	0.0104	0.0000	47.7791	47.7791	8.7600e-003	0.0000	47.9981
Total	**0.0343**	**0.2765**	**0.3222**	**5.8000e-004**		**0.0108**	**0.0108**		**0.0104**	**0.0104**	**0.0000**	**47.7791**	**47.7791**	**8.7600e-003**	**0.0000**	**47.9981**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.0500e-003	6.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7754	0.7754	4.0000e-005	1.1000e-004	0.8106
Worker	2.3000e-004	1.4000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4988	0.4988	1.0000e-005	1.0000e-005	0.5035
Total	**2.8000e-004**	**2.1900e-003**	**2.4000e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2742**	**1.2742**	**5.0000e-005**	**1.2000e-004**	**1.3141**

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1609	1.2985	1.5128	2.7000e-003		0.0508	0.0508		0.0486	0.0486	0.0000	224.3541	224.3541	0.0412	0.0000	225.3828
Total	**0.1609**	**1.2985**	**1.5128**	**2.7000e-003**		**0.0508**	**0.0508**		**0.0486**	**0.0486**	**0.0000**	**224.3541**	**224.3541**	**0.0412**	**0.0000**	**225.3828**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	9.4300e-003	3.1900e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.5707	3.5707	1.9000e-004	5.3000e-004	3.7332
Worker	1.0400e-003	6.0000e-004	7.6600e-003	2.0000e-005	3.3400e-003	1.0000e-005	3.3500e-003	8.9000e-004	1.0000e-005	9.0000e-004	0.0000	2.2963	2.2963	6.0000e-005	6.0000e-005	2.3171
Total	**1.2600e-003**	**0.0100**	**0.0109**	**6.0000e-005**	**4.6000e-003**	**6.0000e-005**	**4.6600e-003**	**1.2500e-003**	**6.0000e-005**	**1.3100e-003**	**0.0000**	**5.8670**	**5.8670**	**2.5000e-004**	**5.9000e-004**	**6.0504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1609	1.2985	1.5128	2.7000e-003		0.0508	0.0508		0.0486	0.0486	0.0000	224.3539	224.3539	0.0412	0.0000	225.3825
Total	**0.1609**	**1.2985**	**1.5128**	**2.7000e-003**		**0.0508**	**0.0508**		**0.0486**	**0.0486**	**0.0000**	**224.3539**	**224.3539**	**0.0412**	**0.0000**	**225.3825**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	9.4300e-003	3.1900e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.5707	3.5707	1.9000e-004	5.3000e-004	3.7332
Worker	1.0400e-003	6.0000e-004	7.6600e-003	2.0000e-005	3.3400e-003	1.0000e-005	3.3500e-003	8.9000e-004	1.0000e-005	9.0000e-004	0.0000	2.2963	2.2963	6.0000e-005	6.0000e-005	2.3171
Total	**1.2600e-003**	**0.0100**	**0.0109**	**6.0000e-005**	**4.6000e-003**	**6.0000e-005**	**4.6600e-003**	**1.2500e-003**	**6.0000e-005**	**1.3100e-003**	**0.0000**	**5.8670**	**5.8670**	**2.5000e-004**	**5.9000e-004**	**6.0504**

3.5 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0300e-003	0.0855	0.1343	2.1000e-004		4.0300e-003	4.0300e-003		3.7200e-003	3.7200e-003	0.0000	17.8399	17.8399	5.6500e-003	0.0000	17.9812
Paving	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2000e-003**	**0.0855**	**0.1343**	**2.1000e-004**		**4.0300e-003**	**4.0300e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**17.8399**	**17.8399**	**5.6500e-003**	**0.0000**	**17.9812**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.8000e-004	4.9000e-003	2.0000e-005	3.9800e-003	1.0000e-005	3.9800e-003	1.0200e-003	1.0000e-005	1.0300e-003	0.0000	1.4671	1.4671	4.0000e-005	4.0000e-005	1.4804
Total	**6.6000e-004**	**3.8000e-004**	**4.9000e-003**	**2.0000e-005**	**3.9800e-003**	**1.0000e-005**	**3.9800e-003**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**0.0000**	**1.4671**	**1.4671**	**4.0000e-005**	**4.0000e-005**	**1.4804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0300e-003	0.0855	0.1343	2.1000e-004		4.0300e-003	4.0300e-003		3.7200e-003	3.7200e-003	0.0000	17.8398	17.8398	5.6500e-003	0.0000	17.9812
Paving	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2000e-003**	**0.0855**	**0.1343**	**2.1000e-004**		**4.0300e-003**	**4.0300e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**17.8398**	**17.8398**	**5.6500e-003**	**0.0000**	**17.9812**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.8000e-004	4.9000e-003	2.0000e-005	3.9800e-003	1.0000e-005	3.9800e-003	1.0200e-003	1.0000e-005	1.0300e-003	0.0000	1.4671	1.4671	4.0000e-005	4.0000e-005	1.4804
Total	**6.6000e-004**	**3.8000e-004**	**4.9000e-003**	**2.0000e-005**	**3.9800e-003**	**1.0000e-005**	**3.9800e-003**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**0.0000**	**1.4671**	**1.4671**	**4.0000e-005**	**4.0000e-005**	**1.4804**

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0360**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0447	0.0447	0.0000	0.0000	0.0451
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0447**	**0.0447**	**0.0000**	**0.0000**	**0.0451**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0360**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0447	0.0447	0.0000	0.0000	0.0451
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0447**	**0.0447**	**0.0000**	**0.0000**	**0.0451**

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	2.2900e-003	3.6200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.5107	0.5107	3.0000e-005	0.0000	0.5114
Total	**6.8500e-003**	**2.2900e-003**	**3.6200e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.5107**	**0.5107**	**3.0000e-005**	**0.0000**	**0.5114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.3500e-003	8.3500e-003	0.0000	0.0000	8.4200e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.3500e-003**	**8.3500e-003**	**0.0000**	**0.0000**	**8.4200e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	2.2900e-003	3.6200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.5107	0.5107	3.0000e-005	0.0000	0.5114
Total	**6.8500e-003**	**2.2900e-003**	**3.6200e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.5107**	**0.5107**	**3.0000e-005**	**0.0000**	**0.5114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.3500e-003	8.3500e-003	0.0000	0.0000	8.4200e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.3500e-003**	**8.3500e-003**	**0.0000**	**0.0000**	**8.4200e-003**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.4700e-003	9.4900e-003	0.0719	1.3000e-004	0.0151	1.0000e-004	0.0152	4.0500e-003	9.0000e-005	4.1400e-003	0.0000	12.1786	12.1786	1.0000e-003	7.0000e-004	12.4113
Unmitigated	9.4700e-003	9.4900e-003	0.0719	1.3000e-004	0.0151	1.0000e-004	0.0152	4.0500e-003	9.0000e-005	4.1400e-003	0.0000	12.1786	12.1786	1.0000e-003	7.0000e-004	12.4113

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	41.28	0.00	0.00	40,167	40,167
Parking Lot	0.00	0.00	0.00		
Total	41.28	0.00	0.00	40,167	40,167

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government (Civic Center)	6.60	5.50	6.40	75.00	20.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150
Parking Lot	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	13.8566	13.8566	2.2400e-003	2.7000e-004	13.9936
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	13.8566	13.8566	2.2400e-003	2.7000e-004	13.9936
NaturalGas Mitigated	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
NaturalGas Unmitigated	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	139320	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.5000e-004**	**6.8300e-003**	**5.7400e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**7.4347**	**7.4347**	**1.4000e-004**	**1.4000e-004**	**7.4788**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	139320	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.5000e-004**	**6.8300e-003**	**5.7400e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**7.4347**	**7.4347**	**1.4000e-004**	**1.4000e-004**	**7.4788**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	147662	13.6623	2.2100e-003	2.7000e-004	13.7973
Parking Lot	2100	0.1943	3.0000e-005	0.0000	0.1962
Total		**13.8566**	**2.2400e-003**	**2.7000e-004**	**13.9936**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	147662	13.6623	2.2100e-003	2.7000e-004	13.7973
Parking Lot	2100	0.1943	3.0000e-005	0.0000	0.1962
Total		**13.8566**	**2.2400e-003**	**2.7000e-004**	**13.9936**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Unmitigated	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	**0.0381**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.0000**	**4.5000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	**0.0381**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.0000**	**4.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5069	1.8300e-003	1.0700e-003	1.8720
Unmitigated	1.7989	2.2700e-003	1.3400e-003	2.2544

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.70847 / 1.04713	1.7989	2.2700e-003	1.3400e-003	2.2544
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.7989**	**2.2700e-003**	**1.3400e-003**	**2.2544**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.36678 / 1.04713	1.5069	1.8300e-003	1.0700e-003	1.8720
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.5069**	**1.8300e-003**	**1.0700e-003**	**1.8720**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.1797	0.5048	0.0000	22.7991
Unmitigated	10.1797	0.5048	0.0000	22.7991

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	49.02	10.1797	0.5048	0.0000	22.7991
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.1797**	**0.5048**	**0.0000**	**22.7991**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	49.02	10.1797	0.5048	0.0000	22.7991
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.1797**	**0.5048**	**0.0000**	**22.7991**

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	30	201	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Total	**4.9500e-003**	**0.0138**	**0.0126**	**2.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**2.2962**	**2.2962**	**3.2000e-004**	**0.0000**	**2.3043**

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - GHG

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	8.60	1000sqft	2.35	8,600.00	0
Parking Lot	15.00	Space	0.13	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	114.11	**CH4 Intensity (lb/MWhr)**	0.018	**N2O Intensity (lb/MWhr)**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted for 2030 RPS. Start of Construction based on applicant response - "begin in summer 2027"

Land Use - Square footage of Fire Station and parking spaces given from applicant.

Construction Phase - Based off the applicant informaiton. Preliminary construction for grading and site preparation for 4 months and 12-14 months of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Vehicle Trips - Vehicle Trip rate for fire station

Area Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Construction Off-road Equipment Mitigation - SBCAPCD Rule 345 - Control of Fugitive Dust From Construction and Demolition Activities

Area Mitigation - Based on SBCAPCD Rule 323.1

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Proposed use of a standard emergency diesel generator. operational assurance testing of the generator for 0.5 hour/week and two 2-hour test/year (30 total hours for testing)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	262.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	43.00
tblLandUse	LotAcreage	0.20	2.35
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.018
tblProjectCharacteristics	CO2IntensityFactor	203.98	114.11
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.002
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	30.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	WD_TR	33.98	4.80

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0845	0.7827	0.7049	1.5800e-003	0.1899	0.0303	0.2201	0.0782	0.0283	0.1065	0.0000	135.9369	135.9369	0.0364	1.8000e-004	136.9005
2028	0.2080	1.4065	1.6819	3.0100e-003	8.6300e-003	0.0554	0.0640	2.2900e-003	0.0529	0.0552	0.0000	252.2537	252.2537	0.0472	6.4000e-004	253.6244
2029	6.8600e-003	2.2900e-003	3.6500e-003	1.0000e-005	1.0000e-005	1.0000e-004	1.2000e-004	0.0000	1.0000e-004	1.1000e-004	0.0000	0.5190	0.5190	3.0000e-005	0.0000	0.5198
Maximum	**0.2080**	**1.4065**	**1.6819**	**3.0100e-003**	**0.1899**	**0.0554**	**0.2201**	**0.0782**	**0.0529**	**0.1065**	**0.0000**	**252.2537**	**252.2537**	**0.0472**	**6.4000e-004**	**253.6244**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2027	0.0845	0.7827	0.7049	1.5800e-003	0.0873	0.0303	0.1176	0.0357	0.0283	0.0640	0.0000	135.9367	135.9367	0.0364	1.8000e-004	136.9003
2028	0.2080	1.4065	1.6819	3.0100e-003	8.6300e-003	0.0554	0.0640	2.2900e-003	0.0529	0.0552	0.0000	252.2534	252.2534	0.0472	6.4000e-004	253.6241
2029	6.8600e-003	2.2900e-003	3.6500e-003	1.0000e-005	1.0000e-005	1.0000e-004	1.2000e-004	0.0000	1.0000e-004	1.1000e-004	0.0000	0.5190	0.5190	3.0000e-005	0.0000	0.5198
Maximum	**0.2080**	**1.4065**	**1.6819**	**3.0100e-003**	**0.0873**	**0.0554**	**0.1176**	**0.0357**	**0.0529**	**0.0640**	**0.0000**	**252.2534**	**252.2534**	**0.0472**	**6.4000e-004**	**253.6241**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.68**	**0.00**	**36.08**	**52.82**	**0.00**	**26.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2027**	**9-30-2027**	0.4151	0.4151
2	**10-1-2027**	**12-31-2027**	0.4478	0.4478
3	**1-1-2028**	**3-31-2028**	0.4426	0.4426
4	**4-1-2028**	**6-30-2028**	0.4425	0.4425
5	**7-1-2028**	**9-30-2028**	0.4473	0.4473
6	**10-1-2028**	**12-31-2028**	0.2888	0.2888
7	**1-1-2029**	**3-31-2029**	0.0065	0.0065
		Highest	0.4478	0.4478

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	15.1862	15.1862	1.3700e-003	2.7000e-004	15.3015
Mobile	9.0400e-003	9.0300e-003	0.0696	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0500e-003	9.0000e-005	4.1300e-003	0.0000	11.9355	11.9355	9.6000e-004	6.8000e-004	12.1607
Stationary	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Waste						0.0000	0.0000		0.0000	0.0000	10.1797	0.0000	10.1797	0.5048	0.0000	22.7991
Water						0.0000	0.0000		0.0000	0.0000	0.6045	0.6682	1.2727	2.1900e-003	1.3300e-003	1.7225
Total	**0.0528**	**0.0297**	**0.0882**	**1.8000e-004**	**0.0151**	**1.3400e-003**	**0.0165**	**4.0500e-003**	**1.3400e-003**	**5.3800e-003**	**10.7841**	**30.0866**	**40.8707**	**0.5096**	**2.2800e-003**	**54.2885**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Energy	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	15.1862	15.1862	1.3700e-003	2.7000e-004	15.3015
Mobile	9.0400e-003	9.0300e-003	0.0696	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0500e-003	9.0000e-005	4.1300e-003	0.0000	11.9355	11.9355	9.6000e-004	6.8000e-004	12.1607
Stationary	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Waste						0.0000	0.0000		0.0000	0.0000	10.1797	0.0000	10.1797	0.5048	0.0000	22.7991
Water						0.0000	0.0000		0.0000	0.0000	0.4836	0.5725	1.0561	1.7500e-003	1.0600e-003	1.4163
Total	**0.0528**	**0.0297**	**0.0882**	**1.8000e-004**	**0.0151**	**1.3400e-003**	**0.0165**	**4.0500e-003**	**1.3400e-003**	**5.3800e-003**	**10.6632**	**29.9909**	**40.6541**	**0.5092**	**2.0100e-003**	**53.9822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.12**	**0.32**	**0.53**	**0.09**	**11.84**	**0.56**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2027	8/30/2027	5	43	
2	Grading	Grading	8/31/2027	10/28/2027	5	43	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Building Construction	Building Construction	10/29/2027	10/30/2028	5	262	
4	Paving	Paving	10/31/2028	11/30/2028	5	23	
5	Architectural Coating	Architectural Coating	12/1/2028	1/4/2029	5	25	

Acres of Grading (Site Preparation Phase): 64.5

Acres of Grading (Grading Phase): 43

Acres of Paving: 0.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 12,900; Non-Residential Outdoor: 4,300; Striped Parking Area: 360 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	5.00	2.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0342	0.0000	0.0342	3.6900e-003	0.0000	3.6900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0236	0.2364	0.1919	5.3000e-004		8.8000e-003	8.8000e-003		8.1000e-003	8.1000e-003	0.0000	46.2780	46.2780	0.0150	0.0000	46.6522
Total	**0.0236**	**0.2364**	**0.1919**	**5.3000e-004**	**0.0342**	**8.8000e-003**	**0.0430**	**3.6900e-003**	**8.1000e-003**	**0.0118**	**0.0000**	**46.2780**	**46.2780**	**0.0150**	**0.0000**	**46.6522**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.1000e-004	2.5600e-003	1.0000e-005	1.0600e-003	0.0000	1.0700e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.7460	0.7460	2.0000e-005	2.0000e-005	0.7530
Total	**3.5000e-004**	**2.1000e-004**	**2.5600e-003**	**1.0000e-005**	**1.0600e-003**	**0.0000**	**1.0700e-003**	**2.8000e-004**	**0.0000**	**2.9000e-004**	**0.0000**	**0.7460**	**0.7460**	**2.0000e-005**	**2.0000e-005**	**0.7530**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0154	0.0000	0.0154	1.6600e-003	0.0000	1.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0236	0.2364	0.1919	5.3000e-004		8.8000e-003	8.8000e-003		8.1000e-003	8.1000e-003	0.0000	46.2779	46.2779	0.0150	0.0000	46.6521
Total	**0.0236**	**0.2364**	**0.1919**	**5.3000e-004**	**0.0154**	**8.8000e-003**	**0.0242**	**1.6600e-003**	**8.1000e-003**	**9.7600e-003**	**0.0000**	**46.2779**	**46.2779**	**0.0150**	**0.0000**	**46.6521**

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3.2 Site Preparation - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.1000e-004	2.5600e-003	1.0000e-005	1.0600e-003	0.0000	1.0700e-003	2.8000e-004	0.0000	2.9000e-004	0.0000	0.7460	0.7460	2.0000e-005	2.0000e-005	0.7530
Total	**3.5000e-004**	**2.1000e-004**	**2.5600e-003**	**1.0000e-005**	**1.0600e-003**	**0.0000**	**1.0700e-003**	**2.8000e-004**	**0.0000**	**2.9000e-004**	**0.0000**	**0.7460**	**0.7460**	**2.0000e-005**	**2.0000e-005**	**0.7530**

3.3 Grading - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1523	0.0000	0.1523	0.0736	0.0000	0.0736	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2671	0.1826	4.4000e-004		0.0107	0.0107		9.8100e-003	9.8100e-003	0.0000	38.9270	38.9270	0.0126	0.0000	39.2417
Total	**0.0256**	**0.2671**	**0.1826**	**4.4000e-004**	**0.1523**	**0.0107**	**0.1630**	**0.0736**	**9.8100e-003**	**0.0834**	**0.0000**	**38.9270**	**38.9270**	**0.0126**	**0.0000**	**39.2417**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3300e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9326	0.9326	3.0000e-005	3.0000e-005	0.9413
Total	**4.3000e-004**	**2.6000e-004**	**3.2000e-003**	**1.0000e-005**	**1.3300e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**0.9326**	**0.9326**	**3.0000e-005**	**3.0000e-005**	**0.9413**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0685	0.0000	0.0685	0.0331	0.0000	0.0331	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0256	0.2671	0.1826	4.4000e-004		0.0107	0.0107		9.8100e-003	9.8100e-003	0.0000	38.9269	38.9269	0.0126	0.0000	39.2417
Total	**0.0256**	**0.2671**	**0.1826**	**4.4000e-004**	**0.0685**	**0.0107**	**0.0792**	**0.0331**	**9.8100e-003**	**0.0429**	**0.0000**	**38.9269**	**38.9269**	**0.0126**	**0.0000**	**39.2417**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.6000e-004	3.2000e-003	1.0000e-005	1.3300e-003	1.0000e-005	1.3300e-003	3.5000e-004	0.0000	3.6000e-004	0.0000	0.9326	0.9326	3.0000e-005	3.0000e-005	0.9413
Total	**4.3000e-004**	**2.6000e-004**	**3.2000e-003**	**1.0000e-005**	**1.3300e-003**	**1.0000e-005**	**1.3300e-003**	**3.5000e-004**	**0.0000**	**3.6000e-004**	**0.0000**	**0.9326**	**0.9326**	**3.0000e-005**	**3.0000e-005**	**0.9413**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.2765	0.3222	5.8000e-004		0.0108	0.0108		0.0104	0.0104	0.0000	47.7791	47.7791	8.7600e-003	0.0000	47.9982
Total	**0.0343**	**0.2765**	**0.3222**	**5.8000e-004**		**0.0108**	**0.0108**		**0.0104**	**0.0104**	**0.0000**	**47.7791**	**47.7791**	**8.7600e-003**	**0.0000**	**47.9982**

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3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.0500e-003	6.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7754	0.7754	4.0000e-005	1.1000e-004	0.8106
Worker	2.3000e-004	1.4000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4988	0.4988	1.0000e-005	1.0000e-005	0.5035
Total	**2.8000e-004**	**2.1900e-003**	**2.4000e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2742**	**1.2742**	**5.0000e-005**	**1.2000e-004**	**1.3141**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0343	0.2765	0.3222	5.8000e-004		0.0108	0.0108		0.0104	0.0104	0.0000	47.7791	47.7791	8.7600e-003	0.0000	47.9981
Total	**0.0343**	**0.2765**	**0.3222**	**5.8000e-004**		**0.0108**	**0.0108**		**0.0104**	**0.0104**	**0.0000**	**47.7791**	**47.7791**	**8.7600e-003**	**0.0000**	**47.9981**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.0000e-005	2.0500e-003	6.9000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7754	0.7754	4.0000e-005	1.1000e-004	0.8106
Worker	2.3000e-004	1.4000e-004	1.7100e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.4988	0.4988	1.0000e-005	1.0000e-005	0.5035
Total	**2.8000e-004**	**2.1900e-003**	**2.4000e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2742**	**1.2742**	**5.0000e-005**	**1.2000e-004**	**1.3141**

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1609	1.2985	1.5128	2.7000e-003		0.0508	0.0508		0.0486	0.0486	0.0000	224.3541	224.3541	0.0412	0.0000	225.3828
Total	**0.1609**	**1.2985**	**1.5128**	**2.7000e-003**		**0.0508**	**0.0508**		**0.0486**	**0.0486**	**0.0000**	**224.3541**	**224.3541**	**0.0412**	**0.0000**	**225.3828**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	9.4300e-003	3.1900e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.5707	3.5707	1.9000e-004	5.3000e-004	3.7332
Worker	1.0400e-003	6.0000e-004	7.6600e-003	2.0000e-005	3.3400e-003	1.0000e-005	3.3500e-003	8.9000e-004	1.0000e-005	9.0000e-004	0.0000	2.2963	2.2963	6.0000e-005	6.0000e-005	2.3171
Total	**1.2600e-003**	**0.0100**	**0.0109**	**6.0000e-005**	**4.6000e-003**	**6.0000e-005**	**4.6600e-003**	**1.2500e-003**	**6.0000e-005**	**1.3100e-003**	**0.0000**	**5.8670**	**5.8670**	**2.5000e-004**	**5.9000e-004**	**6.0504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1609	1.2985	1.5128	2.7000e-003		0.0508	0.0508		0.0486	0.0486	0.0000	224.3539	224.3539	0.0412	0.0000	225.3825
Total	**0.1609**	**1.2985**	**1.5128**	**2.7000e-003**		**0.0508**	**0.0508**		**0.0486**	**0.0486**	**0.0000**	**224.3539**	**224.3539**	**0.0412**	**0.0000**	**225.3825**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	9.4300e-003	3.1900e-003	4.0000e-005	1.2600e-003	5.0000e-005	1.3100e-003	3.6000e-004	5.0000e-005	4.1000e-004	0.0000	3.5707	3.5707	1.9000e-004	5.3000e-004	3.7332
Worker	1.0400e-003	6.0000e-004	7.6600e-003	2.0000e-005	3.3400e-003	1.0000e-005	3.3500e-003	8.9000e-004	1.0000e-005	9.0000e-004	0.0000	2.2963	2.2963	6.0000e-005	6.0000e-005	2.3171
Total	**1.2600e-003**	**0.0100**	**0.0109**	**6.0000e-005**	**4.6000e-003**	**6.0000e-005**	**4.6600e-003**	**1.2500e-003**	**6.0000e-005**	**1.3100e-003**	**0.0000**	**5.8670**	**5.8670**	**2.5000e-004**	**5.9000e-004**	**6.0504**

3.5 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0300e-003	0.0855	0.1343	2.1000e-004		4.0300e-003	4.0300e-003		3.7200e-003	3.7200e-003	0.0000	17.8399	17.8399	5.6500e-003	0.0000	17.9812
Paving	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2000e-003**	**0.0855**	**0.1343**	**2.1000e-004**		**4.0300e-003**	**4.0300e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**17.8399**	**17.8399**	**5.6500e-003**	**0.0000**	**17.9812**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.8000e-004	4.9000e-003	2.0000e-005	3.9800e-003	1.0000e-005	3.9800e-003	1.0200e-003	1.0000e-005	1.0300e-003	0.0000	1.4671	1.4671	4.0000e-005	4.0000e-005	1.4804
Total	**6.6000e-004**	**3.8000e-004**	**4.9000e-003**	**2.0000e-005**	**3.9800e-003**	**1.0000e-005**	**3.9800e-003**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**0.0000**	**1.4671**	**1.4671**	**4.0000e-005**	**4.0000e-005**	**1.4804**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.0300e-003	0.0855	0.1343	2.1000e-004		4.0300e-003	4.0300e-003		3.7200e-003	3.7200e-003	0.0000	17.8398	17.8398	5.6500e-003	0.0000	17.9812
Paving	1.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.2000e-003**	**0.0855**	**0.1343**	**2.1000e-004**		**4.0300e-003**	**4.0300e-003**		**3.7200e-003**	**3.7200e-003**	**0.0000**	**17.8398**	**17.8398**	**5.6500e-003**	**0.0000**	**17.9812**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	3.8000e-004	4.9000e-003	2.0000e-005	3.9800e-003	1.0000e-005	3.9800e-003	1.0200e-003	1.0000e-005	1.0300e-003	0.0000	1.4671	1.4671	4.0000e-005	4.0000e-005	1.4804
Total	**6.6000e-004**	**3.8000e-004**	**4.9000e-003**	**2.0000e-005**	**3.9800e-003**	**1.0000e-005**	**3.9800e-003**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**0.0000**	**1.4671**	**1.4671**	**4.0000e-005**	**4.0000e-005**	**1.4804**

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0360**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0447	0.0447	0.0000	0.0000	0.0451
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0447**	**0.0447**	**0.0000**	**0.0000**	**0.0451**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0360**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.5000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0447	0.0447	0.0000	0.0000	0.0451
Total	**2.0000e-005**	**1.0000e-005**	**1.5000e-004**	**0.0000**	**6.0000e-005**	**0.0000**	**7.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0447**	**0.0447**	**0.0000**	**0.0000**	**0.0451**

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	2.2900e-003	3.6200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.5107	0.5107	3.0000e-005	0.0000	0.5114
Total	**6.8500e-003**	**2.2900e-003**	**3.6200e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.5107**	**0.5107**	**3.0000e-005**	**0.0000**	**0.5114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.3500e-003	8.3500e-003	0.0000	0.0000	8.4200e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.3500e-003**	**8.3500e-003**	**0.0000**	**0.0000**	**8.4200e-003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	2.2900e-003	3.6200e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.5107	0.5107	3.0000e-005	0.0000	0.5114
Total	**6.8500e-003**	**2.2900e-003**	**3.6200e-003**	**1.0000e-005**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**	**0.0000**	**0.5107**	**0.5107**	**3.0000e-005**	**0.0000**	**0.5114**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	8.3500e-003	8.3500e-003	0.0000	0.0000	8.4200e-003
Total	**0.0000**	**0.0000**	**3.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.3500e-003**	**8.3500e-003**	**0.0000**	**0.0000**	**8.4200e-003**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.0400e-003	9.0300e-003	0.0696	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0500e-003	9.0000e-005	4.1300e-003	0.0000	11.9355	11.9355	9.6000e-004	6.8000e-004	12.1607
Unmitigated	9.0400e-003	9.0300e-003	0.0696	1.2000e-004	0.0151	9.0000e-005	0.0152	4.0500e-003	9.0000e-005	4.1300e-003	0.0000	11.9355	11.9355	9.6000e-004	6.8000e-004	12.1607

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	41.28	0.00	0.00	40,167	40,167
Parking Lot	0.00	0.00	0.00		
Total	41.28	0.00	0.00	40,167	40,167

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government (Civic Center)	6.60	5.50	6.40	75.00	20.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017
Parking Lot	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.7516	7.7516	1.2200e-003	1.4000e-004	7.8227
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.7516	7.7516	1.2200e-003	1.4000e-004	7.8227
NaturalGas Mitigated	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
NaturalGas Unmitigated	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	139320	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.5000e-004**	**6.8300e-003**	**5.7400e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**7.4347**	**7.4347**	**1.4000e-004**	**1.4000e-004**	**7.4788**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government (Civic Center)	139320	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4347	7.4347	1.4000e-004	1.4000e-004	7.4788
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.5000e-004**	**6.8300e-003**	**5.7400e-003**	**4.0000e-005**		**5.2000e-004**	**5.2000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**7.4347**	**7.4347**	**1.4000e-004**	**1.4000e-004**	**7.4788**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	147662	7.6429	1.2100e-003	1.3000e-004	7.7130
Parking Lot	2100	0.1087	2.0000e-005	0.0000	0.1097
Total		**7.7516**	**1.2300e-003**	**1.3000e-004**	**7.8227**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government (Civic Center)	147662	7.6429	1.2100e-003	1.3000e-004	7.7130
Parking Lot	2100	0.1087	2.0000e-005	0.0000	0.1097
Total		**7.7516**	**1.2300e-003**	**1.3000e-004**	**7.8227**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Unmitigated	0.0381	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	**0.0381**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.0000**	**4.5000e-004**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0340					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.2000e-004	4.2000e-004	0.0000	0.0000	4.5000e-004
Total	**0.0381**	**0.0000**	**2.2000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.2000e-004**	**4.2000e-004**	**0.0000**	**0.0000**	**4.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0561	1.7500e-003	1.0600e-003	1.4163
Unmitigated	1.2727	2.1900e-003	1.3300e-003	1.7225

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.70847 / 1.04713	1.2727	2.1900e-003	1.3300e-003	1.7225
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.2727**	**2.1900e-003**	**1.3300e-003**	**1.7225**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government (Civic Center)	1.36678 / 1.04713	1.0561	1.7500e-003	1.0600e-003	1.4163
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.0561**	**1.7500e-003**	**1.0600e-003**	**1.4163**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	10.1797	0.5048	0.0000	22.7991
Unmitigated	10.1797	0.5048	0.0000	22.7991

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	49.02	10.1797	0.5048	0.0000	22.7991
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.1797**	**0.5048**	**0.0000**	**22.7991**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government (Civic Center)	49.02	10.1797	0.5048	0.0000	22.7991
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**10.1797**	**0.5048**	**0.0000**	**22.7991**

9.0 Operational Offroad

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	30	201	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (175 - 300 HP)	4.9500e-003	0.0138	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.2962	2.2962	3.2000e-004	0.0000	2.3043
Total	**4.9500e-003**	**0.0138**	**0.0126**	**2.0000e-005**		**7.3000e-004**	**7.3000e-004**		**7.3000e-004**	**7.3000e-004**	**0.0000**	**2.2962**	**2.2962**	**3.2000e-004**	**0.0000**	**2.3043**

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - AQ

Santa Barbara County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	8.60	1000sqft	2.35	8,600.00	0
Parking Lot	15.00	Space	0.13	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Start of Construction based on applicant response - "begin in summer 2027"

Land Use - Square footage of Fire Station and parking spaces given from applicant.

Construction Phase - Based off the applicant informaiton. Preliminary construction for grading and site preparation for 4 months and 12-14 months of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Vehicle Trips - Trips generation rates for the fire station land use.

Area Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Construction Off-road Equipment Mitigation - SBCAPCD Rule 345 - Control of Fugitive Dust From Construction and Demolition Activities

Area Mitigation - Based on SBCAPCD Rule 323.1

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Proposed use of a standard emergency diesel generator. operational assurance testing of the generator for 0.5 hour/week and two 2-hour test/year (30 total hours for testing)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	262.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	43.00
tblLandUse	LotAcreage	0.20	2.35
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	30.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	WD_TR	33.98	4.80

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	1.5018	12.4351	14.1098	0.0256	7.1457	0.4963	7.6421	3.4415	0.4566	3.8981	0.0000	2,411.6844	2,411.6844	0.7684	6.1400e-003	2,431.2020
2028	3.4284	12.1127	14.1059	0.0256	0.3541	0.4706	0.7050	0.0907	0.4504	0.4622	0.0000	2,350.2085	2,350.2085	0.5456	6.0100e-003	2,362.5623
2029	3.4283	1.1464	1.8224	3.0100e-003	6.3200e-003	0.0515	0.0579	1.6800e-003	0.0515	0.0532	0.0000	286.1402	286.1402	0.0155	1.2000e-004	286.5618
Maximum	**3.4284**	**12.4351**	**14.1098**	**0.0256**	**7.1457**	**0.4963**	**7.6421**	**3.4415**	**0.4566**	**3.8981**	**0.0000**	**2,411.6844**	**2,411.6844**	**0.7684**	**6.1400e-003**	**2,431.2020**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	1.5018	12.4351	14.1098	0.0256	3.2503	0.4963	3.7466	1.5579	0.4566	2.0145	0.0000	2,411.6844	2,411.6844	0.7684	6.1400e-003	2,431.2020
2028	3.4284	12.1127	14.1059	0.0256	0.3541	0.4706	0.7050	0.0907	0.4504	0.4622	0.0000	2,350.2085	2,350.2085	0.5456	6.0100e-003	2,362.5623
2029	3.4283	1.1464	1.8224	3.0100e-003	6.3200e-003	0.0515	0.0579	1.6800e-003	0.0515	0.0532	0.0000	286.1402	286.1402	0.0155	1.2000e-004	286.5618
Maximum	**3.4284**	**12.4351**	**14.1098**	**0.0256**	**3.2503**	**0.4963**	**3.7466**	**1.5579**	**0.4566**	**2.0145**	**0.0000**	**2,411.6844**	**2,411.6844**	**0.7684**	**6.1400e-003**	**2,431.2020**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.90**	**0.00**	**46.35**	**53.30**	**0.00**	**42.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Energy	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Mobile	0.0756	0.0683	0.5165	9.8000e-004	0.1190	7.4000e-004	0.1197	0.0318	6.9000e-004	0.0325		104.8300	104.8300	7.9500e-003	5.6600e-003	106.7144
Stationary	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.4534**	**0.5667**	**0.9709**	**1.9900e-003**	**0.1190**	**0.0279**	**0.1468**	**0.0318**	**0.0278**	**0.0596**		**234.1121**	**234.1121**	**0.0207**	**6.4800e-003**	**236.5594**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Energy	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Mobile	0.0756	0.0683	0.5165	9.8000e-004	0.1190	7.4000e-004	0.1197	0.0318	6.9000e-004	0.0325		104.8300	104.8300	7.9500e-003	5.6600e-003	106.7144
Stationary	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.4534**	**0.5667**	**0.9709**	**1.9900e-003**	**0.1190**	**0.0279**	**0.1468**	**0.0318**	**0.0278**	**0.0596**		**234.1121**	**234.1121**	**0.0207**	**6.4800e-003**	**236.5594**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2027	8/30/2027	5	43	
2	Grading	Grading	8/31/2027	10/28/2027	5	43	
3	Building Construction	Building Construction	10/29/2027	10/30/2028	5	262	
4	Paving	Paving	10/31/2028	11/30/2028	5	23	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	12/1/2028	1/4/2029	5	25	

Acres of Grading (Site Preparation Phase): 64.5

Acres of Grading (Grading Phase): 43

Acres of Paving: 0.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 12,900; Non-Residential Outdoor: 4,300; Striped Parking Area: 360 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	5.00	2.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.0985	10.9957	8.9257	0.0245		0.4094	0.4094		0.3766	0.3766		2,372.6856	2,372.6856	0.7674		2,391.8700
Total	**1.0985**	**10.9957**	**8.9257**	**0.0245**	**1.5908**	**0.4094**	**2.0001**	**0.1718**	**0.3766**	**0.5484**		**2,372.6856**	**2,372.6856**	**0.7674**		**2,391.8700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0159	8.7000e-003	0.1168	3.7000e-004	0.0505	2.0000e-004	0.0507	0.0134	1.8000e-004	0.0136		38.9988	38.9988	1.0500e-003	1.0300e-003	39.3320
Total	**0.0159**	**8.7000e-003**	**0.1168**	**3.7000e-004**	**0.0505**	**2.0000e-004**	**0.0507**	**0.0134**	**1.8000e-004**	**0.0136**		**38.9988**	**38.9988**	**1.0500e-003**	**1.0300e-003**	**39.3320**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.0985	10.9957	8.9257	0.0245		0.4094	0.4094		0.3766	0.3766	0.0000	2,372.6856	2,372.6856	0.7674		2,391.8700
Total	**1.0985**	**10.9957**	**8.9257**	**0.0245**	**0.7158**	**0.4094**	**1.1252**	**0.0773**	**0.3766**	**0.4539**	**0.0000**	**2,372.6856**	**2,372.6856**	**0.7674**		**2,391.8700**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0159	8.7000e-003	0.1168	3.7000e-004	0.0505	2.0000e-004	0.0507	0.0134	1.8000e-004	0.0136		38.9988	38.9988	1.0500e-003	1.0300e-003	39.3320
Total	**0.0159**	**8.7000e-003**	**0.1168**	**3.7000e-004**	**0.0505**	**2.0000e-004**	**0.0507**	**0.0134**	**1.8000e-004**	**0.0136**		**38.9988**	**38.9988**	**1.0500e-003**	**1.0300e-003**	**39.3320**

3.3 Grading - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1904	12.4243	8.4937	0.0206		0.4961	0.4961		0.4564	0.4564		1,995.7975	1,995.7975	0.6455		2,011.9345
Total	**1.1904**	**12.4243**	**8.4937**	**0.0206**	**7.0826**	**0.4961**	**7.5787**	**3.4247**	**0.4564**	**3.8811**		**1,995.7975**	**1,995.7975**	**0.6455**		**2,011.9345**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	0.0109	0.1460	4.6000e-004	0.0632	2.5000e-004	0.0634	0.0168	2.3000e-004	0.0170		48.7484	48.7484	1.3100e-003	1.2900e-003	49.1650
Total	**0.0199**	**0.0109**	**0.1460**	**4.6000e-004**	**0.0632**	**2.5000e-004**	**0.0634**	**0.0168**	**2.3000e-004**	**0.0170**		**48.7484**	**48.7484**	**1.3100e-003**	**1.2900e-003**	**49.1650**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.1904	12.4243	8.4937	0.0206		0.4961	0.4961		0.4564	0.4564	0.0000	1,995.7975	1,995.7975	0.6455		2,011.9345
Total	**1.1904**	**12.4243**	**8.4937**	**0.0206**	**3.1872**	**0.4961**	**3.6832**	**1.5411**	**0.4564**	**1.9975**	**0.0000**	**1,995.7975**	**1,995.7975**	**0.6455**		**2,011.9345**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0199	0.0109	0.1460	4.6000e-004	0.0632	2.5000e-004	0.0634	0.0168	2.3000e-004	0.0170		48.7484	48.7484	1.3100e-003	1.2900e-003	49.1650
Total	**0.0199**	**0.0109**	**0.1460**	**4.6000e-004**	**0.0632**	**2.5000e-004**	**0.0634**	**0.0168**	**2.3000e-004**	**0.0170**		**48.7484**	**48.7484**	**1.3100e-003**	**1.2900e-003**	**49.1650**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0861	0.0295	3.4000e-004	0.0119	5.1000e-004	0.0124	3.4100e-003	4.8000e-004	3.9000e-003		37.1410	37.1410	1.8800e-003	5.5000e-003	38.8267
Worker	9.9400e-003	5.4400e-003	0.0730	2.3000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4900e-003		24.3742	24.3742	6.5000e-004	6.4000e-004	24.5825
Total	**0.0121**	**0.0915**	**0.1025**	**5.7000e-004**	**0.0434**	**6.3000e-004**	**0.0441**	**0.0118**	**5.9000e-004**	**0.0124**		**61.5152**	**61.5152**	**2.5300e-003**	**6.1400e-003**	**63.4092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0861	0.0295	3.4000e-004	0.0119	5.1000e-004	0.0124	3.4100e-003	4.8000e-004	3.9000e-003		37.1410	37.1410	1.8800e-003	5.5000e-003	38.8267
Worker	9.9400e-003	5.4400e-003	0.0730	2.3000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4900e-003		24.3742	24.3742	6.5000e-004	6.4000e-004	24.5825
Total	**0.0121**	**0.0915**	**0.1025**	**5.7000e-004**	**0.0434**	**6.3000e-004**	**0.0441**	**0.0118**	**5.9000e-004**	**0.0124**		**61.5152**	**61.5152**	**2.5300e-003**	**6.1400e-003**	**63.4092**

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0844	0.0292	3.3000e-004	0.0119	4.9000e-004	0.0124	3.4100e-003	4.7000e-004	3.8800e-003		36.4224	36.4224	1.9300e-003	5.4000e-003	38.0795
Worker	9.4300e-003	5.0000e-003	0.0695	2.2000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4800e-003		23.8962	23.8962	6.0000e-004	6.1000e-004	24.0941
Total	**0.0115**	**0.0894**	**0.0986**	**5.5000e-004**	**0.0434**	**6.1000e-004**	**0.0440**	**0.0118**	**5.8000e-004**	**0.0124**		**60.3186**	**60.3186**	**2.5300e-003**	**6.0100e-003**	**62.1736**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0900e-003	0.0844	0.0292	3.3000e-004	0.0119	4.9000e-004	0.0124	3.4100e-003	4.7000e-004	3.8800e-003		36.4224	36.4224	1.9300e-003	5.4000e-003	38.0795
Worker	9.4300e-003	5.0000e-003	0.0695	2.2000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4800e-003		23.8962	23.8962	6.0000e-004	6.1000e-004	24.0941
Total	**0.0115**	**0.0894**	**0.0986**	**5.5000e-004**	**0.0434**	**6.1000e-004**	**0.0440**	**0.0118**	**5.8000e-004**	**0.0124**		**60.3186**	**60.3186**	**2.5300e-003**	**6.0100e-003**	**62.1736**

3.5 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8002**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0566	0.0300	0.4169	1.3400e-003	0.3541	7.0000e-004	0.3548	0.0907	6.4000e-004	0.0913		143.3771	143.3771	3.6200e-003	3.6800e-003	144.5646
Total	**0.0566**	**0.0300**	**0.4169**	**1.3400e-003**	**0.3541**	**7.0000e-004**	**0.3548**	**0.0907**	**6.4000e-004**	**0.0913**		**143.3771**	**143.3771**	**3.6200e-003**	**3.6800e-003**	**144.5646**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8002**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0566	0.0300	0.4169	1.3400e-003	0.3541	7.0000e-004	0.3548	0.0907	6.4000e-004	0.0913		143.3771	143.3771	3.6200e-003	3.6800e-003	144.5646
Total	**0.0566**	**0.0300**	**0.4169**	**1.3400e-003**	**0.3541**	**7.0000e-004**	**0.3548**	**0.0907**	**6.4000e-004**	**0.0913**		**143.3771**	**143.3771**	**3.6200e-003**	**3.6800e-003**	**144.5646**

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.0000e-003	0.0139	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.7792	4.7792	1.2000e-004	1.2000e-004	4.8188
Total	**1.8900e-003**	**1.0000e-003**	**0.0139**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.7792**	**4.7792**	**1.2000e-004**	**1.2000e-004**	**4.8188**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8900e-003	1.0000e-003	0.0139	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.7792	4.7792	1.2000e-004	1.2000e-004	4.8188
Total	**1.8900e-003**	**1.0000e-003**	**0.0139**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.7792**	**4.7792**	**1.2000e-004**	**1.2000e-004**	**4.8188**

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7800e-003	9.2000e-004	0.0133	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.6922	4.6922	1.1000e-004	1.2000e-004	4.7300
Total	**1.7800e-003**	**9.2000e-004**	**0.0133**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.6922**	**4.6922**	**1.1000e-004**	**1.2000e-004**	**4.7300**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7800e-003	9.2000e-004	0.0133	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.6922	4.6922	1.1000e-004	1.2000e-004	4.7300
Total	**1.7800e-003**	**9.2000e-004**	**0.0133**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.6922**	**4.6922**	**1.1000e-004**	**1.2000e-004**	**4.7300**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0756	0.0683	0.5165	9.8000e-004	0.1190	7.4000e-004	0.1197	0.0318	6.9000e-004	0.0325		104.8300	104.8300	7.9500e-003	5.6600e-003	106.7144
Unmitigated	0.0756	0.0683	0.5165	9.8000e-004	0.1190	7.4000e-004	0.1197	0.0318	6.9000e-004	0.0325		104.8300	104.8300	7.9500e-003	5.6600e-003	106.7144

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	41.28	0.00	0.00	40,167	40,167
Parking Lot	0.00	0.00	0.00		
Total	41.28	0.00	0.00	40,167	40,167

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government (Civic Center)	6.60	5.50	6.40	75.00	20.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150
Parking Lot	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150

5.0 Energy Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
NaturalGas Unmitigated	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government (Civic Center)	381.699	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1200e-003**	**0.0374**	**0.0314**	**2.2000e-004**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**		**44.9057**	**44.9057**	**8.6000e-004**	**8.2000e-004**	**45.1726**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government (Civic Center)	0.381699	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1200e-003**	**0.0374**	**0.0314**	**2.2000e-004**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**		**44.9057**	**44.9057**	**8.6000e-004**	**8.2000e-004**	**45.1726**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Unmitigated	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Total	**0.2087**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**5.1600e-003**	**5.1600e-003**	**1.0000e-005**		**5.5000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Total	**0.2087**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**5.1600e-003**	**5.1600e-003**	**1.0000e-005**		**5.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	30	201	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.1649**	**0.4610**	**0.4205**	**7.9000e-004**		**0.0243**	**0.0243**		**0.0243**	**0.0243**		**84.3712**	**84.3712**	**0.0118**		**84.6669**

11.0 Vegetation

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - AQ

Santa Barbara County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	8.60	1000sqft	2.35	8,600.00	0
Parking Lot	15.00	Space	0.13	6,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.9	**Precipitation Freq (Days)**	37
Climate Zone	4			**Operational Year**	2029
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Start of Construction based on applicant response - "begin in summer 2027"

Land Use - Square footage of Fire Station and parking spaces given from applicant.

Construction Phase - Based off the applicant informaiton. Preliminary construction for grading and site preparation for 4 months and 12-14 months of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Grading -

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Vehicle Trips - Trips generation rates for the fire station land use.

Area Coating - Based on SBCAPCD Architectural Coating Rule 323.1

Construction Off-road Equipment Mitigation - SBCAPCD Rule 345 - Control of Fugitive Dust From Construction and Demolition Activities

Area Mitigation - Based on SBCAPCD Rule 323.1

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Proposed use of a standard emergency diesel generator. operational assurance testing of the generator for 0.5 hour/week and two 2-hour test/year (30 total hours for testing)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Parking	250	100
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	NumDays	220.00	262.00
tblConstructionPhase	NumDays	6.00	43.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	3.00	43.00
tblLandUse	LotAcreage	0.20	2.35
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	201.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	30.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	WD_TR	33.98	4.80

2.0 Emissions Summary

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	1.5027	12.4367	14.1143	0.0256	7.1457	0.4963	7.6421	3.4415	0.4566	3.8981	0.0000	2,410.8955	2,410.8955	0.7685	6.2100e-003	2,430.4451
2028	3.4286	12.1161	14.1103	0.0256	0.3541	0.4706	0.7050	0.0907	0.4504	0.4622	0.0000	2,349.7789	2,349.7789	0.5460	6.0800e-003	2,362.1550
2029	3.4284	1.1466	1.8231	3.0100e-003	6.3200e-003	0.0515	0.0579	1.6800e-003	0.0515	0.0532	0.0000	286.0454	286.0454	0.0155	1.3000e-004	286.4706
Maximum	**3.4286**	**12.4367**	**14.1143**	**0.0256**	**7.1457**	**0.4963**	**7.6421**	**3.4415**	**0.4566**	**3.8981**	**0.0000**	**2,410.8955**	**2,410.8955**	**0.7685**	**6.2100e-003**	**2,430.4451**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	1.5027	12.4367	14.1143	0.0256	3.2503	0.4963	3.7466	1.5579	0.4566	2.0145	0.0000	2,410.8955	2,410.8955	0.7685	6.2100e-003	2,430.4451
2028	3.4286	12.1161	14.1103	0.0256	0.3541	0.4706	0.7050	0.0907	0.4504	0.4622	0.0000	2,349.7789	2,349.7789	0.5460	6.0800e-003	2,362.1550
2029	3.4284	1.1466	1.8231	3.0100e-003	6.3200e-003	0.0515	0.0579	1.6800e-003	0.0515	0.0532	0.0000	286.0454	286.0454	0.0155	1.3000e-004	286.4706
Maximum	**3.4286**	**12.4367**	**14.1143**	**0.0256**	**3.2503**	**0.4963**	**3.7466**	**1.5579**	**0.4566**	**2.0145**	**0.0000**	**2,410.8955**	**2,410.8955**	**0.7685**	**6.2100e-003**	**2,430.4451**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**51.90**	**0.00**	**46.35**	**53.30**	**0.00**	**42.68**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Energy	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Mobile	0.0730	0.0739	0.5801	9.7000e-004	0.1190	7.4000e-004	0.1197	0.0318	7.0000e-004	0.0325		103.3497	103.3497	8.7800e-003	6.0100e-003	105.3595
Stationary	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.4507**	**0.5723**	**1.0345**	**1.9800e-003**	**0.1190**	**0.0279**	**0.1468**	**0.0318**	**0.0278**	**0.0596**		**232.6317**	**232.6317**	**0.0215**	**6.8300e-003**	**235.2045**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Energy	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Mobile	0.0730	0.0739	0.5801	9.7000e-004	0.1190	7.4000e-004	0.1197	0.0318	7.0000e-004	0.0325		103.3497	103.3497	8.7800e-003	6.0100e-003	105.3595
Stationary	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.4507**	**0.5723**	**1.0345**	**1.9800e-003**	**0.1190**	**0.0279**	**0.1468**	**0.0318**	**0.0278**	**0.0596**		**232.6317**	**232.6317**	**0.0215**	**6.8300e-003**	**235.2045**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2027	8/30/2027	5	43	
2	Grading	Grading	8/31/2027	10/28/2027	5	43	
3	Building Construction	Building Construction	10/29/2027	10/30/2028	5	262	
4	Paving	Paving	10/31/2028	11/30/2028	5	23	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Architectural Coating	Architectural Coating	12/1/2028	1/4/2029	5	25	

Acres of Grading (Site Preparation Phase): 64.5

Acres of Grading (Grading Phase): 43

Acres of Paving: 0.13

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 12,900; Non-Residential Outdoor: 4,300; Striped Parking Area: 360 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	5.00	2.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.0985	10.9957	8.9257	0.0245		0.4094	0.4094		0.3766	0.3766		2,372.6856	2,372.6856	0.7674		2,391.8700
Total	**1.0985**	**10.9957**	**8.9257**	**0.0245**	**1.5908**	**0.4094**	**2.0001**	**0.1718**	**0.3766**	**0.5484**		**2,372.6856**	**2,372.6856**	**0.7674**		**2,391.8700**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0175	9.9500e-003	0.1228	3.6000e-004	0.0505	2.0000e-004	0.0507	0.0134	1.8000e-004	0.0136		38.2099	38.2099	1.1600e-003	1.1300e-003	38.5751
Total	**0.0175**	**9.9500e-003**	**0.1228**	**3.6000e-004**	**0.0505**	**2.0000e-004**	**0.0507**	**0.0134**	**1.8000e-004**	**0.0136**		**38.2099**	**38.2099**	**1.1600e-003**	**1.1300e-003**	**38.5751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7158	0.0000	0.7158	0.0773	0.0000	0.0773			0.0000			0.0000
Off-Road	1.0985	10.9957	8.9257	0.0245		0.4094	0.4094		0.3766	0.3766	0.0000	2,372.6856	2,372.6856	0.7674		2,391.8700
Total	**1.0985**	**10.9957**	**8.9257**	**0.0245**	**0.7158**	**0.4094**	**1.1252**	**0.0773**	**0.3766**	**0.4539**	**0.0000**	**2,372.6856**	**2,372.6856**	**0.7674**		**2,391.8700**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0175	9.9500e-003	0.1228	3.6000e-004	0.0505	2.0000e-004	0.0507	0.0134	1.8000e-004	0.0136		38.2099	38.2099	1.1600e-003	1.1300e-003	38.5751
Total	**0.0175**	**9.9500e-003**	**0.1228**	**3.6000e-004**	**0.0505**	**2.0000e-004**	**0.0507**	**0.0134**	**1.8000e-004**	**0.0136**		**38.2099**	**38.2099**	**1.1600e-003**	**1.1300e-003**	**38.5751**

3.3 Grading - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.1904	12.4243	8.4937	0.0206		0.4961	0.4961		0.4564	0.4564		1,995.7975	1,995.7975	0.6455		2,011.9345
Total	**1.1904**	**12.4243**	**8.4937**	**0.0206**	**7.0826**	**0.4961**	**7.5787**	**3.4247**	**0.4564**	**3.8811**		**1,995.7975**	**1,995.7975**	**0.6455**		**2,011.9345**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0124	0.1535	4.5000e-004	0.0632	2.5000e-004	0.0634	0.0168	2.3000e-004	0.0170		47.7624	47.7624	1.4600e-003	1.4100e-003	48.2189
Total	**0.0218**	**0.0124**	**0.1535**	**4.5000e-004**	**0.0632**	**2.5000e-004**	**0.0634**	**0.0168**	**2.3000e-004**	**0.0170**		**47.7624**	**47.7624**	**1.4600e-003**	**1.4100e-003**	**48.2189**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.1872	0.0000	3.1872	1.5411	0.0000	1.5411			0.0000			0.0000
Off-Road	1.1904	12.4243	8.4937	0.0206		0.4961	0.4961		0.4564	0.4564	0.0000	1,995.7975	1,995.7975	0.6455		2,011.9345
Total	**1.1904**	**12.4243**	**8.4937**	**0.0206**	**3.1872**	**0.4961**	**3.6832**	**1.5411**	**0.4564**	**1.9975**	**0.0000**	**1,995.7975**	**1,995.7975**	**0.6455**		**2,011.9345**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0218	0.0124	0.1535	4.5000e-004	0.0632	2.5000e-004	0.0634	0.0168	2.3000e-004	0.0170		47.7624	47.7624	1.4600e-003	1.4100e-003	48.2189
Total	**0.0218**	**0.0124**	**0.1535**	**4.5000e-004**	**0.0632**	**2.5000e-004**	**0.0634**	**0.0168**	**2.3000e-004**	**0.0170**		**47.7624**	**47.7624**	**1.4600e-003**	**1.4100e-003**	**48.2189**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1100e-003	0.0888	0.0304	3.4000e-004	0.0119	5.1000e-004	0.0124	3.4100e-003	4.9000e-004	3.9000e-003		37.1939	37.1939	1.8800e-003	5.5100e-003	38.8830
Worker	0.0109	6.2200e-003	0.0767	2.3000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4900e-003		23.8812	23.8812	7.3000e-004	7.0000e-004	24.1094
Total	**0.0130**	**0.0951**	**0.1071**	**5.7000e-004**	**0.0434**	**6.3000e-004**	**0.0441**	**0.0118**	**6.0000e-004**	**0.0124**		**61.0751**	**61.0751**	**2.6100e-003**	**6.2100e-003**	**62.9924**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1100e-003	0.0888	0.0304	3.4000e-004	0.0119	5.1000e-004	0.0124	3.4100e-003	4.9000e-004	3.9000e-003		37.1939	37.1939	1.8800e-003	5.5100e-003	38.8830
Worker	0.0109	6.2200e-003	0.0767	2.3000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4900e-003		23.8812	23.8812	7.3000e-004	7.0000e-004	24.1094
Total	**0.0130**	**0.0951**	**0.1071**	**5.7000e-004**	**0.0434**	**6.3000e-004**	**0.0441**	**0.0118**	**6.0000e-004**	**0.0124**		**61.0751**	**61.0751**	**2.6100e-003**	**6.2100e-003**	**62.9924**

3.4 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498		2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**		**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0871	0.0300	3.3000e-004	0.0119	4.9000e-004	0.0124	3.4100e-003	4.7000e-004	3.8800e-003		36.4758	36.4758	1.9200e-003	5.4100e-003	38.1362
Worker	0.0104	5.7200e-003	0.0731	2.2000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4800e-003		23.4133	23.4133	6.7000e-004	6.7000e-004	23.6301
Total	**0.0124**	**0.0928**	**0.1031**	**5.5000e-004**	**0.0434**	**6.1000e-004**	**0.0440**	**0.0118**	**5.8000e-004**	**0.0124**		**59.8891**	**59.8891**	**2.5900e-003**	**6.0800e-003**	**61.7663**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4897	12.0233	14.0072	0.0250		0.4700	0.4700		0.4498	0.4498	0.0000	2,289.8898	2,289.8898	0.4200		2,300.3887
Total	**1.4897**	**12.0233**	**14.0072**	**0.0250**		**0.4700**	**0.4700**		**0.4498**	**0.4498**	**0.0000**	**2,289.8898**	**2,289.8898**	**0.4200**		**2,300.3887**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0871	0.0300	3.3000e-004	0.0119	4.9000e-004	0.0124	3.4100e-003	4.7000e-004	3.8800e-003		36.4758	36.4758	1.9200e-003	5.4100e-003	38.1362
Worker	0.0104	5.7200e-003	0.0731	2.2000e-004	0.0316	1.2000e-004	0.0317	8.3800e-003	1.1000e-004	8.4800e-003		23.4133	23.4133	6.7000e-004	6.7000e-004	23.6301
Total	**0.0124**	**0.0928**	**0.1031**	**5.5000e-004**	**0.0434**	**6.1000e-004**	**0.0440**	**0.0118**	**5.8000e-004**	**0.0124**		**59.8891**	**59.8891**	**2.5900e-003**	**6.0800e-003**	**61.7663**

3.5 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234		1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8002**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**		**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0622	0.0343	0.4387	1.3200e-003	0.3541	7.0000e-004	0.3548	0.0907	6.4000e-004	0.0913		140.4796	140.4796	4.0400e-003	4.0300e-003	141.7807
Total	**0.0622**	**0.0343**	**0.4387**	**1.3200e-003**	**0.3541**	**7.0000e-004**	**0.3548**	**0.0907**	**6.4000e-004**	**0.0913**		**140.4796**	**140.4796**	**4.0400e-003**	**4.0300e-003**	**141.7807**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7854	7.4371	11.6737	0.0179		0.3503	0.3503		0.3234	0.3234	0.0000	1,710.0067	1,710.0067	0.5420		1,723.5556
Paving	0.0148					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.8002**	**7.4371**	**11.6737**	**0.0179**		**0.3503**	**0.3503**		**0.3234**	**0.3234**	**0.0000**	**1,710.0067**	**1,710.0067**	**0.5420**		**1,723.5556**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0622	0.0343	0.4387	1.3200e-003	0.3541	7.0000e-004	0.3548	0.0907	6.4000e-004	0.0913		140.4796	140.4796	4.0400e-003	4.0300e-003	141.7807
Total	**0.0622**	**0.0343**	**0.4387**	**1.3200e-003**	**0.3541**	**7.0000e-004**	**0.3548**	**0.0907**	**6.4000e-004**	**0.0913**		**140.4796**	**140.4796**	**4.0400e-003**	**4.0300e-003**	**141.7807**

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.1400e-003	0.0146	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.6827	4.6827	1.3000e-004	1.3000e-004	4.7260
Total	**2.0700e-003**	**1.1400e-003**	**0.0146**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.6827**	**4.6827**	**1.3000e-004**	**1.3000e-004**	**4.7260**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0700e-003	1.1400e-003	0.0146	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.6827	4.6827	1.3000e-004	1.3000e-004	4.7260
Total	**2.0700e-003**	**1.1400e-003**	**0.0146**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.6827**	**4.6827**	**1.3000e-004**	**1.3000e-004**	**4.7260**

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	1.0600e-003	0.0140	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.5974	4.5974	1.2000e-004	1.3000e-004	4.6388
Total	**1.9600e-003**	**1.0600e-003**	**0.0140**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.5974**	**4.5974**	**1.2000e-004**	**1.3000e-004**	**4.6388**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	3.2556					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**3.4265**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	1.0600e-003	0.0140	4.0000e-005	6.3200e-003	2.0000e-005	6.3400e-003	1.6800e-003	2.0000e-005	1.7000e-003		4.5974	4.5974	1.2000e-004	1.3000e-004	4.6388
Total	**1.9600e-003**	**1.0600e-003**	**0.0140**	**4.0000e-005**	**6.3200e-003**	**2.0000e-005**	**6.3400e-003**	**1.6800e-003**	**2.0000e-005**	**1.7000e-003**		**4.5974**	**4.5974**	**1.2000e-004**	**1.3000e-004**	**4.6388**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0730	0.0739	0.5801	9.7000e-004	0.1190	7.4000e-004	0.1197	0.0318	7.0000e-004	0.0325		103.3497	103.3497	8.7800e-003	6.0100e-003	105.3595
Unmitigated	0.0730	0.0739	0.5801	9.7000e-004	0.1190	7.4000e-004	0.1197	0.0318	7.0000e-004	0.0325		103.3497	103.3497	8.7800e-003	6.0100e-003	105.3595

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government (Civic Center)	41.28	0.00	0.00	40,167	40,167
Parking Lot	0.00	0.00	0.00		
Total	41.28	0.00	0.00	40,167	40,167

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government (Civic Center)	6.60	5.50	6.40	75.00	20.00	5.00	50	34	16
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government (Civic Center)	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150
Parking Lot	0.512325	0.057014	0.206318	0.140374	0.024305	0.006187	0.011219	0.006234	0.000948	0.000543	0.028133	0.003250	0.003150

5.0 Energy Detail

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
NaturalGas Unmitigated	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government (Civic Center)	381.699	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1200e-003**	**0.0374**	**0.0314**	**2.2000e-004**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**		**44.9057**	**44.9057**	**8.6000e-004**	**8.2000e-004**	**45.1726**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Government (Civic Center)	0.381699	4.1200e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003		44.9057	44.9057	8.6000e-004	8.2000e-004	45.1726
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**4.1200e-003**	**0.0374**	**0.0314**	**2.2000e-004**		**2.8400e-003**	**2.8400e-003**		**2.8400e-003**	**2.8400e-003**		**44.9057**	**44.9057**	**8.6000e-004**	**8.2000e-004**	**45.1726**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Unmitigated	0.2087	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003

Orcutt Fire Station Project - AQ - Santa Barbara County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Total	**0.2087**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**5.1600e-003**	**5.1600e-003**	**1.0000e-005**		**5.5000e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0223					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.2000e-004	2.0000e-005	2.4000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.1600e-003	5.1600e-003	1.0000e-005		5.5000e-003
Total	**0.2087**	**2.0000e-005**	**2.4000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**5.1600e-003**	**5.1600e-003**	**1.0000e-005**		**5.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	30	201	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (175 - 300 HP)	0.1649	0.4610	0.4205	7.9000e-004		0.0243	0.0243		0.0243	0.0243		84.3712	84.3712	0.0118		84.6669
Total	**0.1649**	**0.4610**	**0.4205**	**7.9000e-004**		**0.0243**	**0.0243**		**0.0243**	**0.0243**		**84.3712**	**84.3712**	**0.0118**		**84.6669**

11.0 Vegetation

Attachment B

Biological Resources Assessment

Orcutt Fire Station Project

Biological Resources Assessment

prepared for

Santa Barbara County Fire Department
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August 2021

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Executive Summary

The Orcutt Fire Station project site is located in the community of Orcutt, Santa Barbara County, California. The proposed project site is located south of Union Valley Parkway and west of U.S. Route 101 (US 101); the approximate center of the project site is located at latitude 34.879943°N and longitude -120.426761°W. The site, Assessor's Parcel Number 107-321-013, is depicted on the *Santa Maria, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle. The project site is bordered by Union Valley Parkway to the south, developed residential communities to the east and north and vacant space to the west.

The Biological Study Area (BSA) analyzed in this biological resources assessment report is comprised of the area where all project components will be located as outlined in the project description to thoroughly ascertain the potential impacts to biological resources on site and in the vicinity of the proposed project. The 5.67-acre BSA is generally level and contains an elevational range between 350-400 feet (107-122 meters) above mean sea level.

No wetlands or waters are mapped within the BSA by the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory or USGS National Hydrography Dataset and none were observed during an on-site reconnaissance survey.

Four vegetation communities and land cover types are associated with the BSA: non-native annual grassland, eucalyptus grove, iceplant mat/landscaped, and road shoulder/disturbed. The BSA contains four coast live oak (*Quercus agrifolia*) trees in the southern portion of the project area along Union Valley Parkway. The site is dominated by non-native annual grassland.

The database and literature review of records from the *Santa Maria, California* USGS 7.5-minute topographic quadrangle, the surrounding eight quadrangles, and the USFWS Information for Planning and Consultation list of federally listed species reveals 69 special status plant species and 32 special status animal species known or have the potential to occur within the vicinity of the BSA (Appendix D). This search area contains a large diversity of habitats, many of which are absent from the BSA, and therefore many of the species that were returned in the search results were determined to have no potential or a low potential to occur within the BSA based on lack of suitable habitat or marginal habitat conditions, respectively, for those species.

The BSA is not located within federally designated critical habitat but, based on the presence of their general habitat requirements and each species geographic range, the BSA contains moderate potential habitat for two special status animal species: California legless lizard (*Anniella pulchra*) and western spadefoot (*Spea hammondii*). In addition, the grasslands, trees and shrubs within and adjacent to the BSA have potential to support nesting birds protected by the federal Migratory Bird Treaty Act and California Fish and Game Code (CFGC) Section 3500. With implementation of avoidance measures impacts to special status animals would be reduced to less than significant levels.

The BSA contains three coast live oak trees that have diameters at breast height greater than six inches and one coast live oak tree with a DBH less than six inches; all four coast live oaks are over six feet in height. The coast live oak trees are at the edge of the project area and would require mitigation if removed. Implementation of avoidance and mitigation measures described in this biological resources assessment would reduce the potential for project-related impacts to native oak trees.

1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this Biological Resources Assessment (BRA) report to document existing conditions, evaluate the potential to support special status species, as well as evaluate the potential for impacts to special status and sensitive biological resources during implementation of the proposed Orcutt Fire Station Project (project). The approximate 4.6-acre project site is located in northern Santa Barbara County (County), California.

1.1 Project Location and Study Area

The project site is located in the community of Orcutt, Santa Barbara County, California (Figure 1). The proposed project site is located adjacent to and north of Union Valley Parkway and west of U.S. Highway 101 (US 101); the approximate center of the project site is located at latitude 34.879943°N and longitude -120.426761°W. The site is depicted on the *Santa Maria, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle and is designated as Assessor's Parcel Number 107-321-013. The proposed project would occur on the approximately 4.6-acre project site as well as the adjacent Union Valley Parkway road shoulder to the south. Developed residential communities occur to the east and north and vacant space to the west (Figure 1).

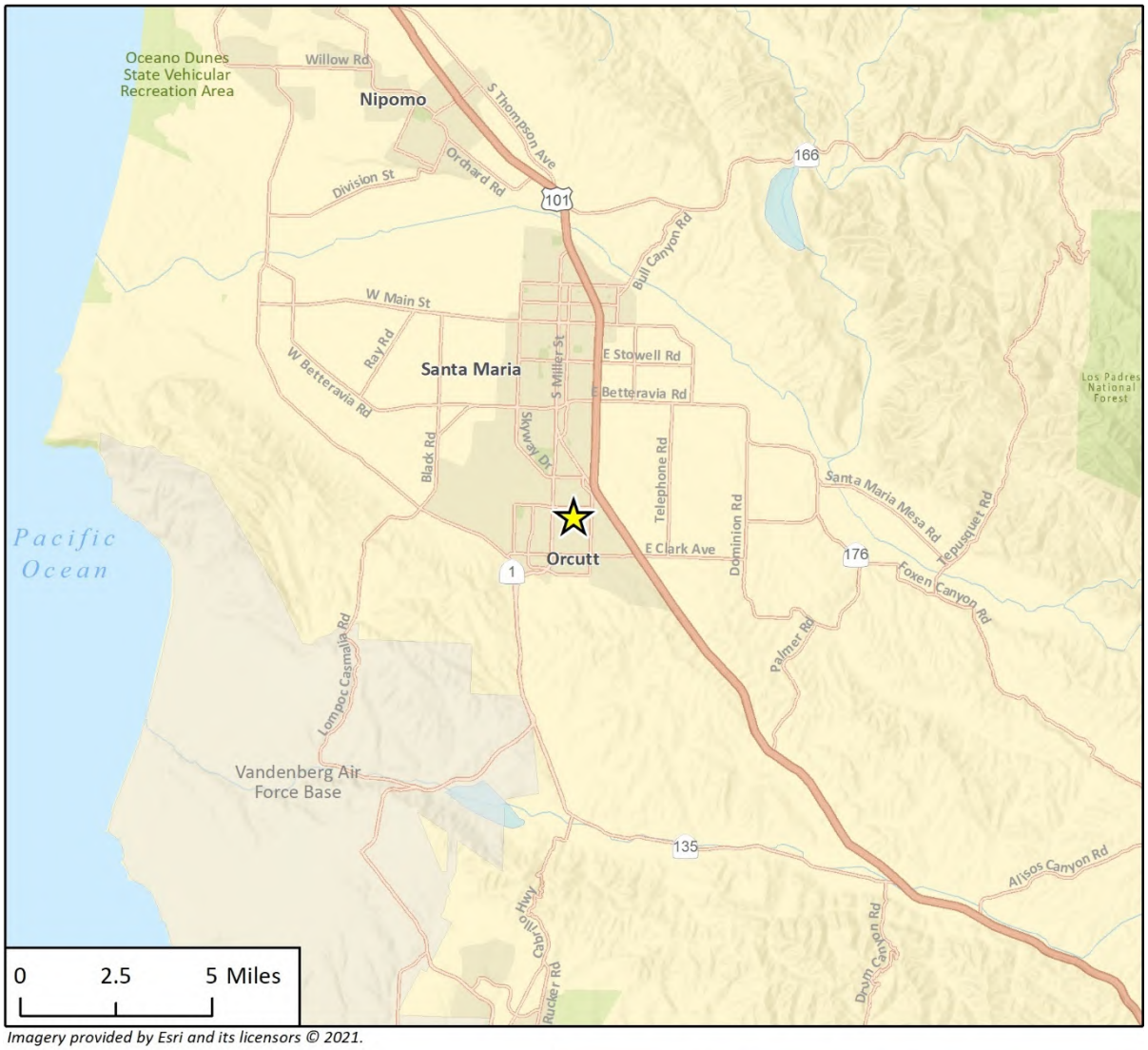
The Biological Study Area (BSA) (Figure 2) analyzed in this BRA contains all of the project components (impact areas) as outlined in the project description. The BSA was defined in order to assess the potential impacts to biological resources on site, as well as in the vicinity of the proposed project. The BSA was also defined to an extent that would be suitable to ascertain any indirect impacts to biological resources in areas outside of the proposed project impact area. The BSA for the proposed project is approximately 5.67 acres and is presented in Figure 2.

1.2 Project Description

The Santa Barbara County Fire Department proposes a new fire station on the project site. The proposed fire station would be approximately 8,600 square feet in area. The maximum roof height would be 32 feet. The fire station would include three drive-through bays for fire trucks and associated apparatus. The fire station's interior uses would provide the following fire-fighting staff amenities: bedrooms with bathrooms, a communal kitchen, dining area, fire station captain's office, day room, workout area, laundry room with extractor units, among other amenities.

The project would include one or two aboveground fuel tanks for the storage of up to 250 gallons of gasoline and up to 1,000 gallons of diesel (if only one fuel tank would be on the site, the tank with be bifurcated to hold both gasoline and diesel). An emergency diesel-powered generator would also be located on the northeast side of the project building. Additional exterior structures would include a trash and recycling enclosure and storage area for lawn and gardening tools to the north of the main building.

Figure 1 Regional Location Map



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Project Location

N

Figure 2 Biological Study Area

Imagery provided by Microsoft Bing and its licensors © 2021.

The site would also include three driveways: one at the western terminus of Brookside Avenue and two along Union Valley Parkway. Fifteen parking spaces would be located on site, including two accessible spaces. The areas adjacent to and around the structure and exterior facilities would be landscaped with a mixture of native and drought tolerant plantings.

Preliminary construction, including rough grading and site preparation, would occur over an approximately four-month period. All grading would be balanced on-site with a maximum depth of soil cut being 10 feet. Subsequent fire station construction would occur over a 12- to 14-month period. It is anticipated that project construction would begin the summer of 2027 and the station would begin operations by early 2029. No eucalyptus tree removals are proposed, and no project activities would occur within the designated Open Space area.

A preliminary site plan is included as Attachment E.

2 Methodology

2.1 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special status plant and animal species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of Santa Barbara).

2.1.1 Definition of Special Status Species

For the purposes of this report, special status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act; species that are under review may be included if there is a reasonable expectation of listing within the life of the project;
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act;
- Plant species listed as rare by the California Department of Fish and Wildlife (CDFW) under the Native Plant Protection Act;
- Species designated as Fully Protected by the CDFW;
- Species designated as Species of Special Concern or Watch List by the CDFW; note these designations are administrative designations made by CDFW and have no formal protective measures through State or federal statutes;
- Species designated as sensitive by the U.S. Forest Service or U.S. Bureau of Land Management, if the project would affect lands administered by these agencies; and
- Species designated as locally important by the local agency and/or otherwise protected through local ordinances and/or policies.

2.1.2 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes (Appendix A):

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act (Porter-Cologne Act)

- Orcutt Community Plan (OCP)
- Santa Barbara County Environmental Thresholds and Guidelines Manual

2.1.3 Previous CEQA Review

The OCP Environmental Impact Report (EIR) (County of Santa Barbara 1995) analyzed the potential impacts as a result of buildout under the OCP. The project area was also considered in the OCP EIR as "Key Site 27." The OCP EIR indicated that no rare, endangered, or threatened species of flora or fauna are known or expected to occur on Key Site 27 and no site-specific impact analysis was conducted as part of Volume 2 of the EIR. The OCP EIR did not include any impacts or mitigation measures for biological resources for Key Site 27. The OCP EIR impact analysis and mitigation measures were reviewed in the context of the proposed project and incorporated as applicable in this BRA.

2.1.4 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

a) *Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.*

Guidelines for evaluation of biological impacts and significance thresholds for projects in the County are contained in *Environmental Thresholds and Guidelines Manual* (County Guidelines; County of Santa Barbara 2008, revised 2015) and *A Planner's Guide to Conditions of Approval and Mitigation Measures* (County of Santa Barbara 2005). Determination of significance for disturbance to habitats or species within the County's jurisdiction is based on the following criteria:

a. *Conflict with adopted environmental plans and goals of the community where it is located;*
b. *Substantially affect a rare or endangered species of animal, plant or the habitat of the species;*

c. *Interfere substantially with the movement of any resident or migratory fish or wildlife species; or*
d. *Substantially diminish habitat for fish, wildlife, or plants.*

The evaluation of project impacts as detailed in the County Guidelines calls for an assessment of both short- and long-term impacts. Significant impacts to species or habitats are those which substantially impact significant resources in the following ways:

a. *Substantially reduce or eliminate species diversity or abundance;*
b. *Substantially reduce or eliminate quantity or quality of nesting areas;*
c. *Substantially limit reproductive capacity through losses of individuals or habitat;*
d. *Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources;*
e. *Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes); or*
f. *Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.*

Instances in which project impacts would be less than significant include:

a. *Small acreages of non-native grassland if wildlife values are low;*
b. *Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies;*
c. *Areas of historical disturbance such as intensive agriculture;*
d. *Small pockets of habitats already significantly fragmented or isolated, and degraded or disturbed; or*
e. *Areas of primarily ruderal species resulting from pre-existing man-made disturbance.*

Additional County guidelines are provided for specific biological communities. These are used in conjunction with the general impact assessment guidelines described above.

Wetlands

Based on the County Guidelines, the following types of project-created impacts may be considered significant:

a. *Projects that result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect on the environment;*
b. *Wildlife access, use, and dispersal in wetland habitats are key components of their ecosystem value. Projects that substantially interrupt wildlife access, use and dispersal in wetland areas, would typically be considered to have potentially significant impacts; and*
c. *The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Therefore, maintenance of hydrological conditions, such as the quantity and quality of runoff, must be assessed in project review.*

Riparian Habitats

Based on the County Guidelines, the following types of project-related impacts may be considered significant:

a. *Direct removal of riparian vegetation;*
b. *Disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation;*
c. *Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion;*
d. *Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential; and*
e. *Construction activity that disrupts critical time periods (nesting, breeding) for fish and other wildlife species.*

Individual Native Trees

Based on the County Guidelines, the following types of project-related impacts may be considered significant:

a. *Impacts to native specimen trees, regardless of size. Specimen trees are defined as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species;*
b. *Impacts to rare native trees, which are very low in number or isolated in distribution; or*
c. *In general, the loss of 10% or more of the trees of biological value on a project site.*

2.2 Literature Review

Queries of the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation System (IPaC; USFWS 2021a), CDFW California Natural Diversity Database (CNDDB; CDFW 2021a) and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2021) were conducted to obtain comprehensive information regarding State and federally listed species as well as other special status species considered to have potential to occur within the *Santa Maria, California* USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles (*Oceano, Nipomo, Huasna Peak, Twitchell Dam, Sisquoc, Orcutt, Casmalia*, and *Guadalupe*). The results of these scientific database queries were compiled into a table that is presented as Appendix D.

Additional sources of information that was reviewed regarding sensitive biological resources included:

- CDFW Biogeographic Information and Observation System Viewer Application for the Biological Study Area (CDFW 2021b);
- USFWS Critical Habitat Portal (USFWS 2021b);
- USFWS National Wetlands Inventory (NWI) Mapper (USFWS 2021c);

- USGS National Hydrography Dataset (NHD; USGS 2021); and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA, NRCS 2021a).

2.3 Field Reconnaissance Survey

A reconnaissance survey was completed for the original project design by Rincon Senior Biologist Michael Tom and Associate Biologist Lindsey Stockton on July 8, 2021. This reconnaissance survey was restricted to the BSA. The results of that survey were also used to inform the analysis in this BRA.

Mr. Tom and Ms. Stockton surveyed the entire BSA on foot. Weather conditions were mild and generally favorable for the detection of wildlife species typically active during the day. The sky was clear, with less than five percent cloud cover throughout the survey. The temperature averaged 80 degrees Fahrenheit and winds were mild ranging from one to three miles per hour. The survey was conducted to document the existing site conditions and to evaluate the potential for presence of sensitive biological resources, including sensitive plant and animal species, sensitive plant communities, and habitat for nesting birds protected by federal and state laws. During the survey, an inventory of plant and animal species observed was compiled and a preliminary assessment of potentially jurisdictional aquatic features was conducted. The compendium of plant and wildlife observed on the BSA on July 8, 2021 can be found in Appendix C.

Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and the Jepson eFlora (Jepson Flora Project [eds.] 2019). All plant species encountered were noted and identified to the lowest taxonomic level possible given the condition of the materials during the site visit. The vegetation classification system used for this analysis is based on *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009), but has been modified as needed to accurately describe the existing habitats observed on site. These vegetation communities were mapped onto aerial imagery depicting the BSA and then later digitized using ArcGIS® (ESRI 2019).

Wildlife identification and nomenclature followed standard reference texts, including *Sibley Birds West: Field Guide to Birds of Western North America* (Sibley 2016), *Field Guide to Western Reptiles and Amphibians* (Stebbins 2003), and *Mammals of North America* (Bowers et al. 2004). The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of the habitats observed within the BSA during the field survey. Several sensitive species were eliminated from consideration as having potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or knowledge of regional distribution.

3 Existing Conditions

This section summarizes the results of the literature review, reconnaissance-level field survey, and vegetation mapping efforts. Discussions regarding the general environmental setting, vegetation communities present, plants and animals observed, potential special status species issues, and other possible constraints regarding the biological resources on site are presented below. A complete list of all the plant and animal species observed on site during the field survey is presented as Appendix C and representative photographs of the project site are provided in Appendix B.

3.1 Physical Characteristics

The project site is generally located in the Santa Maria Valley in northern Santa Barbara County, California. Average annual temperatures in Santa Maria ranged between 46 and 69 degrees Fahrenheit, with the warmest temperatures occurring between July and October and the coldest temperatures occurring between November and February. Santa Maria receives rainfall of approximately 14 inches annually, with the most rain occurring between December through March (Western Regional Climate Center 2021).

The BSA has generally flat topography, with elevations ranging 350-400 feet (107-122 meters) above mean sea level and is dominated by non-native annual grassland habitat. A dirt footpath also traverses east-west across the southern portion of the site connecting Brookside Avenue to Union Valley Parkway. During the reconnaissance survey people and pets (dogs) were observed utilizing the foot path.

3.1.1 Watershed and Drainages

The BSA is located within the Lower Orcutt Creek sub-watershed of the Santa Maria sub-basin (Hydrologic Unit Code 180600080503). The Santa Maria River Watershed is located in southern San Luis Obispo County and northern Santa Barbara County. The watershed includes the major tributaries of the Cuyama and Sisquoc Rivers as well as a number of smaller tributaries. No wetlands or waters are mapped within the study area by the NWI (USFWS 2021c) or NHD (USGS 2021).

3.1.2 Soils

Two soil map units are documented within the BSA: Marina sand, 9 to 30 percent slope and Oceano sand, 2 to 15 percent slope. The northeast corner of the project site consists of Oceano sand, the remaining area contains Marina sand (USDA, NRCS 2021a). Descriptions of each soil map unit are presented below.

- **Marina sand, 9 to 30 percent slopes**, is a somewhat excessively drained soil that occurs on terraces. Marina sand is derived from eolian deposits and has a typically homogeneous soil profile of sand textures to 88 inches. This soil map unit is not included on the *National Hydric Soils List* (USDA, NRCS 2021b).
- **Oceano sand, 2 to 15 percent slopes eroded,** is an excessively drained soil that occurs on dunes. This soil type is derived from eolian sands and has a typical soil profile of sandy loam textures. This soil map unit is not included on the *National Hydric Soils List* (USDA, NRCS 2021b).

3.2 Vegetation and Other Land Cover

This section describes the characteristics, extent, and location of the vegetation communities and other land cover types within the BSA, including dominant plant species observed within each community/land cover type during site visits. Four vegetation communities or land cover types are associated with the BSA: non-native annual grassland, eucalyptus grove, iceplant mat/landscaped, and road shoulder/disturbed. The BSA contains four coast live oak (*Quercus agrifolia*) trees in the southern portion of the project area along Union Valley Parkway. A list of plant species observed on site during the field surveys conducted for this report can be found in Appendix C. The vegetation classification system used for this analysis is based on MCV2 (Sawyer et al. 2009), but has been modified as needed to accurately describe the existing habitats observed onsite. Approximate acreages of the vegetation communities found within the BSA are shown in Table 1 and the extents of vegetation communities and other land cover types are presented in Figure 3. They are also discussed in greater detail below.

Table 1 Vegetation Communities within the BSA

Vegetation/Land Cover Type	BSA (acres)
Non-native annual grassland	3.89
Eucalyptus grove	1.37
Iceplant mat/landscape	0.15
Road shoulder/developed	0.26
Total	**5.67**

3.2.1 Non-native Annual Grassland

Non-native annual grassland within the BSA encompasses approximately 3.89 acres and consists primarily of exotic annual grasses and includes areas dominated by non-native grasses including rip-gut brome (*Bromus diandrus*), wild oat (*Avena fatua*), and veldt grass (*Ehrharta calycina*) (Table 1 and Figure 3). Although non-native annual grasses form the dominant plant species composition, annual and perennial forbs, such as jimson weed (*Datura stramonium*) and doveweed (*Croton californicus*), are also scattered within this vegetation type. Additionally, four coast live oak individuals that appear to have been planted occur within the southernmost region of this vegetation community. The non-native annual grassland within the BSA most closely resembles the *Bromus* (*diandrus*, *hordeaceous*) – *Brachypodium distachyon* Semi-Natural Herbaceous Stands in MCV2 (Sawyer et al. 2009).

3.2.2 Eucalyptus Grove

Within the BSA, this alliance is dominated by blue gum eucalyptus (*Eucalyptus globulus*) as the sole tree species and is characterized by a dense stand of eucalyptus with over 80 percent cover within the tree layer (Figure 3). The herbaceous layer is sparse, and primarily consists of leaf litter with sparse weedy non-native grasses. This alliance is found within the eastern portion of the BSA corresponding with the area designated as Open Space. The BSA contains 1.37 acres of this vegetation community. The eucalyptus grove within the BSA most closely resembles the *Eucalyptus*

Figure 3 Vegetation Communities

Imagery provided by Microsoft Bing and its licensors © 2021.

spp. - Ailanthus altissima - Robinia pseudoacacia Woodland Semi-Natural Alliance in MCV2 (Sawyer et al. 2009).

3.2.3 Iceplant Mat/Landscaped

Iceplant (*Carpobrotus edulis*) dominates a small area in the southern region of the BSA, bordering Union Valley Parkway (Figure 3). Non-native grasses occur in low abundance within this vegetation community. Planted nonnative shrubs also occur amongst the mats of iceplant. The iceplant mat vegetation community within the BSA most closely resembles the *Mesembryanthemum* spp. - *Carpobrotus* spp. Herbaceous Semi-Natural Alliance in MCV2 (Sawyer et al. 2009). The BSA contains 0.15 acre of this vegetation community.

3.2.4 Road Shoulder/Disturbed

The road shoulder/disturbed land cover type includes areas that have been heavily disturbed or altered from natural vegetation and is associated with the shoulder of Union Valley Parkway (Figure 3). This land cover type consists of sparsely vegetated native and non-native species, such as ripgut brome and telegraph weed, but consist of mostly bare ground. It is not officially identified in *A Manual of California Vegetation* (Sawyer, et al. 2009) as a defined vegetation community. The study area contains 0.26 acre of this land cover type.

3.3 General Wildlife

Wildlife activity within the BSA during the survey was very low. Wildlife species observed during the reconnaissance-level field survey include red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), and western fence lizard (*Sceloporus occidentalis*), among other common species. Wildlife species observed within the BSA during surveys for this report were limited to common avian species and western fence lizards. There were also abundant small mammal burrows present in the BSA, likely created by gophers (*Thomomys* sp.). A complete list of species observed can be found in Appendix C.

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special status species and other sensitive biological resources and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of proposed development on a property. This section discusses sensitive biological resources observed on the project site and evaluates the potential for the project site to support additional sensitive biological resources. Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project site, and the results of surveys of the project site. The potential for each special status species to occur in the study area was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on-site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

4.1 Special Status Species

4.1.1 Special Status Plant Species

Based on the database queries described in Section 2.2, 69 special status plant species are known to or have the potential to occur within the vicinity of the BSA (Appendix D). No special status plant species were determined to have a moderate or high potential to occur. Only four special status plant species were determined to have low potential to occur within the BSA, Hoover's bent grass (*Agrostis hooveri;* California Rare Plant Rank 1B.2), Douglas' fiddleneck (*Amsinckia douglasiana*; California Rare Plant Rank 4.2), California spineflower (*Mucronea californica*; California Rare Plant Rank 4.2), and large-flowered leptosiphon (*Leptosiphon grandiflorus*; California Rare Plant Rank 4.2); however, it is very unlikely that these species will occur due to the prevalence of non-native grasses on site and the amount of existing disturbances on and adjacent to the site.

4.1.2 Special Status Animal Species

Based on the database queries described in Section 2.2, 32 special status animal species are known to or have the potential to occur within the vicinity of the BSA (Appendix D). Of those, the following six special status animal species were determined to have low potential to occur within the BSA: monarch - California overwintering population (*Danaus plexippus* pop. 1; Federal Candidate), coast horned lizard (*Phrynosoma blainvillii;* Species of Special Concern), burrowing owl (*Athene cunicularia;* Species of Special Concern), Swainson's hawk (*Buteo swainsoni*; Species of State Threatened), American peregrine falcon (*Falco peregrinus anatum*; Fully Protected), and American badger (*Taxidea taxus;* Species of Special Concern). Because of the marginally suitable habitat or lack of certain habitat features, these species are not likely to occur (see Appendix D) and are not discussed further. Two species were determined to have moderate potential to occur on site, northern California legless lizard (*Anniella pulchra*; Species of Special Concern) and western spade foot (*Spea hammondii*; Species of Special Concern). These species are further discussed below.

Northern California Legless Lizard

The northern California legless lizard is a small slender lizard with no legs, has eyelids, a shovel-shaped snout, smooth shiny scales, and a blunt tail. This species lives mostly underground and occurs with sandy and loose loamy soils or leaf litter. The northern California legless lizard inhabits areas of sparse vegetation within chaparral, coastal dunes, and coastal scrub habitats. This special status species prefers moist, warm soil. The non-native annual grasslands and eucalyptus groves within the BSA contains areas of sandy soil and leaf litter, providing potentially suitable habitat for the northern California legless lizard. In addition, this species is known to occur long Union Valley Parkway in similar habitat types (CDFW 2021a, 2021b). Based on the habitat requirements, known occurrences in the vicinity of the BSA and suitable habitat found within the BSA, this species has a moderate potential to occur.

Western Spadefoot

The western spadefoot is almost completely terrestrial, entering water only to breed. Breeding pools that are suitable for breeding are those which do not contain bullfrogs, fish, or crayfish and that pond for at least 30 days for successful completion of larval development (Morey and Reznick 2004). Outside the breeding season, the western spadefoot spends the majority of the time underground to avoid desiccation and prefer open areas with sandy or gravelly soils in a variety of habitats in the vicinity of a suitable breeding pond. The western spadefoot has been documented within the nine-quad search area surrounding the BSA as well as 500 feet from BSA (CDFW 2021a, 2021b). This closest occurrence documented by the CNDDB is described as a seasonal rain-filled depression used for breeding by the species and is located in the southeast corner of the intersection of Union Valley Parkway and Hummel Drive. The BSA does not contain suitable aquatic; however, the upland habitats found within the BSA provide suitable upland habitat for the western spadefoot as they contain sandy soils and suitable vegetation types for western spadefoot occupancy during the non-breeding season in close proximity to a known breeding location. Based on the habitat requirements, known occurrences in the vicinity of the BSA and suitable habitat found within the BSA, this species has a moderate potential to occur.

4.1.3 Other Protected Species

Nesting Birds

The trees, shrubs, and grassland areas in and surrounding the BSA provide suitable habitat for nesting bird species. Several species of birds common to the area that typically nest in the habitats found within the BSA were detected during the reconnaissance survey. Although no raptor nests were detected during the reconnaissance survey, the eucalyptus trees found in the western portion of the site and adjacent to the BSA could be utilized by some raptor species for nesting.

4.2 Sensitive Plant Communities and Critical Habitats

Five sensitive natural community were identified by the CNDDB as occurring in the regional vicinity of the BSA: central dune scrub, central foredunes, coastal and valley freshwater marsh, southern California threespine stickleback stream, and southern vernal pool; however, these sensitive natural communities do not occur on site. The Sensitive Natural Communities List in the CNDDB is not currently maintained and no new information has been added. Therefore, vegetation types on site were also compared with the List of Vegetation Alliances and Associations (CDFW 2020). According to the CDFW's Vegetation Program, Alliances with State ranks of S1-S3 are considered to be imperiled, and thus, potentially of special concern. None of the three vegetation community types mapped within the BSA are considered sensitive by CDFW (2020).

No federally designated critical habitat occurs within the BSA.

4.3 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large and small scale. Essential Connectivity Areas (ECAs) are regions in which land conservation and management actions should be prioritized to maintain and enhance ecological connectivity and represent principal connections between Natural Landscape Blocks. ECAs are mapped based on coarse ecological condition indicators, rather than the needs of particular species and thus serve the majority of species in each region. Regionally, the BSA

is not located within an ECA as mapped in the report California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (2010). The project site is within an urban setting, bordered by existing barriers to most regional wildlife movement in the form of existing housing developments along the entire northern and eastern boundaries because of these barriers and edge effects, in combination with the existing disturbances on site, the habitats within the BSA likely do not contribute greatly to regional wildlife movement patterns.

4.4 Resources Protected by Local Policies and Ordinances

Native Trees

In 1998 the County's Board of Supervisors initiated a collaborative public process to develop recommendations for oak protection. By July 2001 the County adopted the Oak Tree Protection and Regeneration Program. An outcome of this program was the Santa Barbara County Comprehensive Plan Conservation Element Oak Tree Protection in the Inland Rural Areas of Santa Barbara County as adopted in 2003 and republished in 2009. This document outlined protection goals, development standards, policies and implementing actions to promote the conservation, protection, and regeneration of native oak populations and oak woodlands.

- Oak Tree Protection Policy 1 states that "native oak trees, native oak woodlands and native oak savannas shall be protected to the maximum extent feasible in the County's rural and/or agricultural lands. Regeneration of oak trees shall be encouraged."
- Development Standard 1 (Protection of all species of mature oak trees) states that "development shall avoid removal of or damage to mature oak trees, to the maximum extent feasible." Mature oak trees are defined as live oak trees six inches or greater in DBH. "Native oak trees that cannot be avoided shall be replanted on site or on a receiver site known to be capable of supporting the particular oak tree species. Replanting shall conform to the County's *Standard Conditions and Mitigation Measures*."

The County's *Environmental Thresholds and Guidelines Manual* (2008) states that individual native specimen trees (mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species) are potentially significant. In general, the loss of 10 percent or more of the trees (by number or by canopy cover) of biological value on a project site is considered potentially significant.

In addition, the OCP protects native trees that are considered established and protected if they are six feet in height.

The BSA contains four coast live oak trees over six feet in height and of those four oak trees, three have a diameter at breast height (DBH) of greater than six inches. See Figure 3 for the locations of each tree. The coast live oak trees are at the edge of the project area and would require mitigation if removed.

Non-native Trees

In addition, the OCP protects non-native trees which are defined as those with a DBH of 25 inches or greater (Policy BIO-O-4). Removal of these non-native trees would require replacement with native trees per DevStd BIO-O-4.1 of the OCP and BIO-26 of the OCP EIR. Therefore, non-native eucalyptus trees that meet the criteria described in the OCP found in the area mapped as eucalyptus grove

(depicted in Figure 3) would be considered sensitive. No other non-native trees within the BSA are considered sensitive.

4.5 Habitat Conservation Plans

The BSA does not occur in an area with an adopted Habitat Conservation Plan (HCP) or Natural Communities Conservation Plan (NCCP).

5 Impact Analysis and Mitigation Measures

5.1 Special Status Species

The proposed project would have a significant effect on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Additionally, consistent with the County of Santa Barbara Environmental Thresholds and Guidelines Manual (2008):

Substantially affect a rare or endangered species of animal, plant or the habitat of the species.

5.1.1 Special Status Plants

No special status plant species were determined to have a moderate or high potential to occur and no federal or State rare, threatened, or endangered plant species have potential to occur on site. Therefore, impacts to special status plants would be less than significant or not expected and no mitigation measures related to special status plants are recommended.

5.1.2 Special Status Animals

As discussed above, two special status animal species have potential to occur in the BSA based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the survey area, and previous reports for areas in the vicinity of the BSA. Impacts as well as recommended avoidance and minimization efforts for special status animals are discussed below.

Suitable habitat for the northern California legless lizard occurs within sandy soils and iceplant mats of the proposed development footprint as well as the eucalyptus grove leaf litter within the BSA. Direct impacts to these species could occur during ground disturbance in the form of harassment and/or injury, if present.

Suitable upland habitat for the western spadefoot toad can be found throughout the BSA. Much of the impact area within the BSA does occur within suitable upland habitat for the western spadefoot. Potential impacts, if present in upland areas, could occur during ground disturbance in the form of harassment and/or injury, especially since western spadefoot are known to burrow underground. No impacts to aquatic breeding habitat would occur from the proposed project.

Several bird species protected by the CFGC and the MBTA may nest in grasslands, trees, and shrubs within or adjacent to the BSA. Development of the project may result in direct or indirect impacts to nesting bird species, should they be present within and/or in the immediate vicinity of areas of disturbance at the time of construction. Impacts to nesting birds could occur if nests with eggs or young are present within the proposed disturbance area during project implementation that may cause direct impact to the nest, and/or failure or abandonment of the nest.

Impacts to special status animal species are potentially significant.

Special Status Animal Recommended Mitigation Measures

The OCP EIR identified potential impacts to special status species and nesting birds on a programmatic level, but no mitigation measures specific to Key Site 27 were developed as part of the OCP EIR. The following mitigation measures are proposed to facilitate the implementation of the applicable programmatic mitigation measures in the OCP EIR to provide project specific measures to avoid and/or minimize impacts to sensitive biological resources.

BIO-1 Northern California Legless Lizard and Western Spadefoot Pre-construction Survey and Relocation

At a minimum of two weeks prior to initiation of ground disturbing activities and vegetation removal, a County-approved biologist shall survey the limits of grading for northern California legless lizards and western spadefoot. Surveys for legless lizards shall include raking of leaf litter and sand under shrub and trees in suitable habitat within the disturbance footprint to a minimum depth of eight inches. If northern California legless lizards and/or western spadefoots are found and would be impacted by the project the County-approved biologist shall capture and relocate the species to designated open space areas on site or at County-approved off-site locations. Captured animals shall be placed into containers with sand or other moist substrates and released in the designated areas within three hours. In addition to preconstruction surveys, the biologist shall be on-site during initial grading activities to relocate any northern California legless lizards and/or western spadefoots that are unearthed during excavation. If in good health, they shall be immediately relocated to the designated relocation area. If injured, the animals shall be turned over to a CDFW-approved specialist until they are in a condition suitable for release into the designated release area or deposited at an approved vertebrate museum.

Plan Requirements and Timing. Prior to ground-disturbing activities, the name, qualifications, scope, and contact information for the surveying biologist must be submitted to the County for approval in advance of the surveys. Proposed relocation areas shall be identified and approved by the County prior to beginning the work. A report of the results of the pre-construction survey and any required capture and relocation efforts shall be submitted to the County for review prior to initiation of ground-disturbing activities. Weekly monitoring reports shall be submitted to the County by the County-approved biologist during initial ground disturbing activities. Biological monitoring requirements are to be implemented during construction. This measure shall be printed on all grading and construction plans.

Monitoring. The County and/or County-approved biologist shall monitor compliance with the above avoidance and minimization measures.

BIO-2 Nesting Bird Surveys

If feasible, removal of vegetation within suitable nesting bird habitats will be scheduled to occur in the fall and winter (between September 1 and February 14), after fledging and before the initiation of the nesting season. For vegetation removal activities occurring during the nesting season (generally February 15 to August 31), surveys for nesting birds covered by the CFGC and the MBTA should be conducted by a qualified biologist no more than 14 days prior to vegetation removal. The surveys should include the disturbance area plus a 300-foot buffer around the site, or to the topographic divide where substantial topography is present in the buffer. If active nests are located, all construction work should be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer should be a minimum of 50 feet for non-raptor bird species and at

least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) should be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist should confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitoring construction within the buffer zones to ensure active nests and nesting birds are not impacted.

Plan Requirements and Timing. The surveys shall be conducted no more than 14 days prior to the initiation of vegetation and/or tree removal activities. A report of the nesting bird survey results shall be submitted to the County for review and approval prior to construction activities which involve tree or vegetation removal. These measures are to be implemented during grading and construction activities.

Monitoring. The County and/or County-approved biologist shall monitor compliance with the above avoidance and minimization measures. Active nests shall be monitored periodically by the County-approved biologist until it has been determined that the nest is no longer being used by either the young or adults.

Implementation of these recommended avoidance, minimization, and mitigation measures would reduce impacts to special status animals to less than significant levels.

5.2 Sensitive Plant Communities

The proposed project would have a significant effect on biological resources if it would:

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

No sensitive vegetation communities or riparian habitats occur within the BSA; therefore, no impacts would occur to these resources. No measures are recommended.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

No State or federally protected wetlands or jurisdictional areas are located within the BSA; therefore, there would be no impacts to waters or wetlands. No measures are recommended.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

The project site is bordered by existing barriers to most regional wildlife movement in the form of existing housing developments along the entire northern and eastern boundaries. In addition, the project site is located largely in an urban setting, is disturbed and construction of the fire station would encompass a relatively small area and not include development of the entire parcel. Designated open space areas would maintain connectivity with adjacent parcels. Therefore, impacts to wildlife movement would be less than significant and no measures are recommended.

5.5 Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

The proposed project may result in direct or indirect impacts to oak trees with heights greater than six feet and/or a DBH greater than or equal to 6 inches within the BSA. However, the exact number of trees to be removed, trimmed, and/or critical root zones impacted from the proposed project is not known at this time due to limited information regarding the project's final design, grading limits, and staging area locations. Up to four coast live oaks could be removed or otherwise impacted by the project. Impacts to any of the four oak trees would be potentially significant.

No impacts to the eucalyptus grove and no eucalyptus removals are proposed and therefore, no impacts to protected non-native trees would occur.

Native Tree Recommended Mitigation Measures

BIO-3 Tree Avoidance and Tree Protection Plan

The County should modify the proposed project to either incorporate (to implement OCP Policy BIO-O-3 and OCP EIR BIO-26) and/or avoid oak trees. A County-approved biologist and/or arborist shall prepare a Tree Protection Plan (TPP) to ensure avoidance of impacts to protected trees that are not planned for removal. The TPP shall include the following components:

a. Prior to the onset of any construction activities, high visibility orange construction fencing shall be installed around existing stands and individuals that are to be retained at a buffer/extent radius of six feet beyond the canopy dripline, wherever the topography allows for such fencing or otherwise marked in the field to protect them from harm during grading and construction.
b. No construction equipment shall be parked, stored, or operated within 25 feet of any protected tree dripline.
c. No fill soil, rocks, or construction materials shall be stored or placed within 25 feet of the dripline of a protected tree.

d. No artificial surface, pervious or impervious, shall be placed within 25 feet of the dripline of any protected tree, except for County-approved project access roads.
e. Any roots encountered that are one inch in diameter or greater shall be cleanly cut. This shall be done under the direction of a County-approved arborist/biologist.
f. Any construction activity required within three feet of a protected tree's dripline shall be done with hand tools.
g. No permanent irrigation shall occur within the dripline of any existing protected tree.
h. Only designated trees shall be removed. All grading and construction plans shall clearly delineate those trees to be removed and those to remain.

If avoidance of oak trees is not feasible, the County shall also implement mitigation measure BIO-4 below.

Plan Requirements and Timing. The County-approved biologist and/or arborist shall submit theTPP to the County. The County shall include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures that are indicatd in the TPP. The construction contractor shall install the tree protection measures indicated in the TPP and project plans prior to the initation of on-site project activities.

Monitoring. The County shall demonstrate that trees identified for protection were not damaged or removed or, if damage or removal occurred, that replacement is completed as required by the TPP prior to final building inspection clearance.

BIO-4 Tree Replacement Plan (Also Implements OCP EIR BIO-26)

If protected oak trees will be removed, a Tree Replacement Plan shall be prepared by a certified arborist or landscape architect. The tree replacement plan shall be designed to replace native trees removed by the proposed project at a ratio of 10:1 (trees planted: trees impacted) for protected oak trees. Upon final design, the County or County-approved biologist and/or arborist shall determine the final impacts to protected trees and the subsequent number of replacement plantings needed for restoration for the project. Replacement trees shall be installed on-site. Monitoring of planted trees shall be for a minimum of seven years or until stasis has been determined by a certified arborist. The plan shall include the following components at a minimum:

a. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type);
b. Goal(s) of the compensatory mitigation project;
c. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values);
d. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan [including species to be used and container sizes]);
e. Maintenance activities during the monitoring period, including weed removal and irrigation as appropriate (activities, responsible parties, schedule);
f. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target

acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports);

g. Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants;
h. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria;
i. Notification of completion of compensatory mitigation; and
j. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).

Plan Requirements and Timing. The County-approved biologist and/or arborist shall submit the Tree Replacment Plan to the County. Plan components shall be included on grading and landscaping plans.

Monitoring. The County shall demonstrate that all required components of the approved Tree Replacement Plan are in place as required prior to final inspection clearance and maintained throughout maintenance period.

Implementation of these recommended mitigation measures would reduce the potential for project-related impacts to protected trees to less than significant levels.

5.6 Adopted or Approved Plans

The proposed project would have a significant effect on biological resources if it would:

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

The project site is not located within an area with an adopted HCP or NCCP; therefore, there would be no conflicts with an adopted or approved plan. Therefore, no measures are recommended.

6 Limitations, Assumptions, and Use Reliance

This BRA has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Regulatory Setting

Regulatory Setting

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or animal species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g., U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e., California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- Central Coast Regional Water Quality Control Board (waters of the State);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; Species of Special Concern; nesting birds);
- County of Santa Barbara

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) have jurisdiction over "waters of the State," pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-

DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The RWQCB administers actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any federally threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is restricted to direct mortality of a listed species and the law does not prohibit indirect harm by way of habitat modification. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated.

The CDFW also enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibits take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level office to take any bird in violation of the federal Migratory Bird Treaty Act. CDFW administers these requirements.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species in special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to

administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 *et seq*. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over activities that divert, obstruct, or alter the channel, bed, or bank of any river, stream or lake.

Local Jurisdiction

Santa Barbara County (County) has guidelines for evaluation of biological impacts and significance thresholds for projects in the County and are described in the County's *Environmental Thresholds and Guidelines Manual* (County Guidelines; October 2008, revised July 2015) and *A Planner's Guide to Conditions of Approval and Mitigation Measures* (2005).

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Appendix B

Site Photographs

Photograph 1: View of non-native annual grassland habitat and eucalyptus grove (aspect: west; July 8, 2021).

Photograph 2. View of eucalyptus grove habitat (aspect: southwest; July 8, 2021).

Photograph 3. View of iceplant mat/ landscaped area. Coast live oak seen on the left (aspect: east; July 8, 2021).

Photograph 4. View of the road shoulder/ disturbed area. Coast live oak seen in foreground (aspect: west; July 8, 2021).

Photograph 5. View of the eastern edge of the project area (aspect: north; July 8, 2021).

Photograph 6. View of non-native annual grassland habitat (aspect: south; July 8, 2021).

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Appendix C

Floral and Faunal Compendium

Plant Species Observed Within the Study Area on July 8, 2021

Scientific Name	Common Name	Status	Native or Introduced
Avena fatuna	wild oat	None	Introduced; Cal-IPC Moderate*
Bromus diantrus	ripgut brome	None	Introduced; Cal-IPC Moderate
Carpobrotus edulis	iceplant	None	Introduced; Cal-IPC High
Croton californicus	dove weed	None	Native
Datura stramonium	jimsonweed	None	Introduced
Ehrharta calycina	perennial veldt grass	None	Introduced; Cal-IPC High
Erodium brachycarpum	filaree	None	Introduced
Eschscholzia californica	California poppy	None	Native
Eucalyptus globulus	blue gum	None	Introduced; Cal-IPC Limited
Heterotheca grandiflora	telegraph weed	None	Native
Raphanus sativus	wild radish	None	Introduced; Cal-IPC Limited
Quercus agrifolia	coast live oak	None	Native

*Cal-IPC – California Invasive Plant Council

Animal Species Observed Within the Study Area on July 8, 2021

Family	Scientific Name	Common Name
Accipitridae	*Buteo jamaicensis*	Red tail hawk
Trochilidae	*Calypte anna*	Anna's Hummingbird
Geomyidae	*Thomomys* sp.	Gopher burrows
Phrynosomatidae	*Sceloporus occidentalis*	Fence lizard

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Appendix D

Special Status Species Evaluation Table

Special Status Plant and Animal Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Plants and Lichens				
Abronia maritima red sand-verbena	None/None G4/S3? 4.2	Perennial herb, blooms Feb-Nov. Occurs in coastal dunes of central and southern California, as well as the Channel Islands. Formerly fairly widespread, but available habitat has decreased, especially in Southern California. Under 100m.	None	No suitable coastal dunes present on BSA. Species not expected to occur.
Agrostis hooveri Hoover's bent grass	None/None G2/S2 1B.2	Usually occurs on sandy substrates within closed-cone coniferous forest, chaparral, cismontane woodland, and valley and foothill grassland. Species blooms from Apr to Jul and typically occurs at elevations ranging from 6-610m.	Low	Marginal habitat present in grassland habitat on-BSA; however, this species was not observed during survey which occurred during the bloom period for this species. Therefore, species not expected to occur.
Amsinckia douglasiana Douglas' fiddleneck	None/None G4/S4 4.2	Cismontane woodland, valley and foothill grassland. Monterey shale; dry habitats. 0-1950m. Blooms Mar-May.	Low	Marginally suitable habitats present on BSA due to the existing disturbances occurring on site. This species was not observed during site surveys. Species not expected to occur.
Aphanisma blitoides aphanisma	None/None G3G4/S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils. 1-305m. Blooms Feb-Jun.	None	BSA too far inland; species is known from immediate coast. Was not observed during site visits which occurred during the bloom period. Species not expected to occur.
Arctostaphylos obispoensis Bishop manzanita	None/None G3/S3 4.3	Chaparral, cismontane woodland, closed-cone coniferous forest. Rocky, serpentine sites. 150-1005m. Blooms Feb-Jun.	None	No suitable habitat within BSA. Species not expected to occur.
Arctostaphylos pilosula Santa Margarita manzanita	None/None G2?/S2? 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, Closed-cone coniferous forest. Shale outcrops & slopes; reported growing on decomposed granite or sandstone. 75-1100m. Blooms Dec-May.	None	No suitable habitat within BSA. Species not expected to occur.
Arctostaphylos purissima La Purisima manzanita	None/None G2/S2 1B.1	Chaparral, coastal scrub. Sandstone outcrops, sandy soil. 60-390m. Blooms Nov-May.	None	No suitable habitat within BSA. Species not expected to occur.
Arctostaphylos refugioensis Refugio manzanita	None/None G3/S3 1B.2	Chaparral on sandstone. 274-820m. Blooms (May) Dec-Mar.	None	No suitable chaparral habitat present on BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Arctostaphylos rudis sand mesa manzanita	None/None G2/S2 1B.2	Chaparral, coastal scrub. On sandy soils in Lompoc/Nipomo area. 25-322m. Blooms Nov-Feb.	None	No suitable habitat within BSA. Species not expected to occur.
Arenaria paludicola marsh sandwort	FE/SE G1/S1 1B.1	Occurs in sandy substrates and openings within freshwater or brackish marshes and swamps. This species blooms between May and Aug, and typically occurs at elevations ranging from 3-170m.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	None/None G5T2/S2 1B.2	Occurs in clay substrates within coastal scrub. This species blooms between Mar and Jun, and typically occurs at elevations ranging from 20-90m.	None	No suitable habitat within BSA. Species not expected to occur.
Astragalus nuttallii var. *nuttallii* ocean bluff milk-vetch	None/None G4T4/S4 4.2	Coastal bluff scrub, coastal dunes. 3-120m. Blooms Jan-Nov.	None	No suitable coastal dunes or scrub present within BSA. Species not expected to occur.
Atriplex serenana var. *davidsonii* Davidson's saltscale	None/None G5T1/S1 1B.2	Annual herb. blooms Apr to Oct. Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m.	None	No suitable habitat within BSA. Species not expected to occur.
Calystegia subacaulis ssp. *episcopalis* Cambria morning-glory	None/None G3T2?/S2? 4.2	Usually occurs in clay substrates within chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland. This species blooms between Mar and Jul, and typically occurs at elevations ranging from 5-500m.	None	Suitable soils absent on BSA. Species not expected to occur.
Castilleja densiflora var. *obispoensis* San Luis Obispo owl's-clover	None/None G5T2/S2 1B.2	Meadows and seeps, valley and foothill grassland. Sometimes on serpentine. 10-430m. Blooms Mar-May.	None	No suitable habitat within BSA. Species not expected to occur.
Ceanothus cuneatus var. *fascicularis* Lompoc ceanothus	None/None G5T4/S4 4.2	Chaparral. Sandy soils. 5-400m. Blooms Feb-Apr.	None	No suitable habitat within BSA. Species not expected to occur.
Ceanothus gloriosus var. *gloriosus* Point Reyes ceanothus	None/None G4T4/S4 4.3	Closed-cone coniferous forest, Coastal bluff scrub, coastal dunes, coastal scrub. Usually on bluffs along the coast in sandy soils, but also known from more inland sites. 5-520m. Blooms Mar-May.	None	No suitable habitat within BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Ceanothus impressus var. *impressus* Santa Barbara ceanothus	None/None G3T3/S3 1B.2	Chaparral. Sandy.	None	No suitable habitat within BSA. Species not expected to occur.
Ceanothus impressus var. *nipomensis* Nipomo Mesa ceanothus	None/None G3T2/S2 1B.2	Chaparral. Sandy.	None	No suitable habitat within BSA. Species not expected to occur.
Chenopodium littoreum coastal goosefoot	None/None G1/S1 1B.2	Occurs in coastal dunes. Species blooms between Apr and Aug, and typically occurs at elevations ranging from 10-30m.	None	BSA is much farther inland than species typically occurs. No suitable habitat within BSA. Species not expected to occur.
Chorizanthe palmeri Palmer's spineflower	None/None G4/S4 4.2	Chaparral, cismontane woodland, Valley and foothill grassland. Dry, rocky places and hillsides. Serpentine substrates. 55-945m. Blooms Apr-Aug.	None	Suitable soils absent. Not observed. Species not expected to occur.
Chorizanthe rectispina straight-awned spineflower	None/None G2/S2 1B.3	Chaparral, cismontane woodland, coastal scrub. Often on granite in chaparral. 85-1035m. Blooms Apr-Jul.	None	No suitable habitat within BSA. Species not expected to occur.
Cicuta maculata var. *bolanderi* Bolander's water-hemlock	None/None G5T4T5/S2? 2B.1	Marshes and swamps. In fresh or brackish water. 0-200m. Blooms Jul-Sep.	None	No suitable habitat present due to lack of marshes or swamps. Species not expected to occur.
Cirsium rhothophilum surf thistle	None/ST G1/S1 1B.2	Coastal bluff scrub, Coastal dunes. Open areas in central dune scrub; usually in coastal dunes. 3-60m. Blooms Apr-Jun.	None	No suitable habitat within BSA. Species not expected to occur.
Cirsium scariosum var. *loncholepis* La Graciosa thistle	FE/ST G5T1/S1 1B.1	Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps, Valley and foothill grassland. Lake edges, riverbanks, other wetlands; often in dune areas. Mesic, sandy sites. 4-220m. Blooms May-Aug.	None	No suitable habitat present on BSA due to lack of mesic soils. Species not observed or expected to occur.
Cladium californicum California saw-grass	None/None G4/S2 2B.2	Marshes and swamps, Meadows and seeps. Freshwater or alkaline moist habitats. - 60-1600m. Blooms Jun-Sep.	None	No suitable habitat present on BSA due to lack of meadows, seep, marshes or swamps. Species not observed or expected to occur.
Clarkia speciosa ssp. *immaculata* Pismo clarkia	FE/SR G4T1/S1 1B.1	Chaparral, cismontane woodland, valley and foothill grassland. On ancient sand dunes not far from the coast. Sandy soils; openings. 25-185m. Blooms May-Jul.	None	No suitable ancient sand dune habitat present on BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Convolvulus simulans small-flowered morning-glory	None/None G4/S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges. 30-740m. Blooms Mar-Jul.	None	No suitable habitat present on BSA due to lack of clay and serpentine soils. Species not expected to occur.
Cordylanthus rigidus ssp. *littoralis* seaside bird's-beak	None/SE G5T2/S2 1B.1	Chaparral, cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Sandy, often disturbed sites, usually within chaparral or coastal scrub. 0-515m. Blooms Apr-Oct.	None	Suitable habitat present on BSA. This species is not known to occur in the Santa Maria/Orcutt area (Calflora 2021). Therefore, species not expected to occur.
Deinandra increscens ssp. *villosa* Gaviota tarplant	FE/SE G4G5T2/S2 1B.1	Coastal bluff scrub, coastal scrub, valley and foothill grassland. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. 20-430m. Blooms May-Oct.	None	Suitable grassland habitat present. However, the BSA is not located in coastal terraces. Therefore, species not expected to occur.
Deinandra paniculata paniculate tarplant	None/None G4/S4 4.2	Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in vernal pools or on mima mounds near them. 25-940m. Blooms (Mar)Apr-Nov.	None	No suitable habitat within BSA. Species not expected to occur.
Delphinium parryi ssp. *blochmaniae* dune larkspur	None/None G4T2/S2 1B.2	Chaparral, coastal dunes. On rocky areas and dunes. 0-200m. Blooms Apr-Jun.	None	No suitable habitat present due to lack of maritime chaparral or coastal dunes. Species not expected to occur.
Dichondra occidentalis western dichondra	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. On sandy loam, clay, and rocky soils. 50-500m. Blooms (Jan)Mar-Jul.	None	No suitable soils are present within the BSA. Species not expected to occur.
Dithyrea maritima beach spectaclepod	None/ST G1/S1 1B.1	Occurs in coastal dunes and sandy substrates within coastal scrub sand dunes and other sandy soils near the seashore. This species blooms between Mar and May, and typically occurs at elevations ranging from 3-50m.	None	Range is restricted to the immediate coast. No suitable habitat within BSA. Species not expected to occur.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	None/None G3T2/S2 1B.1	Occurs in rocky, often clay or serpentinite substrates within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. This species blooms between Apr and Jun, and typically occurs at elevations ranging from 5-450m.	None	Suitable soils absent. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Eleocharis parvula small spikerush	None/None G5/S3 4.3	Marshes and swamps. In coastal salt marshes. 1-3020m. Blooms (Apr)Jun-Aug (Sep).	None	No suitable marsh habitat present. Species not expected to occur.
Erigeron blochmaniae Blochman's leafy daisy	None/None G2/S2 1B.2	Coastal dunes, coastal scrub. Sand dunes and hills. 3-45m. Blooms Jun-Aug.	None	BSA outside of known elevational range for species No suitable habitat within BSA. Species not expected to occur.
Erigeron sanctarum saints' daisy	None/None G3/S3 4.2	Chaparral, cismontane woodland, coastal scrub. 75-350m. Blooms Mar-Jul.	None	No suitable habitat within BSA. Species not expected to occur.
Eriodictyon capitatum Lompoc yerba santa	FE/SR G2/S2 1B.2	Chaparral, closed-cone coniferous forest, coastal bluff scrub. Sandy soils on terraces. 40-900m. Blooms May-Sep.	None	No suitable habitat type present due to lack of coniferous forest and maritime chaparral. Species not expected to occur.
Eriogonum elegans elegant wild buckwheat	None/None G4G5/S4S5 4.3	Cismontane woodland, valley and foothill grassland. Usually in sandy or gravelly substrates; often in washes, sometimes roadsides. 200-1525m. Blooms May-Nov.	None	Suitable habitat types found on site, however BSA outside know elevational range of species and no washes occur on site. Species not expected to occur.
Erysimum capitatum var. *lompocense* San Luis Obispo wallflower	None/None G5T3/S3 4.2	Chaparral, coastal scrub. Sandy hillsides and mesas. 60-500m. Blooms Feb-May.	None	No suitable habitat within BSA. Species not expected to occur.
Erysimum suffrutescens suffrutescent wallflower	None/None G3/S3 4.2	Chaparral, coastal bluff scrub, coastal dunes, coastal scrub, and bluffs. 0-150m. Blooms Jan-Jul (Aug).	None	No suitable habitat within BSA. Species not expected to occur.
Gilia ochroleuca ssp. *lanosa* sisquoc gilia	None/None G4T3/S3 4.3	Chaparral, cismontane woodland, pinyon and juniper woodland. Gravelly (rarely), Sandy, streambanks (sometimes) 450-1480m. Blooms (Apr) May-Jun.	None	No suitable habitat present. Species not expected to occur.
Gilia tenuiflora ssp. *amplifaucalis* trumpet-throated gilia	None/None G3G4T3/S3 4.3	Cismontane woodland, valley and foothill grassland. Sandy soils of dry creeks, floodplains, and slopes. 390-900m. Blooms Mar-Apr.	None	No suitable habitat present. Species not expected to occur.
Horkelia cuneata var. *puberula* mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Blooms February to September. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m (230-2655ft).	None	No suitable habitat present. Species not expected to occur.
Horkelia cuneata var. *sericea* Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. 10-200m. Blooms Apr-Sep.	None	Uncommon south of San Luis Obispo County and Santa Barbara County. No suitable habitat present. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Juglans californica Southern California black walnut	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Slopes, canyons, alluvial habitats. 50-900m. Blooms Mar-Aug.	None	No suitable habitat within BSA. Species not expected to occur.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Coastal dunes, marshes and swamps, meadows and seeps. Moist saline places. 3-900m. Blooms (Mar)May-Jun.	None	No suitable habitat type present. Species not expected to occur.
Layia carnosa beach layia	FE/SE G2/S2 1B.1	Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. 0-60m. Blooms Mar-Jul.	None	Site is too far inland; species is known from dunes at the immediate coast. Species not expected to occur.
Layia heterotricha pale-yellow layia	None/None G2/S2 1B.1	Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. 300-1705m. Blooms Mar-Jun.	None	No suitable soil types on site. Not known to occur in the Santa Maria Valley. Species not expected to occur.
Leptosiphon grandiflorus large-flowered leptosiphon	None/None G3G4/S3S4 4.2	Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Open, grassy flats, generally sandy soil. 5-1220m. Blooms Apr-Aug.	Low	Marginal habitat, due to disturbance, present in grassland habitat on-BSA.
Lessingia tenuis spring lessingia	None/None G4/S4 4.3	Chaparral, cismontane woodland, lower montane coniferous forest. Openings. 300-2150m. Blooms May-Jul.	None	No suitable habitat type present. Species not expected to occur.
Lupinus ludovicianus San Luis Obispo County lupine	None/None G1/S1 1B.2	Chaparral, cismontane woodland. Open areas in sandy soil, Santa Margarita formation. 50-525m. Blooms Apr-Jul.	None	The site is outside known range of this species. Species not expected to occur.
Lupinus nipomensis Nipomo Mesa lupine	FE/SE G1/S1 1B.1	Coastal dunes. Dry sandy flats, restricted to back dunes, associated with central dune scrub habitat - a rare community type. 10-50m. Blooms Dec-May.	None	No suitable habitat present. Species not expected to occur.
Malacothamnus gracilis slender bush-mallow	None/None G1Q/S1 1B.1	Chaparral. Dry, rocky slopes. 190-575m. Blooms May-Oct.	None	No suitable habitat present. BSA outside known elevational range of species. Species not expected to occur.
Malacothamnus jonesii Jones' bush-mallow	None/None G4/S4 4.3	Chaparral, cismontane woodland. 160-1075m. Blooms (Mar) Apr-Oct.	None	No suitable habitat present. BSA outside known elevational range of species. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Malacothrix incana dunedelion	None/None G3G4/S3S4 4.3	Coastal dunes, coastal scrub. On flats and slopes, as well as unstabilized dunes near the ocean. 2-35m. Blooms (Jan) Apr-Oct.	None	Species occurs in dunes at the immediate coast. Dune habitat is not present. Species not expected to occur.
Monardella sinuata ssp. *sinuata* southern curly-leaved monardella	None/None G3T2/S2 1B.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy soils. 0-300m. Blooms Apr-Sep.	None	No suitable habitat present. Species not expected to occur.
Monardella undulata ssp. *crispa* crisp monardella	None/None G3T2/S2 1B.2	Coastal dunes, coastal scrub. Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. 10-120m. Blooms Apr-Aug (Dec).	None	This subspecies occurs at the immediate coast. Suitable dune habitat not present. Species not expected to occur.
Monardella undulata ssp. *undulata* San Luis Obispo monardella	None/None G2/S2 1B.2	Coastal dunes, coastal scrub. Stabilized sand of the immediate coast. 10-200m. Blooms May-Sep.	None	Outside known range of this species. This subspecies is restricted to San Luis Obispo County. Species not expected to occur.
Mucronea californica California spineflower	None/None G3/S3 4.2	Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Sandy soil. 0-1400m. Blooms Mar-Jul (Aug).	Low	Marginal habitat, due to disturbance, present in grassland habitat on-BSA
Muhlenbergia utilis aparejo grass	None/None G4/S2S3 2B.2	Chaparral, cismontane woodland, coastal scrub, marshes and swamps, meadows and seeps. Alkaline (sometimes), serpentinite (sometimes) 25-2325m. Blooms Mar-Oct.	None	No suitable habitat present. Species not expected to occur.
Nasturtium gambelii Gambel's water cress	FE/ST G1/S1 1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-330m. Blooms Apr-Oct.	None	No suitable habitat present. Species not expected to occur.
Nemacaulis denudata var. *denudata* coast woolly-heads	None/None G3G4T2/S2 1B.2	Coastal dunes. 0-100m. Blooms Apr-Sep.	None	No suitable dune habitat present. Species not expected to occur.
Orobanche parishii ssp. *brachyloba* short-lobed broomrape	None/None G4?T4/S3 4.2	Coastal bluff scrub, coastal dunes, coastal scrub. Sandy soil near beaches; reported to grow on *Isocoma menziesii* and other shrubs. 3-305m. Blooms Apr-Oct.	None	No suitable dune habitat present. Species not expected to occur.
Prunus fasciculata var. *punctata* sand almond	None/None G5T4/S4 4.3	Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy flats. 15-200m. Blooms Mar-Apr.	None	No suitable habitat present. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Scrophularia atrata black-flowered figwort	None/None G2?/S2? 1B.2	Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. 10-500m. Blooms Mar-Jul.	None	No suitable habitat type present. Species not expected to occur.
Senecio blochmaniae Blochman's ragwort	None/None G3/S3 4.2	Coastal dunes. 0-100m. Blooms May-Oct.	None	No suitable habitat type present. Species not expected to occur.
Symphyotrichum defoliatum San Bernardino aster	None/None G2/S2 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, meadows and seeps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040m. Blooms Jul-Nov.	None	No suitable habitat present. Species not expected to occur.
Invertebrates				
Ablautus schlingeri Oso Flaco robber fly	None/None G1/S1	Sand dunes.	None	No suitable dune habitat present. Species not expected to occur.
Branchinecta lynchi vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the central valley, central coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Danaus plexippus pop. 1 monarch - California overwintering population	FC/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Low	Surrounding eucalyptus is marginally suitable winter roosting habitat. Not expected to overwinter on-site. No CNDDB occurrences or known roosting observations are documented for this site.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Fish				
Eucyclogobius newberryi tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE/SE G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small southern California streams. Cool (<24 °C), clear water with abundant vegetation.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Gila orcuttii arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Oncorhynchus mykiss irideus steelhead - southern California DPS	FE/None G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Amphibians				
Ambystoma californiense California tiger salamander	FT/ST G2G3/S2S3 WL	Central California DPS federally listed as threatened. Santa Barbara and Sonoma counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	None	No suitable breeding habitat present on BSA. The BSA is not located within a California tiger salamander metapopulation area . The BSA is outside the range of the species. BSA isolated by residential development. Not expected to occur.
Anaxyrus californicus arroyo toad	FE/None G2G3/S2S3 SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	None	No suitable washes, intermittent streams, pools and sandy terraces with emergent vegetation present on BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Rana boylii foothill yellow-legged frog	None/SE G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	None	No suitable aquatic habitat present on BSA. Vegetation communities are generally suitable upland habitat but the BSA is beyond dispersal distance from breeding habitat. Species not expected to occur.
Spea hammondii western spadefoot	None/None G2G3/S3 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Moderate	No suitable breeding habitat on BSA. Grasslands and the sandy soils could provide suitable upland refuge, and the site is located approximately 500 feet from a known breeding location. This species could disperse to the project site during the non-breeding season.
Reptiles				
Anniella pulchra Northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Moderate	The shrubs and iceplant mats in the BSA provides potentially suitable habitat for *A. pulchra*. Species has a moderate potential to occur.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 1830m elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Phrynosoma blainvillii coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low	The vegetation within the BSA provides marginally suitable habitat for this species. The site is disturbed and located in a largely urban setting. This species is unlikely to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 2100m elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Birds				
Accipiter striatus sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 84m of water.	None	No suitable habitat present on BSA. Species not expected to occur.
Agelaius tricolor tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None	No suitable open water habitats such as marshes or ponds present on BSA. Species not expected to occur.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	None	No suitable habitat present on BSA. Species not expected to occur.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low	Marginal habitat present within the BSA; however, this species was not observed during survey and no suitable burrows are present.
Buteo swainsoni Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Low	The site is outside the breeding range of the species. The species is highly migratory and encounters would be incidental as the species migrates between breeding and non-breeding sites.
Charadrius nivosus western snowy plover	FT/None G3T3/S2 SSC	Sandy beaches, salt pond levees & shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	None	No suitable coastal habitat present on BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also, main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	None	No suitable habitat present on BSA. Species not expected to occur.
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Low	No suitable nesting habitat present on BSA. May occur transiently as individuals move through the region. Species not expected to occur.
Laterallus jamaicensis coturniculus California black rail	None/ST G3G4T1/S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None	No suitable aquatic habitat present on BSA. Species not expected to occur.
Setophaga petechia yellow warbler	None/None G5/S3S4 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	None	No suitable habitat present on BSA. Species not expected to occur.
Sternula antillarum browni California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	None	No suitable coastal habitat present on BSA. Species not expected to occur.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None	No suitable habitat present on BSA. Species not expected to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Mammals				
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	None	No suitable roosting habitat or rocky areas preset on BSA. Species not expected to occur.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	None	No suitable cavernous roosting areas present on BSA. Species not expected to occur.
Lasiurus blossevillii western red bat	None/None G4/S3 SSC	Roosts in trees in forests and woodlands of varying elevations. Forages in grasslands, shrublands, open woodlands and forests, and agriculture. Typically found in riparian habitats, does not occur in deserts.	None	No suitable roosting or foraging habitat present on BSA. No riparian habitats on site Species not expected to occur.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low	Suitable soils and small rodent prey base present on BSA. No potential dens observed during site visit, however due to the small size of the project area and surrounding residential developments, species has low potential to occur.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Area	Habitat Suitability/ Observations
Sensitive Natural Communities				
Central Dune Scrub	None/None G2/S2.2		None	Habitat does not occur on site.
Central Foredunes	None/None G1/S1.2		None	Habitat does not occur on site.
Coastal and Valley Freshwater Marsh	None/None G3/S2.1		None	Habitat does not occur on site.
Southern California Threespine Stickleback Stream	None/None GNR/SNR		None	Habitat does not occur on site.
Southern Vernal Pool	None/None GNR/SNR		None	Habitat does not occur on site.

Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)
FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)
1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

CRPR Threat Code Extension
.1 = Seriously endangered in California (>80% of occurrences threatened/ high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/ moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/ low degree and immediacy of threat)

Other Statuses
G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Appendix E

Preliminary Site Plan

OPTION - B

T FIRE STATION

Attachment C

Cultural Resources Technical Study

Brookside Avenue Fire Station Project

Cultural Resources Technical Study

Confidential

prepared for

The County of Santa Barbara
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prepared by

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August 2021

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Please cite this report as follows:

Glenn, R., and A. Pulcheon
2021 *Cultural Resource Technical Study, Brookside Avenue Fire Station Project Parcel Number 107-321-013, Santa Barbara County, California*. Rincon Consultants Project No. 20-09360. Report on file at the Central Coast Information Center, University of California, Santa Barbara

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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by the County of Santa Barbara to conduct a cultural resources technical study of the 4.6-acre project site (Assessor's Parcel Number (APN) 107-321-013) for the Brookside Avenue Fire Station Project (project) in the unincorporated community of Orcutt, county of Santa Barbara, California. The proposed project is subject to the California Environmental Quality Act (CEQA), with the County of Santa Barbara serving as lead agency.

This study includes a cultural resources records search, Sacred Lands File Search, Native American Contacts program and Assembly Bill (52) outreach, a pedestrian survey of the project site, and preparation of this report in accordance with the County of Santa Barbara Guidelines for Determining the Significance of and Impacts to Cultural Resources (2018). The cultural resources records search did not identify any previously recorded cultural resources within the current project site, and the field survey did not identify any cultural resources. Based on the results of the study, Rincon recommends a finding of ***no impact to historical resources*** under CEQA. The following measures are recommended in the case of the unanticipated discovery of cultural resources during the execution of the current undertaking.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the county coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by the County of Santa Barbara to conduct a cultural resources technical study for the Brookside Avenue Fire Station Project (project) in the unincorporated community of Orcutt, county of Santa Barbara, California. The project site (Assessor's Parcel Number [APN] 107-321-013) is a 4.6-acre vacant lot on West Union Valley Parkway (Figure 1). This cultural resources study includes a cultural resources records search, a Sacred Lands File Search and Native American contacts program, an intensive pedestrian survey, and the preparation of this technical report in accordance with the County of Santa Barbara Guidelines for Determining the Significance of and Impacts to Cultural Resources (2018) and is in compliance with the requirements of CEQA.

1.1 Project Description

The Santa Barbara County Fire Department proposes a new fire station on the project site. The proposed one-story fire station would be approximately 8,600 square feet in area. The maximum roof height would be 32 feet. The fire station would include three drive-through bays for fire trucks and associated apparatus. The fire station's interior uses would provide the following fire-fighting staff amenities: bedrooms with bathrooms, a communal kitchen, dining area, fire station captain's office, day room, workout area, laundry room with extractor units, among other amenities. The site would also include three driveways: one at the western terminus of Brookside Avenue and two along Union Valley Parkway. The emergency vehicles (i.e., fire engines and ambulances) would leave the proposed station and egress onto Union Valley Parkway. When the vehicles return to the station, they would ingress the project site via the second driveway along Union Valley Parkway. Fifteen parking spaces would be located on site, including two accessible spaces. The areas adjacent to and around the structure and exterior facilities would be landscaped with a mixture of native and drought tolerant plantings.

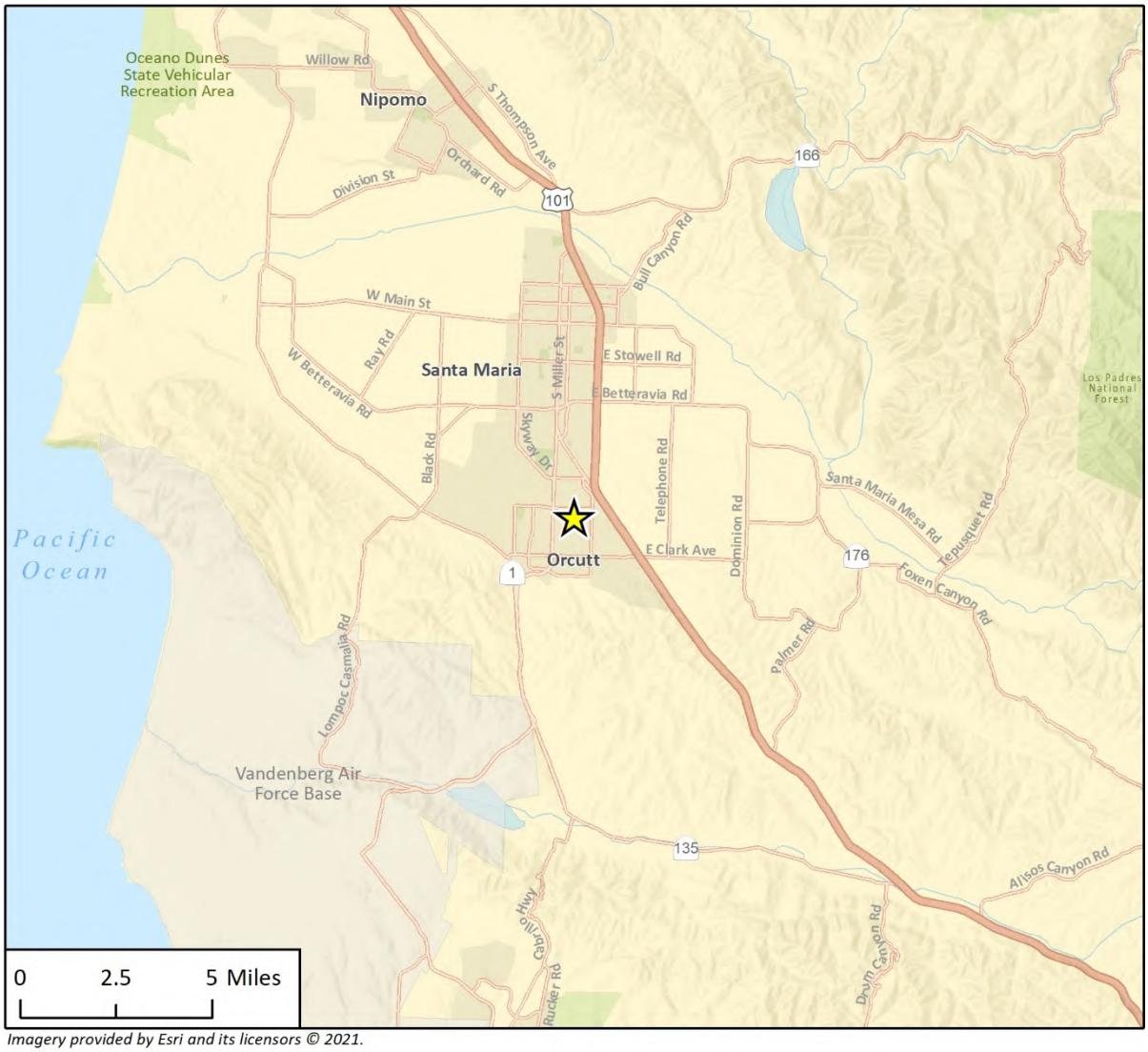
1.2 Project Location

The 4.6-acre project site is located at the western terminus of Brookside Avenue and north of West Union Valley Parkway in the unincorporated community of Orcutt in Santa Barbara County, just south of the city of Santa Maria. The project site is identified as Assessor's Parcel Number (APN) 107-321-013 and is currently vacant land with a eucalyptus grove in the northwestern portion of the site. The project site is located in an area that is primarily composed of residential and vacant land uses in Township 09N, Range 34W of the United States Geologic Survey (USGS) *Santa Maria, CA* 7.5-minute quadrangle (Figure 2). Properties in the vicinity include vacant, undeveloped land and single-family residences.

1.3 Personnel

Rincon Archaeologist Ryan Glenn, MA, Registered Professional Archaeologist (RPA), managed this study, conducted the Native American outreach and pedestrian survey, and served as primary author of this report. Andrew Pulcheon, M.A., RPA served as principal investigator for this study and coauthored this report. GIS Analyst Josh Patterson prepared the figures found in this report.

Figure 1 Project Location



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Project Location

N

Figure 2 Project Site

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2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources to which the proposed project should adhere before and during implementation.

2.1 State Regulations

2.1.1 California Environmental Quality Act

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be *historically significant* (State CEQA Guidelines, Section 15064.5[a] [1-3]).

A resource shall be considered *historically significant* if it meets any of the following criteria:

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

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
2) Has a special and particular quality such as being the oldest of its type or the best available example of its type
3) Is directly associated with a scientifically recognized important prehistoric or historic event or person

2.1.2 Assembly Bill 52

A historical resource is one listed in or determined to be eligible for listing in the CRHR, a resource included in a local register of historical resources or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines

§15064.5[a] [1-3]). Section 15064.5(a)(3) also states that a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR.

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and meets either of the following criteria:

1) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

2.1.3 Codes Governing Human Remains

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment of the remains and associated grave goods.

2.2 County of Santa Barbara Regulations and Policies

The County of Santa Barbara Guidelines for Determining the Significance of and Impacts to Cultural Resources (2018:8-9) details the standard practices for conducting Phase I archaeological investigations. These efforts include a record search at the Central Coast Information Center (CCIC) and a pedestrian survey. The guidelines note that the pedestrian survey should be augmented with subsurface probing, known as an XPI survey, if an archaeological site has been identified within 100 meters of proposed project ground disturbance. If an XPI survey is within or near a prehistoric and/or Native American contact/historic archaeological site, a Native American monitor must be retained to observe the effort.

3 Natural and Cultural Setting

3.1 Natural Setting

The project site is located in northwest Santa Barbara County, approximately 0.41 miles west of the intersection of East Union Valley Parkway and South Brady Road, and approximately 12 miles east of the Pacific Ocean (Figure 2). The approximate center of the project site occurs at Universal Transverse Mercator coordinates Zone 10S, 753188.08 meters east, 3862760.01 meters north. The project site is in northern Santa Barbara County, south of the city of Santa Maria in the unincorporated community of Orcutt. This region is characterized by a mild, coastally influenced climate. On average, temperatures range from 53 degrees Fahrenheit (F) to 75 degrees F during the summer and from 38 degrees F to 64 degrees F during the winter months. On average, the warmest month is September, and the coolest month is January. The average annual precipitation in this region is 13.0 inches, with most of the precipitation typically occurring from December to March, and highest rainfall typically occurring in February (Western Regional Climate Center 2019). The topography of the project site is mostly flat, with the elevation at the approximate center of the Study Area of 423 feet (128 meters) above mean sea level. Project site is currently vacant, undeveloped land and adjacent land uses include vacant, undeveloped land and single-family residences.

3.2 Cultural Setting

Cultural resources include prehistoric resources, historic-period resources, and Native American resources. Prehistoric resources represent the remains of human occupation prior to European settlement. Historic-period resources represent remains after European settlement and may be part of a "built environment," including man-made structures used for habitation, work, recreation, education, and religious worship, and may also be represented by houses, factories, office buildings, schools, churches, museums, hospitals, bridges, and other structural remains. Native American or Tribal resources include ethnographic elements pertaining to Native American issues and values.

3.2.1 Prehistoric Setting

The County of Santa Barbara is located in what has been defined as the Northern California Bight (Northern Bight) archaeological region, one of eight organizational divisions of the state (Moratto 1984; Glassow et al. 2007; Moratto and Chartkoff 2007). The Northern Bight archaeological region encompasses the area from Vandenberg Air Force Base on the coast, south to Point Conception, including the Channel Islands, south along the coast to Rancho Palos Verdes, into the Los Angeles Basin, and north to the “northern margins of Ventura and Santa Barbara Counties” (Glassow et al. 2007:191).

Paleo-Coastal Tradition (ca. 12,000 – 9000 B.P. [Before Present])

The Paleo-Indian Period, also referred to as the Paleo-Coastal Tradition, defines the earliest human occupation of the Northern Bight, and describes the cultural trends and subsistence strategies of prehistoric populations from approximately 12,000 to 9000 BCE (Glassow et al. 2007). The Paleo-Indian Period in North America is largely recognized by projectile points associated with extinct large mammal remains, such as mammoth, bison, and dire wolves, particularly in the Southwest and

Plains regions (Reed 1992; Slaughter et al. 1992; Huckell 1996; Erlandson et al. 2007). These projectile points have been classified as the Clovis style, which exhibit a lanceolate shape with a flute initiated from the base that extends as far as the midline (Justice 2002; Hollenshead 2007).

The earliest accepted dates for human occupation in California were recovered from archaeological sites on two of the Northern Channel Islands, located off the southern coast of Santa Barbara County. The earliest radiocarbon dates known for the region, calibrated to approximately 11,000 years B.P., were derived from human remains and rodent bones recovered from within the same deposits on Santa Rosa Island (Johnson et al. 2002; Erlandson et al. 2007; Glassow et al. 2007). Archaeological deposits from the Daisy Cave site on San Miguel Island establishes the presence of people in this area approximately 10,000 years ago (Erlandson 1991; Erlandson et al. 2007). In San Luis Obispo County, archaeological sites CA-SLO-1764 (Lebow et al. 2001), Cross Creek (CA-SLO-1797; Fitzgerald 2000), and CA-SLO-832 (Jones et al. 2001) yielded radiocarbon dates from approximately 9,000 years ago (Jones and Ferneau 2002).

Recent data from Paleo-Indian sites in southern California indicate that the economy was a diverse mix of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones and Ferneau 2002; Erlandson et al. 2007). Archaeological deposits at the Daisy Cave site yielded an assemblage of "the oldest known fishhooks in the Americas" (Erlandson et al. 2007:57). Shell middens discovered on the mainland of California have also yielded dates from 10,000 to 9000 B.P. (Erlandson et al. 2007).

A fluted projectile point fragment was recovered from site CA-SBA-1951 on the Santa Barbara Channel coastal plain (Erlandson et al. 1987; Erlandson 1994). Another fluted projectile point was reportedly found on the surface in Nipomo, San Luis Obispo County (Mills et al. 2005; Rondeau et al. 2007). Large side-notched projectile points of the Central Coast Stemmed series in this area date to as early as 8,000 years ago (Justice 2002) suggesting some overlap with the Clovis type. Central Coast Stemmed projectile points have been recovered along the Central Coast, which is located immediately north of the Northern Bight region. These sites include Diablo Canyon (CA-SLO-2; Greenwood 1972), Cross Creek (CA-SLO-1797; Fitzgerald 2000), Little Pico Creek (CA-SLO-175; Jones and Waugh 1995), and the Honda Beach site (CA-SBA-530; Glassow 1997), among others. At the Metcalf site (CA-SCL-178), in southern Santa Clara Valley, Hildebrandt (1983) recovered two large side-notched points associated with charcoal dates ranging from 9,960 – 8,500 years ago.

Millingstone Horizon (ca. 9000 – 7000 B.P.)

It is generally accepted that human occupation of California originated from small, dispersed occupations during the Paleo-Indian period. Populations increased from the Paleo-Indian Period to the Millingstone Horizon, possibly as a result of an ecological adaptation to collecting plant resources. Rogers (1929) originally identified the Millingstone Horizon along the Santa Barbara Channel. Wallace (1955, 1978) further defined the period, noting the appearance and abundance of milling implements in archaeological sites from this period. The milling implements, including milling stones (e.g., metates, milling slabs) and hand stones (e.g., manos, mullers), are associated with the horizontal motion of grinding small seeds and nuts, and lend to the name Millingstone Horizon (Desautels and Leach 1978; Glassow et al. 2007).

These milling implements are particularly noted in archaeological sites along the coast of California and become even more prevalent near the end of the Horizon (Wallace 1955, 1978; Warren 1968; Desautels and Leach 1978). Excavations at the Tank Site (CA-LAN-1) in Topanga Canyon from 1947 to 1948 confirmed the presence of a significant number of milling implements that correspond with the Millingstone Horizon (Treganza and Bierman 1958). Although the milling implements suggest an

emphasis on seed and nut gathering, Millingstone populations likely employed a mixed food procurement strategy which included hunting. Flaked stone assemblages, which include crude core and cobble-core tools, flake tools, large side-notched projectile points, and pitted stones (Desautels and Leach 1978; Glassow et al. 2007; Jones et al. 2007), shell middens, and faunal remains in coastal Millingstone Period sites point to broad-spectrum hunting and gathering of shellfish, fish, birds, and mammals. This mixed food procurement strategy demonstrates adaptation to regional and local environments, lending to population increase.

Early Period (ca. 7000 – 4000 B.P.)

The Early Period of the Northern Bight is marked by a lower frequency of radiocarbon dated archaeological sites as well as changes in artifact forms. Differences in artifact forms, particularly in ground stone implements, likely represent changes in subsistence (Glassow et al. 2007). The material culture recovered from Early Period sites within the Northern Bight region provides evidence for continued exploitation of inland plant and coastal marine resource as well as the incorporation of "newly important food resources" found in specific habitats (Glassow et al. 2007:197). In addition to the use of metates and manos, prehistoric populations began to use mortars and pestles, such as those recovered from the Sweetwater Mesa (CA-LAN-267) and Aerophysics (CA-SBA-53) sites (Glassow et al. 2007).

Artifact assemblages recovered from Early Period sites also include bipointed bone gorge hooks used for fishing, Olivella beads, bone tools, and pendants made from soapstone. The frequency of projectile points in Early Period assemblages also increased, while the style began to change from lanceolate forms to side-notched forms (Glassow et al. 2007). This projectile point style trend, first identified by David Banks Rogers in 1929, was confirmed by Greenwood (1972) at Diablo Canyon. The projectile point trend has become apparent at numerous sites along the California coast as well as a few inland sites (e.g., CA-SBA-210 and CA-SBA-530). In many cases, manifestations of this trend are associated with the establishment of new and larger settlements, such as at the Aerophysics site (Glassow et al. 2007; Jones et al. 2007).

Middle Period (ca. 4000 – 2000 B.P.)

The Middle Period describes a pronounced trend toward greater adaptation to regional or local resources as well as the development of socioeconomic and political complexity in prehistoric populations (Glassow et al. 2007). The remains of fish, land mammals, and sea mammals are increasingly abundant and diverse in archaeological deposits along the coast.

Coastal populations developed shell fishhooks, and projectile points changed from side-notched dart points to contracting stem styles. Flaked stone tools used for hunting and processing—such as large side-notched, stemmed, lanceolate or leaf-shaped projectile points, large knives, edge modified flakes, and drill-like implements—occurred in archaeological deposits in higher frequencies and are more morphologically diversified during the Middle Period. Bone tools, including awls, are more numerous than in the preceding period, and the use of asphaltum adhesive became common. Circular fish hooks that date from between 3000 and 2500 B.P., compound bone fish hooks that date between 1700 and 1100 B.P., notched stone sinkers, and the tule reed or balsa raft, indicative of complex maritime technology, became part of the toolkit during this period (Kennett 1998; King 1990; Arnold 1995; Jones and Klar 2005; Glassow et al. 2007).

Populations continued to follow a seasonal settlement pattern until the end of the Middle Period; large, permanently occupied settlements with formal architecture, particularly in coastal areas, appear to have been the norm by the end of the Middle Period (Kennett 1998; Glassow et al. 2007).

Prehistoric populations began to bury the deceased in formal cemeteries with artifacts that may represent changes in ideology and the development of ritual practices (Glassow et al. 2007).

Middle – Late Transition Period (ca. 2000 – 1000 B.P.)

The Middle-Late Transition period is marked by major changes in settlement patterns, diet, and interregional exchange. Prehistoric populations continued to occupy more permanent settlements, with the continued use of formal, though crowded cemeteries and the burial of goods with the deceased. Burials are normally flexed, placed face down, and oriented toward the north or west (Warren 1968). The interments are typically marked by vertical pieces of whalebone, and have abundant grave goods, such as ornaments, effigies, and utensils.

After 1500 B.P., a wealth of ornaments, ceremonial, and artistic items characterize the Northern Bight "Chumash Tradition" along the central coast and offshore islands (Warren 1968). Ground stone items include bowls, mortars and pestles, balls, grooved stones, doughnut stones, stone beads, pendants, pipes, tubes, and mammal effigies. Projectile points, both large and small, were typically non-stemmed and leaf-shaped, with convex or concave bases. Chipped stone implements also included drills and scrapers. Utilitarian objects were made from bone (e.g., awls, fishhooks, whistles, and tubes) and shell (e.g., fishhooks and abalone shell dishes). Shell beads and ornaments were abundant, and bowls, pestles, pipes, and stone tubes were inlaid with shell beads and engraved. Bowls, pipes, and ornaments were commonly manufactured from steatite.

The manufacture of the plank canoe, called *tomol*, allowed coastal prehistoric populations to catch larger fish that occupied deeper sea waters (Glassow et al. 2007). Following the introduction of the *tomol*, which was lined with naturally occurring asphaltum, populations began to use harpoons, hooks and lines, and nets to catch deep sea fish and mammals (Van Horn 1979). The plank canoe appears to have influenced "commerce between the mainland coast and the Channel Islands," and fish remains indicate "a noticeable increase in the acquisition of large deep-sea fish such as tuna and swordfish" (Glassow et al. 2007:204).

Projectile points diagnostic of both the Middle and Late periods are found in Northern Bight archaeological sites (Glassow et al. 2007). These projectile points include large, contracting-stemmed types typical of the Middle Period, as well as small, leaf-shaped Late Period projectile points, which likely reflect the introduction of the bow and arrow. Middle-Late Transition Period sites indicate that populations replaced atlatl (dart) technologies with the bow and arrow, which required smaller projectile points.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993).

Late Period (ca. 1000 B.P. – Historic Contact)

Late Period archaeological sites indicate sociopolitical and economic complexity among populations in the Northern Bight. Glassow et al. (2007:205) explain that sometime between 800 and 700 B.P., a ranked society emerged in the region. Climatic change may have stimulated the development of specialized crafts, regional trade, and changes in food procurement. Unlike the large Middle period shell middens, Late Period sites are more frequently single-component deposits. There are also more inland sites, with fewer and less visible sites along the Pacific shore during the Late Period. The settlement pattern and dietary reconstructions indicate a lesser reliance on marine resources than

observed for the Middle and Middle-Late Transition periods, as well as an increased preference for deer and rabbit (Jones 1995). An increase in the number of sites with bedrock mortar features that date to the Late Period suggests that nuts and seeds began to take on a more significant dietary role in Late Period populations.

Late Period sites are distinguished by small, finely worked projectile points and temporally diagnostic shell beads. These shell beads were used as monetary currency to trade with inland populations. Trade brought many maritime goods, such as fish, shellfish, and steatite bowls to inland locations, such as CA-SBA-3404, CA-SBA-485, and CA-SBA-2358, particularly during the latter part of the Late Period. Small, finely worked projectile points are typically associated with bow and arrow technology, which is believed to have been introduced to the area by the Takic migration from the deserts into southern California.

3.2.2 Ethnographic Setting

The project site lies within Chumash ethnographic territory, which extends from the current city of Malibu, north beyond San Luis Obispo, and inland as far as 68 kilometers (42 miles) (Glassow 1996). The Chumash also inhabited the northern Channel Islands. The Chumash spoke six closely related languages, divided into two broad groups – Northern Chumash, consisting of only Obispeño, and Southern Chumash, including Purisimeño, Ineseño, Barbareño, Ventureño, and Island Chumash (Mithun 1999). The Chumash are divided into three main groups, including Interior, Coastal, and Northern Channel Islands Chumash. The coastal Barbareño Chumash referred to themselves as the Wal-wa-ren-na, and "occupied the narrow coastal plain from Point Conception to Punta Gorda in Ventura County" (Grant 1978b:509).

Chumash villages generally ranged between 30 and 200 people, with the largest settlements numbering anywhere from 500 to 800 people (Glassow 1996:14). Grant (1978b) describes a typical Chumash village along the Santa Barbara Channel as consisting of "several houses, a sweathouse, store houses, a ceremonial enclosure, gaming area, and a cemetery usually placed well away from the living area." Archaeological investigations have recognized separate areas within cemeteries for elites and non-elites (King 1969).

Permanent Chumash villages included hemispherical or rounded mud-covered (insulated) pole and thatch dwellings arranged in close groups (Brown 2001). Thatching was made from tule, Carrizo grass, wild alfalfa, and fern (Grant 1978b). Smaller Chumash groups correspondingly occupied short-term special-purpose camps throughout the year to acquire seasonal resources (Glassow 1996). Cooking fires were centered within the dwelling to allow smoke to ventilate through a hole in the roof (Grant 1978b).

The Chumash are well-known for their wooden plank canoe, or tomol. The tomol facilitated the procurement of marine resources and the trade network between the mainland and the Channel Islands. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. In addition to marine resources, the Chumash subsistence focused on acorns, pine nuts, prickly pear cactus, and other plant resources, and land animals such as mule deer, antelope, quail, dove, and other waterfowl (Brown 2001). The Chumash also manufactured various other utilitarian and non-utilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. Olivella shell beads were especially important for trade.

Spanish explorers first arrived in the Santa Barbara Channel region in 1542. Contact had much more of an impact starting in 1770 with the establishment of the missions. Mission life led to severe population decline and culture loss (Johnson 1987). Although the Chumash languages are no longer

commonly spoken (Timbrook 1990), many descendants of the Chumash still live in the region and a cultural revitalization has been ongoing since the 20th century (Glassow et al. 2007). Today, the Santa Ynez Band of Chumash Indians, whose reservation is approximately 43 kilometers (27 miles) southeast of the project site, is the only federally recognized tribe.

3.2.3 Historic Setting

The post-Contact history of California is generally divided into three periods: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each of these periods is briefly described below.

Spanish Period (1769–1822)

The Santa Barbara Channel region was first visited by the Cabrillo Expedition in October of 1542 (Chesnut 1993). A second Spanish expedition, consisting of two ships under the command of Sebastian Vizcaino, arrived in the Santa Barbara area in 1602. For more than 200 years, Cabrillo, Vizcaino and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003).

The Spanish began to permanently occupy Alta California in the late eighteenth century. While the Spanish funded expeditions to claim Alta California for the Spanish government, Franciscan missionaries traveled to proselytize and convert the local populations to Catholicism for the Church. Gaspar de Portolá established the first Spanish settlement, a military fort named El Presidio Reál de San Diego, in Alta California in May 1769. The Presidio of San Diego was the first of four presidios that would be established throughout Alta California for the Spanish government. A year later, in June 1770, Portolá established the El Presidio Real de San Carlos de Monterrey, a bay originally identified by the Spanish explorer Sebastian Vizcaino in the early seventeenth century. Juan Bautista de Anza established El Presidio Real de San Francisco in June 1776. The Spanish established El Presidio de Santa Bárbara, the fourth and final presidio, in Alta California in 1782. The presidio was a temporary structure until construction of a permanent adobe structure began in 1784.

Franciscan Father Junípero Serra founded Misión San Diego de Alcalá in June 1769. The San Diego Mission was the first of 21 missions founded by the Franciscans in the late eighteenth and early nineteenth centuries. Misión Santa Barbara is the tenth mission founded by the Spanish, and was founded in 1786, four years after the establishment of the presidio. The Chumash that lived in the vicinity of the project site came under the control of the Spanish at Mission Santa Barbara. Other missions established along the central coast include Misión San Luis Obispo de Tolosa, founded in 1772, and Misión La Purisima Concepción, founded in 1787 (Weber 1992).

Mission Santa Barbara was reconstructed twice to enlarge the church in 1789 and 1793. The Spanish began to rebuild the church again in 1812 following damage from a major earthquake. The presidio and the mission were constructed using large adobe bricks shaped by a form and then sun dried. Large ceramic roof tiles called tejas were created by molding the clay on timbers until fully dried, creating the long, rounded shape seen at both the presidio and mission. Some floors were lined with clay tiles called ladrillos formed from the same clay used for the roof tiles, but mostly remained dirt. Mission Santa Barbara benefitted from construction of a dam and aqueduct system that diverted water from Mission Canyon. The Spanish relied on Chumash labor to construct the buildings, dam, and aqueduct system. Spanish families began to settle the area, becoming Pueblo Santa Barbara.

These settlers began to use the Goleta Valley for ranching and agriculture, and Pueblo Santa Barbara became an epicenter for hide and tallow trade.

Mission life led to severe population decline and culture loss among the Chumash. The Spanish brought with them diseases for which the Chumash had no immunity. Living and working in proximity spread diseases throughout the native populations and killed many. The Spanish also introduced domestic plants and animals for labor and food. These non-native species vastly altered the landscape, forcing the Chumash to adopt new foods and lifeways.

Mexican Period (1822–1848)

Mexico's revolution against Spain achieved success in 1821. News of the victory reached California in 1822, marking the beginning of the Mexican period. The hallmarks of the Mexican period are the secularization of the missions, completely accomplished by 1836, and a greater distribution of private land grants to prominent citizens, including retired military personnel. The Secularization Act of 1833 enabled Mexican governors in California to distribute former mission lands to individuals in the form of land grants. "The intention of the secularization of the California missions in 1834 was to transform the mission centers into Pueblos; the Indians, with their knowledge of trade and agriculture, would become Mexican citizens in these Pueblos," Grant (1978a:507) explains. Mexican governors made more than 700 land grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). Forty land grants were issued in Santa Barbara County, where its fertile valleys were ideal for the ranching and agriculture prevalent during this period (Avina 1976; Tompkins 1976, 1987; Chesnut 1993).

Although Pueblo Santa Barbara thrived on hide and tallow trade, ranchers soon identified a more prosperous market in providing beef for the growing gold-mining population. Daniel Hill applied for a land grant in the mid-1840s and was granted the land that he would name Rancho La Goleta after the adjacent Goleta Slough, an estuary that historically formed an island (Mescaltitlan) surrounded by wetlands and marshes. Modugno (2015) explains that "the area around the east side of the slough had already been nicknamed La Goleta, or the schooner, because some schooners had run aground in that area, and at least one schooner had been built there." The Map of the Rancho La Goleta, published in the 1840s, indicates a wreck at the mouth of the slough just south of the rancho (University of California Berkeley N.d.).

American Period (1848–Present)

In 1848, the Treaty of Guadalupe Hidalgo was signed, ending the Mexican American War, and making California a territory of the United States. After American annexation, a struggle followed to improve local transportation and communications with the rest of the country so that the region could economically develop. The Gold Rush brought a multitude of new settlers to California in 1848 and the construction of the transcontinental railroad in 1869 contributed further to California's population boom. The County of Santa Barbara was incorporated on February 18, 1850, approximately seven months before California received statehood. The government built a lighthouse at Santa Barbara in 1856, and regular stagecoach routes began in the early 1860s (Southern California Writers' Project 1941). The real estate boom of the 1880s in southern California only mildly affected Santa Barbara County, particularly outside the city (Dumke 1944). Since that time, California has continued to grow and become a national leader in a number of fields, such as agriculture, communications, and the aerospace industry. Santa Barbara County is a popular tourist destination, with emphasis on the county's beaches, wine producers, missions, and Chumash sites.

Local History

The City of Santa Maria was originally established by settlers "attracted to the Santa Maria Valley" following establishment of nearby Missions San Luis Obispo de Tolosa and La Purísima Concepción De María Santísima (City of Santa Maria 2016). Four men, Rudolph Cook, Isaac Fesler, Isaac Miller, and John Thornburgh, each donated 40 acres where the four corners of their properties met to the establishment of a township in 1873. This property lies at the intersection of what is now Main and Broadway Streets (City of Santa Maria 2016). The township was surveyed in the fall of 1874, and the surveyor's map was accepted and recorded at the county seat on April 12, 1875.

The Pacific Coast Railroad built tracks traveling south from San Luis Obispo and completed the new rail spur in 1882. Stage and freight lines serviced the Santa Maria Valley on a regular basis. The local water table was tapped for new fields and orchards, prompting migration to the area, and stores, markets, saloons, and hotels soon cropped up (Foster 2016). In 1885, the town's name was changed to from Central City to Santa Maria, because the United States Postal Service repeatedly delivered mail intended for Central City, California to Central City, Colorado (City of Santa Maria 2016; Treankler 2015).

By the late 1800s, Swiss-Italian dairymen; Danish, Portuguese, and Japanese farmers; and Spanish, English, Irish, and Scottish settlers populated the town. Settlers typically became involved the major industries of the area-- dry land farming, cattle, and oil. In 1894 the Southern Pacific Railroad reached as far south as San Luis Obispo. Union Sugar Company arrived in the valley by 1900 (Foster 2016). Not until 1901 were trains traveling south through Santa Maria on the way to Los Angeles. The Santa Maria Valley Railroad began operating in 1912, hauling oil from the oil fields at Roadamite to the Southern Pacific Railroad Station at Guadalupe (Foster 2016; Foster n.d.). On September 12, 1905, the City of Santa Maria was incorporated "as a general law city" (Foster 2016; City of Santa Maria 2013:xi).

The project site is located just south of Santa Maria in the unincorporated suburb of Orcutt. Orcutt became an oil boomtown due to increased oil production in the region starting in the 1900's. By 1903 the Orcutt and Santa Maria oil fields were producing large amounts of oil utilizing twenty-two wells (Redmon 2009). This economic success attracted lots of settlers to the region coming to work the wells. This caused a large influx in population (Redmon 2009). By 1906, Orcutt had several stores, two restaurants, a hotel and three saloons. By 1910's the population had reached almost 1,000 citizens. The oil boom ended in the 1920's, when Union Oil cut production in half between 1921 and 1927 (Redmon 2009). To compound things, the state rerouted the main highway around Orcutt, which also had a negative effect upon the town. In the years to follow, Santa Maria became the primary population and economic center of northern Santa Barbara County.

Since 1957, the City of Santa Maria has been heavily influenced by programs at Vandenberg Air Force Base, located 20 miles south. In the 1970s, the Santa Maria Town Center mall was constructed. The city council has worked to maintain Santa Maria's status as a regional retail hub. The city remains the leader in retail sales growth for Santa Barbara County, and annexations have increased the size to approximately 22 square miles (City of Santa Maria 2013). Agriculture, however, remains the city's chief economic influence. The Santa Maria Valley is home to several vineyards and wineries and primary crops include strawberries, celery, lettuce, peas, and squash.

4 Background Research

4.1 California Historical Resources Information System

On July 21, 2021, Rincon received the results of a records search of the California Historical Resources Information System, which was conducted by the staff at the Central Coast Information Center (CCIC) located at University of California, Santa Barbara. The search was conducted to identify previously recorded cultural resources (prehistoric or historic), as well as previously conducted cultural resources work within a 0.5-mile radius of the project site. The search included a review of the NRHP, the California Register of Historical Resources, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic United States Geological Survey (USGS) 7.5- and 15-minute quadrangle maps. Appendix A provides a summary of the records search.

4.1.1 Previous Studies

The cultural resources records search identified a total of 15 previous studies within the 0.5-mile search radius, three of which (SR-04603, SR-04604, and SR-04605) included portions of the project site (Table 1).

Table 1 Previous Cultural Resource Studies within 0.5-Mile of the Project Site

Report Number	Author	Year	Title	Relationship to Project Site
SR-00319	Spanne, L.	1979	*An Archaeological Evaluation for the "Orcutt 13" Residential Developments County of Santa Barbara*	Outside
SR-00322	Spanne, L.	1979	*An Archaeological Evaluation for the Orcutt 7 Residential Developments County of Santa Barbara*	Outside
SR-00324	Spanne, L.	1980	*An Historic Cultural and Archaeological Evaluation of the Orcutt Road Job No. 510052 Orcutt, California, County of Santa Barbara*	Outside
SR-00379	Spanne, L.	1978	*An Archaeological Analysis for Six Proposed Residential Developments in Orcutt, California, Santa Barbara County*	Outside
SR-01801	Toren & Santoro	1995	*Phase I Archaeological Survey for the Orcutt Community Plan*	Outside
SR-02522	Gerber, J.	2000	*Phase I Archaeological Study Proposed Union Valley Parkway, Santa Maria, CA*	Outside
SR-03222	Livingstone, D.	2003	*Historical Resources Evaluation Report for the Hummel Drive Extension Project in Santa Maria, Santa Barbara County, California*	Outside
SR-03309	Dice, M.	2003	*Records Search and Site Visit Results for Spirit Communications Facility SN45XC107A (St. Joseph High School) 4120 S. Bradley Road, Santa Maria, Santa Barbara County, California*	Outside

Report Number	Author	Year	Title	Relationship to Project Site
SR-04365	King, G.	2008	*Finding of No Adverse Effect for the Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California (FHWA080110A)*	Outside
SR-04422	Carr, P. J.	2008	*Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California*	Outside
SR-04451	Kiaha, K.	2007	*Archaeological Survey Report, Union Valley Parkway Project, 05-SB-101-PM 83.1/83.9, EA 05-463800*	Outside
SR-04601	Gerber & Haslouer	2006	*Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California*	Outside
SR-04602	Taniguchi, C., et al	2007	*Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California*	Outside
SR-04603	Nettles, W. M.	2008	*Historic Property Survey Report, Union Valley Parkway*	**Within**
SR-04603A	Kiaha, K.	2007	*Archaeological Survey Report: Union Valley Parkway Project 05-SB-101-PM 83.1/83.9, EA 05-463800*	**Within**
SR-04603B	Gerber, J.	2000	*Not Attached to Report, Only Listed as an Attachment Within It*	**Within**
SR-04603C	Gerber, J.	2001	*Not Attached to Report, Only Listed as an Attachment Within It*	**Within**
SR-04603D	Gerber & Haslouer	2006	*Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California*	**Within**
SR-04603E	Taniguchi, C., et al	2007	*Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California*	**Within**
SR-04604	Peterson, R. R.	2008	*Supplemental Historic Property Survey Report*	**Within**
SR-04604A	Peterson, R. R.	2008	*First Supplemental Archaeological Survey Report: UVP Gap, Union Valley Parkway Extension/Interchange, Santa Maria, Santa Barbara County, California*	**Within**
SR-04605	Peterson, R. R.	2008	*Supplemental Historical Property Survey Report, Union Valley Pkwy/US101*	**Within**
SR-04794	Post/Hazeltine Associates	2012	*Phase III Historic Resources Documentation Report for 4470 Orcutt Road APN 107-250-011, 107-250-012, 107-250-013*	Outside

Source: Central Coastal Information Center, July 2021

4.1.2 Previously Recorded Resources

The cultural resources study identified no cultural resources within the 0.5-mile search radius, and no cultural resources located within the project site.

4.2 Native American Heritage Commission and Assembly Bill (AB) 52 Outreach

As part of the process of identifying Native American cultural resources within or near the project site, Rincon contacted the Native American Heritage Commission (NAHC) on July 14, 2021 and to request a review of the Sacred Lands File. The NAHC emailed a response on August 2, 2021 (Appendix B) and stated the results of the search was negative. The NAHC provided a contact list of nine Native American individuals or tribal organizations that may have knowledge of cultural resources in or near the project site. Rincon prepared Assembly Bill (AB) 52 letters for the County (Appendix B) addressed to each of the NAHC-listed contacts on August 10, 2019, inviting tribes to consult with the County on the current undertaking.

5 Fieldwork

5.1 Methods

Rincon Associate Archaeologist Ryan Glenn, MA, RPA, conducted a field survey of the project site on July 28, 2021. Mr. Glenn surveyed the entirety of the project site in 10-meter transects and examined all areas of exposed ground surface for prehistoric artifacts (e.g., chipped stone tools and production debris, stone milling tools, ceramics), historic debris (e.g., metal, glass, ceramics), or soil discoloration that might indicate the presence of a cultural midden. Project site characteristics and survey conditions were recorded using a field notebook and a digital camera. Copies of the digital photographs are on file with Rincon's San Luis Obispo office.

5.2 Results

The Project site is an undeveloped parcel with vegetation consisting of tall grasses, Datura, Mustard, and wild radish, leading to excellent ground visibility (approximately 80 to 100 percent) (Figure 3). Review of aerial photographs shows that the site appears to have been vacant as early as 1956 and never developed.

The project site consists mainly of aeolian dune sand and is covered in non-native weeds and grasses (Avena sp., Bromus diandrus, Brassica nigra, Festuca perennis, etc.). A modern, unimproved walking trail extends from the terminus of Brookside Avenue, through the project site and then parallels West Union Valley Parkway (Figure 4). Exposed soils consisted of light brown to tan loose sand with small, rounded pebble-sized inclusions from 1 to 4 inches in length. The soil is well-sorted and contained naturally occurring, non-cultural shells consisting of Red Abalone (*Haliotis rufescens*) and scallop (*Crassadoma Sp.*). There was modern trash located throughout the project site consisting of household goods and plastics. A Eucalyptus grove was present in the northwestern corner of the project site (Figure 5).

The field survey did not identify any cultural resources in the project site.

Figure 3 Ground Surface Visibility was Excellent within Project Site

Figure 4 Existing Footpath Through Project Site with West Union Valley Parkway in the Distance, Facing Southwest

Figure 5 Eucalyptus Grove Located in the Northwest Portion of the Project Site

6 Management Recommendations

Based on the results of the cultural resources records search and the pedestrian survey, no known archaeological resources were identified within the project site. Rincon recommends a finding of ***no impact to historical resources*** for the purposes of CEQA and does not recommend any additional archeological work at this time. The following measures are recommended in the case of unanticipated discoveries during ground-disturbing activities.

6.1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) must be contacted immediately to evaluate the find. If the discovery proves to be significant under the NHPA, additional work such as data recovery excavation may be warranted.

6.2 Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code §5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.

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1992 The Spanish Frontier in North America. New Haven, Connecticut: Yale University Press.

Western Regional Climate Center.

2019 Period of Record Monthly Climate Summary. Morro Bay Fire Department, California (045866). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5866

Appendix A

Record Search Results

California Historical Resource Information System
San Luis Obispo & Santa Barbara Counties

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
FAX (805) 682-3170
EMAIL ccic@sbnature2.org

7/21/2021 Records Search # 21-169

Ryan Glenn
Rincon Consultants, Inc.
180 N Ashwood Avenue
Ventura, CA 93003

Re: Brookside Avenue Fire Station 20-09360

The Central Coast Information Center received your record search request for the project area referenced above, located on the Santa Maria USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one half mile radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ☐ custom GIS maps ■ shapefiles ☐ hand-drawn maps ☐ none

Resources within project area:	0
Resources within ½ mile radius:	0
Reports within project area:	3; SR-04603, SR-04604, SR-04605
Reports within ½ mile radius:	15; see list

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 Historic Properties Directory:	☐ enclosed	☐ not requested	■ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	■ nothing listed

The following sources of information are available at **http://ohp.parks.ca.gov/?page_id=28065**. Some of these resources used to be available through the CHRIS but because they are now online, they can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through the sources listed below.

California State Lands Commission Shipwreck Database	*Caltrans Historic Bridge Inventory*
U.S. Geological Survey Historic Topographic Maps	*Rancho Plat Maps*
National Park Service National Register of Historic Places Nominations	*Natural Resource Conservation Service Soil Survey Maps*
US Bureau of Land Management General Land Office Records	*California Historical Landmarks Listing (by county)*
Five Views: An Ethnic Historic Site Survey for California (1988)	*Historical Soil Survey Maps*

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 California Historical Resources Information System (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. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Brian Barbier
Assistant Coordinator

CHRIS Data Request Form

ACCESS AND USE AGREEMENT NO.: 56.00 **IC FILE NO.:** _____

To: Central Coast Information Center

Print Name: Ryan Glenn Date: 07/06/2021

Affiliation: Rincon Consultants, Inc.

Address: 180 N Ashwood Avenue

City: Ventura State: CA Zip: 93003

Phone: (805) 644-4455 Fax: _____ Email: rglenn@rinconconsultants.com

Billing Address (if different than above): _____

Billing Email: ap@rinconconsultants.com Billing Phone: (805) 644-4455

Project Name / Reference: Brookside Avenue Fire Station 20-09360

Project Street Address: APN 107-321-013

County or Counties: Santa Barbara

Township/Range/UTMs: T09N R34W S2

USGS 7.5' Quad(s): Santa Maria

PRIORITY RESPONSE (Additional Fee): yes ☐ / no ■

TOTAL FEE NOT TO EXCEED: $600.00
(If blank, the Information Center will contact you if the fee is expected to exceed $1,000.00)

Special Instructions:

Information Center Use Only

Date of CHRIS Data Provided for this Request: _____

Confidential Data Included in Response: yes ☐ / no ☐

Notes: _____

CHRIS Data Request Form

Mark the request form as needed. Attach a PDF of your project area (with the radius if applicable) mapped on a 7.5' USGS topographic quadrangle to scale 1:24000 ratio 1:1 neither enlarged nor reduced and include a shapefile of your project area, if available. Shapefiles are the current CHRIS standard for submitting digital spatial data for your project area or radius. **Check with the appropriate IC for current availability of digital data products.**

- Documents will be provided in PDF format. Paper copies will only be provided if PDFs are not available at the time of the request or under specially arranged circumstances.
- Location information will be provided as a digital map product (Custom Maps or GIS data) unless the area has not yet been digitized. In such circumstances, the IC may provide hand drawn maps.
- In addition to the $150/hr. staff time fee, client will be charged the Custom Map fee when GIS is required to complete the request [e.g., a map printout or map image/PDF is requested and no GIS Data is requested, or an electronic product is requested (derived from GIS data) but no mapping is requested].

For product fees, see the CHRIS IC Fee Structure on the OHP website.

1. Map Format Choice:

Select One: Custom GIS Maps ☐ GIS Data ☒ Custom GIS Maps **and** GIS Data ☐ No Maps ☐

Any selection below left unmarked will be considered a "no. "

Location Information:

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Locations	yes ☒ / no ☐	yes ☒ / no ☐
Report Locations[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Report Locations[2]	yes ☒ / no ☐	yes ☒ / no ☐

3. Database Information:
(contact the IC for product examples, or visit the SSJVIC website for examples)

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Database		
List (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Detail (PDF format)	yes ☐ / no ☒	yes ☐ / no ☒
Excel Spreadsheet	yes ☐ / no ☒	yes ☐ / no ☒
Report Database[1]		
List (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Detail (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Excel Spreadsheet	yes ☒ / no ☐	yes ☒ / no ☐
Include "Other" Reports [2]	yes ☒ / no ☐	yes ☒ / no ☐

4. Document PDFs (paper copy only upon request)**:**

	Within project area	Within 0.5 mi. radius
ARCHAEOLOGICAL Resource Records[1]	yes ☒ / no ☐	yes ☒ / no ☐
NON-ARCHAEOLOGICAL Resource Records	yes ☐ / no ☒	yes ☐ / no ☒
Reports[1]	yes ☒ / no ☐	yes ☒ / no ☐
"Other" Reports[2]	yes ☐ / no ☒	yes ☐ / no ☒

CHRIS Data Request Form

5. Eligibility Listings and Documentation:

	Within project area	Within 0.5 mi. radius
OHP Built Environment Resources Directory[3]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐
OHP Archaeological Resources Directory[1,5]:		
Directory listing only (Excel format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐
***California Inventory of Historic Resources* (1976):**		
Directory listing only (PDF format)	yes ☒ / no ☐	yes ☒ / no ☐
Associated documentation[4]	yes ☒ / no ☐	yes ☒ / no ☐

6. Additional Information:

The following sources of information may be available through the Information Center. However, several of these sources are now available on the OHP website and can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through these sources. Indicate below if the Information Center should review and provide documentation (if available) of any of the following sources as part of this request.

Caltrans Bridge Survey	yes ☒ / no ☐
Ethnographic Information	yes ☒ / no ☐
Historical Literature	yes ☒ / no ☐
Historical Maps	yes ☒ / no ☐
Local Inventories	yes ☒ / no ☐
GLO and/or Rancho Plat Maps	yes ☒ / no ☐
Shipwreck Inventory	yes ☒ / no ☐
Soil Survey Maps	yes ☒ / no ☐

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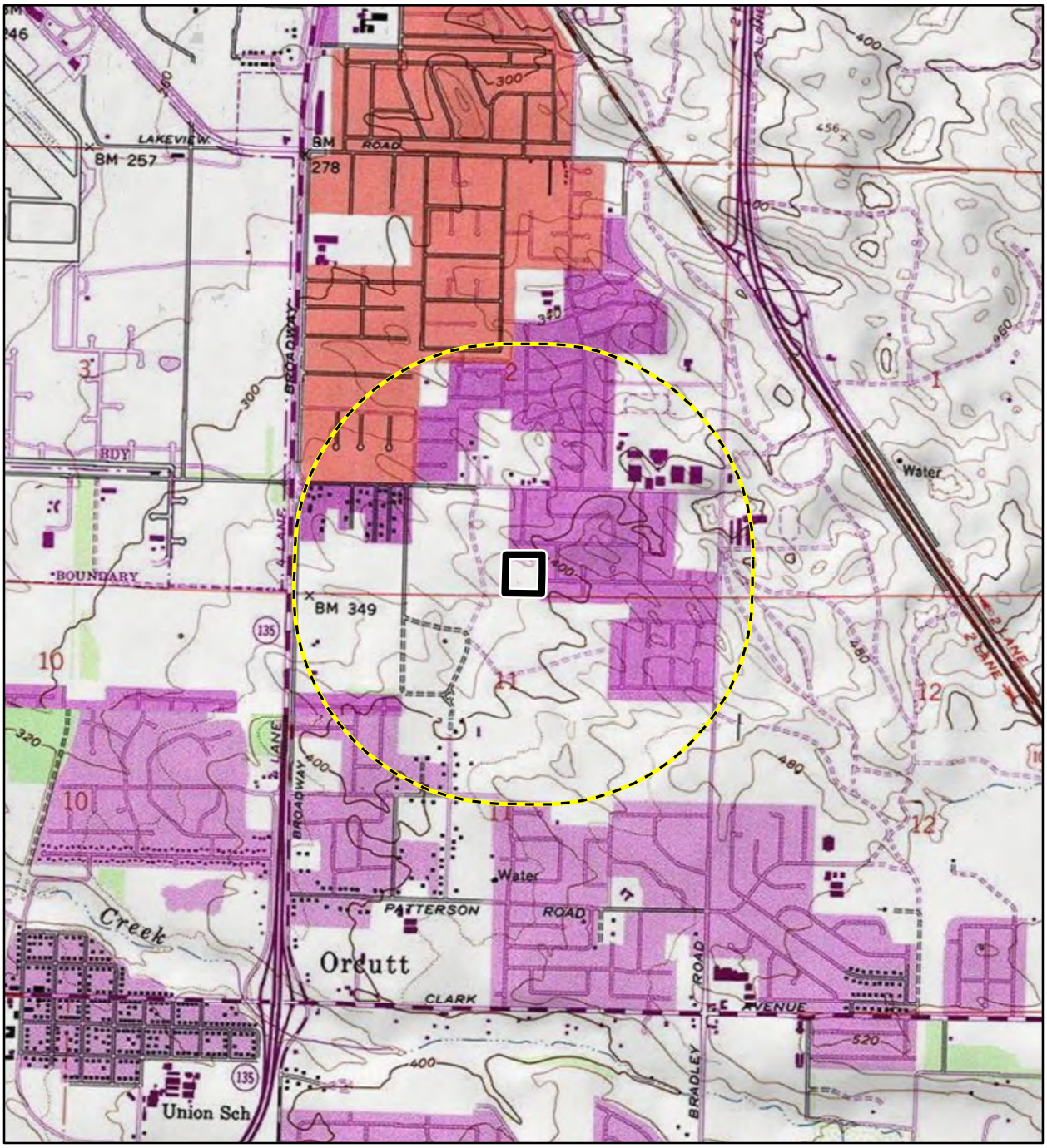
[1] In order to receive archaeological information, requestor must meet qualifications as specified in Section III of the current version of the California Historical Resources Information System Information Center Rules of Operation Manual and be identified as an Authorized User or Conditional User under an active CHRIS Access and Use Agreement.

[2] "Other" Reports GIS layer consists of report study areas for which the report content is almost entirely non-fieldwork related (e.g., local/regional history, or overview) and/or for which the presentation of the study area boundary may or may not add value to a record search.

[3] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Includes, but not limited to, information regarding National Register of Historic Places, California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and historic building surveys. Previously known as the HRI and then as the HPD, it is now known as the Built Environment Resources Directory (BERD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.

[4] Associated documentation will vary by resource. Contact the IC for further details.

[5] Provided as Excel spreadsheets with no cost for the rows; the only cost for this component is IC staff time. Previously known as the Archaeological Determinations of Eligibility, now it is known as the Archaeological Resources Directory (ARD). The Office of Historic Preservation compiles this documentation and it is the source of the official status codes for evaluated resources.



Imagery provided by National Geographic Society, Esri, and their licensors © 2021. Santa Maria Quadrangle. T09N R34W S2. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Half-Mile Buffer

Area of Potential Effects

N

0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Records Search Map

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-00319		1979	Spanne, Larry	An Archaeological Evaluation for the "Orcutt 13" Residential Developments County of Santa Barbara	none given	
SR-00322		1979	Spanne, Larry	An Archaeological Evaluation for the Orcutt 7 Residential Developments County of Santa Barbara.	Laurence W. Spanne, Archaeological Consultant	42-000596, 42-000597, 42-000598, 42-000599
SR-00324		1980	Spanne, L.	An Historic Cultural and Archaeological Evaluation of the Orcutt Road Job No. 510052 Orcutt, California, County of Santa Barbara.	Laurence W. Spanne, Archaeological Consultants	
SR-00379		1978	Spanne, L.	An Archaeological Analysis for Six Proposed Residential Developments in Orcutt, California, Santa Barbara County.		
SR-01801		1995	Toren, G. and Santoro, L.	Phase I Archaeological Survey for the Orcutt Community Plan	ISERA Group, inc.	42-000597, 42-000598, 42-000599, 42-001159, 42-002729, 42-002730, 42-002731, 42-002732, 42-002733, 42-002735, 42-002736, 42-002737, 42-002738, 42-002739, 42-002740, 42-002741, 42-002742, 42-002743, 42-002744, 42-002745, 42-038587, 42-038588, 42-038589, 42-038590, 42-038591, 42-038592, 42-038593, 42-038594, 42-038595, 42-038596, 42-038597, 42-038598, 42-038599, 42-038600, 42-038601, 42-038602
SR-02522		2000	Gerber, Joyce	Phase I Archaeological Study Proposed Union Valley Parkway, Santa Maria, CA	Joyce L. Gerber Archaeological Consulting	
SR-03222		2003	Livingstone, David	Historical Resources Evaluation Report for the Hummel Drive Extension Project in Santa Maria, Santa Barbara County, California	Applied EarthWorks, Inc.	
SR-03309		2003	Dice, M.	Records Search and Site Visit Results for Sprint Telecommunications Facility SN45XC107A (St. Joseph High School), 4120 S. Bradley Road, Santa Maria, Santa Barbara County, California		
SR-04365		2008	King, Gregory	Finding of No Adverse Effect for the Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California (FHWA080110A)	Department of Transportation	
SR-04422		2008	Carr, Paula Juelke	Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California	Department of Transportation	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-04451		2007	Kiaha, Krista	Archaeological Survey Report, Union Valley Parkway Project, 05-SB-101-PM 83.1/83.9, EA 05-463800	Caltrans District 5	
SR-04601		2006	Joyce L. Gerber and Leeann Haslouer	Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California	Applied EarthWorks, Inc.	
SR-04602		2007	Christeen Taniguchi, Ben Taniguchi, David Livingstone, Peggy Beedle, Sandra S. Flint, and Randy Baloian	Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California	Galvin Preservation Associates, Inc.	42-040899, 42-040900, 42-040901, 42-040902, 42-040903, 42-040904
SR-04603		2008	Wendy M. Nettles	Historic Property Survey Report, Union Valley Parkway	Applied EarthWorks, Inc.	
SR-04603A		2007	Krista Kiaha	Archaeological Survey Report: Union Valley Parkway Project 05-SB-101-PM 83.1/83.9, EA 05-463800	Caltrans District 5	
SR-04603B		2000	Gerber	Not attached to report, only listed as an attachment within it.		
SR-04603C		2001	Gerber	Not attached to report, only listed as attached within it.		
SR-04603D		2006	Joyce L. Gerber and Leeann Haslouer	Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California	Applied EarthWorks, Inc.	
SR-04603E		2007	Christeen Taniguchi, Ben Taniguchi, David Livingstone, Peggy Beedle, Sandra S. Flint, and Randy Baloian	Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California	Galvin Preservation Associates Inc.	
SR-04604		2008	Robert R. Peterson, Jr.	Supplemental Historic Property Survey Report	Applied EarthWorks, Inc.	
SR-04604A		2008	Robert R. Peterson	First Supplemental Archaeological Survey Report: UVP Gap, Union Valley Parkway Extension/Interchange, Santa Maria, Santa Barbara County, California	Aplied EarthWorks	
SR-04605		2008	Robert R. Peterson, Jr.	Supplemental Historical Property Survey Report, Union Valley Pkwy/US101	Applied EarthWorks, Inc.	
SR-04794		2012	Post / Hazeltine Associates	Phase III Historic Resources Documentation Report for 4470 Orcutt Road APN 107-250-011, 107-250-012, 107-250-013	Post / Hazeltine Associates	

Report Detail: SR-00319

Identifiers

Report No.: SR-00319
Other IDs:
Cross-refs:

Citation information

Author(s): Spanne, Larry
Year: 1979 (Jan)
Title: An Archaeological Evaluation for the "Orcutt 13" Residential Developments County of Santa Barbara
Affliliation: none given
No. pages: 6
No. maps:
Attributes: Archaeological, Field study
Inventory size: 1578330 sq. m.
Disclosure: Unrestricted
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: Yes

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt, Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	7/31/2018	Brian Barbier

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	7/31/2018	Brian Barbier	ICDB completed
	7/31/2018	Brian Barbier	GIS edited and moved to approx by C. De l'Arbre on 5/21/15
	7/31/2018	Brian Barbier	GIS verified (poor map quality)

Record status: Database Complete

Report Detail: SR-00322

Identifiers

Report No.: SR-00322
Other IDs:
Cross-refs:

Citation information

Author(s): Spanne, Larry
Year: 1979 (Aug)
Title: An Archaeological Evaluation for the Orcutt 7 Residential Developments County of Santa Barbara.
Affliliation: Laurence W. Spanne, Archaeological Consultant
No. pages: 11
No. maps:
Attributes: Archaeological, Field study
Inventory size: None given
Disclosure: Not for publication
Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-42-000596	CA-SBA-000596	
P-42-000597	CA-SBA-000597	
P-42-000598	CA-SBA-000598	
P-42-000599	CA-SBA-000599	

No. resources: 4
Has informals: Yes

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	9/25/2018	Elizabeth Weig

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	7/31/2018	Brian Barbier	Mapped in GIS by C. De l'Arbre on 5/21/15
	7/31/2018	Brian Barbier	Isolated find mapped in Informal resources-points. Report GIS verified. ICDB verified. PDF verified.

Record status: Verified

Report Detail: SR-00324

Identifiers

Report No.: SR-00324
Other IDs:
Cross-refs:

Citation information

Author(s): Spanne, L.
Year: 1980 (Apr)
Title: An Historic Cultural and Archaeological Evaluation of the Orcutt Road Job No. 510052 Orcutt, California, County of Santa Barbara.
Affliliation: Laurence W. Spanne, Archaeological Consultants
No. pages: 9
No. maps:
Attributes: Archaeological, Field study
Inventory size: None given
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt, Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	9/25/2018	Elizabeth Weig

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	9/25/2018	Elizabeth Weigle	Entered additional information. ICDB entry verified. GIS verified.

Record status: Database Complete

Report Detail: SR-00379

Identifiers

Report No.: SR-00379
Other IDs:
Cross-refs:

Citation information

Author(s): Spanne, L.
Year: 1978 (Jun)
Title: An Archaeological Analysis for Six Proposed Residential Developments in Orcutt, California, Santa Barbara County.
Affliliation:
No. pages: 6
No. maps:
Attributes: Archaeological, Field study
Inventory size: 870105 sq. m.
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt, Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	6/3/2015	CCIC3

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.

Record status:

Report Detail: SR-01801

Identifiers

Report No.: SR-01801
Other IDs:
Cross-refs:

Citation information

Author(s): Toren, G. and Santoro, L.
Year: 1995 (Jun)
Title: Phase I Archaeological Survey for the Orcutt Community Plan
Affliliation: ISERA Group, inc.
No. pages: 63
No. maps:
Attributes: Archaeological, Field study
Inventory size: None given
Disclosure: Not for publication
Collections: No

General notes

Associated resources

Primary No.	*Trinomial*	*Name*
P-42-000597	CA-SBA-000597	
P-42-000598	CA-SBA-000598	
P-42-000599	CA-SBA-000599	
P-42-001159	CA-SBA-001159	
P-42-002729	CA-SBA-002729	
P-42-002730	CA-SBA-002730	
P-42-002731	CA-SBA-002731	
P-42-002732	CA-SBA-002732	
P-42-002733	CA-SBA-002733	
P-42-002735	CA-SBA-002735	
P-42-002736	CA-SBA-002736	
P-42-002737	CA-SBA-002737	
P-42-002738	CA-SBA-002738	
P-42-002739	CA-SBA-002739	
P-42-002740	CA-SBA-002740	
P-42-002741	CA-SBA-002741	
P-42-002742	CA-SBA-002742	
P-42-002743	CA-SBA-002743	
P-42-002744	CA-SBA-002744	
P-42-002745	CA-SBA-002745	
P-42-038587		
P-42-038588		
P-42-038589		
P-42-038590		
P-42-038591		
P-42-038592		
P-42-038593		
P-42-038594		
P-42-038595		
P-42-038596		
P-42-038597		
P-42-038598		
P-42-038599		
P-42-038600		
P-42-038601		
P-42-038602		

No. resources: 36

Report Detail: SR-01801

Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt, Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	9/26/2018	Elizabeth Weig

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	8/10/2018	Matthew LoBian	GIS edited.
	9/26/2018	Elizabeth Weigle	Entered additional information. Updated PDF. ICDB verified. GIS verified.

Record status: Database Complete

Report Detail: SR-02522

Identifiers

Report No.: SR-02522
Other IDs:
Cross-refs:

Citation information

Author(s): Gerber, Joyce
Year: 2000 (Apr)
Title: Phase I Archaeological Study Proposed Union Valley Parkway, Santa Maria, CA
Affliliation: Joyce L. Gerber Archaeological Consulting
No. pages: 14
No. maps: 3
Attributes: Archaeological, Field study
Inventory size: None Given
Disclosure: Unrestricted
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	8/10/2018	Matthew LoBia

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	8/10/2018	Matthew LoBian	GIS edited.

Record status:

Report Detail: SR-03222

Identifiers

Report No.: SR-03222
Other IDs:
Cross-refs:

Citation information

Author(s): Livingstone, David
Year: 2003 (Sep)
Title: Historical Resources Evaluation Report for the Hummel Drive Extension Project in Santa Maria, Santa Barbara County, California
Affliliation: Applied EarthWorks, Inc.
No. pages: 97
No. maps:
Attributes: Archaeological, Field study
Inventory size: 1.76 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt, Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	5/23/2016	CCIC4

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.

Record status:

Report Detail: SR-03309

Identifiers

Report No.: SR-03309
Other IDs:
Cross-refs:

Citation information

Author(s): Dice, M.
Year: 2003
Title: Records Search and Site Visit Results for Sprint Telecommunications Facility SN45XC107A (St. Joseph High School), 4120 S. Bradley Road, Santa Maria, Santa Barbara County, California
Affliliation:
No. pages: 7
No. maps:
Attributes: Archaeological, Field study
Inventory size: 1570 square feet
Disclosure:
Collections:

General notes

Associated resources

No. resources: 0
Has informals:

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:		

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.

Record status:

Report Detail: SR-04365

Identifiers

Report No.: SR-04365
Other IDs:
Cross-refs:

Citation information

Author(s): King, Gregory
Year: 2008 (Jul)
Title: Finding of No Adverse Effect for the Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California (FHWA080110A)
Affliliation: Department of Transportation
No. pages: 3
No. maps:
Attributes: Architectural/Historical, Evaluation
Inventory size: 5 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	10/15/2019	Mia Magradze

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	10/15/2019	Mia Magradze	PDF complited

Record status:

Report Detail: SR-04422

Identifiers

Report No.: SR-04422
Other IDs:
Cross-refs:

Citation information

Author(s): Carr, Paula Juelke
Year: 2008 (Jun)
Title: Union Valley Parkway Extension/Interchange Project, Santa Barbara County, California
Affliliation: Department of Transportation
No. pages: 22
No. maps:
Attributes: Management/planning
Inventory size: 1.5 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Orcutt
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	5/11/2016	CCIC4

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.

Record status:

Report Detail: SR-04451

Identifiers

Report No.: SR-04451
Other IDs:
Cross-refs: See also SR-04600

Citation information

Author(s): Kiaha, Krista
Year: 2007 (Nov)
Title: Archaeological Survey Report, Union Valley Parkway Project, 05-SB-101-PM 83.1/83.9, EA 05-463800
Affliliation: Caltrans District 5
No. pages: 83
No. maps:
Attributes: Archaeological, Field study
Inventory size: 62 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	3/8/2018	Malachi Allen

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	3/8/2018	Malachi Allen	Fixed date.

Record status:

Report Detail: SR-04601

Identifiers

Report No.: SR-04601
Other IDs:
Cross-refs:

Citation information

Author(s): Joyce L. Gerber and Leeann Haslouer
Year: 2006 (Apr)
Title: Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California
Affliliation: Applied EarthWorks, Inc.
No. pages: 20
No. maps: 3
Attributes: Archaeological, Field study
Inventory size: 76
Disclosure: Unrestricted
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/9/2014	jay
Last modified:	8/3/2018	Matthew LoBia

IC actions:	*Date*	*User*	*Action taken*
	9/9/2014	jay	Appended placeholder record (not present in Filemaker bibliography database).
	8/3/2018	Matthew LoBian	GIS edited.

Record status:

Report Detail: SR-04602

Identifiers

Report No.: SR-04602
Other IDs:
Cross-refs:

Citation information

Author(s): Christeen Taniguchi, Ben Taniguchi, David Livingstone, Peggy Beedle, Sandra S. Flint, and Randy Baloian
Year: 2007 (Dec)
Title: Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California
Affliliation: Galvin Preservation Associates, Inc.
No. pages: 30
No. maps:
Attributes: Architectural/Historical, Field study
Inventory size: ~9000 square feet
Disclosure: Not for publication
Collections: No

General notes

size not listed for all buildings, estimated area

Associated resources

Primary No.	*Trinomial*	*Name*
P-42-040899		
P-42-040900		
P-42-040901		
P-42-040902		
P-42-040903		
P-42-040904		

No. resources: 6
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/9/2014	jay
Last modified:	2/18/2016	CCIC4

IC actions:	*Date*	*User*	*Action taken*
	9/9/2014	jay	Appended placeholder record (not present in Filemaker bibliography database).

Record status:

Report Detail: SR-04603

Identifiers

Report No.: SR-04603
Other IDs:
Cross-refs:

Citation information

Author(s): Wendy M. Nettles
Year: 2008 (Jan)
Title: Historic Property Survey Report, Union Valley Parkway
Affliliation: Applied EarthWorks, Inc.
No. pages: 6
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 56 acres
Disclosure: Not for publication
Collections: No

Sub-desig.: A
Author(s): Krista Kiaha
Year: 2007 (Nov)
Title: Archaeological Survey Report: Union Valley Parkway Project 05-SB-101-PM 83.1/83.9, EA 05-463800
Affiliation: Caltrans District 5
Report type(s): Archaeological, Field study
Inventory size:
No. pages: 5
Disclosure: Not for publication
Collections: No
PDF Pages: 7-11

Sub-desig.: B
Author(s): Gerber
Year: 2000
Title: Not attached to report, only listed as an attachment within it.
Affiliation:
Report type(s): Archaeological
Inventory size:
No. pages:
Disclosure:
Collections:
PDF Pages: -

Sub-desig.: C
Author(s): Gerber
Year: 2001
Title: Not attached to report, only listed as attached within it.
Affiliation:
Report type(s): Archaeological
Inventory size:
No. pages:
Disclosure:
Collections:
PDF Pages: -

Report Detail: SR-04603

Sub-desig.: D
Author(s): Joyce L. Gerber and Leeann Haslouer
Year: 2006 (Apr)
Title: Archaeological Survey Report for the Union Valley Parkway Extension in Santa Maria, Santa Barbara County, California
Affiliation: Applied EarthWorks, Inc.
Report type(s): Archaeological, Field study
Inventory size:
No. pages: 20
Disclosure: Not for publication
Collections: No
PDF Pages: 12-31

Sub-desig.: E
Author(s): Christeen Taniguchi, Ben Taniguchi, David Livingstone, Peggy Beedle, Sandra S. Flint, and Randy Baloian
Year: 2007 (Dec)
Title: Historical Resources Evaluation Report for the Union Valley Parkway Extension Project in Santa Maria, Santa Barbara County, California
Affiliation: Galvin Preservation Associates Inc.
Report type(s): Architectural/Historical, Field study
Inventory size:
No. pages: 30
Disclosure: Not for publication
Collections: No
PDF Pages: 32-61

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	User
Entered:	9/8/2014	jay
Last modified:	1/9/2017	Alicia_Gorman

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.
	1/9/2017	Alicia_Gorman	Added attachments and additional citations (some could not be filled out completely due to missing attachments).

Record status:

Report Detail: SR-04604

Identifiers

Report No.: SR-04604
Other IDs:
Cross-refs:

Citation information

Author(s): Robert R. Peterson, Jr.
Year: 2008 (Jun)
Title: Supplemental Historic Property Survey Report
Affliliation: Applied EarthWorks, Inc.
No. pages: 21
No. maps:
Attributes: Archaeological, Architectural/Historical, Field study
Inventory size: 12.5
Disclosure: Not for publication
Collections: No

Sub-desig.: A
Author(s): Robert R. Peterson
Year: 2008 (June)
Title: First Supplemental Archaeological Survey Report: UVP Gap, Union Valley Parkway Extension/Interchange, Santa Maria, Santa Barbara County, California
Affiliation: Aplied EarthWorks
Report type(s): Archaeological, Field study
Inventory size:
No. pages: 15
Disclosure: Not for publication
Collections: No
PDF Pages: 7-21

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*	
Entered:	9/9/2014	jay	
Last modified:	1/9/2017	Alicia_Gorman	
IC actions:	*Date*	*User*	*Action taken*
	9/9/2014	jay	Appended placeholder record (not present in Filemaker bibliography database).

Record status:

Report Detail: SR-04605

Identifiers

Report No.: SR-04605
Other IDs:
Cross-refs:

Citation information

Author(s): Robert R. Peterson, Jr.
Year: 2008
Title: Supplemental Historical Property Survey Report, Union Valley Pkwy/US101
Affliliation: Applied EarthWorks, Inc.
No. pages: 6
No. maps: 2
Attributes: Archaeological, Field study
Inventory size: 12.5
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/9/2014	jay
Last modified:	8/3/2018	Matthew LoBia

IC actions:	*Date*	*User*	*Action taken*
	9/9/2014	jay	Appended placeholder record (not present in Filemaker bibliography database).
	8/3/2018	Matthew LoBian	GIS edited.

Record status:

Report Detail: SR-04794

Identifiers

Report No.: SR-04794
Other IDs:
Cross-refs:

Citation information

Author(s): Post / Hazeltine Associates
Year: 2012 (Feb)
Title: Phase III Historic Resources Documentation Report for 4470 Orcutt Road APN 107-250-011, 107-250-012, 107-250-013
Affliliation: Post / Hazeltine Associates
No. pages: 256
No. maps:
Attributes: Architectural/Historical, Evaluation
Inventory size: 50 acres
Disclosure: Not for publication
Collections: No

General notes

Associated resources

No. resources: 0
Has informals: No

Location information

County(ies): Santa Barbara
USGS quad(s): Santa Maria
Address:
PLSS:

Database record metadata

	Date	*User*
Entered:	9/8/2014	jay
Last modified:	4/6/2016	CCIC4

IC actions:	*Date*	*User*	*Action taken*
	9/8/2014	jay	Appended record from Filemaker bibliography database.

Record status:

Appendix B

Sacred Lands File Search

NATIVE AMERICAN HERITAGE COMMISSION

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

August 2, 2021

Ryan Glenn
Rincon Consultants, Inc.

Via Email to: rglenn@rinconconsultants.com

Re: Brookside Avenue Fire Station Project, Santa Barbara County

Dear Mr. Glenn:

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

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

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

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

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Santa Barbara County
8/2/2021

Barbareno/ Ventureno Band of Mission Indians
Brenda Guzman,
58 N. Ann Street, #8 Chumash
Ventura, CA, 93001
Phone: (209) 601 - 4676
brendamguzman@gmail.com

Barbareno/Ventureno Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave Chumash
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com

Barbareno/ Ventureno Band of Mission Indians
Annette Ayala,
188 S. Santa Rosa Street Chumash
Ventura, CA, 93001
Phone: (805) 515 - 9844
annetteayala78@yahoo.com

Barbareno/ Ventureno Band of Mission Indians
Patrick Tumamait,
992 El Camino Corto Chumash
Ojai, CA, 93023
Phone: (805) 216 - 1253

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street Chumash
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net

Coastal Band of the Chumash Nation
Mariza Sullivan, Chairperson
P. O. Box 4464 Chumash
Santa Barbara, CA, 93140
Phone: (805) 665 - 0486
cbcntribalchair@gmail.com

Northern Chumash Tribal Council
Fred Collins, Spokesperson
P.O. Box 6533 Chumash
Los Osos, CA, 93412
Phone: (805) 801 - 0347
fcollins@northernchumash.org

San Luis Obispo County Chumash Council
Mark Vigil, Chief
1030 Ritchie Road Chumash
Grover Beach, CA, 93433
Phone: (805) 481 - 2461
Fax: (805) 474-4729

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517 Chumash
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org

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 Brookside Avenue Fire Station Project, Santa Barbara County.

Attachment D

Energy Calculation Sheets

Post-2020, Pre-2030 Projects

	2021	2030
Percent procurement	28.5	60
CO2 (lbs/MWh)	203.98	114.11
CH4 (lbs/MWh)	0.033	0.018
N2O (lbs/MWh)	0.004	0.002

Sources for Renewables Procurement Percentage

PG&E	2021	28.5%	https://www.energy.ca.gov/filebrowser/download/3245
SDG&E	2021	31.3%	https://www.energy.ca.gov/filebrowser/download/3257
SCE	2021	35.1%	https://www.energy.ca.gov/filebrowser/download/3265
Other Utilities			https://www.energy.ca.gov/programs-and-topics/programs

Post-2030, Pre-2045 Projects

	2021	2030	2040	2045
Percent procurement	35.1	60	86.67	100
CO2 (lbs/MWh)	391	114.11	38.04	0
CH4 (lbs/MWh)	0.033	0.018	0.006	0
N2O (lbs/MWh)	0.004	0.002	0.001	0

s/power-source-disclosure/power-content-label/annual-power-content-0

Attachment E

Phase I Environmental Site Assessment

Phase I Environmental Site Assessment

Brookside Avenue
Assessor's Parcel Number 107-321-013
Santa Maria, California

prepared for
County of Santa Barbara

prepared by
Rincon Consultants, Inc.

April 22, 2020

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Rincon Consultants, Inc.

1530 Monterey Street, Suite D
San Luis Obispo, California 93401

805 547 0900 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

April 22, 2020
Project 20-09360

Susan Freebourn, Real Property Agent II
County of Santa Barbara, General Services Department
1105 Santa Barbara Street, Second Floor
Santa Barbara, California 93101
Via email: sfreebourn@countyofsb.org

Subject: **Phase I Environmental Site Assessment**
Brookside Avenue
Assessor's Parcel Number (APN) 107-321-013
Santa Maria, California

Dear Ms. Freebourn:

This report presents the findings of a Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for the property located at the western terminus of Brookside Avenue, identified as Assessor's Parcel Number (APN) 107-321-013, in Santa Maria, California. The Phase I ESA was performed in accordance with our proposal and contract dated March 20, 2020.

The accompanying report presents our findings and provides an opinion regarding the presence of recognized environmental conditions in connection with the subject property. Our work program for this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to asbestos, lead-based paint, lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high-voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
Rincon Consultants, Inc.

Lauren Kodama Roenicke
Project Manager

Walt Hamann, PG, CEG, CHG
Principal

Table of Contents

Tables

Figures

Appendices

Executive Summary

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the property identified as Assessor's Parcel Number (APN) 107-321-013 in Santa Maria, California (Figure 1, Vicinity Map). The Phase I ESA was performed for the County of Santa Barbara (Client) by Rincon Consultants, Inc. (Rincon). Client has requested this assessment and will use the information for the purpose of purchasing the subject property. The subject property is currently vacant, undeveloped land.

The subject property is located in an area that is primarily composed of residential and vacant land uses. Properties in the vicinity of the subject property include vacant, undeveloped land and single-family residences.

Rincon performed a reconnaissance of the subject property on April 15, 2020. The purpose of the reconnaissance was to observe existing conditions and to obtain information indicating the presence of recognized environmental conditions (RECs) in connection with the subject property. Trash/debris were observed throughout the subject property. During the site reconnaissance, two metal pipes labeled, "Warning Gas Pipeline" were observed in the southwestern corner of the subject property. In addition, two gas pipeline markers were observed, one in the southwestern corner and one adjacent to the southeastern corner of the subject property. For the purposes of this Phase I ESA, we are interpreting that the "gas" pipeline markers observed are indicative of natural gas pipelines. Pipes that appear to be vent pipes were also observed.

A regulatory database search was conducted by LightBox for sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred. The search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property and adjacent properties were not listed in any of the databases searched by LightBox. One nearby release site within one-half mile of the subject property was identified; based on our review of the information provided, the release from this property is not expected to impact the subject property.

Historical sources reviewed as part of the Phase I ESA include aerial photographs and topographic maps. The photos and maps reviewed indicate that the subject property has remained vacant, undeveloped land since at least 1905.

Based on the findings of this Phase I ESA, it is our opinion that there are no RECs in connection with the subject property; however, there is one unknown environmental condition in connection with the subject property as follows.

Unknown Environmental Condition

1. Gas pipeline markers observed onsite and adjacent to the subject property

If Client wishes to further investigate the gas pipeline markers, Client may wish to conduct a soil vapor assessment at the subject property to determine whether the subject property has been impacted by the presence of the natural gas pipeline.

Introduction

This report presents the findings of a Phase I Environmental Site Assessment (ESA) conducted for the property identified as Assessor's Parcel Number (APN) 107-321-013 in Santa Maria, California (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. (Rincon) for the County of Santa Barbara (Client) in general conformance with American Society for Testing and Materials (ASTM) E1527-13, and our proposal and contract dated March 20, 2020. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions (RECs) on the subject property.

Purpose

Client has requested this assessment and will use the information for the purpose of purchasing the subject property. The purpose of this Phase I ESA was to determine if there are RECs on the subject property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A REC is defined pursuant to ASTM E1527-13 as,

> "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment".

A Controlled REC is defined pursuant to ASTM E1527-13 as,

> "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report".

A Historical REC is defined pursuant to ASTM E1527-13 as,

> "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in

> the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition".

A *de minimis* condition is defined pursuant to ASTM E1527-13 as,

> "a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions".

Scope of Services

The scope of services conducted during this study is outlined below:

- Performed a reconnaissance of the subject property to identify obvious indicators of the existence of hazardous materials.
- Observed adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtained and reviewed an environmental records database search to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Reviewed files for the subject property and immediately adjacent properties as identified in the database report, as applicable.
- Reviewed the current United States Geological Survey (USGS) topographic map to obtain information about the subject property and regional topography and uses of the subject property and surrounding sites.
- Reviewed additional pertinent record sources (e.g., California Geologic Energy Management Division [CalGEM] records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Reviewed the California State Water Resources Control Board (SWRCB) 2019 Statewide Per- and Polyfluoroalkyl Substances (PFAS) Investigation online Public Map Viewer regarding current PFAS orders at any facilities located in the vicinity of the subject property.
- Reviewed reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provided a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Provided a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Conducted interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Reviewed available client-provided information (e.g., previous environmental reports, title documentation).

Significant Assumptions, Limitations, Deviations, Exceptions, Special Terms, and Conditions

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce Client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E1527-13 practice, our scope of services did not include any inquiries with respect to asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high-voltage power lines.

User Reliance

Client has requested this assessment and will use the information for the purpose of purchasing or acquiring the subject property. This Phase I ESA was prepared for use solely and exclusively by the Santa Barbara County Fire Protection District. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

Site Description

Location

The subject property is a 4.6-acre parcel located at the western terminus of Brookside Avenue in Santa Maria, California (Figure 2, Site Map). The property is identified as APN 107-321-013.

Subject Property and Vicinity General Characteristics

The subject property is currently vacant, undeveloped land.

The subject property is located in an area that is primarily composed of residential and vacant land uses. Properties in the vicinity of the subject property include vacant, undeveloped land and single-family residences. The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

Table 1 Current Uses of Adjacent Properties

Area	Use
Northern Properties	Single-family residences
Eastern Properties	Brookside Avenue and single-family residences
Southern Properties	E Union Valley Parkway followed by vacant, undeveloped land and residential development
Western Properties	Vacant, undeveloped land

Descriptions of Structures, Roads, Other Improvements on the Subject Property

Access to the subject property is available from Brookside Avenue.

Although no utilities are currently located at the subject property, the following utility providers service the subject property area:

- Electrical & Natural Gas Service – Pacific Gas & Electric
- Water & Sewer Service – City of Santa Maria
- Solid Waste Service – City of Santa Maria

User-Provided Information

As described in ASTM E1527-13 Section 6, the County of Santa Barbara was interviewed for actual knowledge pertaining to the subject property to help identify RECs in connection with the subject property. Carlo Achdjian, Real Property Manager for the County of Santa Barbara, completed the User Questionnaire as provided by ASTM E1527-13 Appendix X3 prior to completion of the site reconnaissance on April 6, 2020. A copy of the completed questionnaire is included as Appendix A.

Based on our review of the completed questionnaire, Mr. Achdjian did not review the following sources of information and is unaware of information regarding the following:

- Recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the subject property
- Recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the subject property under federal, tribal, state or local law
- Title Report that identifies information pertaining to environmental cleanup liens or AULs for the subject property

Based on our review of the completed questionnaire, Mr. Achdjian is unaware of information regarding the following:

- Specialized knowledge or experience related to the subject property or nearby properties
- Reduction in value for the subject property relative to any known environmental issues
- Commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- Obvious indicators that point to the presence or likely presence of releases at the subject property
- Pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the subject property
- Pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property
- Notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products

Records Review

Physical Setting Sources

Topography

The current USGS topographic map (Santa Maria Quadrangle, 2018) indicates that the subject property is situated at an elevation of about 400 feet above mean sea level with topography sloping down to the west northwest.

Geology and Hydrogeology

According to the California Geological Survey (CGS), California Geomorphic Provinces, Note 36[1], the subject property is located within the Coast Ranges Geomorphic Province. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the San Andreas Fault. Strata dip beneath alluvium of the Great Valley. To the west is the Pacific Ocean. The coastline is uplifted, terraced and wave-cut. The Coast Ranges are composed of thick Mesozoic and Cenozoic sedimentary strata. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by irregular, knobby, landslide-topography of the Franciscan Complex. The eastern border is characterized by strike-ridges and valleys in Upper Mesozoic strata. In several areas, Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields. The Coast Ranges are subparallel to the active San Andreas Fault. The San Andreas is more than 600 miles long, extending from Pt. Arena to the Gulf of California. West of the San Andreas is the Salinian Block, a granitic core extending from the southern extremity of the Coast Ranges to the north of the Farallon Islands.

Site Geology

According to the current USGS Geologic Map (Santa Maria and Twitchell Dam Quadrangles, 1994) the subject property is underlain by Quaternary-aged older alluvium, specifically wind deposited sand.

Regional Groundwater Occurrence and Quality

The subject property is located within the Santa Maria groundwater basin.

During the preparation of this Phase I ESA, we reviewed the California SWRCB's online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property. According to *Case Closure Summary, Righetti High School, 941 E Foster Road, Santa Maria, California* prepared by the Santa Barbara County Fire Department and dated October 3, 2007, groundwater is estimated to be encountered at approximately 50 feet below ground surface. This groundwater flow direction is unknown. This property is located approximately 0.24-mile northeast of the subject property.

[1] https://www.conservation.ca.gov/cgs/Documents/CGS-Note-36.pdf

Standard Environmental Record Sources

LightBox was contracted to provide a database search of public lists of sites that generate, store, treat, or dispose of hazardous materials or sites for which a release or incident has occurred. The LightBox search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the LightBox report, which specifies the ASTM E1527-13 search distance for each public list, is included as Appendix B. As shown on the attached LightBox report, federal, state, and county lists were reviewed as part of the research effort. Please refer to Appendix B for a complete listing of sites reported by LightBox and a description of the databases reviewed.

The Map Findings Summary, included in the LightBox report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the LightBox report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

Offsite Properties

Offsite properties listed by LightBox fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., Leaking Underground Storage Tank [LUST], National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the LightBox Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property;
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes;
- Reported case type (e.g., soil only, failed underground storage tank [UST] test only);
- Reported substance released (e.g., chlorinated solvents, gasoline, metals);
- Reported regulatory agency status (e.g., case closed, “no further action”); and,
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM E1527-13, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

Table 2 LightBox Listing Summary of Select Sites Within One-Half Mile of the Subject Property

Site Name	LightBox Site ID	Site Address	Distance from Subject Property	Database Reference	Comments
Nearby Release Site					
Righetti High School	B7, B8	941 E Foster Road	Less than ½ Mile – Northeast	**LUST**	A release of gasoline impacted soil in January 2003, associated with the removal of a 1,000-gallon gasoline UST. Case closed in May 2003. Based on the distance from the subject property and the soil only nature of the release, this property is not expected to impact the subject property.

*__Bold__ listings indicate a release database

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

Orphan Listings

LightBox reported three orphan or unmapped site listings, which LightBox is unable to plot due to insufficient address information. Based on Rincon's review of the limited address information or site descriptions for the orphan listings, none of the listings are expected to impact the subject property.

Additional Environmental Record Sources

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for the subject property and facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, upgradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., SWRCB GeoTracker database, Department of Toxic Substances Control [DTSC] EnviroStor database, local fire department) and/or files requested from the applicable regulatory agency, as described below.

Subject Property

The subject property was not listed in any of the databases searched by LightBox.

Adjacent Properties

Adjacent properties were not listed in any of the databases searched by LightBox.

Nearby Release Site

One nearby release site within one-quarter mile of the subject property was identified by LightBox. Based on the distance from the subject property, the soil only nature of the release and the closed case status, the upgradient release site identified in the LightBox report is not expected to impact the subject property.

Review of State of California Geologic Energy Management Division (CalGEM) Records

A review of the State of California Geologic Energy Management Division (CalGEM) Online Mapping System[2] indicates that no oil wells are located on the subject property or adjacent properties. The following oil wells ae located within one-quarter mile of the subject property:

- API 0408321450 – Idle oil and gas well operated by HVI Cat Canyon, Inc. – located approximately 450 feet south southwest of the subject property
- API 0408321336 – Idle oil and gas well operated by HVI Cat Canyon, Inc. – located approximately 450 feet south southwest of the subject property

[2] https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx

- API 0408321509 – Idle oil and gas well operated by HVI Cat Canyon, Inc. – located approximately 450 feet south southwest of the subject property
- API 0408321472 – Idle oil and gas well operated by HVI Cat Canyon, Inc. – located approximately 1,000 feet west of the subject property
- API 0408321507 – Idle oil and gas well operated by Coastal Oil and Gas Corporation – located approximately 1,025 feet west of the subject property
- API 0408321506 – Cancelled oil and gas well operated by Coastal Oil and Gas Corporation – located approximately 1,038 feet west of the subject property
- API 0408321505 – Cancelled oil and gas well operated by Coastal Oil and Gas Corporation – located approximately 1,060 feet west of the subject property

Review of National Pipeline Mapping System Records

A review of the National Pipeline Mapping System (NPMS) online Public Map Viewer[3] indicates that no gas transmission pipelines or hazardous liquid pipelines are located on the subject property or adjacent properties.

However, during the site reconnaissance, four gas pipeline markers were observed along the southern boundary of the subject property. For the purposes of this Phase I ESA, we are interpreting the "gas" pipeline markers to be indicative of a natural gas pipeline.

Review of California Statewide PFAS Investigation

In 2019, the California SWRCB sent assessment requirements to property owners of sites that may be potential sources of PFAS. These sites currently include select landfills, airports, and chrome plating facilities. According to the SWRCB, "PFAS are a large group of human-made substances that do not occur naturally in the environment and are resistant to heat, water, and oil" (SWRCB 2019).

Our April 6, 2020 review of the California 2019 Statewide PFAS Investigation online Public Map Viewer[4] indicates that there are no current chrome plating, airport, or landfill PFAS orders at any facilities located within one-half mile of the subject property.

Our April 6, 2020 review of the California 2019 Statewide Drinking Water System Quarterly Testing Results online Public Map Viewer indicates that PFAS were not detected in the closest drinking water well to the subject property, located approximately 0.58-mile northwest of the subject property.

Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The LightBox report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E2600-15, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were

[3] https://www.npms.phmsa.dot.gov/PublicViewer/

[4] https://www.waterboards.ca.gov/pfas/

initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons (30 feet from the subject property) and other COCs (100 feet from the subject property). Per ASTM E2600-15, vapors associated with impacted soil or groundwater present within these distances have the potential to migrate beneath the subject property.

Petroleum Hydrocarbons

Based on our review of the LightBox report, no releases on the subject property or adjacent properties have the potential to have petroleum hydrocarbon-impacted soil vapor migrating beneath the subject property. Therefore, per ASTM E2600-15, as this distance exceeds the 30-foot distance considered the critical distance wherein such migration may pose a threat to the subject property, there are no potential threats to the subject property posed by the potential migration of other petroleum hydrocarbon vapors from listed sites.

Other COCs

Based on our review of the LightBox report, there are no known or suspect sites contaminated with other COCs within 1,760 feet of the subject property. Therefore, per ASTM E2600-15, as this distance exceeds the 100-foot distance considered the critical distance wherein such migration may pose a threat to the subject property, there are no potential threats to the subject property posed by the potential migration of other COC vapors from listed sites.

Historical Use Information on the Property and the Adjoining Properties

The historical records review completed for this Phase I ESA includes aerial photographs and topographic maps as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix C.

Review of Aerial Photographs

Aerial photographs from LightBox's aerial photograph collection were obtained. In addition, a current aerial from Google Earth was reviewed. The aerial photographs were reviewed on April 20, 2020.

Review of Historical Topographic Maps

Historical topographic maps from LightBox's map collection were obtained. The historical topographic maps were reviewed on April 20, 2020.

Review of City Directory Listings

City directories were not reviewed as part of this research effort.

Review of Fire Insurance Maps

Fire insurance maps were not reviewed as part of this research effort.

Review of City of Santa Maria Building Permit Records

Based on the sufficient amount of information obtained from the above sources and the fact that the subject property has never been developed with structures, building permit records were not reviewed.

Other Historical Sources

Based on the historical information obtained, no additional historical sources were reviewed.

Summary of Historical Uses

Subject Property

Based on our review of the documents listed above, it appears that the subject property was developed with the following:

- 1905: Vacant land
- 1938, 1943, 1948, and 1954: Vacant land on eastern portion, dense vegetation on western portion
- 1959: Vacant land
- 1967: Vacant land on eastern portion, trees/vegetation on western portion
- 1974: Vacant land
- 1975, 1975, and 1981: Vacant land on eastern portion, trees/vegetation on western portion; dirt trails visible
- 1982: Vacant land
- 1994, 2005, 2009, 2012, 2016, and 2018: Vacant land on eastern portion, trees/vegetation on western portion; few dirt trails visible

Northern Adjacent Properties (Residential)

Based on our review of the documents listed above, it appears that the northern adjacent properties were developed with the following:

- 1905: Vacant land
- 1938, 1943, 1948, and 1954: Vacant land on eastern portion, dense vegetation on western portion
- 1959: Vacant land
- 1967: Single-family residences

- 1974: Shaded, indicating an urban area
- 1975, 1978, and 1981: Single-family residences
- 1982: Shaded, indicating an urban area
- 1994, 2005, 2009, 2012, 2016, and 2018: Single-family residences

Eastern Adjacent Properties (Residential)

Based on our review of the documents listed above, it appears that the eastern adjacent properties were developed with the following:

- 1905, 1938, 1943, 1948, 1954, and 1959: Vacant land
- 1967: Single-family residences
- 1974: Shaded, indicating an urban area
- 1975, 1978, and 1981: Single-family residences
- 1982: Shaded, indicating an urban area
- 1994, 2005, 2009, 2012, 2016, and 2018: Single-family residences

Southern Adjacent Properties

Based on our review of the documents listed above, it appears that the southern adjacent properties were developed with the following:

- 1905, 1938, 1943, 1948, 1954, 1959, 1967, 1974, 1975, 1978, 1981, and 1982: Vacant land (dirt trails visible by 1975)
- 1994, 2005, 2009, 2012, 2016, and 2018: E Union Valley Parkway followed by vacant land and residential developments

Western Adjacent Properties (Vacant, undeveloped land)

Based on our review of the documents listed above, it appears that the western adjacent properties were developed with the following:

- 1905: Vacant land
- 1938 1943, and 1948: Vacant land with some vegetation
- 1954: Single rectangular structure
- 1959: Vacant land
- 1967: Vacant land with some vegetation, dirt trails visible
- 1974: Vacant land
- 1975, 1978, and 1981: Vacant land with some vegetation, dirt trails visible
- 1982: Vacant land with undeveloped road
- 1994, 2005, 2009, 2012, 2016, and 2018: Vacant land with some vegetation, dirt trails visible

Gaps in Historical Sources

Several gaps of greater than five years were identified in the historical records reviewed, from 1905 to 1938, from 1948 to 1954, from 1959 to 1967, from 1967 to 1974, from 1981 to 1994, and from 1994 to 2005. These gaps are considered insignificant because the subject property use appears to be similar prior to and following the gaps.

Interviews

Rincon performed interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical conditions and to obtain information indicating the presence of RECs in connection with the subject property.

Interview with Owner

An interview questionnaire was provided to the property owner prior to the site reconnaissance. J Edward McCoy, Trustee, completed the Owner Questionnaire on April 14, 2020. A copy of the completed questionnaire is included in Appendix A. The following information is based on our review of the completed questionnaire.

Mr. McCoy indicated that there are no storage tanks (above or below ground), sumps, clarifiers, solvent degreasers, stained soil, storage tanks, vent pipes, fill pipes, access ways, stained surfaces, private wells, non-public water systems, transformers, capacitors, or hydraulic equipment, records indicating the presence of polychlorinated biphenyls, or records indicating the presence of pesticides or herbicides at the subject property.

Mr. McCoy also indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products at the subject property.

Interview with Site Manager

A site manager was not identified to Rincon.

Interviews with Occupants

Because the subject property is currently vacant, undeveloped land, no occupants were interviewed as part of this research effort.

Interviews with Local Government Officials

Because the subject property was not listed on any of the regulatory databases reviewed, no local government officials were interviewed.

Interviews with Others

Rincon did not attempt to interview neighboring property owners or others as part of this Phase I ESA.

Site Reconnaissance

Rincon performed a reconnaissance of the subject property on April 15, 2020. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of RECs in connection with the subject property. Site photographs are included as Figures 4 and 5.

Methodology and Limiting Conditions

The site reconnaissance was conducted by:

1. Observing the subject property from public thoroughfares,
2. Observing the adjacent properties from public thoroughfares,
3. Observing the subject property from walking paths/sidewalks.

Because of the large size of the subject property, several east-west or north-south walking transects were completed across the subject property. Our observation of the subject property was limited by physical obstructions including dense brush.

Current Use of the Property and Adjacent Properties

The subject property is currently vacant, undeveloped land. Adjacent properties include single-family residences and vacant land.

Past Use of the Property and Adjacent Properties

Based on our site reconnaissance, past uses at the subject property and adjacent properties are not readily apparent.

Current or Past Uses in the Surrounding Areas

The subject property is surrounded by residential and vacant land uses as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic, hydrogeologic, hydrologic, and topographic information are as previously stated in the Physical Settings Section of this report.

General Description of Structures

No structures were observed on the subject property.

Roads

No roads are located on the subject property. The western terminus of Brookside Avenue is located adjacent to the east and E Union Valley Parkway is located adjacent to the south.

Potable Water Supply

The City of Santa Maria does not currently supply potable water to the subject property.

Sewage Disposal System

No sewage disposal system is located at the subject property.

Observations

Hazardous Substances and Petroleum Products in Connection with Identified Uses

No hazardous substances or petroleum products were identified at the subject property.

Storage Tanks

During the site reconnaissance, no above- or below-ground storage tanks or evidence of underground storage tanks were observed on the subject property.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Pools of Liquid

During the site reconnaissance, no pools of liquid were observed.

Drums

During the site reconnaissance, no drums were observed on the subject property.

Hazardous Substances and Petroleum Products Containers Not in Connection with Identified Uses

No hazardous substances or petroleum products not in connection with identified uses were observed at the subject property.

Unidentified Substance Containers

No unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance.

Indications of Polychlorinated Biphenyls (PCBs)

Rincon did not observe indications of PCBs on the subject property during the site reconnaissance.

Other Conditions of Concern

During the site reconnaissance, the following conditions of concern were noted:

Trash/Debris. During the site reconnaissance, miscellaneous trash and debris were observed throughout the subject area, including an area of concrete rubble located in the northeastern portion of the subject property. It is recommended that all trash and debris located on the subject property be removed.

Gas pipeline and markers. During the site reconnaissance, two metal pipes labeled, "Warning Gas Pipeline" were observed in the southwestern corner of the subject property. In addition, two gas pipeline markers were observed, one in the southwestern corner and one adjacent to the southeastern corner of the subject property. For the purpose of this Phase I ESA, we are interpreting the "gas" pipeline markers to be indicative of a natural gas pipeline. Pipes that appear to be vent pipes were also observed.

Culvert. A culvert was noted near the western terminus of Brookside Avenue.

Transient Camps. Transient camps were noted in the northeastern and southwestern corners of the subject property.

During the site reconnaissance, Rincon did not note any of the following:

- Clarifiers and sumps
- Degreasers/parts washers
- Pools of liquid
- Pits, ponds, and lagoons
- Stained soil or stained pavement
- Stressed vegetation
- Wastewater
- Wells
- Septic systems/effluent disposal system

Evaluation

Findings

Known or suspect RECs associated with the subject property include the following:

- Gas pipeline markers observed onsite and adjacent to the subject property

Opinions

A. **Gas pipeline markers observed onsite and adjacent to the subject property.** During the site reconnaissance, gas pipeline markers were observed along the southern boundary of the subject property, as well as adjacent to the southeastern corner of the subject property. For the purpose of the Phase I ESA, the "gas" pipeline markers are interpreted to be indicative of a natural gas pipeline. Therefore, the natural gas pipeline markers are considered an *unknown environmental condition.*

Conclusions

Rincon has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 for APN 107-321-013 in Santa Maria, California. Any exceptions to, or deletions from, this practice are described in the Deviations section of this report. This assessment has not revealed evidence of RECs associated with the subject property; however, the assessment has revealed evidence of one unknown environmental condition in connection with the subject property as follows:

Unknown Environmental Condition

1. Gas pipeline markers observed onsite and adjacent to the subject property

Recommendations

If Client wishes to further investigate the gas pipeline markers, Client may wish to conduct a soil vapor assessment at the subject property to determine whether the subject property has been impacted by the presence of the natural gas pipeline.

Deviations

Deviations from ASTM E1527-13 practice were not encountered during the completion of this Phase I ESA.

In addition, a lien search was not completed as part of this assessment; however, one was requested from the user.

References

The following reference materials were used in preparation of this Phase I ESA:

Aerial Photographs

Photos provided by LightBox on April 6, 2020.

Environmental Database

LightBox report dated April 6, 2020.

Geology

California Geologic Survey (CGS), *California Geomorphic Provinces Note 36*, December 2002. Accessed April 2020;

USGS Geologic Map (Santa Maria and Twitchell Dam Quadrangles, 1994).

Groundwater

California Natural Resources Agency, California Department of Water Resources, *California Groundwater Bulletin 118*, 2003, https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118. Accessed April 2020;

Case Closure Summary, Righetti High School, 941 E Foster Road, Santa Maria, California prepared by the Santa Barbara County Fire Department and dated October 3, 2007.

Historical Topographic Maps

Maps provided by LightBox on April 6, 2020.

Oil and Gas Records

State of California Department of Conservation Geologic Energy Management Division (CalGEM, formerly DOGGR) website: https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx. Accessed April 2020.

PFAS (Per- and Polyfluoroalkyl Substances)

California State Water Resources Control Board (SWRCB) online 2019 Statewide PFAS Investigation online Public Map Viewer: https://www.waterboards.ca.gov/pfas/. Accessed April 2020.

Pipelines

National Pipeline Mapping System (NPMS) Public Map Viewer: https://www.npms.phmsa.dot.gov/PublicViewer/. Accessed April 2020.

Topography

USGS topographic map (Santa Maria Quadrangle, 2018).

Signatures of Environmental Professionals

The qualified environmental professionals that are responsible for preparing the report include Walt Hamann, Lisa Bestard, and Lauren Kodama Roenicke. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Signature	Date
Walt Hamann, PG, CEG, CHG	Principal
Name	Title

Signature	Date
Lisa Bestard	Senior Environmental Scientist
Name	Title

Signature	Date
Lauren Kodama Roenicke	Project Manager
Name	Title

Qualifications of Environmental Consultants

The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Walt Hamann, Lisa Bestard, Lauren Kodama Roenicke, and Michelle Carter. Their qualifications are summarized below.

Environmental Professional Qualifications	**X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience**	**X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries**	**X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience**	**X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience**
Walt Hamann	PG, CHG, CEG		MS Geology	30 years
Lisa Bestard			BA Biology	18 years
Lauren Kodama Roenicke			BS Environmental Studies	7 years
Michelle Carter			BS Earth Science	2 years

Walt Hamann, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

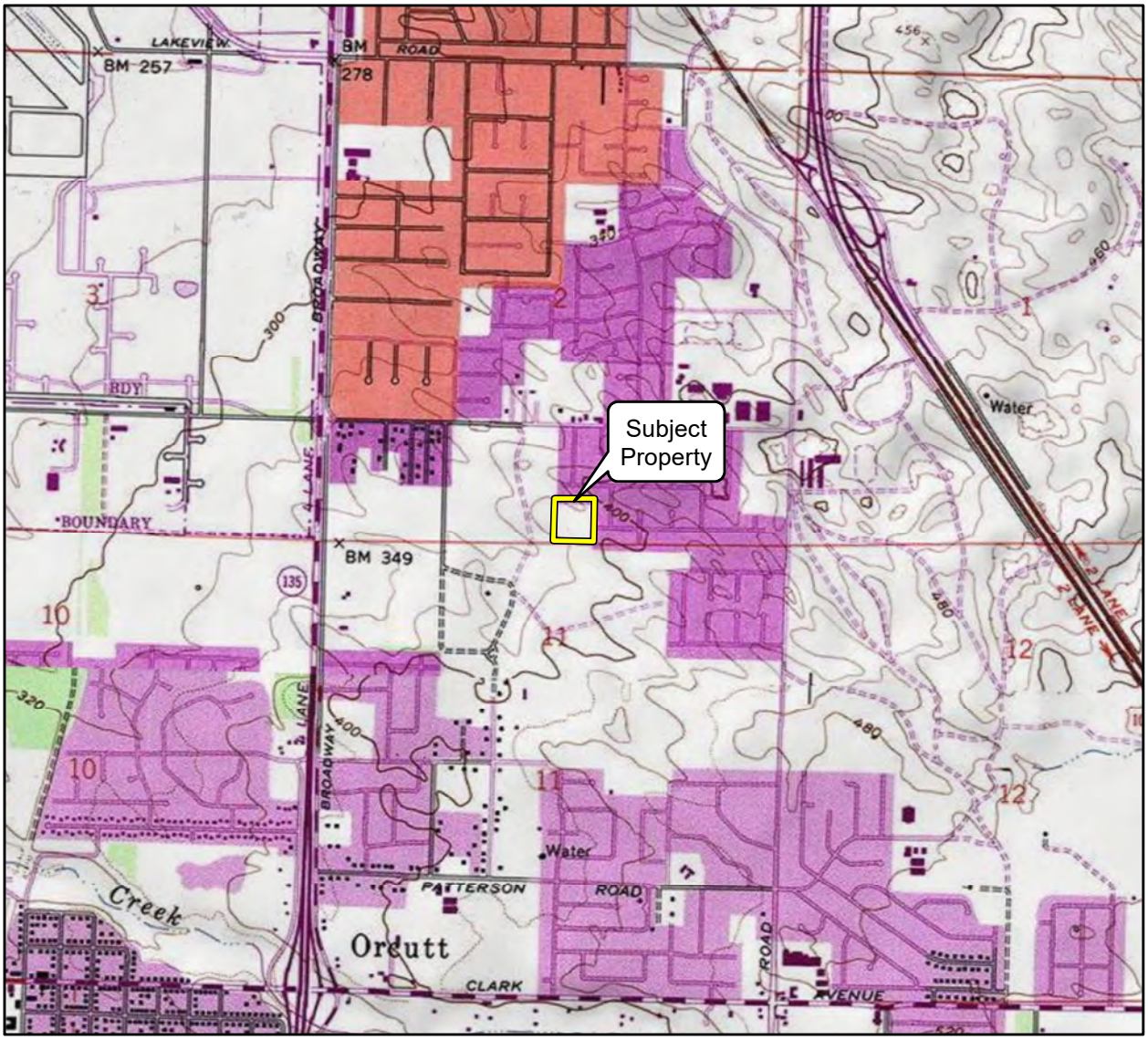
Lisa Bestard is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Arts degree in biology from University of San Diego, San Diego, California. Ms. Bestard has extensive experience performing Due Diligence Phase I and Phase II Environmental Site Assessments and various remediation projects and providing soil and waste management services. She has 18 years of experience conducting research, assessment, and remediation projects in California. Ms. Bestard's responsibilities at Rincon include implementation of site assessments and development of site remediation programs within the Environmental Site Assessment and Remediation Group.

Lauren G. Kodama Roenicke is a Project Manager with Rincon Consultants. She holds a Bachelor of Science degree in Environmental Studies with an outside concentration of Ecology, Evolution, and Marine Biology from the University of California, Santa Barbara. Ms. Roenicke has experience working on Phase I Environmental Site Assessments for a variety of commercial, rural, and industrial properties. In addition, Ms. Roenicke has been involved in working on large scale, multi-site projects for developers, banks, regulatory agencies, and other public and private Clients. Ms. Roenicke's

responsibilities at Rincon include implementation of Phase I and Phase II Environmental Site Assessment Reports, which involve soil, groundwater, and soil vapor assessments.

Michelle Carter is an Associate Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Earth Science with an emphasis in Geology from the University of California, Santa Barbara. Ms. Carter's responsibilities at Rincon include implementation of Phase I Environmental Site Assessment reports for a variety of commercial, rural, and industrial properties. She also has experience with Phase II Environmental Site Assessments, which involve soil, groundwater, and soil vapor assessments.

Figures



Imagery provided by National Geographic Society, Esri and its licensors © 2020. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

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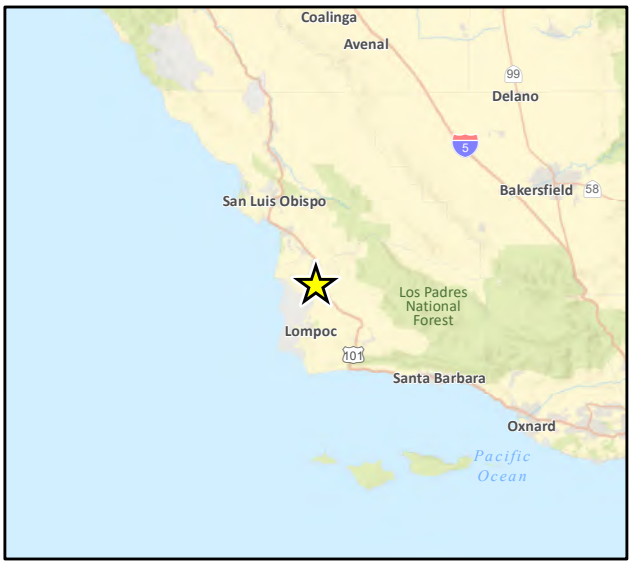

Vicinity Map

Figure 1

Imagery provided by Microsoft Bing and its licensors © 2020.

Site Map

Figure 2

Imagery provided by Microsoft Bing and its licensors © 2020.

Adjacent Land Use Map

Figure 3

Photograph 1. View of the subject property, facing west.

Photograph 2. View of a culvert that drains onto the subject property located along the eastern boundary, facing east.

Photograph 3. View of a water meter located along the eastern boundary of the subject property.

Photograph 4. View of concrete debris located in the northeastern corner of the subject property.

Photograph 5. View of a transient encampment located in the eucalyptus grove on the subject property, facing south.

Photograph 6. View of two vent pipes located in the southwestern corner of the subject property.

Photograph 7. View of a gas pipeline marker located along the southern boundary of the subject property, facing west.

Photograph 8. View of concrete debris located in the southwestern corner of the subject property, facing northeast.

Photograph 9. View of the southern adjacent Union Valley Parkway, facing south.

Photograph 10. View of the eastern adjacent Brookside Avenue and single-family residences, facing east.

Photograph 11. View of the northern adjacent single-family residences, facing northwest.

Photograph 12. View of the western adjacent vacant, undeveloped land, facing west.

Attachment F

Phase II Environmental Site Assessment

Rincon Consultants, Inc.

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Santa Barbara, California 93101

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July 22, 2021
Project No.: 20-09360

Susan Freebourn
County of Santa Barbara
General Services Department
1105 Santa Barbara Street, Second Floor
Santa Barbara, California 93101
Via email: sfreebourn@countyofsb.org

Subject: **Phase II Environmental Site Assessment**
Assessor's Parcel Number (APN) 107-321-013
Santa Maria, California

Dear Ms. Freebourn:

Rincon Consultants, Inc. (Rincon) is pleased to submit this letter report summarizing the results of a Phase II Environmental Site Assessment (ESA) conducted at the 4.6-acre parcel identified as APN 107-321-013 located at the western terminus of Brookside Avenue in Santa Maria, California (site – Figure 1). The Phase II ESA was conducted for the County of Santa Barbara and comprised a soil vapor assessment to evaluate the site for potential impacts from the adjacent gas pipeline markers identified in the draft Phase I ESA prepared for the site by Rincon, dated April 22, 2020.

Objectives and Scope of Work

The Phase II ESA was conducted to determine if soil vapor at the site has been impacted by the adjacent gas pipeline running east-west along Union Valley Parkway (Figure 2).

The Phase II ESA performed at the site included the following scope of work, consistent with Rincon's proposal dated August 25, 2020:

- Boring mark-outs and Underground Service Alert notification
- Preparation of a site-specific Health and Safety Plan
- Advancement of four borings to depths of up to five feet below ground surface (bgs)
- Collection of soil vapor samples from the four boring locations
- Analysis of soil vapor samples for volatile organic compounds (VOCs), total petroleum hydrocarbons as gasoline (TPHg), and methane
- Evaluation of laboratory analytical results and comparison of analyte concentrations to applicable environmental and human health screening levels

Soil Vapor Sampling and Laboratory Analytical Methods

On July 12, 2021, Rincon oversaw the advancement of four borings and the collection of four soil vapor samples at the site (SV-1 through SV-4) by Optimal Technology (Optimal) (Figure 2). The borings were advanced to a depth of five feet bgs along the southern site boundary. These locations were chosen based on their proximity to the adjacent gas pipeline.

Soil vapor sampling was performed in accordance with the California Department of Toxic Substances Control's July 2015 Advisory for Active Soil Gas Investigations[1]. The sampling methodology is described in detail in the attached report from Optimal dated June 13, 2021 (Attachment 1).

Soil vapor samples were analyzed onsite by Optimal's mobile analytical laboratory for VOCs and TPHg by United States Environmental Protection Agency (EPA) Modified Method 8260B, and methane by EPA Modified Method 8015.

Soil Vapor Analytical Results

Soil vapor analytical results were compared to San Francisco Bay Regional Water Quality Control Board (SFB RWQCB) Environmental Screening Levels (ESLs) (SFB RWQCB 2019)[2] for soil gas for both residential and commercial/industrial land use because the proposed site development is a fire station, and fire fighters typically spend several days in a row at the station. The laboratory analytical report for soil vapor samples is included as Attachment 1.

VOCs, TPHg, and methane were not detected above laboratory reporting limits in the soil vapor samples analyzed. In addition, Rincon confirmed that the laboratory reporting limits for each constituent are below the commercial/industrial ESLs, and are also below the more conservative (i.e., more protective) residential ESLs.

Conclusions and Recommendations

VOCs, TPHg, and methane were not detected above laboratory reporting limits in the soil vapor samples analyzed, and therefore the soil vapor results indicate that the site has not been impacted by the adjacent pipeline. No additional site assessment activities are recommended.

Limitations

This report has been prepared for and is intended for the exclusive use of the County of Santa Barbara. The contents of this report should not be relied upon by any other party without the written consent of Rincon. Our conclusions regarding the site are based on observations of existing site conditions and the results of the subsurface sampling program described in this report. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

[1] Department of Toxic Substances Control. 2015. *Advisory—Active Soil Gas Investigations*. July 2015.
[2] San Francisco Bay Regional Water Quality Control Board. 2019. Environmental Screening Levels (ESLs). July 2019.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the site. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Furthermore, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions, and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled.

We appreciate the opportunity to support you on this project. Please contact us with any questions or concerns.

Sincerely,
Rincon Consultants, Inc.

Lauren Kodama Roenicke
Project Manager, Due Diligence

Ryan Thacher, PhD, PE
Director, Site Assessment and Remediation

Lisa Bestard
Senior Environmental Scientist

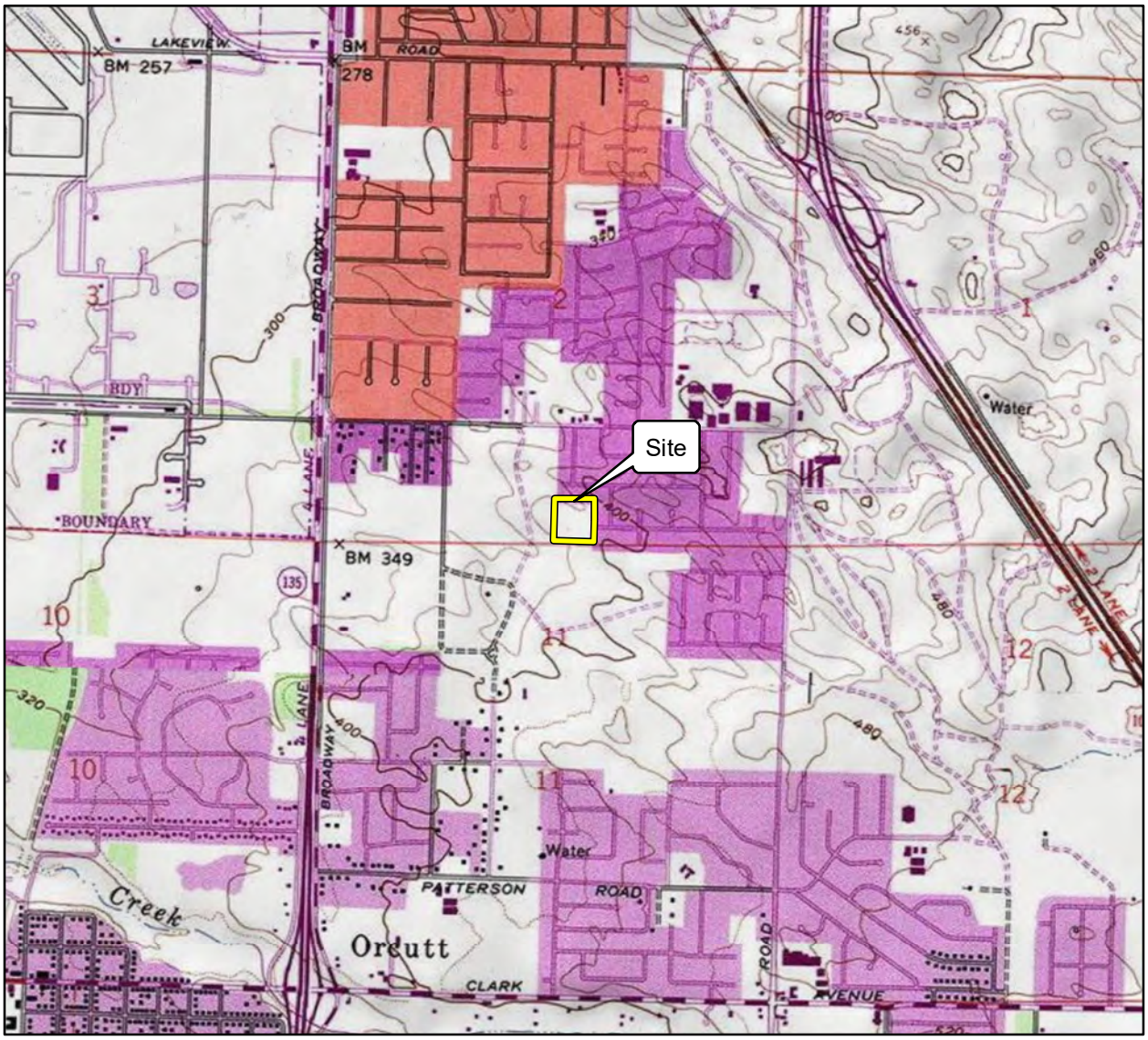
Figures

Figure 1 Vicinity
Figure 2 Boring Locations

Attachments

Attachment 1 Soil Vapor Sampling and Laboratory Analytical Report (Optimal 2021)

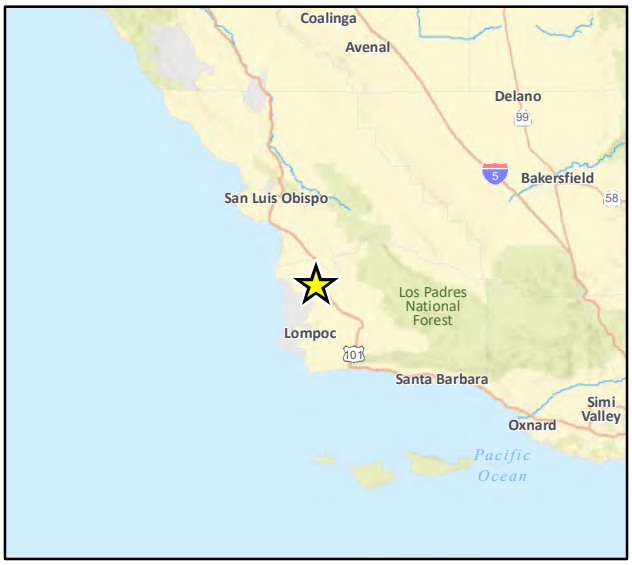
Figures



Imagery provided by National Geographic Society, Esri and its licensors © 2020. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

0 1,000 2,000
Scale in Feet

N



Vicinity

Figure 1

Imagery provided by Microsoft Bing and its licensors © 2021.

Boring Locations

Figure 2

Attachment 1

Soil Vapor Sampling and Laboratory Analytical Report (Optimal 2021)

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July 13, 2021

Lauren Kodama Roenicke
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, CA 93003

Dear Lauren:

This letter presents the results of the soil vapor investigation conducted by Optimal Technology (Optimal), for Rincon Consultants, Inc. on July 12, 2021. The study was performed at the West End of Brookside Ave., Orcutt, California.

Optimal was contracted to perform a soil vapor survey at this site to screen for possible chlorinated solvents and aromatic hydrocarbons. The primary objective of this soil vapor investigation was to determine if soil vapor contamination is present in the subsurface soil.

Gas Sampling Method

Gas sampling was performed by hydraulically pushing soil gas probes to a depth of 5.0 feet below ground surface (bgs). An electric rotary hammer drill was used to drill a 1.0-inch diameter hole through the overlying surface to allow probe placement when required. The same electric hammer drill was used to push probes in areas of resistance during placement.

At each sampling location, an electric vacuum pump set to draw 0.2 liters per minute (L/min) of soil vapor was attached to the probe and purged prior to sample collection. Vapor samples were obtained in gas-tight syringes by drawing the sample through a luer-lock connection which connects the sampling probe and the vacuum pump. Samples were immediately injected into the gas chromatograph/purge and trap after collection. New tubing was used at each sampling point to prevent cross contamination.

All analyses were performed on a laboratory grade Agilent model 6890N gas chromatograph equipped with an Agilent model 5973N Mass Spectra Detector, Flame Ionization Detector (FID) and Tekmar LSC 3100 Purge and Trap. A Restek column using helium/nitrogen as the carrier gas was used to perform all analysis. All results were collected on a personal computer utilizing Agilent's MS and chromatographic data collection and handling system.

Quality Assurance

5-Point Calibration
The initial five-point calibration consisted of 20, 50, 100, 200 and 500 ul injections of the calibration standard. A calibration factor on each analyte was generated using a best fit line method using the Agilent data system. If the r^2 factor generated from this line was not greater than 0.990, an additional five-point calibration would have been performed. Method reporting limits were calculated to be 1-1000 micrograms per cubic meter (ug/m^3) for the individual compounds and 5.0 parts per million by volume (ppmV) for Methane.

A daily calibration check was performed using a pre-mixed standard supplied by Scotty Analyzed Gases. The standard contained common halogenated solvents and aromatic hydrocarbons (see Table 1). The individual compound concentrations in the standards ranged between 0.025 nanograms per microliter (ng/ul) and 0.25 ng/ul.

TABLE 1

Dichlorodifluoromethane	Carbon Tetrachloride	Chloroethane
Trichlorofluoromethane	1,2-Dichloroethane	Benzene
1,1-Dichloroethene	Trichloroethene	Toluene
Methylene Chloride	1,1,2-Trichloroethane	Ethylbenzene
trans-1,2-Dichloroethene	Tetrachloroethene	m-/p-Xylene
1,1-Dichloroethane	Chloroform	o-Xylene
cis-1,2-Dichloroethene	1,1,1,2-Tetrachloroethane	Vinyl Chloride
1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	Freon 113
4-Methyl-2-Pentanone	Cyclohexane	Acetone
Chlorobenzene	2-Butanone	Isobutane
Methane		

Sample Replicates
A replicate analysis (duplicate) was run to evaluate the reproducibility of the sampling system and instrument. The difference between samples did not vary more than 20%.

Equipment Blanks
Blanks were run at the beginning of each workday and after calibrations. The blanks were collected using an ambient air sample. These blanks checked the septum, syringe, GC column, GC detector and the ambient air. Contamination was not found in any of the blanks analyzed during this investigation. Blank results are given along with the sample results.

Tracer Gas Leak Test
A tracer gas was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points include the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals. Isobutane was used as the tracer gas. No Isobutane was found in any of the samples collected.

Purge Volume
The standard purge volume of three volumes was purged in accordance with the July 2015 DTSC/RWQCB Advisory for Active Soil Gas Investigations.

Shut-in Test
A shut-in test was conducted prior to purging or sampling each location to check for leaks in the above-ground sampling system. The system was evaluated to a minimum measured vacuum of 100 inches of water. The vacuum gauge was calibrated and sensitive enough to indicate a water pressure change of at least 0.5 inches.

Scope of Work

To achieve the objective of this investigation a total of 10 vapor samples were collected from 4 locations at the site. Sampling depths, vacuum readings, purge volume and sampling volumes are given on the analytical results page. All the collected vapor samples were analyzed on-site using Optimal's mobile laboratory.

Subsurface Conditions

Subsurface soil conditions at this site offered sampling flows at 0" water vacuum.

Results

During this vapor investigation, none of the compounds listed in Table 1 above were detected above the listed reporting limits. A complete table of analytical results is included with this report.

Disclaimer

All conclusions presented in this letter are based solely on the information collected by the soil vapor survey conducted by Optimal Technology. Soil vapor testing is only a subsurface screening tool and does not represent actual contaminant concentrations in either the soil and/or groundwater. We enjoyed working with you on this project and look forward to future projects. If you have any questions, please contact me at (877) 764-5427.

Sincerely,

Attila Baly
Project Manager

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SOIL VAPOR RESULTS

Site Name: West End of Brookside Ave., Orcutt, CA
Analyst: A. Baly **Collector:** A. Baly
Method: Modified EPA 8260B

Lab Name: Optimal Technology
Inst. ID: Agilent 6890NF
Detector: Agilent 5973N Mass Spectrometer

Date: 7/12/21

SAMPLE ID	BLANK-1	SV-1	SV-2	SV-3	SV-4	SV-4 Dup		
Sampling Depth (Ft.)	N/A	5.0	5.0	5.0	5.0	5.0		
Purge Volume (ml)	N/A	1,500	1,500	1,500	1,500	1,500		
Vacuum (in. of Water)	N/A	0	0	0	0	0		
Injection Volume (ul)	100,000	100,000	100,000	100,000	100,000	100,000		
Dilution Factor	1	1	1	1	1	1		

COMPOUND	REP. LIMIT	CONC (ug/m^3)	CONC (ug/m^3)	CONC (ug/m^3)	CONC (ug/m^3)	CONC (ug/m^3)	CONC (ug/m^3)		
Dichlorodifluoromethane	1000	ND	ND	ND	ND	ND	ND		
Chloroethane	1000	ND	ND	ND	ND	ND	ND		
Trichlorofluoromethane	1000	ND	ND	ND	ND	ND	ND		
Freon 113	1000	ND	ND	ND	ND	ND	ND		
Methylene Chloride	30	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	50	ND	ND	ND	ND	ND	ND		
Chloroform	4	ND	ND	ND	ND	ND	ND		
1,1,1-Trichloroethane	1000	ND	ND	ND	ND	ND	ND		
Carbon Tetrachloride	2	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane	3	ND	ND	ND	ND	ND	ND		
Trichloroethene (TCE)	10	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND		
Tetrachloroethene (PCE)	10	ND	ND	ND	ND	ND	ND		
1,1,1,2-Tetrachloroethane	10	ND	ND	ND	ND	ND	ND		
1,1,2,2-Tetrachloroethane	1	ND	ND	ND	ND	ND	ND		
Vinyl Chloride	1	ND	ND	ND	ND	ND	ND		
Acetone	1000	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethene	1000	ND	ND	ND	ND	ND	ND		
trans-1,2-Dichloroethene	1000	ND	ND	ND	ND	ND	ND		
2-Butanone (MEK)	1000	ND	ND	ND	ND	ND	ND		
cis-1,2-Dichloroethene	200	ND	ND	ND	ND	ND	ND		
Cyclohexane	1000	ND	ND	ND	ND	ND	ND		
Benzene	3	ND	ND	ND	ND	ND	ND		
4-Methyl-2-Pentanone	1000	ND	ND	ND	ND	ND	ND		
Toluene	1000	ND	ND	ND	ND	ND	ND		
Chlorobenzene	1000	ND	ND	ND	ND	ND	ND		
Ethylbenzene	30	ND	ND	ND	ND	ND	ND		
m/p-Xylene	1000	ND	ND	ND	ND	ND	ND		
o-Xylene	1000	ND	ND	ND	ND	ND	ND		
TPH-g	5000	ND	ND	ND	ND	ND	ND		
Isobutane (Tracer Gas)	1000	ND	ND	ND	ND	ND	ND		

Note: ND = Below Listed Reporting Limit

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SOIL VAPOR RESULTS

Site Name: West End of Brookside Ave., Orcutt, CA
Lab Name: Optimal Technology
Date: 7/12/21
Analyst: A. Baly **Collector:** A. Baly
Inst. ID: Agilent 6890NF
Method: Modified EPA 8015
Detector: FID
Page: 2 of 2

SAMPLE ID	BLANK-1	SV-1	SV-2	SV-3	SV-4	SV-4 Dup		
Sampling Depth (Ft.)	N/A	5.0	5.0	5.0	5.0	5.0		
Purge Volume (ml)	N/A	1,500	1,500	1,500	1,500	1,500		
Vacuum (in. of Water)	N/A	0	0	0	0	0		
Injection Volume (ul)	5,000	5,000	5,000	5,000	5,000	5,000		
Dilution Factor	1	1	1	1	1	1		

COMPOUND	REP. LIMIT	CONC (ppmV)	CONC (ppmV)	CONC (ppmV)	CONC (ppmV)	CONC (ppmV)	CONC (ppmV)		
Methane	5.0	ND	ND	ND	ND	ND	ND		
Isobutane (Tracer Gas)	1.0	ND	ND	ND	ND	ND	ND		

Note: ND = Below Listed Reporting Limit

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CHAIN OF CUSTODY FORM

Site Name/Number Site Address **West End of Brookside Ave., Orcutt, CA** Company Name		PO# / Project Ref#
Contact Person(s):	Phone#	Email:
Comments:		

				TESTS REQUIRED (please mark with an "X")			
Sample Identification	Sampling Device	Date Collected	Time Collected	**Soil Gas Mod 8260B**	**Soil Gas Mod 8021B**	**Soil Gas Mod 8015**	**Notes**
BLANK-1	Syringe	7/12/21	8:06 AM	x		x	
SV-1	Syringe	7/12/21	8:37 AM	x		x	
SV-2	Syringe	7/12/21	9:06 AM	x		x	
SV-3	Syringe	7/12/21	9:32 AM	x		x	
SV-4	Syringe	7/12/21	9:58 AM	x		x	
SV-4 Dup	Syringe	7/12/21	9:58 AM	x		x	

Collected & Tested by:

Attila Bo

Attachment G

Noise Calculations

NM1

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 63.5 - 2021/08/05 12:11:02
- Level Range : 40-100
- SEL : 78.5
- Leq : 49.0
-

No.s	Date Time	(dB)				
1	2021/08/05 12:09:11	50.7	50.8	51.6	49.4	47.7
6	2021/08/05 12:09:26	46.8	46.5	45.7	46.3	46.9
11	2021/08/05 12:09:41	46.9	46.4	46.6	46.9	47.5
16	2021/08/05 12:09:56	47.2	47.4	46.7	45.8	45.5
21	2021/08/05 12:10:11	45.1	45.5	45.3	45.5	45.8
26	2021/08/05 12:10:26	46.3	47.0	47.7	48.2	48.1
31	2021/08/05 12:10:41	48.3	48.8	49.1	54.8	60.4
36	2021/08/05 12:10:56	58.8	62.3	63.2	60.6	59.6
41	2021/08/05 12:11:11	55.0	52.5	49.1	48.7	46.7
46	2021/08/05 12:11:26	46.5	46.3	46.5	46.3	46.4
51	2021/08/05 12:11:41	46.4	46.1	45.4	45.5	45.7
56	2021/08/05 12:11:56	45.5	45.7	46.2	47.0	47.3
61	2021/08/05 12:12:11	46.7	46.6	46.3	46.1	46.4
66	2021/08/05 12:12:26	47.0	47.9	47.7	48.4	49.5
71	2021/08/05 12:12:41	50.0	50.6	50.4	49.5	47.9
76	2021/08/05 12:12:56	46.1	44.9	44.8	45.1	45.4
81	2021/08/05 12:13:11	45.6	45.8	46.9	46.6	46.0
86	2021/08/05 12:13:26	45.5	44.5	44.1	45.1	46.7
91	2021/08/05 12:13:41	47.1	47.6	47.3	47.7	47.5
96	2021/08/05 12:13:56	48.0	48.2	50.7	49.4	48.3
101	2021/08/05 12:14:11	46.7	46.9	45.9	45.5	45.1
106	2021/08/05 12:14:26	46.3	45.7	44.9	45.8	46.9
111	2021/08/05 12:14:41	47.2	51.1	49.0	47.0	47.7
116	2021/08/05 12:14:56	46.5	44.7	44.5	44.7	45.3
121	2021/08/05 12:15:11	45.8	46.8	46.0	45.9	46.9
126	2021/08/05 12:15:26	45.9	45.5	46.2	46.8	49.2
131	2021/08/05 12:15:41	48.3	50.0	52.4	51.2	50.3
136	2021/08/05 12:15:56	47.8	47.3	46.4	45.7	45.4
141	2021/08/05 12:16:11	46.6	47.7	46.5	45.7	46.4
146	2021/08/05 12:16:26	46.2	46.7	46.4	46.3	47.3
151	2021/08/05 12:16:41	46.9	47.0	47.7	48.5	48.4
156	2021/08/05 12:16:56	47.7	47.8	48.3	47.8	48.0
161	2021/08/05 12:17:11	47.6	46.9	46.4	45.5	46.6
166	2021/08/05 12:17:26	47.3	47.4	46.5	48.3	47.9
171	2021/08/05 12:17:41	47.0	47.7	48.3	48.0	48.6
176	2021/08/05 12:17:56	50.2	50.2	47.4	47.5	47.9
181	2021/08/05 12:18:11	48.0	47.7	47.2	47.5	48.3
186	2021/08/05 12:18:26	48.9	48.4	48.6	47.3	47.2
191	2021/08/05 12:18:41	46.6	44.9	45.1	45.2	47.4
196	2021/08/05 12:18:56	47.0	48.2	47.5	46.9	46.8
201	2021/08/05 12:19:11	47.3	47.6	47.7	48.4	49.0
206	2021/08/05 12:19:26	51.5	53.7	51.6	48.6	48.3
211	2021/08/05 12:19:41	48.6	47.3	46.7	46.2	46.1
216	2021/08/05 12:19:56	46.8	47.4	47.6	47.5	46.8
221	2021/08/05 12:20:11	46.3	46.1	45.9	46.6	46.4
226	2021/08/05 12:20:26	46.5	46.6	46.6	45.8	45.1
231	2021/08/05 12:20:41	44.8	45.2	45.2	45.1	45.0
236	2021/08/05 12:20:56	44.4	44.6	46.3	46.8	47.7
241	2021/08/05 12:21:11	48.2	47.9	48.0	47.7	47.9
246	2021/08/05 12:21:26	47.5	48.1	47.1	46.9	47.1
251	2021/08/05 12:21:41	46.0	46.5	46.4	47.4	47.0
256	2021/08/05 12:21:56	47.7	48.1	47.6	47.5	47.7
261	2021/08/05 12:22:11	47.1	47.1	46.6	46.7	46.2
266	2021/08/05 12:22:26	45.8	45.6	45.4	45.5	44.8
271	2021/08/05 12:22:41	44.7	44.8	45.2	44.6	45.3
276	2021/08/05 12:22:56	45.7	45.8	46.5	47.1	47.4
281	2021/08/05 12:23:11	46.9	46.9	46.8	46.1	46.0
286	2021/08/05 12:23:26	47.1	47.0	47.2	47.9	49.0
291	2021/08/05 12:23:41	49.3	49.0	47.8	48.0	48.5
296	2021/08/05 12:23:56	48.4	47.4	47.9	48.3	49.4

NM2

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 77.9 - 2021/08/05 12:34:03
- Level Range : 40-100
- SEL : 96.5
- Leq : 67.0
-

No.s	Date Time	(dB)				
1	2021/08/05 12:30:08	57.5	73.6	66.9	63.0	65.0
6	2021/08/05 12:30:23	58.8	62.7	67.6	71.7	65.4
11	2021/08/05 12:30:38	65.7	76.7	72.5	66.9	62.9
16	2021/08/05 12:30:53	62.6	64.7	60.1	68.0	60.6
21	2021/08/05 12:31:08	54.9	65.1	65.0	58.6	66.5
26	2021/08/05 12:31:23	57.9	65.5	67.8	72.5	70.1
31	2021/08/05 12:31:38	61.8	56.9	59.3	73.1	74.8
36	2021/08/05 12:31:53	69.3	66.0	62.0	66.3	67.9
41	2021/08/05 12:32:08	69.2	70.0	69.6	61.5	59.6
46	2021/08/05 12:32:23	65.7	58.7	53.1	51.2	58.5
51	2021/08/05 12:32:38	63.7	70.2	71.6	70.3	68.8
56	2021/08/05 12:32:53	65.7	63.9	61.4	65.0	66.5
61	2021/08/05 12:33:08	64.6	67.1	61.6	52.9	48.5
66	2021/08/05 12:33:23	48.9	49.8	51.2	52.3	54.1
71	2021/08/05 12:33:38	56.4	62.8	72.8	70.5	67.6
76	2021/08/05 12:33:53	66.2	67.1	76.5	74.0	69.7
81	2021/08/05 12:34:08	72.1	71.6	69.0	64.4	69.7
86	2021/08/05 12:34:23	67.9	70.8	71.7	69.0	66.3
91	2021/08/05 12:34:38	57.8	56.6	63.1	64.7	62.1
96	2021/08/05 12:34:53	54.1	55.2	50.9	53.2	54.8
101	2021/08/05 12:35:08	67.4	61.1	62.5	62.0	64.5
106	2021/08/05 12:35:23	68.1	70.8	62.8	64.0	56.4
111	2021/08/05 12:35:38	63.6	62.5	56.4	53.1	63.2
116	2021/08/05 12:35:53	65.2	65.7	63.7	66.5	65.6
121	2021/08/05 12:36:08	65.0	57.1	51.4	49.6	51.1
126	2021/08/05 12:36:23	67.5	61.6	61.8	65.5	55.6
131	2021/08/05 12:36:38	52.0	61.4	63.9	66.6	66.0
136	2021/08/05 12:36:53	69.9	71.5	74.0	68.6	66.4
141	2021/08/05 12:37:08	69.4	61.1	57.2	58.6	66.2
146	2021/08/05 12:37:23	70.5	71.1	66.0	59.4	64.0
151	2021/08/05 12:37:38	62.6	56.9	56.2	54.6	57.7
156	2021/08/05 12:37:53	66.9	69.2	65.9	66.8	67.7
161	2021/08/05 12:38:08	70.4	70.3	67.3	67.7	63.0
166	2021/08/05 12:38:23	58.1	63.3	58.8	72.4	66.1
171	2021/08/05 12:38:38	60.9	57.8	56.5	56.3	64.4
176	2021/08/05 12:38:53	67.6	69.6	69.4	63.8	61.9
181	2021/08/05 12:39:08	69.0	69.0	68.7	68.6	59.6
186	2021/08/05 12:39:23	52.7	48.7	60.5	57.9	53.7
191	2021/08/05 12:39:38	66.5	68.8	63.2	75.6	71.1
196	2021/08/05 12:39:53	71.1	69.4	66.3	64.6	59.3
201	2021/08/05 12:40:08	55.1	57.4	58.6	69.2	67.8
206	2021/08/05 12:40:23	62.7	67.6	67.6	68.5	60.8
211	2021/08/05 12:40:38	60.1	63.3	77.3	73.7	66.0
216	2021/08/05 12:40:53	67.5	69.8	69.6	66.2	65.2
221	2021/08/05 12:41:08	70.4	69.5	66.0	64.6	66.8
226	2021/08/05 12:41:23	60.6	55.5	63.8	62.1	63.2
231	2021/08/05 12:41:38	55.2	52.7	55.3	50.9	51.0
236	2021/08/05 12:41:53	51.6	53.3	64.1	62.0	61.9
241	2021/08/05 12:42:08	69.7	70.1	73.4	69.3	75.6
246	2021/08/05 12:42:23	72.5	69.9	70.8	72.2	67.5
251	2021/08/05 12:42:38	68.3	66.6	59.3	58.3	65.8
256	2021/08/05 12:42:53	69.1	59.6	53.0	49.4	47.3
261	2021/08/05 12:43:08	48.4	49.1	64.3	59.3	52.0
266	2021/08/05 12:43:23	50.5	49.3	51.5	57.6	52.5
271	2021/08/05 12:43:38	52.1	53.9	53.1	54.2	56.0
276	2021/08/05 12:43:53	66.3	70.4	69.1	64.2	64.6
281	2021/08/05 12:44:08	65.4	67.2	65.9	67.2	59.6
286	2021/08/05 12:44:23	54.5	54.8	57.2	56.1	55.2
291	2021/08/05 12:44:38	55.9	54.4	67.2	69.4	66.8
296	2021/08/05 12:44:53	66.1	65.0	66.4	65.0	57.4

NM3 - Long-term 24hr

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 76.1 - 2021/08/05 15:30:10
- Level Range : 40-100
- SEL : 119.3
- Leq : 70.0
-

No.s	Date Time	(dB)				
1	2021/08/05 12:59:49	49.0	50.6	50.9	45.4	47.2
6	2021/08/05 13:19:49	43.6	45.9	45.6	51.2	44.4
11	2021/08/05 13:39:49	50.3	50.0	46.8	45.3	47.0
16	2021/08/05 13:59:49	51.1	48.0	49.6	48.1	48.3
21	2021/08/05 14:19:49	50.9	49.6	49.3	49.2	51.2
26	2021/08/05 14:39:49	48.7	49.2	51.2	51.6	51.7
31	2021/08/05 14:59:49	48.7	49.7	49.1	50.2	49.7
36	2021/08/05 15:19:49	50.7	50.6	51.3	50.0	51.8
41	2021/08/05 15:39:49	49.7	50.4	49.5	49.1	49.2
46	2021/08/05 15:59:49	50.1	49.7	49.3	51.0	51.1
51	2021/08/05 16:19:49	51.4	50.6	48.3	52.2	50.6
56	2021/08/05 16:39:49	50.1	50.2	48.8	52.5	53.1
61	2021/08/05 16:59:49	49.0	49.0	49.3	47.9	61.9
66	2021/08/05 17:19:49	47.3	50.3	51.5	50.1	50.5
71	2021/08/05 17:39:49	52.8	49.0	50.1	49.6	47.1
76	2021/08/05 17:59:49	50.9	49.3	46.5	47.8	47.6
81	2021/08/05 18:19:49	49.7	46.5	46.8	47.7	46.1
86	2021/08/05 18:39:49	46.7	46.6	49.4	43.8	47.4
91	2021/08/05 18:59:49	46.6	44.3	49.6	51.1	45.6
96	2021/08/05 19:19:49	46.6	45.9	45.9	42.0	46.8
101	2021/08/05 19:39:49	43.3	51.2	45.3	43.8	46.6
106	2021/08/05 19:59:49	45.8	44.3	45.8	45.6	42.1
111	2021/08/05 20:19:49	43.1	41.6	41.9	41.9	42.7
116	2021/08/05 20:39:49	48.6	50.7	47.7	41.3	42.1
121	2021/08/05 20:59:49	44.8	49.5	45.1	47.5	45.9
126	2021/08/05 21:19:49	42.3	41.0	42.0	42.7	44.0
131	2021/08/05 21:39:49	45.1	46.4	39.4	42.3	42.9
136	2021/08/05 21:59:49	43.7	50.9	42.3	39.1	41.5
141	2021/08/05 22:19:49	45.6	41.8	38.6	37.2	40.5
146	2021/08/05 22:39:49	39.0	42.7	35.4	38.5	37.7
151	2021/08/05 22:59:49	39.5	36.2	41.0	35.5	37.4
156	2021/08/05 23:19:49	33.5	39.4	38.7	36.5	40.9
161	2021/08/05 23:39:49	36.5	42.1	33.9	31.6	37.2
166	2021/08/05 23:59:49	39.6	32.7	33.6	33.0	36.2
171	2021/08/06 00:19:49	35.1	31.9	32.1	43.5	41.7
176	2021/08/06 00:39:49	31.4	31.1	36.9	30.7	34.6
181	2021/08/06 00:59:49	32.1	35.3	31.3	30.8	30.5
186	2021/08/06 01:19:49	30.7	34.0	30.1	31.3	33.1
191	2021/08/06 01:39:49	31.2	31.9	31.1	30.1	31.6
196	2021/08/06 01:59:49	31.3	30.2	30.7	34.0	32.1
201	2021/08/06 02:19:49	34.2	39.4	38.1	46.7	31.1
206	2021/08/06 02:39:49	30.4	30.6	30.8	30.7	30.0
211	2021/08/06 02:59:49	30.4	31.1	32.3	31.2	37.5
216	2021/08/06 03:19:49	30.9	31.1	31.4	32.0	32.0
221	2021/08/06 03:39:49	40.7	39.3	35.0	31.0	32.7
226	2021/08/06 03:59:49	37.1	33.3	34.1	34.5	33.2
231	2021/08/06 04:19:49	31.6	32.5	34.6	40.0	36.7
236	2021/08/06 04:39:49	37.5	40.1	39.0	43.7	42.3
241	2021/08/06 04:59:49	41.3	36.1	35.5	41.1	40.5
246	2021/08/06 05:19:49	40.1	45.1	40.5	46.4	41.6
251	2021/08/06 05:39:49	40.1	43.1	43.2	40.9	45.8
256	2021/08/06 05:59:49	52.5	45.8	39.1	42.6	48.6
261	2021/08/06 06:19:49	43.6	49.1	47.2	48.3	45.7
266	2021/08/06 06:39:49	44.7	45.3	46.5	47.1	48.6
271	2021/08/06 06:59:49	49.2	47.8	42.2	46.5	50.0
276	2021/08/06 07:19:49	49.3	42.5	47.5	44.8	46.6
281	2021/08/06 07:39:49	45.9	47.8	49.2	49.2	48.3
286	2021/08/06 07:59:49	46.6	51.0	46.5	48.6	45.6
291	2021/08/06 08:19:49	45.0	44.4	44.1	43.8	46.3
296	2021/08/06 08:39:49	49.0	46.5	44.8	46.3	44.0
301	2021/08/06 08:59:49	44.1	45.6	44.8	42.4	42.8
306	2021/08/06 09:19:49	47.0	42.7	47.8	50.8	44.1
311	2021/08/06 09:39:49	44.7	42.6	46.0	48.4	43.8
316	2021/08/06 09:59:49	40.2	42.2	45.1	43.1	39.8
321	2021/08/06 10:19:49	47.7	48.4	45.5	48.8	46.1
326	2021/08/06 10:39:49	46.9	46.4	42.5	47.6	44.6
331	2021/08/06 10:59:49	45.1	46.0	41.6	46.6	44.3
336	2021/08/06 11:19:49	44.4	44.3	47.5	45.0	45.2
341	2021/08/06 11:39:49	45.5	43.9	42.2	47.1	49.2
346	2021/08/06 11:59:49	49.4	50.9	43.7	45.4	46.2
351	2021/08/06 12:19:49	45.7	46.5	49.2	47.0	49.4
356	2021/08/06 12:39:49	45.1	47.8	45.3	46.2	46.3