

APPENDIX C

California Emissions Estimator (CalEEMod) Model Results

Average Annual Daily Criteria Pollutant Emissions

Hunter Subdivision Project

Unmitigated Construction

Year	ROG	Nox	tons PM10 exh	PM2.5 exh	Unmitigated Construction Year	ROG	Nox	average lbs/day PM10 exh	PM2.5 exh
2023	0.2271	1.577	0.0722	0.0675	Total	3.1	12.7	0.5	0.5
2024	0.1352	0.00929	0.00046	0.00046					
	0.2544	1.0927	0.0469	0.0441					
2025	0.1602	1.3947	0.0552	0.052					
2026	0.3227	0.1578	0.00631	0.00596					
	0.2447	1.015	0.0403	0.0379					
2027	0.244	1.0137	0.0403	0.0379					
2028	0.2074	0.9791	0.036	0.0344					
Total	1.7957	7.23929	0.29767	0.28022					

Construction Duration:

1142 days

Total Duration

Phase 1		
Site Preparation	3/20/2023	3/31/2023
Grading	4/1/2023	4/28/2023
Paving	4/29/2023	5/26/2023
Building Construction	5/27/2023	12/22/2023
Architectural Coating	12/23/2023	1/19/2024
Phase 2		
Building Construction	3/18/2024	10/11/2024
Architectural Coating	10/12/2024	11/8/2024
Phase 3		
Building Construction	3/17/2025	1/30/2026
Architectural Coating	1/31/2026	2/25/2026
Phase 4		
Building Construction	3/23/2026	10/16/2026
Architectural Coating	10/17/2026	11/11/2026

10 days

20 days

20 days

150 days

20 days

150 days

20 days

230 days

18 days

150 days

18 days

Phase 5		
Building Construction	3/22/2027	10/15/2027
Architectural Coating	10/16/2027	11/10/2027
Phase 6		
Building Construction	3/20/2028	10/13/2028
Architectural Coating	10/14/2028	11/8/2028

150 days

18 days

150 days

18 days

1142 days

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:32 AM

Hunter Subdivision Project - First Year
Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Hunter Subdivision Project - First Year - Napa County, Annual

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

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					
2023	0.2271	1.5770	1.7270	3.2700e-003	0.1977	0.0722	0.2698	0.0946	0.0675	0.1621	0.0000	286.2994	286.2994	0.0633	0.0000	287.8816
2024	0.1352	9.2900e-003	0.0152	3.0000e-005	6.5000e-004	4.6000e-004	1.1100e-003	1.7000e-004	4.6000e-004	6.3000e-004	0.0000	2.3984	2.3984	1.2000e-004	0.0000	2.4014
Maximum	0.2271	1.5770	1.7270	3.2700e-003	0.1977	0.0722	0.2698	0.0946	0.0675	0.1621	0.0000	286.2994	286.2994	0.0633	0.0000	287.8816

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					
2023	0.2271	1.5770	1.7270	3.2700e-003	0.1120	0.0722	0.1841	0.0488	0.0675	0.1162	0.0000	286.2991	286.2991	0.0633	0.0000	287.8814
2024	0.1352	9.2900e-003	0.0152	3.0000e-005	6.5000e-004	4.6000e-004	1.1100e-003	1.7000e-004	4.6000e-004	6.3000e-004	0.0000	2.3984	2.3984	1.2000e-004	0.0000	2.4014
Maximum	0.2271	1.5770	1.7270	3.2700e-003	0.1120	0.0722	0.1841	0.0488	0.0675	0.1162	0.0000	286.2991	286.2991	0.0633	0.0000	287.8814

	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
Percent Reduction	0.00	0.00	0.00	0.00	43.22	0.00	31.64	48.37	0.00	28.17	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	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0903	6.3300e-003	0.0967	0.0497	5.8200e-003	0.0555	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

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	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497
Total	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497

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					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0407	6.3300e-003	0.0470	0.0223	5.8200e-003	0.0282	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

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	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497
Total	2.8000e-004	1.8000e-004	1.9700e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5494	0.5494	1.0000e-005	0.0000	0.5497

3.3 Grading - 2023

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004		7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e-004	0.0655	7.7500e-003	0.0733	0.0337	7.1300e-003	0.0408	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713

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	1.5800e-003	4.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4962	0.4962	2.0000e-005	0.0000	0.4967
Worker	6.2000e-004	4.0000e-004	4.3700e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2208	1.2208	3.0000e-005	0.0000	1.2215
Total	6.7000e-004	1.9800e-003	4.8200e-003	2.0000e-005	1.7100e-003	1.0000e-005	1.7200e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.7169	1.7169	5.0000e-005	0.0000	1.7182

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					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.1794	0.1475	3.0000e-004		7.7500e-003	7.7500e-003		7.1300e-003	7.1300e-003	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713
Total	0.0171	0.1794	0.1475	3.0000e-004	0.0295	7.7500e-003	0.0372	0.0152	7.1300e-003	0.0223	0.0000	26.0606	26.0606	8.4300e-003	0.0000	26.2713

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	1.5800e-003	4.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.4962	0.4962	2.0000e-005	0.0000	0.4967
Worker	6.2000e-004	4.0000e-004	4.3700e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2208	1.2208	3.0000e-005	0.0000	1.2215
Total	6.7000e-004	1.9800e-003	4.8200e-003	2.0000e-005	1.7100e-003	1.0000e-005	1.7200e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.7169	1.7169	5.0000e-005	0.0000	1.7182

3.4 Paving - 2023

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0175	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

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	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161
Total	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	7.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0175	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

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	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161
Total	4.6000e-004	3.0000e-004	3.2800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9156	0.9156	2.0000e-005	0.0000	0.9161

3.5 Building Construction - 2023

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	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8536	173.8536	0.0414	0.0000	174.8875

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	1.9400e-003	0.0652	0.0187	2.1000e-004	5.4100e-003	8.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6400e-003	0.0000	20.4667	20.4667	9.3000e-004	0.0000	20.4899
Worker	0.0127	8.2500e-003	0.0902	2.8000e-004	0.0326	2.1000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	25.1783	25.1783	5.6000e-004	0.0000	25.1924
Total	0.0147	0.0735	0.1089	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0102	2.6000e-004	0.0105	0.0000	45.6450	45.6450	1.4900e-003	0.0000	45.6823

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	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873
Total	0.1180	1.0789	1.2183	2.0200e-003		0.0525	0.0525		0.0494	0.0494	0.0000	173.8534	173.8534	0.0414	0.0000	174.8873

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	1.9400e-003	0.0652	0.0187	2.1000e-004	5.4100e-003	8.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6400e-003	0.0000	20.4667	20.4667	9.3000e-004	0.0000	20.4899
Worker	0.0127	8.2500e-003	0.0902	2.8000e-004	0.0326	2.1000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	25.1783	25.1783	5.6000e-004	0.0000	25.1924
Total	0.0147	0.0735	0.1089	4.9000e-004	0.0380	2.9000e-004	0.0383	0.0102	2.6000e-004	0.0105	0.0000	45.6450	45.6450	1.4900e-003	0.0000	45.6823

3.6 Architectural Coating - 2023

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	0.0445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.0450	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680
Total	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680

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	0.0445					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Total	0.0450	3.2600e-003	4.5300e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680
Total	8.0000e-005	6.0000e-005	6.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1679	0.1679	0.0000	0.0000	0.1680

3.6 Architectural Coating - 2024

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	0.1336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3600e-003	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176
Total	0.1349	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176

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	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837
Total	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837

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	0.1336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3600e-003	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176
Total	0.1349	9.1400e-003	0.0136	2.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	1.9149	1.9149	1.1000e-004	0.0000	1.9176

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	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837
Total	2.4000e-004	1.5000e-004	1.6600e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.4835	0.4835	1.0000e-005	0.0000	0.4837

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Hunter Subdivision Project - First Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Hunter Subdivision Project - First Year - Napa County, Summer

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

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					
2023	18.0361	27.5558	18.6698	0.0394	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088
2024	18.0228	1.2362	2.0497	3.7300e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	357.4378	357.4378	0.0174	0.0000	357.8735
Maximum	18.0361	27.5558	18.6698	0.0394	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088

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					
2023	18.0361	27.5558	18.6698	0.0394	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088
2024	18.0228	1.2362	2.0497	3.7300e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	357.4378	357.4378	0.0174	0.0000	357.8735
Maximum	18.0361	27.5558	18.6698	0.0394	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,816.8229	3,816.8229	1.1954	0.0000	3,846.7088

	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
Percent Reduction	0.00	0.00	0.00	0.00	54.28	0.00	50.61	54.65	0.00	48.68	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	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Hunter Subdivision Project - First Year - Napa County, Summer

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.308 1	3,687.308 1	1.1926		3,717.121 9

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
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
Worker	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870
Total	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	8.1298	1.2660	9.3958	4.4688	1.1647	5.6336	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

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
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
Worker	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870
Total	0.0583	0.0317	0.4255	1.3000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		129.5148	129.5148	2.8900e-003		129.5870

3.3 Grading - 2023

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5523	0.7749	7.3273	3.3675	0.7129	4.0804		2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	4.6000e-003	0.1568	0.0427	5.2000e-004	0.0135	1.8000e-004	0.0137	3.8900e-003	1.7000e-004	4.0700e-003		55.2560	55.2560	2.4000e-003		55.3159
Worker	0.0648	0.0352	0.4727	1.4400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		143.9053	143.9053	3.2100e-003		143.9855
Total	0.0694	0.1919	0.5154	1.9600e-003	0.1778	1.1800e-003	0.1790	0.0475	1.0900e-003	0.0486		199.1613	199.1613	5.6100e-003		199.3014

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	2.9486	0.7749	3.7235	1.5154	0.7129	2.2283	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	4.6000e-003	0.1568	0.0427	5.2000e-004	0.0135	1.8000e-004	0.0137	3.8900e-003	1.7000e-004	4.0700e-003		55.2560	55.2560	2.4000e-003		55.3159
Worker	0.0648	0.0352	0.4727	1.4400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		143.9053	143.9053	3.2100e-003		143.9855
Total	0.0694	0.1919	0.5154	1.9600e-003	0.1778	1.1800e-003	0.1790	0.0475	1.0900e-003	0.0486		199.1613	199.1613	5.6100e-003		199.3014

3.4 Paving - 2023

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7532	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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
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
Worker	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891
Total	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7532	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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
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
Worker	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891
Total	0.0486	0.0264	0.3546	1.0800e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		107.9290	107.9290	2.4100e-003		107.9891

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	0.0253	0.8621	0.2348	2.8700e-003	0.0744	9.9000e-004	0.0754	0.0214	9.5000e-004	0.0224		303.9081	303.9081	0.0132		304.2374
Worker	0.1782	0.0967	1.3000	3.9700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		395.7396	395.7396	8.8200e-003		395.9602
Total	0.2035	0.9588	1.5348	6.8400e-003	0.5262	3.7500e-003	0.5300	0.1413	3.4900e-003	0.1447		699.6476	699.6476	0.0220		700.1976

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	0.0253	0.8621	0.2348	2.8700e-003	0.0744	9.9000e-004	0.0754	0.0214	9.5000e-004	0.0224		303.9081	303.9081	0.0132		304.2374
Worker	0.1782	0.0967	1.3000	3.9700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		395.7396	395.7396	8.8200e-003		395.9602
Total	0.2035	0.9588	1.5348	6.8400e-003	0.5262	3.7500e-003	0.5300	0.1413	3.4900e-003	0.1447		699.6476	699.6476	0.0220		700.1976

3.6 Architectural Coating - 2023

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	18.0005	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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
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
Worker	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920
Total	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	18.0005	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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
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
Worker	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920
Total	0.0357	0.0193	0.2600	7.9000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		79.1479	79.1479	1.7600e-003		79.1920

3.6 Architectural Coating - 2024

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	17.9896	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	17.9896	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 9:36 AM

Hunter Subdivision Project - First Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	5.50	Acre	5.50	239,580.00	0
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	2
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 4 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2023 (March), with completion in January 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	4/12/2024	5/26/2023
tblConstructionPhase	PhaseEndDate	3/15/2024	12/22/2023
tblConstructionPhase	PhaseEndDate	5/10/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	3/16/2024	4/29/2023
tblConstructionPhase	PhaseStartDate	4/29/2023	5/27/2023
tblConstructionPhase	PhaseStartDate	4/13/2024	12/23/2023
tblLandUse	Population	6.00	2.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	41.00	11.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	106.00	55.00
tblTripsAndVMT	WorkerTripNumber	21.00	11.00

2.0 Emissions Summary

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					
2023	18.0380	27.5643	18.6514	0.0393	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874
2024	18.0246	1.2408	2.0386	3.6800e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	351.7373	351.7373	0.0173	0.0000	352.1706
Maximum	18.0380	27.5643	18.6514	0.0393	18.2141	1.2669	19.4811	9.9699	1.1656	11.1355	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874

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					
2023	18.0380	27.5643	18.6514	0.0393	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874
2024	18.0246	1.2408	2.0386	3.6800e-003	0.0904	0.0615	0.1518	0.0240	0.0614	0.0854	0.0000	351.7373	351.7373	0.0173	0.0000	352.1706
Maximum	18.0380	27.5643	18.6514	0.0393	8.2777	1.2669	9.5446	4.5080	1.1656	5.6736	0.0000	3,807.1056	3,807.1056	1.1953	0.0000	3,836.9874

	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
Percent Reduction	0.00	0.00	0.00	0.00	54.28	0.00	50.61	54.65	0.00	48.68	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	3/20/2023	3/31/2023	5	10	
2	Grading	Grading	4/1/2023	4/28/2023	5	20	
3	Paving	Paving	4/29/2023	5/26/2023	5	20	
4	Building Construction	Building Construction	5/27/2023	12/22/2023	5	150	
5	Architectural Coating	Architectural Coating	12/23/2023	1/19/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.5

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

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Hunter Subdivision Project - First Year - Napa County, Winter

Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	20.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.308 1	3,687.308 1	1.1926		3,717.121 9

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
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
Worker	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655
Total	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655

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					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	8.1298	1.2660	9.3958	4.4688	1.1647	5.6336	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

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
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
Worker	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655
Total	0.0614	0.0402	0.4071	1.2000e-003	0.1479	9.0000e-004	0.1488	0.0392	8.3000e-004	0.0401		119.7975	119.7975	2.7200e-003		119.8655

3.3 Grading - 2023

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.5523	0.7749	7.3273	3.3675	0.7129	4.0804		2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	4.9000e-003	0.1578	0.0487	5.1000e-004	0.0135	1.9000e-004	0.0137	3.8900e-003	1.8000e-004	4.0700e-003		53.9148	53.9148	2.5900e-003		53.9796
Worker	0.0682	0.0446	0.4524	1.3400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		133.1084	133.1084	3.0200e-003		133.1839
Total	0.0731	0.2024	0.5011	1.8500e-003	0.1778	1.1900e-003	0.1790	0.0475	1.1000e-003	0.0486		187.0231	187.0231	5.6100e-003		187.1635

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					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	2.9486	0.7749	3.7235	1.5154	0.7129	2.2283	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	4.9000e-003	0.1578	0.0487	5.1000e-004	0.0135	1.9000e-004	0.0137	3.8900e-003	1.8000e-004	4.0700e-003		53.9148	53.9148	2.5900e-003		53.9796
Worker	0.0682	0.0446	0.4524	1.3400e-003	0.1643	1.0000e-003	0.1653	0.0436	9.2000e-004	0.0445		133.1084	133.1084	3.0200e-003		133.1839
Total	0.0731	0.2024	0.5011	1.8500e-003	0.1778	1.1900e-003	0.1790	0.0475	1.1000e-003	0.0486		187.0231	187.0231	5.6100e-003		187.1635

3.4 Paving - 2023

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7532	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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
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
Worker	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880
Total	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880

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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.7205					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7532	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

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
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
Worker	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880
Total	0.0511	0.0335	0.3393	1.0000e-003	0.1232	7.5000e-004	0.1240	0.0327	6.9000e-004	0.0334		99.8313	99.8313	2.2700e-003		99.8880

3.5 Building Construction - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	0.0270	0.8679	0.2680	2.8000e-003	0.0744	1.0400e-003	0.0754	0.0214	1.0000e-003	0.0224		296.5311	296.5311	0.0143		296.8876
Worker	0.1875	0.1227	1.2440	3.6700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		366.0480	366.0480	8.3100e-003		366.2558
Total	0.2145	0.9906	1.5120	6.4700e-003	0.5262	3.8000e-003	0.5300	0.1413	3.5400e-003	0.1448		662.5791	662.5791	0.0226		663.1434

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	0.0270	0.8679	0.2680	2.8000e-003	0.0744	1.0400e-003	0.0754	0.0214	1.0000e-003	0.0224		296.5311	296.5311	0.0143		296.8876
Worker	0.1875	0.1227	1.2440	3.6700e-003	0.4518	2.7600e-003	0.4546	0.1198	2.5400e-003	0.1224		366.0480	366.0480	8.3100e-003		366.2558
Total	0.2145	0.9906	1.5120	6.4700e-003	0.5262	3.8000e-003	0.5300	0.1413	3.5400e-003	0.1448		662.5791	662.5791	0.0226		663.1434

3.6 Architectural Coating - 2023

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	18.0005	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

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
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
Worker	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512
Total	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	18.0005	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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
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
Worker	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512
Total	0.0375	0.0245	0.2488	7.3000e-004	0.0904	5.5000e-004	0.0909	0.0240	5.1000e-004	0.0245		73.2096	73.2096	1.6600e-003		73.2512

3.6 Architectural Coating - 2024

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	17.9896	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263

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	17.8088					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	17.9896	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263

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**Hunter Subdivision Project - Second Year
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Second Year - Napa County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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					
2024	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6110	221.6110	0.0427	0.0000	222.6788
Maximum	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6110	221.6110	0.0427	0.0000	222.6788

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					
2024	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6108	221.6108	0.0427	0.0000	222.6786
Maximum	0.2544	1.0927	1.3333	2.5400e-003	0.0389	0.0469	0.0858	0.0105	0.0441	0.0546	0.0000	221.6108	221.6108	0.0427	0.0000	222.6786

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

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	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8868	173.8868	0.0411	0.0000	174.9148
Total	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8868	173.8868	0.0411	0.0000	174.9148

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	1.8600e-003	0.0646	0.0175	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.3524	20.3524	9.3000e-004	0.0000	20.3757
Worker	0.0119	7.4200e-003	0.0829	2.7000e-004	0.0326	2.0000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	24.1739	24.1739	5.0000e-004	0.0000	24.1865
Total	0.0138	0.0720	0.1005	4.8000e-004	0.0380	2.7000e-004	0.0383	0.0102	2.6000e-004	0.0105	0.0000	44.5263	44.5263	1.4300e-003	0.0000	44.5622

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	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8866	173.8866	0.0411	0.0000	174.9146
Total	0.1104	1.0083	1.2125	2.0200e-003		0.0460	0.0460		0.0433	0.0433	0.0000	173.8866	173.8866	0.0411	0.0000	174.9146

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	1.8600e-003	0.0646	0.0175	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.3524	20.3524	9.3000e-004	0.0000	20.3757
Worker	0.0119	7.4200e-003	0.0829	2.7000e-004	0.0326	2.0000e-004	0.0328	8.6700e-003	1.9000e-004	8.8600e-003	0.0000	24.1739	24.1739	5.0000e-004	0.0000	24.1865
Total	0.0138	0.0720	0.1005	4.8000e-004	0.0380	2.7000e-004	0.0383	0.0102	2.6000e-004	0.0105	0.0000	44.5263	44.5263	1.4300e-003	0.0000	44.5622

3.3 Architectural Coating - 2024

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	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	0.1299	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

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	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450
Total	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450

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	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	0.1299	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

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	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450
Total	3.2000e-004	2.0000e-004	2.2100e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	0.0000	2.4000e-004	0.0000	0.6446	0.6446	1.0000e-005	0.0000	0.6450

Hunter Subdivision Project - Second Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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					
2024	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866
Maximum	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866

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					
2024	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866
Maximum	13.0257	14.3844	17.5847	0.0336	0.5262	0.6170	1.1432	0.1413	0.5803	0.7216	0.0000	3,237.8502	3,237.8502	0.6255	0.0000	3,253.4866

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	0.0242	0.8537	0.2199	2.8500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.3000e-004	0.0224		302.2028	302.2028	0.0132		302.5328
Worker	0.1661	0.0869	1.1980	3.8100e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		379.9485	379.9485	7.9000e-003		380.1461
Total	0.1904	0.9406	1.4178	6.6600e-003	0.5262	3.6700e-003	0.5299	0.1413	3.4000e-003	0.1447		682.1513	682.1513	0.0211		682.6789

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	0.0242	0.8537	0.2199	2.8500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.3000e-004	0.0224		302.2028	302.2028	0.0132		302.5328
Worker	0.1661	0.0869	1.1980	3.8100e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		379.9485	379.9485	7.9000e-003		380.1461
Total	0.1904	0.9406	1.4178	6.6600e-003	0.5262	3.6700e-003	0.5299	0.1413	3.4000e-003	0.1447		682.1513	682.1513	0.0211		682.6789

3.3 Architectural Coating - 2024

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	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	12.9925	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292

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	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	12.9925	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292
Total	0.0332	0.0174	0.2396	7.6000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		75.9897	75.9897	1.5800e-003		76.0292

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Hunter Subdivision Project - Second Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2024 (March), with completion in November 2024.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Second Year - Napa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	2/26/2025	11/8/2024
tblConstructionPhase	PhaseEndDate	1/31/2025	10/11/2024
tblConstructionPhase	PhaseStartDate	2/1/2025	10/12/2024
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

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					
2024	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.033	3,202.033	0.6261	0.0000	3,217.6849
Maximum	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.033	3,202.033	0.6261	0.0000	3,217.6849

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					
2024	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.0333	3,202.0333	0.6261	0.0000	3,217.6849
Maximum	13.0275	14.4132	17.5599	0.0333	0.5262	0.6170	1.1432	0.1413	0.5804	0.7216	0.0000	3,202.0333	3,202.0333	0.6261	0.0000	3,217.6849

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/18/2024	10/11/2024	5	150	
2	Architectural Coating	Architectural Coating	10/12/2024	11/8/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	0.0258	0.8592	0.2510	2.7800e-003	0.0744	1.0200e-003	0.0754	0.0214	9.7000e-004	0.0224		294.8883	294.8883	0.0143		295.2457
Worker	0.1752	0.1102	1.1422	3.5300e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		351.4462	351.4462	7.4200e-003		351.6316
Total	0.2010	0.9694	1.3931	6.3100e-003	0.5262	3.7100e-003	0.5299	0.1413	3.4400e-003	0.1447		646.3344	646.3344	0.0217		646.8772

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	0.0258	0.8592	0.2510	2.7800e-003	0.0744	1.0200e-003	0.0754	0.0214	9.7000e-004	0.0224		294.8883	294.8883	0.0143		295.2457
Worker	0.1752	0.1102	1.1422	3.5300e-003	0.4518	2.6900e-003	0.4545	0.1198	2.4700e-003	0.1223		351.4462	351.4462	7.4200e-003		351.6316
Total	0.2010	0.9694	1.3931	6.3100e-003	0.5262	3.7100e-003	0.5299	0.1413	3.4400e-003	0.1447		646.3344	646.3344	0.0217		646.8772

3.3 Architectural Coating - 2024

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	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	12.9925	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263

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	12.8117					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	12.9925	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
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
Worker	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263
Total	0.0350	0.0220	0.2284	7.1000e-004	0.0904	5.4000e-004	0.0909	0.0240	4.9000e-004	0.0245		70.2892	70.2892	1.4800e-003		70.3263

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Hunter Subdivision Project - Third Year Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.1 Overall 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					
2025	0.1602	1.3948	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4078	301.4078	0.0586	0.0000	302.8735
2026	0.3227	0.1578	0.2076	4.0000e-004	6.3600e-003	6.3100e-003	0.0127	1.7100e-003	5.9600e-003	7.6700e-003	0.0000	34.5691	34.5691	6.3300e-003	0.0000	34.7274
Maximum	0.3227	1.3948	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4078	301.4078	0.0586	0.0000	302.8735

	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					
2025	0.1602	1.3947	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4075	301.4075	0.0586	0.0000	302.8732
2026	0.3227	0.1578	0.2076	4.0000e-004	6.3600e-003	6.3100e-003	0.0127	1.7100e-003	5.9600e-003	7.6700e-003	0.0000	34.5691	34.5691	6.3300e-003	0.0000	34.7273
Maximum	0.3227	1.3947	1.8018	3.4500e-003	0.0527	0.0552	0.1079	0.0142	0.0520	0.0662	0.0000	301.4075	301.4075	0.0586	0.0000	302.8732

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

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	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1962	241.1962	0.0567	0.0000	242.6137
Total	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1962	241.1962	0.0567	0.0000	242.6137

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	2.4900e-003	0.0886	0.0231	2.9000e-004	7.5000e-003	1.0000e-004	7.6000e-003	2.1700e-003	1.0000e-004	2.2700e-003	0.0000	28.0672	28.0672	1.3000e-003	0.0000	28.0997
Worker	0.0155	9.3000e-003	0.1059	3.6000e-004	0.0452	2.7000e-004	0.0455	0.0120	2.5000e-004	0.0123	0.0000	32.1444	32.1444	6.3000e-004	0.0000	32.1601
Total	0.0180	0.0979	0.1290	6.5000e-004	0.0527	3.7000e-004	0.0531	0.0142	3.5000e-004	0.0146	0.0000	60.2115	60.2115	1.9300e-003	0.0000	60.2598

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	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1959	241.1959	0.0567	0.0000	242.6134
Total	0.1422	1.2969	1.6728	2.8000e-003		0.0549	0.0549		0.0516	0.0516	0.0000	241.1959	241.1959	0.0567	0.0000	242.6134

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	2.4900e-003	0.0886	0.0231	2.9000e-004	7.5000e-003	1.0000e-004	7.6000e-003	2.1700e-003	1.0000e-004	2.2700e-003	0.0000	28.0672	28.0672	1.3000e-003	0.0000	28.0997
Worker	0.0155	9.3000e-003	0.1059	3.6000e-004	0.0452	2.7000e-004	0.0455	0.0120	2.5000e-004	0.0123	0.0000	32.1444	32.1444	6.3000e-004	0.0000	32.1601
Total	0.0180	0.0979	0.1290	6.5000e-004	0.0527	3.7000e-004	0.0531	0.0142	3.5000e-004	0.0146	0.0000	60.2115	60.2115	1.9300e-003	0.0000	60.2598

3.2 Building Construction - 2026

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	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6611
Total	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6611

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	2.5000e-004	9.2700e-003	2.3400e-003	3.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	2.9533	2.9533	1.4000e-004	0.0000	2.9568
Worker	1.5400e-003	9.0000e-004	0.0104	4.0000e-005	4.7800e-003	3.0000e-005	4.8100e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	3.2714	3.2714	6.0000e-005	0.0000	3.2729
Total	1.7900e-003	0.0102	0.0127	7.0000e-005	5.5700e-003	4.0000e-005	5.6100e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	6.2247	6.2247	2.0000e-004	0.0000	6.2297

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	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6610
Total	0.0150	0.1372	0.1769	3.0000e-004		5.8000e-003	5.8000e-003		5.4600e-003	5.4600e-003	0.0000	25.5111	25.5111	6.0000e-003	0.0000	25.6610

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	2.5000e-004	9.2700e-003	2.3400e-003	3.0000e-005	7.9000e-004	1.0000e-005	8.0000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	2.9533	2.9533	1.4000e-004	0.0000	2.9568
Worker	1.5400e-003	9.0000e-004	0.0104	4.0000e-005	4.7800e-003	3.0000e-005	4.8100e-003	1.2700e-003	3.0000e-005	1.3000e-003	0.0000	3.2714	3.2714	6.0000e-005	0.0000	3.2729
Total	1.7900e-003	0.0102	0.0127	7.0000e-005	5.5700e-003	4.0000e-005	5.6100e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	6.2247	6.2247	2.0000e-004	0.0000	6.2297

3.3 Architectural Coating - 2026

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	0.3041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.3056	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356

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	0.3041					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.3056	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Third Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.0 Emissions Summary

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					
2025	1.5466	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.349 5	3,221.349 5	0.6214	0.0000	3,236.883 9
2026	33.9894	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.023 4	3,206.023 4	0.6208	0.0000	3,221.542 9
Maximum	33.9894	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.349 5	3,221.349 5	0.6214	0.0000	3,236.883 9

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					
2025	1.5466	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.3495	3,221.3495	0.6214	0.0000	3,236.8839
2026	33.9894	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	33.9894	13.3933	17.3981	0.0334	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,221.3495	3,221.3495	0.6214	0.0000	3,236.8839

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0234	0.8450	0.2088	2.8300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		300.5382	300.5382	0.0133		300.8708
Worker	0.1558	0.0786	1.1046	3.6500e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		364.3369	364.3369	7.1200e-003		364.5150
Total	0.1792	0.9236	1.3135	6.4800e-003	0.5262	3.5900e-003	0.5298	0.1413	3.3400e-003	0.1446		664.8751	664.8751	0.0204		665.3858

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0234	0.8450	0.2088	2.8300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		300.5382	300.5382	0.0133		300.8708
Worker	0.1558	0.0786	1.1046	3.6500e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		364.3369	364.3369	7.1200e-003		364.5150
Total	0.1792	0.9236	1.3135	6.4800e-003	0.5262	3.5900e-003	0.5298	0.1413	3.3400e-003	0.1446		664.8751	664.8751	0.0204		665.3858

3.2 Building Construction - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	0.1694	0.9075	1.2252	6.3400e-003	0.5262	3.4900e-003	0.5297	0.1413	3.2500e-003	0.1445		649.5491	649.5491	0.0198		650.0448

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	0.1694	0.9075	1.2252	6.3400e-003	0.5262	3.4900e-003	0.5297	0.1413	3.2500e-003	0.1445		649.5491	649.5491	0.0198		650.0448

3.3 Architectural Coating - 2026

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	33.7892					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	33.9600	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456

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	33.7892					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	33.9600	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

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
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
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project - Third Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Condo/Townhouse	25.00	Dwelling Unit	1.56	25,000.00	62
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences, 2 ADUs, and 25 low income units. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2025 (March), with completion in February 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Table Name	Column Name	Default Value	New Value
tblLandUse	Population	6.00	5.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	4.00	11.00
tblTripsAndVMT	WorkerTripNumber	23.00	55.00
tblTripsAndVMT	WorkerTripNumber	5.00	11.00

2.1 Overall Construction (Maximum Daily Emission)

	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					
2025	1.5568	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.766 2	3,186.766 2	0.6220	0.0000	3,202.317 0
2026	33.9911	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.522 1	3,172.522 1	0.6215	0.0000	3,188.058 8
Maximum	33.9911	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.766 2	3,186.766 2	0.6220	0.0000	3,202.317 0

	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					
2025	1.5568	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.766 2	3,186.766 2	0.6220	0.0000	3,202.317 0
2026	33.9911	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.522 1	3,172.522 1	0.6215	0.0000	3,188.058 8
Maximum	33.9911	13.4194	17.3733	0.0331	0.5262	0.5312	1.0574	0.1413	0.4996	0.6409	0.0000	3,186.766 2	3,186.766 2	0.6220	0.0000	3,202.317 0

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/17/2025	1/30/2026	5	230	
2	Architectural Coating	Architectural Coating	1/31/2026	2/25/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 87,480; Residential Outdoor: 29,160; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0249	0.8501	0.2383	2.7600e-003	0.0744	1.0000e-003	0.0754	0.0214	9.6000e-004	0.0224		293.2796	293.2796	0.0144		293.6400
Worker	0.1645	0.0996	1.0503	3.3800e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		337.0123	337.0123	6.6600e-003		337.1789
Total	0.1894	0.9497	1.2887	6.1400e-003	0.5262	3.6300e-003	0.5299	0.1413	3.3800e-003	0.1446		630.2919	630.2919	0.0211		630.8189

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0249	0.8501	0.2383	2.7600e-003	0.0744	1.0000e-003	0.0754	0.0214	9.6000e-004	0.0224		293.2796	293.2796	0.0144		293.6400
Worker	0.1645	0.0996	1.0503	3.3800e-003	0.4518	2.6300e-003	0.4545	0.1198	2.4200e-003	0.1223		337.0123	337.0123	6.6600e-003		337.1789
Total	0.1894	0.9497	1.2887	6.1400e-003	0.5262	3.6300e-003	0.5299	0.1413	3.3800e-003	0.1446		630.2919	630.2919	0.0211		630.8189

3.2 Building Construction - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	0.1795	0.9314	1.2005	6.0000e-003	0.5262	3.5300e-003	0.5298	0.1413	3.2900e-003	0.1446		616.0477	616.0477	0.0205		616.5607

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	0.1795	0.9314	1.2005	6.0000e-003	0.5262	3.5300e-003	0.5298	0.1413	3.2900e-003	0.1446		616.0477	616.0477	0.0205		616.5607

3.3 Architectural Coating - 2026

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	33.7892					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	33.9600	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846

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	33.7892					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	33.9600	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

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
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
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846

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**Hunter Subdivision Project - Fourth Year
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Fourth Year - Napa County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.1 Overall 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					
2026	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2140	219.2140	0.0424	0.0000	220.2734
Maximum	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2140	219.2140	0.0424	0.0000	220.2734

	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					
2026	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2138	219.2138	0.0424	0.0000	220.2732
Maximum	0.2447	1.0150	1.3110	2.5100e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	219.2138	219.2138	0.0424	0.0000	220.2732

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

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	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618
Total	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618

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	1.7400e-003	0.0632	0.0160	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.1364	20.1364	9.4000e-004	0.0000	20.1600
Worker	0.0105	6.1100e-003	0.0708	2.5000e-004	0.0326	1.9000e-004	0.0328	8.6700e-003	1.8000e-004	8.8500e-003	0.0000	22.3047	22.3047	4.1000e-004	0.0000	22.3150
Total	0.0123	0.0693	0.0867	4.6000e-004	0.0380	2.6000e-004	0.0383	0.0102	2.5000e-004	0.0105	0.0000	42.4411	42.4411	1.3500e-003	0.0000	42.4750

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	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616
Total	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616

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	1.7400e-003	0.0632	0.0160	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.1364	20.1364	9.4000e-004	0.0000	20.1600
Worker	0.0105	6.1100e-003	0.0708	2.5000e-004	0.0326	1.9000e-004	0.0328	8.6700e-003	1.8000e-004	8.8500e-003	0.0000	22.3047	22.3047	4.1000e-004	0.0000	22.3150
Total	0.0123	0.0693	0.0867	4.6000e-004	0.0380	2.6000e-004	0.0383	0.0102	2.5000e-004	0.0105	0.0000	42.4411	42.4411	1.3500e-003	0.0000	42.4750

3.3 Architectural Coating - 2026

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	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.1297	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356

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	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.1297	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356
Total	2.5000e-004	1.5000e-004	1.7000e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5353	0.5353	1.0000e-005	0.0000	0.5356

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Hunter Subdivision Project - Fourth Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Fourth Year - Napa County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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					
2026	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429

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					
2026	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429
Maximum	14.4355	13.3772	17.3098	0.0333	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,206.0234	3,206.0234	0.6208	0.0000	3,221.5429

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	0.1694	0.9075	1.2252	6.3400e-003	0.5262	3.4900e-003	0.5297	0.1413	3.2500e-003	0.1445		649.5491	649.5491	0.0198		650.0448

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0226	0.8359	0.2000	2.8200e-003	0.0744	9.4000e-004	0.0754	0.0214	9.0000e-004	0.0223		298.9825	298.9825	0.0134		299.3167
Worker	0.1468	0.0716	1.0252	3.5200e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		350.5666	350.5666	6.4600e-003		350.7281
Total	0.1694	0.9075	1.2252	6.3400e-003	0.5262	3.4900e-003	0.5297	0.1413	3.2500e-003	0.1445		649.5491	649.5491	0.0198		650.0448

3.3 Architectural Coating - 2026

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	14.2352					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	14.4061	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456

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	14.2352					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	14.4061	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

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
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
Worker	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456
Total	0.0294	0.0143	0.2050	7.0000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		70.1133	70.1133	1.2900e-003		70.1456

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Hunter Subdivision Project - Fourth Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2026 (March), with completion in November 2026.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Fourth Year - Napa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/3/2027	11/11/2026
tblConstructionPhase	PhaseEndDate	2/5/2027	10/16/2026
tblConstructionPhase	PhaseStartDate	2/6/2027	10/17/2026
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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					
2026	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588

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					
2026	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588
Maximum	14.4372	13.4010	17.2851	0.0330	0.5262	0.5311	1.0573	0.1413	0.4995	0.6408	0.0000	3,172.5221	3,172.5221	0.6215	0.0000	3,188.0588

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/23/2026	10/16/2026	5	150	
2	Architectural Coating	Architectural Coating	10/17/2026	11/11/2026	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	0.1795	0.9314	1.2005	6.0000e-003	0.5262	3.5300e-003	0.5298	0.1413	3.2900e-003	0.1446		616.0477	616.0477	0.0205		616.5607

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0241	0.8406	0.2282	2.7500e-003	0.0744	9.8000e-004	0.0754	0.0214	9.4000e-004	0.0224		291.7753	291.7753	0.0145		292.1376
Worker	0.1554	0.0907	0.9723	3.2500e-003	0.4518	2.5500e-003	0.4544	0.1198	2.3500e-003	0.1222		324.2724	324.2724	6.0300e-003		324.4231
Total	0.1795	0.9314	1.2005	6.0000e-003	0.5262	3.5300e-003	0.5298	0.1413	3.2900e-003	0.1446		616.0477	616.0477	0.0205		616.5607

3.3 Architectural Coating - 2026

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	14.2352					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	14.4061	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846

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	14.2352					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	14.4061	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

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
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
Worker	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846
Total	0.0311	0.0182	0.1945	6.5000e-004	0.0904	5.1000e-004	0.0909	0.0240	4.7000e-004	0.0244		64.8545	64.8545	1.2100e-003		64.8846

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**Hunter Subdivision Project - Fifth Year
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Fifth Year - Napa County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

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	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3155	218.3155	0.0423	0.0000	219.3740
Maximum	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3155	218.3155	0.0423	0.0000	219.3740

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	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3153	218.3153	0.0423	0.0000	219.3738
Maximum	0.2440	1.0137	1.3052	2.5000e-003	0.0388	0.0403	0.0791	0.0104	0.0379	0.0484	0.0000	218.3153	218.3153	0.0423	0.0000	219.3738

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618
Total	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9396	173.9396	0.0409	0.0000	174.9618

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	1.6900e-003	0.0625	0.0153	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.0365	20.0365	9.5000e-004	0.0000	20.0601
Worker	9.9000e-003	5.5700e-003	0.0657	2.4000e-004	0.0326	1.8000e-004	0.0328	8.6700e-003	1.7000e-004	8.8400e-003	0.0000	21.5249	21.5249	3.7000e-004	0.0000	21.5342
Total	0.0116	0.0680	0.0810	4.5000e-004	0.0380	2.5000e-004	0.0383	0.0102	2.4000e-004	0.0105	0.0000	41.5614	41.5614	1.3200e-003	0.0000	41.5944

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	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616
Total	0.1026	0.9352	1.2064	2.0200e-003		0.0396	0.0396		0.0372	0.0372	0.0000	173.9394	173.9394	0.0409	0.0000	174.9616

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	1.6900e-003	0.0625	0.0153	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	20.0365	20.0365	9.5000e-004	0.0000	20.0601
Worker	9.9000e-003	5.5700e-003	0.0657	2.4000e-004	0.0326	1.8000e-004	0.0328	8.6700e-003	1.7000e-004	8.8400e-003	0.0000	21.5249	21.5249	3.7000e-004	0.0000	21.5342
Total	0.0116	0.0680	0.0810	4.5000e-004	0.0380	2.5000e-004	0.0383	0.0102	2.4000e-004	0.0105	0.0000	41.5614	41.5614	1.3200e-003	0.0000	41.5944

3.3 Architectural Coating - 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					
Archit. Coating	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.1297	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168
Total	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168

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	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.1297	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168
Total	2.4000e-004	1.3000e-004	1.5800e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5166	0.5166	1.0000e-005	0.0000	0.5168

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Hunter Subdivision Project - Fifth Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Fifth Year - Napa County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.1 Overall Construction (Maximum Daily Emission)

	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	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004
Maximum	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004

	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	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004
Maximum	14.4337	13.3612	17.2299	0.0332	0.5262	0.5309	1.0571	0.1413	0.4994	0.6406	0.0000	3,192.2951	3,192.2951	0.6202	0.0000	3,207.8004

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0220	0.8263	0.1922	2.8000e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		297.4972	297.4972	0.0134		297.8323
Worker	0.1380	0.0653	0.9530	3.3900e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		338.3236	338.3236	5.8600e-003		338.4700
Total	0.1600	0.8916	1.1452	6.1900e-003	0.5262	3.3500e-003	0.5296	0.1413	3.1200e-003	0.1444		635.8208	635.8208	0.0193		636.3023

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0220	0.8263	0.1922	2.8000e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		297.4972	297.4972	0.0134		297.8323
Worker	0.1380	0.0653	0.9530	3.3900e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		338.3236	338.3236	5.8600e-003		338.4700
Total	0.1600	0.8916	1.1452	6.1900e-003	0.5262	3.3500e-003	0.5296	0.1413	3.1200e-003	0.1444		635.8208	635.8208	0.0193		636.3023

3.3 Architectural Coating - 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					
Archit. Coating	14.2352					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	14.4061	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940
Total	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940

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	14.2352					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	14.4061	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

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
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
Worker	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940
Total	0.0276	0.0131	0.1906	6.8000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		67.6647	67.6647	1.1700e-003		67.6940

Hunter Subdivision Project - Fifth Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	2.00	Dwelling Unit	0.13	2,000.00	5
Single Family Housing	9.00	Dwelling Unit	2.92	16,200.00	22

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 9 SF residences and 2 ADUs. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2027 (March), with completion in November 2027.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
 Hunter Subdivision Project - Fifth Year - Napa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	150.00
tblConstructionPhase	PhaseEndDate	3/1/2028	11/10/2027
tblConstructionPhase	PhaseEndDate	2/4/2028	10/15/2027
tblConstructionPhase	PhaseStartDate	2/5/2028	10/16/2027
tblLandUse	Population	6.00	5.00
tblLandUse	Population	26.00	22.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	5.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611
Maximum	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611

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	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611
Maximum	14.4354	13.3830	17.2053	0.0328	0.5262	0.5309	1.0572	0.1413	0.4994	0.6407	0.0000	3,159.7378	3,159.7378	0.6209	0.0000	3,175.2611

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/22/2027	10/15/2027	5	150	
2	Architectural Coating	Architectural Coating	10/16/2027	11/10/2027	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 36,855; Residential Outdoor: 12,285; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	9	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0234	0.8306	0.2193	2.7300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		290.3305	290.3305	0.0145		290.6939
Worker	0.1465	0.0827	0.9013	3.1400e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		312.9329	312.9329	5.4500e-003		313.0691
Total	0.1698	0.9133	1.1206	5.8700e-003	0.5262	3.3800e-003	0.5296	0.1413	3.1500e-003	0.1444		603.2634	603.2634	0.0200		603.7630

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

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
Vendor	0.0234	0.8306	0.2193	2.7300e-003	0.0744	9.6000e-004	0.0754	0.0214	9.2000e-004	0.0223		290.3305	290.3305	0.0145		290.6939
Worker	0.1465	0.0827	0.9013	3.1400e-003	0.4518	2.4200e-003	0.4542	0.1198	2.2300e-003	0.1221		312.9329	312.9329	5.4500e-003		313.0691
Total	0.1698	0.9133	1.1206	5.8700e-003	0.5262	3.3800e-003	0.5296	0.1413	3.1500e-003	0.1444		603.2634	603.2634	0.0200		603.7630

3.3 Architectural Coating - 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					
Archit. Coating	14.2352					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	14.4061	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138
Total	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138

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	14.2352					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	14.4061	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

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
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
Worker	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138
Total	0.0293	0.0166	0.1803	6.3000e-004	0.0904	4.8000e-004	0.0909	0.0240	4.5000e-004	0.0244		62.5866	62.5866	1.0900e-003		62.6138

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**Hunter Subdivision Project - Sixth Year
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

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Hunter Subdivision Project - Sixth Year - Napa County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

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					
2028	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3906	199.3906	0.0300	0.0000	200.1405
Maximum	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3906	199.3906	0.0300	0.0000	200.1405

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					
2028	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3905	199.3905	0.0300	0.0000	200.1403
Maximum	0.2074	0.9791	1.1444	2.3500e-003	0.0388	0.0360	0.0747	0.0104	0.0344	0.0449	0.0000	199.3905	199.3905	0.0300	0.0000	200.1403

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8015	155.8015	0.0286	0.0000	156.5158
Total	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8015	155.8015	0.0286	0.0000	156.5158

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	1.6400e-003	0.0618	0.0148	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	19.9543	19.9543	9.5000e-004	0.0000	19.9779
Worker	9.2400e-003	5.0900e-003	0.0612	2.3000e-004	0.0326	1.7000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	20.8369	20.8369	3.4000e-004	0.0000	20.8454
Total	0.0109	0.0669	0.0761	4.4000e-004	0.0380	2.4000e-004	0.0382	0.0102	2.2000e-004	0.0105	0.0000	40.7911	40.7911	1.2900e-003	0.0000	40.8233

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	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8013	155.8013	0.0286	0.0000	156.5156
Total	0.1117	0.9018	1.0505	1.8800e-003		0.0353	0.0353		0.0337	0.0337	0.0000	155.8013	155.8013	0.0286	0.0000	156.5156

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	1.6400e-003	0.0618	0.0148	2.1000e-004	5.4100e-003	7.0000e-005	5.4800e-003	1.5600e-003	7.0000e-005	1.6300e-003	0.0000	19.9543	19.9543	9.5000e-004	0.0000	19.9779
Worker	9.2400e-003	5.0900e-003	0.0612	2.3000e-004	0.0326	1.7000e-004	0.0328	8.6700e-003	1.5000e-004	8.8300e-003	0.0000	20.8369	20.8369	3.4000e-004	0.0000	20.8454
Total	0.0109	0.0669	0.0761	4.4000e-004	0.0380	2.4000e-004	0.0382	0.0102	2.2000e-004	0.0105	0.0000	40.7911	40.7911	1.2900e-003	0.0000	40.8233

3.3 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	0.0831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.0846	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003
Total	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003

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	0.0831					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5400e-003	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011
Total	0.0846	0.0103	0.0163	3.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3011

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	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003
Total	2.2000e-004	1.2000e-004	1.4700e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5001	0.5001	1.0000e-005	0.0000	0.5003

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Hunter Subdivision Project - Sixth Year
Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Sixth Year - Napa County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.1 Overall Construction (Maximum Daily Emission)

	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					
2028	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599
Maximum	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599

	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					
2028	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599
Maximum	9.4261	12.9011	15.0836	0.0311	0.5262	0.4731	0.9994	0.1413	0.4527	0.5940	0.0000	2,913.6918	2,913.6918	0.4387	0.0000	2,924.6599

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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

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
Vendor	0.0214	0.8181	0.1860	2.7900e-003	0.0744	9.1000e-004	0.0753	0.0214	8.7000e-004	0.0223		296.2728	296.2728	0.0134		296.6085
Worker	0.1288	0.0597	0.8904	3.2800e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		327.5292	327.5292	5.3400e-003		327.6628
Total	0.1502	0.8778	1.0764	6.0700e-003	0.5262	3.1500e-003	0.5294	0.1413	2.9400e-003	0.1442		623.8020	623.8020	0.0188		624.2712

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

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
Vendor	0.0214	0.8181	0.1860	2.7900e-003	0.0744	9.1000e-004	0.0753	0.0214	8.7000e-004	0.0223		296.2728	296.2728	0.0134		296.6085
Worker	0.1288	0.0597	0.8904	3.2800e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		327.5292	327.5292	5.3400e-003		327.6628
Total	0.1502	0.8778	1.0764	6.0700e-003	0.5262	3.1500e-003	0.5294	0.1413	2.9400e-003	0.1442		623.8020	623.8020	0.0188		624.2712

3.3 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	9.2294					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	9.4003	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326
Total	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326

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	9.2294					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	9.4003	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

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
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
Worker	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326
Total	0.0258	0.0119	0.1781	6.6000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		65.5058	65.5058	1.0700e-003		65.5326

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Hunter Subdivision Project - Sixth Year
Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	1.00	Dwelling Unit	0.06	1,000.00	3
Single Family Housing	6.00	Dwelling Unit	1.95	10,800.00	15

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD.

Land Use - Construction of 6 SF residences and 1 ADU. Updated population per City of St Helena avg household size per BayAreaCensus.

Construction Phase - Assumed project would begin construction Spring 2028 (March), with completion in November 2028.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Trips and VMT - Assumed same trips for construction of all res dwelling units.

Grading - Assumed site would be balanced.

Page 2 of 8
Hunter Subdivision Project - Sixth Year - Napa County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	18.00
tblConstructionPhase	NumDays	220.00	150.00
tblConstructionPhase	PhaseEndDate	2/2/2029	11/8/2028
tblConstructionPhase	PhaseEndDate	1/19/2029	10/13/2028
tblConstructionPhase	PhaseStartDate	1/20/2029	10/14/2028
tblLandUse	Population	17.00	15.00
tblTripsAndVMT	VendorTripNumber	1.00	11.00
tblTripsAndVMT	WorkerTripNumber	3.00	55.00
tblTripsAndVMT	WorkerTripNumber	1.00	11.00

2.0 Emissions Summary

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					
2028	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9482
Maximum	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9482

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					
2028	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9481
Maximum	9.4277	12.9211	15.0594	0.0308	0.5262	0.4731	0.9994	0.1413	0.4528	0.5940	0.0000	2,881.9613	2,881.9613	0.4395	0.0000	2,892.9481

[illegible]

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2028	10/13/2028	5	150	
2	Architectural Coating	Architectural Coating	10/14/2028	11/8/2028	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 23,895; Residential Outdoor: 7,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Building Construction	8	55.00	11.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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

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
Vendor	0.0227	0.8222	0.2122	2.7200e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		289.1444	289.1444	0.0146		289.5084
Worker	0.1369	0.0756	0.8399	3.0400e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		302.9271	302.9271	4.9600e-003		303.0511
Total	0.1597	0.8978	1.0522	5.7600e-003	0.5262	3.1700e-003	0.5294	0.1413	2.9600e-003	0.1442		592.0714	592.0714	0.0195		592.5595

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

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
Vendor	0.0227	0.8222	0.2122	2.7200e-003	0.0744	9.3000e-004	0.0754	0.0214	8.9000e-004	0.0223		289.1444	289.1444	0.0146		289.5084
Worker	0.1369	0.0756	0.8399	3.0400e-003	0.4518	2.2400e-003	0.4541	0.1198	2.0700e-003	0.1219		302.9271	302.9271	4.9600e-003		303.0511
Total	0.1597	0.8978	1.0522	5.7600e-003	0.5262	3.1700e-003	0.5294	0.1413	2.9600e-003	0.1442		592.0714	592.0714	0.0195		592.5595

3.3 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	9.2294					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	9.4003	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

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
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
Worker	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102
Total	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102

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	9.2294					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	9.4003	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

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
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
Worker	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102
Total	0.0274	0.0151	0.1680	6.1000e-004	0.0904	4.5000e-004	0.0908	0.0240	4.1000e-004	0.0244		60.5854	60.5854	9.9000e-004		60.6102

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 4:06 PM

Hunter Subdivision Project Napa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	11.00	Dwelling Unit	0.00	11,000.00	27
Condo/Townhouse	25.00	Dwelling Unit	3.40	25,000.00	62
Single Family Housing	51.00	Dwelling Unit	13.40	91,800.00	126

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD. Adjusted intensity factors based on PG&E 2020 Corporate Responsibility and Sustainability Report, 206 lb CO2/MWh.

Land Use - 87 units including 51 single family homes, 11 granny flats, and 25 multi family residential units. Updated population per City of St Helena avg household size from BayAreaCensus.

Vehicle Trips - Updated trip generation per traffic report (Dudek).

Woodstoves - No woodstoves or hearths.

Area Coating -

Energy Use - Adjusted T24 energy intensities to meet 2019 T24 standards. Single-family savings are 4% of electricity and 9% of gas. MF savings are 2% and 5%.

Water And Wastewater - Indoor water consumption updated per Preliminary Water Calculations Technical Memorandum (RSA).

Solid Waste - Default rates used.

Construction Off-road Equipment Mitigation - Implement fugitive dust reduction measures - water twice daily.

Mobile Land Use Mitigation - Project would implement a pedestrian network on and off-site, project site is approximately 0.4 mi from VINE transit.

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	T24E	365.68	351.05
tblEnergyUse	T24E	249.32	244.33
tblEnergyUse	T24E	325.76	312.73
tblEnergyUse	T24NG	7,043.85	6,409.90
tblEnergyUse	T24NG	15,568.01	14,789.61
tblEnergyUse	T24NG	25,910.09	23,578.18
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.65	11.00
tblFireplaces	NumberGas	3.75	25.00
tblFireplaces	NumberGas	12.75	51.00
tblFireplaces	NumberNoFireplace	0.44	0.00
tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
tblLandUse	LotAcreage	0.69	0.00
tblLandUse	LotAcreage	1.56	3.40

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tblLandUse	LotAcreage	16.56	13.40
tblLandUse	Population	31.00	27.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	146.00	126.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	10.00	11.00
tblTripsAndVMT	WorkerTripNumber	45.00	55.00
tblTripsAndVMT	WorkerTripNumber	9.00	11.00
tblVehicleTrips	ST_TR	7.16	8.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	9.56
tblVehicleTrips	ST_TR	9.91	9.56
tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	8.31
tblVehicleTrips	SU_TR	8.62	8.31
tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	716,694.28	1,711,778.00
tblWater	IndoorWaterUseRate	1,628,850.64	1,275,310.00
tblWater	IndoorWaterUseRate	3,322,855.31	3,492,027.00
tblWater	OutdoorWaterUseRate	71,488.88	0.00
tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

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	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Energy	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	157.0326	157.0326	9.6600e-003	3.4700e-003	158.3081
Mobile	0.1372	0.8389	1.5198	6.6300e-003	0.6772	4.6400e-003	0.6818	0.1816	4.3300e-003	0.1859	0.0000	614.0446	614.0446	0.0232	0.0000	614.6256
Waste						0.0000	0.0000		0.0000	0.0000	14.1058	0.0000	14.1058	0.8336	0.0000	34.9466
Water						0.0000	0.0000		0.0000	0.0000	2.0555	4.4446	6.5001	0.2118	5.1100e-003	13.3179
Total	0.7572	0.9440	2.2068	7.2800e-003	0.6772	0.0161	0.6933	0.1816	0.0158	0.1974	16.1614	787.4379	803.5993	1.0795	8.7800e-003	833.2042

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	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Energy	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	157.0326	157.0326	9.6600e-003	3.4700e-003	158.3081
Mobile	0.1315	0.8003	1.3874	5.9200e-003	0.5973	4.1700e-003	0.6015	0.1602	3.8900e-003	0.1641	0.0000	548.6616	548.6616	0.0216	0.0000	549.2007
Waste						0.0000	0.0000		0.0000	0.0000	14.1058	0.0000	14.1058	0.8336	0.0000	34.9466
Water						0.0000	0.0000		0.0000	0.0000	1.6444	3.5557	5.2001	0.1694	4.0900e-003	10.6543
Total	0.7514	0.9055	2.0743	6.5700e-003	0.5973	0.0157	0.6129	0.1602	0.0154	0.1755	15.7503	721.1661	736.9163	1.0355	7.7600e-003	765.1158

	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
Percent Reduction	0.76	4.08	6.00	9.75	11.80	2.92	11.59	11.80	2.78	11.08	2.54	8.42	8.30	4.08	11.62	8.17

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility
Improve Pedestrian Network

	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	0.1315	0.8003	1.3874	5.9200e-003	0.5973	4.1700e-003	0.6015	0.1602	3.8900e-003	0.1641	0.0000	548.6616	548.6616	0.0216	0.0000	549.2007
Unmitigated	0.1372	0.8389	1.5198	6.6300e-003	0.6772	4.6400e-003	0.6818	0.1816	4.3300e-003	0.1859	0.0000	614.0446	614.0446	0.0232	0.0000	614.6256

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

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	54.7224	54.7224	7.7000e-003	1.5900e-003	55.3899
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	54.7224	54.7224	7.7000e-003	1.5900e-003	55.3899
NaturalGas Mitigated	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8800e-003	102.9182
NaturalGas Unmitigated	0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8800e-003	102.9182

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					
Apartments Low Rise	105214	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6146	5.6146	1.1000e-004	1.0000e-004	5.6480
City Park	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
Condo/Townhouse	448615	2.4200e-003	0.0207	8.8000e-003	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.9398	23.9398	4.6000e-004	4.4000e-004	24.0821
Single Family Housing	1.36339e+006	7.3500e-003	0.0628	0.0267	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	72.7558	72.7558	1.3900e-003	1.3300e-003	73.1882
Total		0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8700e-003	102.9182

Mitigated

	Natural Gas 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					
Apartments Low Rise	105214	5.7000e-004	4.8500e-003	2.0600e-003	3.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	5.6146	5.6146	1.1000e-004	1.0000e-004	5.6480
City Park	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
Condo/Townhouse	448615	2.4200e-003	0.0207	8.8000e-003	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.9398	23.9398	4.6000e-004	4.4000e-004	24.0821
Single Family Housing	1.36339e+006	7.3500e-003	0.0628	0.0267	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	72.7558	72.7558	1.3900e-003	1.3300e-003	73.1882
Total		0.0103	0.0883	0.0376	5.6000e-004		7.1400e-003	7.1400e-003		7.1400e-003	7.1400e-003	0.0000	102.3102	102.3102	1.9600e-003	1.8700e-003	102.9182

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47675.9	4.4548	6.3000e-004	1.3000e-004	4.5092
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	126011	11.7745	1.6600e-003	3.4000e-004	11.9181
Single Family Housing	411955	38.4930	5.4200e-003	1.1200e-003	38.9626
Total		54.7223	7.7100e-003	1.5900e-003	55.3899

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	47675.9	4.4548	6.3000e-004	1.3000e-004	4.5092
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	126011	11.7745	1.6600e-003	3.4000e-004	11.9181
Single Family Housing	411955	38.4930	5.4200e-003	1.1200e-003	38.9626
Total		54.7223	7.7100e-003	1.5900e-003	55.3899

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	tons/yr										MT/yr					
Mitigated	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060
Unmitigated	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060

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	0.0900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1000e-003	9.3800e-003	3.9900e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.8610	10.8610	2.1000e-004	2.0000e-004	10.9256
Landscaping	0.0194	7.4300e-003	0.6454	3.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	1.0552	1.0552	1.0100e-003	0.0000	1.0805
Total	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060

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	0.0900					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4992					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1000e-003	9.3800e-003	3.9900e-003	6.0000e-005		7.6000e-004	7.6000e-004		7.6000e-004	7.6000e-004	0.0000	10.8610	10.8610	2.1000e-004	2.0000e-004	10.9256
Landscaping	0.0194	7.4300e-003	0.6454	3.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003	0.0000	1.0552	1.0552	1.0100e-003	0.0000	1.0805
Total	0.6096	0.0168	0.6494	9.0000e-005		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	11.9162	11.9162	1.2200e-003	2.0000e-004	12.0060

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	5.2001	0.1694	4.0900e-003	10.6543
Unmitigated	6.5001	0.2118	5.1100e-003	13.3179

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.71178 / 0.451829	1.5563	0.0559	1.3500e-003	3.3556
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.27531 / 1.02688	1.3852	0.0417	1.0100e-003	2.7285
Single Family Housing	3.49203 / 2.09484	3.5585	0.1141	2.7600e-003	7.2338
Total		6.5001	0.2117	5.1200e-003	13.3179

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.36942 / 0.361463	1.2451	0.0447	1.0800e-003	2.6845
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	1.02025 / 0.821507	1.1082	0.0334	8.1000e-004	2.1828
Single Family Housing	2.79362 / 1.67588	2.8468	0.0913	2.2100e-003	5.7870
Total		5.2001	0.1694	4.1000e-003	10.6543

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14.1058	0.8336	0.0000	34.9466
Unmitigated	14.1058	0.8336	0.0000	34.9466

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.06	1.0271	0.0607	0.0000	2.5447
City Park	0.01	2.0300e- 003	1.2000e- 004	0.0000	5.0300e- 003
Condo/Townhous e	11.5	2.3344	0.1380	0.0000	5.7834
Single Family Housing	52.92	10.7423	0.6349	0.0000	26.6136
Total		14.1058	0.8336	0.0000	34.9466

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	5.06	1.0271	0.0607	0.0000	2.5447
City Park	0.01	2.0300e- 003	1.2000e- 004	0.0000	5.0300e- 003
Condo/Townhous e	11.5	2.3344	0.1380	0.0000	5.7834
Single Family Housing	52.92	10.7423	0.6349	0.0000	26.6136
Total		14.1058	0.8336	0.0000	34.9466

CalEEMod Version: CalEEMod.2016.3.2

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Hunter Subdivision Project Napa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	11.00	Dwelling Unit	0.00	11,000.00	27
Condo/Townhouse	25.00	Dwelling Unit	3.40	25,000.00	62
Single Family Housing	51.00	Dwelling Unit	13.40	91,800.00	126

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD. Adjusted intensity factors based on PG&E 2020 Corporate Responsibility and Sustainability Report, 206 lb CO2/MWh.

Land Use - 87 units including 51 single family homes, 11 granny flats, and 25 multi family residential units. Updated population per City of St Helena avg household size from BayAreaCensus.

Vehicle Trips - Updated trip generation per traffic report (Dudek).

Woodstoves - No woodstoves or hearths.

Energy Use - Adjusted T24 energy intensities to meet 2019 T24 standards. Single-family savings are 4% of electricity and 9% of gas. MF savings are 20% and 50%.

Water And Wastewater - Indoor water consumption updated per Preliminary Water Calculations Technical Memorandum (RSA).

Solid Waste - Default rates used.

Construction Off-road Equipment Mitigation - Implement fugitive dust reduction measures - water twice daily.

Mobile Land Use Mitigation - Project would implement a pedestrian network on and off-site, project site is approximately 0.4 mi from VINE transit.

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	T24E	365.68	351.05
tblEnergyUse	T24E	249.32	244.33
tblEnergyUse	T24E	325.76	312.73
tblEnergyUse	T24NG	7,043.85	6,409.90
tblEnergyUse	T24NG	15,568.01	14,789.61
tblEnergyUse	T24NG	25,910.09	23,578.18
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.65	11.00
tblFireplaces	NumberGas	3.75	25.00
tblFireplaces	NumberGas	12.75	51.00
tblFireplaces	NumberNoFireplace	0.44	0.00
tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
tblLandUse	LotAcreage	0.69	0.00
tblLandUse	LotAcreage	1.56	3.40
tblLandUse	LotAcreage	16.56	13.40
tblLandUse	Population	31.00	27.00

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Hunter Subdivision Project Operations - Napa County, Summer

tblLandUse	Population	72.00	62.00
tblLandUse	Population	146.00	126.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	10.00	11.00
tblTripsAndVMT	WorkerTripNumber	45.00	55.00
tblTripsAndVMT	WorkerTripNumber	9.00	11.00
tblVehicleTrips	ST_TR	7.16	8.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	9.56
tblVehicleTrips	ST_TR	9.91	9.56
tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	8.31
tblVehicleTrips	SU_TR	8.62	8.31
tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	716,694.28	1,711,778.00
tblWater	IndoorWaterUseRate	1,628,850.64	1,275,310.00
tblWater	IndoorWaterUseRate	3,322,855.31	3,492,027.00
tblWater	OutdoorWaterUseRate	71,488.88	0.00
tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.9034	4.6791	8.9312	0.0396	4.0054	0.0264	4.0317	1.0707	0.0246	1.0953		4,040.2928	4,040.2928	0.1442		4,043.8974
Total	4.6004	6.9295	17.0245	0.0538	4.0054	0.2414	4.2468	1.0707	0.2397	1.3104	0.0000	6,820.5888	6,820.5888	0.2096	0.0507	6,840.9479

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.8702	4.4730	8.0927	0.0354	3.5327	0.0237	3.5565	0.9444	0.0221	0.9665		3,609.9826	3,609.9826	0.1334		3,613.3170
Total	4.5672	6.7234	16.1860	0.0496	3.5327	0.2388	3.7715	0.9444	0.2372	1.1815	0.0000	6,390.2786	6,390.2786	0.1988	0.0507	6,410.3675

	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
Percent Reduction	0.72	2.97	4.93	7.86	11.80	1.10	11.19	11.80	1.04	9.83	0.00	6.31	6.31	5.15	0.00	6.29

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	0.8702	4.4730	8.0927	0.0354	3.5327	0.0237	3.5565	0.9444	0.0221	0.9665		3,609.982	3,609.982	0.1334		3,613.317
												6	6			0
Unmitigated	0.9034	4.6791	8.9312	0.0396	4.0054	0.0264	4.0317	1.0707	0.0246	1.0953		4,040.292	4,040.292	0.1442		4,043.897
												8	8			4

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

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	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
NaturalGas Unmitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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					
Apartments Low Rise	288.257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	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
Condo/Townhouse	1229.08	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3735.32	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		0.0566	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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					
Apartments Low Rise	0.288257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	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
Condo/Townhouse	1.22908	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3.73532	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		0.0566	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Unmitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

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	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

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	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

CalEEMod Version: CalEEMod.2016.3.2

Date: 3/3/2021 4:18 PM

Hunter Subdivision Project Napa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	0.06	Acre	0.06	2,613.60	0
Apartments Low Rise	11.00	Dwelling Unit	0.00	11,000.00	27
Condo/Townhouse	25.00	Dwelling Unit	3.40	25,000.00	62
Single Family Housing	51.00	Dwelling Unit	13.40	91,800.00	126

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Hunter Subdivision Project. BAAQMD. Adjusted intensity factors based on PG&E 2020 Corporate Responsibility and Sustainability Report, 206 lb CO2/MWh.

Land Use - 87 units including 51 single family homes, 11 granny flats, and 25 multi family residential units. Updated population per City of St Helena avg household size from BayAreaCensus.

Vehicle Trips - Updated trip generation per traffic report (Dudek).

Woodstoves - No woodstoves or hearths.

Energy Use - Adjusted T24 energy intensities to meet 2019 T24 standards. Single-family savings are 4% of electricity and 9% of gas. MF savings are 2% and 5%.

Water And Wastewater - Indoor water consumption updated per Preliminary Water Calculations Technical Memorandum (RSA).

Solid Waste - Default rates used.

Construction Off-road Equipment Mitigation - Implement fugitive dust reduction measures - water twice daily.

Mobile Land Use Mitigation - Project would implement a pedestrian network on and off-site, project site is approximately 0.4 mi from VINE transit.

Water Mitigation - 20% indoor/outdoor reduction in water assumed for CALGreen compliance.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	261.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	T24E	365.68	351.05
tblEnergyUse	T24E	249.32	244.33
tblEnergyUse	T24E	325.76	312.73
tblEnergyUse	T24NG	7,043.85	6,409.90
tblEnergyUse	T24NG	15,568.01	14,789.61
tblEnergyUse	T24NG	25,910.09	23,578.18
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	1.65	11.00
tblFireplaces	NumberGas	3.75	25.00
tblFireplaces	NumberGas	12.75	51.00
tblFireplaces	NumberNoFireplace	0.44	0.00
tblFireplaces	NumberNoFireplace	1.00	0.00
tblFireplaces	NumberNoFireplace	4.08	0.00
tblFireplaces	NumberWood	1.87	0.00
tblFireplaces	NumberWood	4.25	0.00
tblFireplaces	NumberWood	21.93	0.00
tblLandUse	LotAcreage	0.69	0.00
tblLandUse	LotAcreage	1.56	3.40

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Hunter Subdivision Project Operations - Napa County, Winter

tblLandUse	LotAcreage	16.56	13.40
tblLandUse	Population	31.00	27.00
tblLandUse	Population	72.00	62.00
tblLandUse	Population	146.00	126.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	10.00	11.00
tblTripsAndVMT	WorkerTripNumber	45.00	55.00
tblTripsAndVMT	WorkerTripNumber	9.00	11.00
tblVehicleTrips	ST_TR	7.16	8.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	9.56
tblVehicleTrips	ST_TR	9.91	9.56
tblVehicleTrips	SU_TR	6.07	6.94
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	8.31
tblVehicleTrips	SU_TR	8.62	8.31
tblVehicleTrips	WD_TR	6.59	7.36
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	9.44
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	IndoorWaterUseRate	716,694.28	1,711,778.00
tblWater	IndoorWaterUseRate	1,628,850.64	1,275,310.00
tblWater	IndoorWaterUseRate	3,322,855.31	3,492,027.00
tblWater	OutdoorWaterUseRate	71,488.88	0.00
tblWater	OutdoorWaterUseRate	1,026,884.10	1,026,884.00
tblWater	OutdoorWaterUseRate	2,094,843.56	2,094,844.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

tblWoodstoves	WoodstoveWoodMass	582.40	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.7591	4.8337	9.1529	0.0373	4.0054	0.0265	4.0319	1.0707	0.0247	1.0954		3,808.8609	3,808.8609	0.1513		3,812.6424
Total	4.4561	7.0841	17.2462	0.0516	4.0054	0.2416	4.2469	1.0707	0.2398	1.3105	0.0000	6,589.1569	6,589.1569	0.2167	0.0507	6,609.6929

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Energy	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
Mobile	0.7258	4.6049	8.3922	0.0333	3.5327	0.0239	3.5566	0.9444	0.0223	0.9666		3,401.1067	3,401.1067	0.1407		3,404.6248
Total	4.4228	6.8552	16.4854	0.0476	3.5327	0.2389	3.7717	0.9444	0.2373	1.1817	0.0000	6,181.4027	6,181.4027	0.2061	0.0507	6,201.6753

	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
Percent Reduction	0.75	3.23	4.41	7.78	11.80	1.10	11.19	11.80	1.03	9.83	0.00	6.19	6.19	4.86	0.00	6.17

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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	0.7258	4.6049	8.3922	0.0333	3.5327	0.0239	3.5566	0.9444	0.0223	0.9666		3,401.1067	3,401.1067	0.1407		3,404.6248
Unmitigated	0.7591	4.8337	9.1529	0.0373	4.0054	0.0265	4.0319	1.0707	0.0247	1.0954		3,808.8609	3,808.8609	0.1513		3,812.6424

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	80.96	89.98	76.34	188,438	166,202
City Park	0.00	0.00	0.00		
Condo/Townhouse	236.00	239.00	207.75	536,736	473,401
Single Family Housing	481.44	487.56	423.81	1,094,942	965,739
Total	798.40	816.54	707.90	1,820,116	1,605,342

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
City Park	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Condo/Townhouse	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688
Single Family Housing	0.621482	0.031755	0.164303	0.096476	0.014320	0.004717	0.015934	0.038849	0.003869	0.001558	0.005029	0.001019	0.000688

5.0 Energy Detail

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	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324
NaturalGas Unmitigated	0.0567	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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					
Apartments Low Rise	288.257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	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
Condo/Townhouse	1229.08	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3735.32	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		0.0566	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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					
Apartments Low Rise	0.288257	3.1100e-003	0.0266	0.0113	1.7000e-004		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		33.9126	33.9126	6.5000e-004	6.2000e-004	34.1141
City Park	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
Condo/Townhouse	1.22908	0.0133	0.1133	0.0482	7.2000e-004		9.1600e-003	9.1600e-003		9.1600e-003	9.1600e-003		144.5980	144.5980	2.7700e-003	2.6500e-003	145.4573
Single Family Housing	3.73532	0.0403	0.3442	0.1465	2.2000e-003		0.0278	0.0278		0.0278	0.0278		439.4495	439.4495	8.4200e-003	8.0600e-003	442.0610
Total		0.0566	0.4841	0.2060	3.0900e-003		0.0391	0.0391		0.0391	0.0391		617.9601	617.9601	0.0118	0.0113	621.6324

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	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181
Unmitigated	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

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	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

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	0.4930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7351					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1970	1.6837	0.7165	0.0108		0.1361	0.1361		0.1361	0.1361	0.0000	2,149.4118	2,149.4118	0.0412	0.0394	2,162.1846
Landscaping	0.2153	0.0826	7.1708	3.8000e-004		0.0398	0.0398		0.0398	0.0398		12.9241	12.9241	0.0124		13.2335
Total	3.6403	1.7663	7.8873	0.0111		0.1759	0.1759		0.1759	0.1759	0.0000	2,162.3358	2,162.3358	0.0536	0.0394	2,175.4181

Phase 1

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Site Preparation	Rubber Tired Dozers	3
Site Preparation	Tractors/Loaders/Backhoes	4
Grading	Excavators	2
Grading	Graders	1
Grading	Rubber Tired Dozers	1
Grading	Scrapers	2
Grading	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
Paving	Paving Equipment	2
Paving	Rollers	2
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Site Preparation	7	16.73
Grading	8	26.06
Paving	6	20.03
Building Construction	9	173.85
Architectural Coating	1	2.55

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	180	0.55

Grading	400	1.22
Paving	300	0.92
Building Construction	8,250	25.18
Architectural Coating	220	0.65

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	0	0.00
Grading	40	0.50
Paving	0	0.00
Building Construction	1,650	20.47
Architectural Coating	0	0.00

Construction Haul Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Site Preparation	0	0.00
Grading	0	0.00
Paving	0	0.00
Building Construction	0	0.00
Architectural Coating	0	0.00

Phase 2

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	9	173.89
Architectural Coating	1	2.55

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	8,250	24.17
Architectural Coating	220	0.64

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	1,650	20.35
Architectural Coating	0	0.00

Phase 3

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
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Building Construction	9	266.71
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	12,650	35.42
Architectural Coating	198	0.54

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)
Building Construction	2,530	31.02
Architectural Coating	0	0.00

Phase 4

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment
Building Construction	Cranes	1
Building Construction	Forklifts	3
Building Construction	Generator Sets	1
Building Construction	Tractors/Loaders/Backhoes	3
Building Construction	Welders	1
Architectural Coating	Air Compressors	1

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)
Building Construction	9	173.94
Architectural Coating	1	2.30

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction	8,250	22.30	
Architectural Coating	198	0.54	

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction	1,650	20.14	
Architectural Coating	0	0.00	

Phase 5

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment	
Building Construction	Cranes	1	
Building Construction	Forklifts	3	
Building Construction	Generator Sets	1	
Building Construction	Tractors/Loaders/Backhoes	3	
Building Construction	Welders	1	
Architectural Coating	Air Compressors	1	

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)	
Building Construction	9	173.94	
Architectural Coating	1	2.30	

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction	8,250	21.52	
Architectural Coating	198	0.52	

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction	1,650	20.04	
Architectural Coating	0	0.00	

Phase 6

Hours of Operation for Construction Equipment

Phase	Equipment Type	Number of Equipment	
Building Construction	Cranes	1	
Building Construction	Forklifts	2	
Building Construction	Generator Sets	1	
Building Construction	Tractors/Loaders/Backhoes	1	
Building Construction	Welders	3	
Architectural Coating	Air Compressors	1	

Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO2 (MT)	
Building Construction	8	155.80	
Architectural Coating	1	2.30	

Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction	8,250	20.84	
Architectural Coating	198	0.50	

Construction Vendor Truck Diesel Demand

Phase	Trips	Vehicle CO2 (MT)	
Building Construction		1,650	19.95
Architectural Coating		0	0.00

Total For All Phases

	Hours of Equipment Use	Equipment CO2 (MT)	
Site Preparation		560	16.73
Grading		1,280	26.06
Paving		960	20.03
Building Construction		65,440	1,118.13
Architectural Coating		672	12.54
Total		68,912	1,193

Hours/day	Phase Duration	Hours of Equipment Use	Phase Hours Subtotals
	8	10	240
	8	10	320
	8	20	320
	8	20	160
	8	20	160
	8	20	320
	8	20	320
			1,280
	8	20	320
	8	20	320
	8	20	320
			960
	7	150	1,050
	8	150	3,600
	8	150	1,200
	7	150	3,150
	8	150	1,200
			10,200
	6	20	120
			120
	Total		13,120

Kg/CO2/Gallon	Gallons
10.21	1,638.13
10.21	2,552.46
10.21	1,961.49
10.21	17,027.76
10.21	250.07
Total	23,429.90

Kg/CO2/Gallon	Gallons
8.78	62.57

8.78	139.04
8.78	104.28
8.78	2,867.69
8.78	74.19
Total	3,247.78

Kg/CO2/Gallon	Gallons
10.21	0.00
10.21	48.60
10.21	0.00
10.21	2,004.57
10.21	0.00
Total	2,053.17

Kg/CO2/Gallon	Gallons
10.21	0.00
10.21	0.00
10.21	0.00
10.21	0.00
10.21	0.00
Total	0.00

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	10,200
6	20	120	120

Total 10,320

Kg/CO2/Gallon	Gallons
10.21	17,031.03
10.21	250.08
Total	17,281.11

Kg/CO2/Gallon	Gallons
8.78	2,753.29
8.78	73.42
Total	2,826.71

Kg/CO2/Gallon	Gallons
10.21	1,993.38
10.21	0.00
Total	1,993.38

Hours/day	Phase Duration	Hours of Equipmmment Use	Phase Hours Subtotals
7	230	1,610	
8	230	5,520	
8	230	1,840	
7	230	4,830	
8	230	1,840	15,640
6	18	108	108
Total		15,748	

Kg/CO2/Gallon	Gallons
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10.21	26,122.14
10.21	225.06
Total	26,347.20

Kg/CO2/Gallon	Gallons
8.78	4,033.69
8.78	60.97
Total	4,094.66

Kg/CO2/Gallon	Gallons
10.21	3,038.25
10.21	0.00
Total	3,038.25

Hours/day	Phase Duration	Hours of Equipment Use	Phase Hours Subtotals
7	150	1,050	
8	150	3,600	
8	150	1,200	
7	150	3,150	
8	150	1,200	10,200
6	18	108	108
Total		10,308	

Kg/CO2/Gallon	Gallons
10.21	17,036.18
10.21	225.06
Total	17,261.24

Kg/CO2/Gallon	Gallons
8.78	2,540.40
8.78	60.97
Total	2,601.37

Kg/CO2/Gallon	Gallons
10.21	1,972.22
10.21	0.00
Total	1,972.22

Hours/day	Phase Duration	Hours of Equipmment Use	Phase Hours Subtotals
	7	150	1,050
	8	150	3,600
	8	150	1,200
	7	150	3,150
	8	150	1,200
			10,200
	6	18	108
			108
	Total	10,308	

Kg/CO2/Gallon	Gallons
10.21	17,036.18
10.21	225.06
Total	17,261.24

Kg/CO2/Gallon	Gallons
8.78	2,451.58
8.78	58.84

Total	2,510.42
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Kg/CO2/Gallon	Gallons
10.21	1,962.44
10.21	0.00
Total	1,962.44

Hours/day	Phase Duration	Hours of Equipment Use	Phase Hours Subtotals
8		150	1,200
7		150	2,100
8		150	1,200
6		150	900
8		150	3,600
			9,000
6		18	108
			108
	Total	9,108	

Kg/CO2/Gallon	Gallons
10.21	15,259.70
10.21	225.06
Total	15,484.76

Kg/CO2/Gallon	Gallons
8.78	2,373.22
8.78	56.96
Total	2,430.18

Kg/CO2/Gallon	Gallons
10.21	1,954.39
10.21	0.00
Total	1,954.39

Equipment Gallons	Worker Trips	Worker CO2 (MT)	Worker Gallons	Vendor Trips	Vendor CO2 (MT)
1,638.13	180	0.55	62.57	0	0.00
2,552.46	400	1.22	139.04	40	0.50
1,961.49	300	0.92	104.28	0	0.00
109,512.98	53,900	149.43	17,019.87	10,780	131.97
1,400.40	1,232	3.38	385.34	0	0.00
117,065.46	56,012	156	17,711.12	10,820	132

Vendor
Gallons
0.00
48.60
0.00
12,925.25
0.00
12,973.85

Natural Gas Consumption

Land Use	kBTU/yr	Therms
Apartment Low Rise	105,214.00	1,052.14
Condo/Townhouse	448,615.00	4,486.15
Single-Family Housing	1,363,390.00	13,633.90
Total kBTU	1,917,219.00	19,172.19
1,917,219,000.00 BTU		
1 Therm 100,000 BTU		
Total Therms	19,172.19	19,172.19 Total Therms

lda	ldt1	ldt2	mdv	ldh1	ldh2	mhd	hhd	obus	ubus	mcy	sbus	mh	
	0.609162	0.038894	0.1786	0.101308	0.013823	0.005356	0.016956	0.024628	0.001928	0.001823	0.005807	0.000764	0.00095
	0.928914												
	0.071086												

Mobile Source Fuel Consumption - Operation

Fuel	Vehicle CO2 (MT)	Kg/CO2/Gallon	Gallons
Gasoline	510.16	8.78	58,104.81
Diesel	39.04	10.21	3,823.75
Total			61,928.56

California's Consumption of Petroleum Over Construction Period

78,600,000 gallons per day
89,761,200,000.00
0.09%

Phase 1			
Site Preparation	3/20/2023	3/31/2023	10 days
Grading	4/1/2023	4/28/2023	20 days
Paving	4/29/2023	5/26/2023	20 days
Building Construction	5/27/2023	12/22/2023	150 days
Architectural Coating	12/23/2023	1/19/2024	20 days
Phase 2			
Building Construction	3/18/2024	10/11/2024	150 days
Architectural Coating	10/12/2024	11/8/2024	20 days
Phase 3			
Building Construction	3/17/2025	1/30/2026	230 days
Architectural Coating	1/31/2026	2/25/2026	18 days
Phase 4			
Building Construction	3/23/2026	10/16/2026	150 days
Architectural Coating	10/17/2026	11/11/2026	18 days
Phase 5			
Building Construction	3/22/2027	10/15/2027	150 days
Architectural Coating	10/16/2027	11/10/2027	18 days
Phase 6			
Building Construction	3/20/2028	10/13/2028	150 days
Architectural Coating	10/14/2028	11/8/2028	18 days