

The Ranch (Construction Only - Bay Area AQMD Air District, Annual

**The Ranch (Construction Only  
Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	685.00	Dwelling Unit	150.00	1,233,000.00	1959

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics -

Land Use - Applicant Information

Construction Phase - Construction of Phase 3 modeled

Grading - Applicant Information

Demolition -

Vehicle Trips - Project operations modeled separately

Woodstoves - Project operations modeled separately

Consumer Products - Project operations modeled separately

Area Coating -

Landscape Equipment -

Energy Use - Project operations modeled separately

Water And Wastewater - Project operations modeled separately

Solid Waste - Project operations modeled separately

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	1,584.00
tblConstructionPhase	NumDays	3,100.00	1,584.00
tblConstructionPhase	NumDays	200.00	3.00
tblConstructionPhase	NumDays	310.00	142.00
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	120.00	30.00
tblConstructionPhase	PhaseEndDate	3/25/2036	2/22/2027
tblConstructionPhase	PhaseEndDate	7/18/2034	2/8/2027
tblConstructionPhase	PhaseEndDate	1/5/2021	4/3/2020
tblConstructionPhase	PhaseEndDate	8/30/2022	12/1/2020
tblConstructionPhase	PhaseEndDate	5/22/2035	1/12/2021

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tblConstructionPhase	PhaseEndDate	6/22/2021	5/15/2020
tblConstructionPhase	PhaseStartDate	5/23/2035	1/27/2021
tblConstructionPhase	PhaseStartDate	8/31/2022	1/13/2021
tblConstructionPhase	PhaseStartDate	6/23/2021	5/16/2020
tblConstructionPhase	PhaseStartDate	7/19/2034	12/2/2020
tblConstructionPhase	PhaseStartDate	1/6/2021	4/4/2020
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	325.76	0.00
tblEnergyUse	T24NG	25,910.09	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	171.25	0.00
tblFireplaces	NumberNoFireplace	54.80	0.00
tblFireplaces	NumberWood	294.55	0.00
tblGrading	AcresOfGrading	355.00	150.00
tblLandUse	LotAcreage	222.40	150.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	822.78	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	44,630,507.55	0.00
tblWater	OutdoorWaterUseRate	28,136,624.33	0.00
tblWoodstoves	NumberCatalytic	27.40	0.00

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tblWoodstoves	NumberNoncatalytic	27.40	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

## 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					
2020	0.4033	4.4116	2.8321	5.4300e-003	0.7948	0.1982	0.9930	0.3968	0.1824	0.5792	0.0000	477.7260	477.7260	0.1502	0.0000	481.4820
2021	1.7457	3.4456	3.4423	8.9100e-003	0.3492	0.1393	0.4884	0.0942	0.1316	0.2257	0.0000	801.9664	801.9664	0.0923	0.0000	804.2747
2022	1.8097	3.1874	3.3786	8.9600e-003	0.3604	0.1195	0.4798	0.0972	0.1130	0.2102	0.0000	806.9734	806.9734	0.0906	0.0000	809.2389
2023	1.7770	2.8058	3.2758	8.7900e-003	0.3604	0.1028	0.4632	0.0972	0.0973	0.1945	0.0000	791.2466	791.2466	0.0877	0.0000	793.4400
2024	1.7690	2.6789	3.2289	8.7400e-003	0.3631	0.0910	0.4541	0.0979	0.0860	0.1839	0.0000	786.3754	786.3754	0.0872	0.0000	788.5557
2025	1.7415	2.5186	3.1499	8.5900e-003	0.3617	0.0782	0.4399	0.0976	0.0739	0.1714	0.0000	772.6691	772.6691	0.0858	0.0000	774.8150
2026	1.7365	2.5062	3.1033	8.4800e-003	0.3617	0.0781	0.4398	0.0976	0.0738	0.1714	0.0000	763.2145	763.2145	0.0853	0.0000	765.3476
2027	0.2353	0.2641	0.3293	9.0000e-004	0.0394	8.3300e-003	0.0477	0.0106	7.8900e-003	0.0185	0.0000	80.6587	80.6587	8.8700e-003	0.0000	80.8804
<b>Maximum</b>	<b>1.8097</b>	<b>4.4116</b>	<b>3.4423</b>	<b>8.9600e-003</b>	<b>0.7948</b>	<b>0.1982</b>	<b>0.9930</b>	<b>0.3968</b>	<b>0.1824</b>	<b>0.5792</b>	<b>0.0000</b>	<b>806.9734</b>	<b>806.9734</b>	<b>0.1502</b>	<b>0.0000</b>	<b>809.2389</b>

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**2.1 Overall Construction**

**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					
2020	0.4033	4.4116	2.8321	5.4300e-003	0.7948	0.1982	0.9930	0.3968	0.1824	0.5792	0.0000	477.7255	477.7255	0.1502	0.0000	481.4815
2021	1.7457	3.4456	3.4423	8.9100e-003	0.3492	0.1393	0.4884	0.0942	0.1316	0.2257	0.0000	801.9660	801.9660	0.0923	0.0000	804.2743
2022	1.8097	3.1874	3.3786	8.9600e-003	0.3604	0.1195	0.4798	0.0972	0.1130	0.2102	0.0000	806.9730	806.9730	0.0906	0.0000	809.2385
2023	1.7770	2.8058	3.2758	8.7900e-003	0.3604	0.1028	0.4632	0.0972	0.0973	0.1945	0.0000	791.2462	791.2462	0.0877	0.0000	793.4396
2024	1.7690	2.6789	3.2289	8.7400e-003	0.3631	0.0910	0.4541	0.0979	0.0860	0.1839	0.0000	786.3750	786.3750	0.0872	0.0000	788.5553
2025	1.7415	2.5186	3.1499	8.5900e-003	0.3617	0.0782	0.4399	0.0976	0.0739	0.1714	0.0000	772.6687	772.6687	0.0858	0.0000	774.8146
2026	1.7365	2.5062	3.1033	8.4800e-003	0.3617	0.0781	0.4398	0.0976	0.0738	0.1714	0.0000	763.2141	763.2141	0.0853	0.0000	765.3472
2027	0.2353	0.2641	0.3293	9.0000e-004	0.0394	8.3300e-003	0.0477	0.0106	7.8900e-003	0.0185	0.0000	80.6586	80.6586	8.8700e-003	0.0000	80.8804
<b>Maximum</b>	<b>1.8097</b>	<b>4.4116</b>	<b>3.4423</b>	<b>8.9600e-003</b>	<b>0.7948</b>	<b>0.1982</b>	<b>0.9930</b>	<b>0.3968</b>	<b>0.1824</b>	<b>0.5792</b>	<b>0.0000</b>	<b>806.9730</b>	<b>806.9730</b>	<b>0.1502</b>	<b>0.0000</b>	<b>809.2385</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	1.6394	1.6394
2	7-1-2020	9-30-2020	1.7992	1.7992

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3	10-1-2020	12-31-2020	1.3791	1.3791
4	1-1-2021	3-31-2021	1.1452	1.1452
5	4-1-2021	6-30-2021	1.3324	1.3324
6	7-1-2021	9-30-2021	1.3471	1.3471
7	10-1-2021	12-31-2021	1.3552	1.3552
8	1-1-2022	3-31-2022	1.2398	1.2398
9	4-1-2022	6-30-2022	1.2464	1.2464
10	7-1-2022	9-30-2022	1.2601	1.2601
11	10-1-2022	12-31-2022	1.2674	1.2674
12	1-1-2023	3-31-2023	1.1371	1.1371
13	4-1-2023	6-30-2023	1.1437	1.1437
14	7-1-2023	9-30-2023	1.1563	1.1563
15	10-1-2023	12-31-2023	1.1624	1.1624
16	1-1-2024	3-31-2024	1.1073	1.1073
17	4-1-2024	6-30-2024	1.1016	1.1016
18	7-1-2024	9-30-2024	1.1137	1.1137
19	10-1-2024	12-31-2024	1.1195	1.1195
20	1-1-2025	3-31-2025	1.0528	1.0528
21	4-1-2025	6-30-2025	1.0592	1.0592
22	7-1-2025	9-30-2025	1.0708	1.0708
23	10-1-2025	12-31-2025	1.0762	1.0762
24	1-1-2026	3-31-2026	1.0484	1.0484
25	4-1-2026	6-30-2026	1.0549	1.0549
26	7-1-2026	9-30-2026	1.0665	1.0665
27	10-1-2026	12-31-2026	1.0717	1.0717
28	1-1-2027	3-31-2027	0.5147	0.5147
		Highest	1.7992	1.7992

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**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.9672	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.9672</b>	<b>0.0585</b>	<b>5.0728</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>8.3082</b>	<b>8.3082</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>8.5061</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.9672	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.9672</b>	<b>0.0585</b>	<b>5.0728</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>8.3082</b>	<b>8.3082</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>8.5061</b>

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**



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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/3/2020	5	3	
2	Site Preparation	Site Preparation	4/4/2020	5/15/2020	5	30	
3	Grading	Grading	5/16/2020	12/1/2020	5	142	
4	Paving	Paving	12/2/2020	1/12/2021	5	30	
5	Building Construction	Building Construction	1/13/2021	2/8/2027	5	1584	
6	Architectural Coating	Architectural Coating	1/27/2021	2/22/2027	5	1584	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 150**

**Acres of Paving: 0**

**Residential Indoor: 2,496,825; Residential Outdoor: 832,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Demolition	6	15.00	0.00	16.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	247.00	73.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	49.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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					1.7200e-003	0.0000	1.7200e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0498	0.0326	6.0000e-005		2.4900e-003	2.4900e-003		2.3100e-003	2.3100e-003	0.0000	5.0998	5.0998	1.4400e-003	0.0000	5.1358
<b>Total</b>	<b>4.9700e-003</b>	<b>0.0498</b>	<b>0.0326</b>	<b>6.0000e-005</b>	<b>1.7200e-003</b>	<b>2.4900e-003</b>	<b>4.2100e-003</b>	<b>2.6000e-004</b>	<b>2.3100e-003</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>5.0998</b>	<b>5.0998</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>5.1358</b>

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**3.2 Demolition - 2020**

**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	7.0000e-005	2.3400e-003	4.7000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.6131	0.6131	3.0000e-005	0.0000	0.6139
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	7.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1558	0.1558	0.0000	0.0000	0.1559
<b>Total</b>	<b>1.4000e-004</b>	<b>2.3900e-003</b>	<b>1.0200e-003</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>9.0000e-005</b>	<b>1.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.7689</b>	<b>0.7689</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7698</b>

**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					1.7200e-003	0.0000	1.7200e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0498	0.0326	6.0000e-005		2.4900e-003	2.4900e-003		2.3100e-003	2.3100e-003	0.0000	5.0998	5.0998	1.4400e-003	0.0000	5.1358
<b>Total</b>	<b>4.9700e-003</b>	<b>0.0498</b>	<b>0.0326</b>	<b>6.0000e-005</b>	<b>1.7200e-003</b>	<b>2.4900e-003</b>	<b>4.2100e-003</b>	<b>2.6000e-004</b>	<b>2.3100e-003</b>	<b>2.5700e-003</b>	<b>0.0000</b>	<b>5.0998</b>	<b>5.0998</b>	<b>1.4400e-003</b>	<b>0.0000</b>	<b>5.1358</b>

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**3.2 Demolition - 2020**

**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	7.0000e-005	2.3400e-003	4.7000e-004	1.0000e-005	1.4000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.6131	0.6131	3.0000e-005	0.0000	0.6139
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	7.0000e-005	5.0000e-005	5.5000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1558	0.1558	0.0000	0.0000	0.1559
<b>Total</b>	<b>1.4000e-004</b>	<b>2.3900e-003</b>	<b>1.0200e-003</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>9.0000e-005</b>	<b>1.0000e-005</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.7689</b>	<b>0.7689</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.7698</b>

**3.3 Site Preparation - 2020**

**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					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5515
<b>Total</b>	<b>0.0612</b>	<b>0.6363</b>	<b>0.3227</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0330</b>	<b>0.3040</b>	<b>0.1490</b>	<b>0.0303</b>	<b>0.1793</b>	<b>0.0000</b>	<b>50.1460</b>	<b>50.1460</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5515</b>

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**3.3 Site Preparation - 2020**

**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	8.9000e-004	6.4000e-004	6.6300e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.8692	1.8692	5.0000e-005	0.0000	1.8703
<b>Total</b>	<b>8.9000e-004</b>	<b>6.4000e-004</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>2.1500e-003</b>	<b>5.7000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.8692</b>	<b>1.8692</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.8703</b>

**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					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5514
<b>Total</b>	<b>0.0612</b>	<b>0.6363</b>	<b>0.3227</b>	<b>5.7000e-004</b>	<b>0.2710</b>	<b>0.0330</b>	<b>0.3040</b>	<b>0.1490</b>	<b>0.0303</b>	<b>0.1793</b>	<b>0.0000</b>	<b>50.1460</b>	<b>50.1460</b>	<b>0.0162</b>	<b>0.0000</b>	<b>50.5514</b>

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**3.3 Site Preparation - 2020**

**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	8.9000e-004	6.4000e-004	6.6300e-003	2.0000e-005	2.1300e-003	1.0000e-005	2.1500e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.8692	1.8692	5.0000e-005	0.0000	1.8703
<b>Total</b>	<b>8.9000e-004</b>	<b>6.4000e-004</b>	<b>6.6300e-003</b>	<b>2.0000e-005</b>	<b>2.1300e-003</b>	<b>1.0000e-005</b>	<b>2.1500e-003</b>	<b>5.7000e-004</b>	<b>1.0000e-005</b>	<b>5.8000e-004</b>	<b>0.0000</b>	<b>1.8692</b>	<b>1.8692</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>1.8703</b>

**3.4 Grading - 2020**

**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					0.5071	0.0000	0.5071	0.2436	0.0000	0.2436	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3160	3.5640	2.2690	4.4000e-003		0.1544	0.1544		0.1420	0.1420	0.0000	386.8385	386.8385	0.1251	0.0000	389.9663
<b>Total</b>	<b>0.3160</b>	<b>3.5640</b>	<b>2.2690</b>	<b>4.4000e-003</b>	<b>0.5071</b>	<b>0.1544</b>	<b>0.6615</b>	<b>0.2436</b>	<b>0.1420</b>	<b>0.3856</b>	<b>0.0000</b>	<b>386.8385</b>	<b>386.8385</b>	<b>0.1251</b>	<b>0.0000</b>	<b>389.9663</b>

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**3.4 Grading - 2020**

**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	4.7100e-003	3.3700e-003	0.0349	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0500e-003	0.0000	9.8304	9.8304	2.4000e-004	0.0000	9.8363
<b>Total</b>	<b>4.7100e-003</b>	<b>3.3700e-003</b>	<b>0.0349</b>	<b>1.1000e-004</b>	<b>0.0112</b>	<b>8.0000e-005</b>	<b>0.0113</b>	<b>2.9900e-003</b>	<b>7.0000e-005</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>9.8304</b>	<b>9.8304</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>9.8363</b>

**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					0.5071	0.0000	0.5071	0.2436	0.0000	0.2436	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3160	3.5640	2.2690	4.4000e-003		0.1544	0.1544		0.1420	0.1420	0.0000	386.8380	386.8380	0.1251	0.0000	389.9658
<b>Total</b>	<b>0.3160</b>	<b>3.5640</b>	<b>2.2690</b>	<b>4.4000e-003</b>	<b>0.5071</b>	<b>0.1544</b>	<b>0.6615</b>	<b>0.2436</b>	<b>0.1420</b>	<b>0.3856</b>	<b>0.0000</b>	<b>386.8380</b>	<b>386.8380</b>	<b>0.1251</b>	<b>0.0000</b>	<b>389.9658</b>



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**3.4 Grading - 2020**

**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	4.7100e-003	3.3700e-003	0.0349	1.1000e-004	0.0112	8.0000e-005	0.0113	2.9900e-003	7.0000e-005	3.0500e-003	0.0000	9.8304	9.8304	2.4000e-004	0.0000	9.8363
<b>Total</b>	<b>4.7100e-003</b>	<b>3.3700e-003</b>	<b>0.0349</b>	<b>1.1000e-004</b>	<b>0.0112</b>	<b>8.0000e-005</b>	<b>0.0113</b>	<b>2.9900e-003</b>	<b>7.0000e-005</b>	<b>3.0500e-003</b>	<b>0.0000</b>	<b>9.8304</b>	<b>9.8304</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>9.8363</b>

**3.5 Paving - 2020**

**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	0.0149	0.1547	0.1612	2.5000e-004		8.2800e-003	8.2800e-003		7.6200e-003	7.6200e-003	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0149</b>	<b>0.1547</b>	<b>0.1612</b>	<b>2.5000e-004</b>		<b>8.2800e-003</b>	<b>8.2800e-003</b>		<b>7.6200e-003</b>	<b>7.6200e-003</b>	<b>0.0000</b>	<b>22.0310</b>	<b>22.0310</b>	<b>7.1300e-003</b>	<b>0.0000</b>	<b>22.2092</b>

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**3.5 Paving - 2020**

**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	5.5000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1423	1.1423	3.0000e-005	0.0000	1.1430
<b>Total</b>	<b>5.5000e-004</b>	<b>3.9000e-004</b>	<b>4.0500e-003</b>	<b>1.0000e-005</b>	<b>1.3000e-003</b>	<b>1.0000e-005</b>	<b>1.3100e-003</b>	<b>3.5000e-004</b>	<b>1.0000e-005</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.1423</b>	<b>1.1423</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1430</b>

**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	0.0149	0.1547	0.1612	2.5000e-004		8.2800e-003	8.2800e-003		7.6200e-003	7.6200e-003	0.0000	22.0310	22.0310	7.1300e-003	0.0000	22.2092
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0149</b>	<b>0.1547</b>	<b>0.1612</b>	<b>2.5000e-004</b>		<b>8.2800e-003</b>	<b>8.2800e-003</b>		<b>7.6200e-003</b>	<b>7.6200e-003</b>	<b>0.0000</b>	<b>22.0310</b>	<b>22.0310</b>	<b>7.1300e-003</b>	<b>0.0000</b>	<b>22.2092</b>

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**3.5 Paving - 2020**

**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	5.5000e-004	3.9000e-004	4.0500e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	1.1423	1.1423	3.0000e-005	0.0000	1.1430
<b>Total</b>	<b>5.5000e-004</b>	<b>3.9000e-004</b>	<b>4.0500e-003</b>	<b>1.0000e-005</b>	<b>1.3000e-003</b>	<b>1.0000e-005</b>	<b>1.3100e-003</b>	<b>3.5000e-004</b>	<b>1.0000e-005</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>1.1423</b>	<b>1.1423</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>1.1430</b>

**3.5 Paving - 2021**

**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	5.0200e-003	0.0517	0.0586	9.0000e-005		2.7100e-003	2.7100e-003		2.4900e-003	2.4900e-003	0.0000	8.0094	8.0094	2.5900e-003	0.0000	8.0742
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.0200e-003</b>	<b>0.0517</b>	<b>0.0586</b>	<b>9.0000e-005</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>		<b>2.4900e-003</b>	<b>2.4900e-003</b>	<b>0.0000</b>	<b>8.0094</b>	<b>8.0094</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>8.0742</b>

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**3.5 Paving - 2021**

**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	1.8000e-004	1.3000e-004	1.3500e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4008	0.4008	1.0000e-005	0.0000	0.4010
<b>Total</b>	<b>1.8000e-004</b>	<b>1.3000e-004</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4008</b>	<b>0.4008</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4010</b>

**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	5.0200e-003	0.0517	0.0586	9.0000e-005		2.7100e-003	2.7100e-003		2.4900e-003	2.4900e-003	0.0000	8.0094	8.0094	2.5900e-003	0.0000	8.0741
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.0200e-003</b>	<b>0.0517</b>	<b>0.0586</b>	<b>9.0000e-005</b>		<b>2.7100e-003</b>	<b>2.7100e-003</b>		<b>2.4900e-003</b>	<b>2.4900e-003</b>	<b>0.0000</b>	<b>8.0094</b>	<b>8.0094</b>	<b>2.5900e-003</b>	<b>0.0000</b>	<b>8.0741</b>

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**3.5 Paving - 2021**

**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	1.8000e-004	1.3000e-004	1.3500e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4008	0.4008	1.0000e-005	0.0000	0.4010
<b>Total</b>	<b>1.8000e-004</b>	<b>1.3000e-004</b>	<b>1.3500e-003</b>	<b>0.0000</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>4.8000e-004</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>0.4008</b>	<b>0.4008</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4010</b>

**3.6 Building Construction - 2021**

**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	0.2405	2.2052	2.0968	3.4100e-003		0.1213	0.1213		0.1140	0.1140	0.0000	293.0212	293.0212	0.0707	0.0000	294.7885
<b>Total</b>	<b>0.2405</b>	<b>2.2052</b>	<b>2.0968</b>	<b>3.4100e-003</b>		<b>0.1213</b>	<b>0.1213</b>		<b>0.1140</b>	<b>0.1140</b>	<b>0.0000</b>	<b>293.0212</b>	<b>293.0212</b>	<b>0.0707</b>	<b>0.0000</b>	<b>294.7885</b>

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**3.6 Building Construction - 2021**

**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	0.0277	0.9244	0.2304	2.3000e-003	0.0548	1.9200e-003	0.0567	0.0158	1.8400e-003	0.0177	0.0000	221.0274	221.0274	0.0113	0.0000	221.3109
Worker	0.0959	0.0662	0.7008	2.3100e-003	0.2469	1.6100e-003	0.2485	0.0657	1.4900e-003	0.0672	0.0000	208.7168	208.7168	4.6800e-003	0.0000	208.8338
<b>Total</b>	<b>0.1236</b>	<b>0.9905</b>	<b>0.9312</b>	<b>4.6100e-003</b>	<b>0.3017</b>	<b>3.5300e-003</b>	<b>0.3052</b>	<b>0.0815</b>	<b>3.3300e-003</b>	<b>0.0849</b>	<b>0.0000</b>	<b>429.7443</b>	<b>429.7443</b>	<b>0.0160</b>	<b>0.0000</b>	<b>430.1447</b>

**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	0.2405	2.2052	2.0968	3.4100e-003		0.1213	0.1213		0.1140	0.1140	0.0000	293.0208	293.0208	0.0707	0.0000	294.7881
<b>Total</b>	<b>0.2405</b>	<b>2.2052</b>	<b>2.0968</b>	<b>3.4100e-003</b>		<b>0.1213</b>	<b>0.1213</b>		<b>0.1140</b>	<b>0.1140</b>	<b>0.0000</b>	<b>293.0208</b>	<b>293.0208</b>	<b>0.0707</b>	<b>0.0000</b>	<b>294.7881</b>

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**3.6 Building Construction - 2021**

**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	0.0277	0.9244	0.2304	2.3000e-003	0.0548	1.9200e-003	0.0567	0.0158	1.8400e-003	0.0177	0.0000	221.0274	221.0274	0.0113	0.0000	221.3109
Worker	0.0959	0.0662	0.7008	2.3100e-003	0.2469	1.6100e-003	0.2485	0.0657	1.4900e-003	0.0672	0.0000	208.7168	208.7168	4.6800e-003	0.0000	208.8338
<b>Total</b>	<b>0.1236</b>	<b>0.9905</b>	<b>0.9312</b>	<b>4.6100e-003</b>	<b>0.3017</b>	<b>3.5300e-003</b>	<b>0.3052</b>	<b>0.0815</b>	<b>3.3300e-003</b>	<b>0.0849</b>	<b>0.0000</b>	<b>429.7443</b>	<b>429.7443</b>	<b>0.0160</b>	<b>0.0000</b>	<b>430.1447</b>

**3.6 Building Construction - 2022**

**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	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
<b>Total</b>	<b>0.2218</b>	<b>2.0300</b>	<b>2.1272</b>	<b>3.5000e-003</b>		<b>0.1052</b>	<b>0.1052</b>		<b>0.0990</b>	<b>0.0990</b>	<b>0.0000</b>	<b>301.2428</b>	<b>301.2428</b>	<b>0.0722</b>	<b>0.0000</b>	<b>303.0471</b>

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**3.6 Building Construction - 2022**

**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	0.0266	0.9012	0.2224	2.3400e-003	0.0563	1.7100e-003	0.0580	0.0163	1.6400e-003	0.0179	0.0000	224.9192	224.9192	0.0111	0.0000	225.1973
Worker	0.0919	0.0610	0.6619	2.2800e-003	0.2537	1.6200e-003	0.2554	0.0675	1.4900e-003	0.0690	0.0000	206.6280	206.6280	4.3100e-003	0.0000	206.7358
<b>Total</b>	<b>0.1184</b>	<b>0.9622</b>	<b>0.8843</b>	<b>4.6200e-003</b>	<b>0.3100</b>	<b>3.3300e-003</b>	<b>0.3134</b>	<b>0.0838</b>	<b>3.1300e-003</b>	<b>0.0869</b>	<b>0.0000</b>	<b>431.5473</b>	<b>431.5473</b>	<b>0.0154</b>	<b>0.0000</b>	<b>431.9331</b>

**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	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
<b>Total</b>	<b>0.2218</b>	<b>2.0300</b>	<b>2.1272</b>	<b>3.5000e-003</b>		<b>0.1052</b>	<b>0.1052</b>		<b>0.0990</b>	<b>0.0990</b>	<b>0.0000</b>	<b>301.2425</b>	<b>301.2425</b>	<b>0.0722</b>	<b>0.0000</b>	<b>303.0467</b>



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**3.6 Building Construction - 2022**

**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	0.0266	0.9012	0.2224	2.3400e-003	0.0563	1.7100e-003	0.0580	0.0163	1.6400e-003	0.0179	0.0000	224.9192	224.9192	0.0111	0.0000	225.1973
Worker	0.0919	0.0610	0.6619	2.2800e-003	0.2537	1.6200e-003	0.2554	0.0675	1.4900e-003	0.0690	0.0000	206.6280	206.6280	4.3100e-003	0.0000	206.7358
<b>Total</b>	<b>0.1184</b>	<b>0.9622</b>	<b>0.8843</b>	<b>4.6200e-003</b>	<b>0.3100</b>	<b>3.3300e-003</b>	<b>0.3134</b>	<b>0.0838</b>	<b>3.1300e-003</b>	<b>0.0869</b>	<b>0.0000</b>	<b>431.5473</b>	<b>431.5473</b>	<b>0.0154</b>	<b>0.0000</b>	<b>431.9331</b>

**3.6 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	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
<b>Total</b>	<b>0.2045</b>	<b>1.8700</b>	<b>2.1117</b>	<b>3.5000e-003</b>		<b>0.0910</b>	<b>0.0910</b>		<b>0.0856</b>	<b>0.0856</b>	<b>0.0000</b>	<b>301.3462</b>	<b>301.3462</b>	<b>0.0717</b>	<b>0.0000</b>	<b>303.1383</b>

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**3.6 Building Construction - 2023**

**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	0.0200	0.7007	0.1990	2.2700e-003	0.0563	7.6000e-004	0.0571	0.0163	7.3000e-004	0.0170	0.0000	218.5723	218.5723	9.4300e-003	0.0000	218.8081
Worker	0.0859	0.0548	0.6088	2.2000e-003	0.2537	1.5900e-003	0.2553	0.0675	1.4600e-003	0.0690	0.0000	198.7147	198.7147	3.8700e-003	0.0000	198.8114
<b>Total</b>	<b>0.1059</b>	<b>0.7555</b>	<b>0.8078</b>	<b>4.4700e-003</b>	<b>0.3100</b>	<b>2.3500e-003</b>	<b>0.3124</b>	<b>0.0838</b>	<b>2.1900e-003</b>	<b>0.0860</b>	<b>0.0000</b>	<b>417.2870</b>	<b>417.2870</b>	<b>0.0133</b>	<b>0.0000</b>	<b>417.6195</b>

**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	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
<b>Total</b>	<b>0.2045</b>	<b>1.8700</b>	<b>2.1117</b>	<b>3.5000e-003</b>		<b>0.0910</b>	<b>0.0910</b>		<b>0.0856</b>	<b>0.0856</b>	<b>0.0000</b>	<b>301.3458</b>	<b>301.3458</b>	<b>0.0717</b>	<b>0.0000</b>	<b>303.1380</b>

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**3.6 Building Construction - 2023**

**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	0.0200	0.7007	0.1990	2.2700e-003	0.0563	7.6000e-004	0.0571	0.0163	7.3000e-004	0.0170	0.0000	218.5723	218.5723	9.4300e-003	0.0000	218.8081
Worker	0.0859	0.0548	0.6088	2.2000e-003	0.2537	1.5900e-003	0.2553	0.0675	1.4600e-003	0.0690	0.0000	198.7147	198.7147	3.8700e-003	0.0000	198.8114
<b>Total</b>	<b>0.1059</b>	<b>0.7555</b>	<b>0.8078</b>	<b>4.4700e-003</b>	<b>0.3100</b>	<b>2.3500e-003</b>	<b>0.3124</b>	<b>0.0838</b>	<b>2.1900e-003</b>	<b>0.0860</b>	<b>0.0000</b>	<b>417.2870</b>	<b>417.2870</b>	<b>0.0133</b>	<b>0.0000</b>	<b>417.6195</b>

**3.6 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	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
<b>Total</b>	<b>0.1928</b>	<b>1.7611</b>	<b>2.1179</b>	<b>3.5300e-003</b>		<b>0.0803</b>	<b>0.0803</b>		<b>0.0756</b>	<b>0.0756</b>	<b>0.0000</b>	<b>303.7223</b>	<b>303.7223</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5179</b>

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**3.6 Building Construction - 2024**

**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	0.0194	0.6983	0.1929	2.2700e-003	0.0567	7.5000e-004	0.0575	0.0164	7.2000e-004	0.0171	0.0000	218.7350	218.7350	9.3000e-003	0.0000	218.9675
Worker	0.0814	0.0499	0.5683	2.1200e-003	0.2557	1.5700e-003	0.2573	0.0680	1.4400e-003	0.0695	0.0000	192.3183	192.3183	3.5100e-003	0.0000	192.4060
<b>Total</b>	<b>0.1008</b>	<b>0.7482</b>	<b>0.7612</b>	<b>4.3900e-003</b>	<b>0.3124</b>	<b>2.3200e-003</b>	<b>0.3147</b>	<b>0.0844</b>	<b>2.1600e-003</b>	<b>0.0866</b>	<b>0.0000</b>	<b>411.0532</b>	<b>411.0532</b>	<b>0.0128</b>	<b>0.0000</b>	<b>411.3735</b>

**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	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
<b>Total</b>	<b>0.1928</b>	<b>1.7611</b>	<b>2.1179</b>	<b>3.5300e-003</b>		<b>0.0803</b>	<b>0.0803</b>		<b>0.0756</b>	<b>0.0756</b>	<b>0.0000</b>	<b>303.7220</b>	<b>303.7220</b>	<b>0.0718</b>	<b>0.0000</b>	<b>305.5175</b>

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**3.6 Building Construction - 2024**

**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	0.0194	0.6983	0.1929	2.2700e-003	0.0567	7.5000e-004	0.0575	0.0164	7.2000e-004	0.0171	0.0000	218.7350	218.7350	9.3000e-003	0.0000	218.9675
Worker	0.0814	0.0499	0.5683	2.1200e-003	0.2557	1.5700e-003	0.2573	0.0680	1.4400e-003	0.0695	0.0000	192.3183	192.3183	3.5100e-003	0.0000	192.4060
<b>Total</b>	<b>0.1008</b>	<b>0.7482</b>	<b>0.7612</b>	<b>4.3900e-003</b>	<b>0.3124</b>	<b>2.3200e-003</b>	<b>0.3147</b>	<b>0.0844</b>	<b>2.1600e-003</b>	<b>0.0866</b>	<b>0.0000</b>	<b>411.0532</b>	<b>411.0532</b>	<b>0.0128</b>	<b>0.0000</b>	<b>411.3735</b>

**3.6 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	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
<b>Total</b>	<b>0.1785</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6549</b>	<b>302.6549</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4335</b>

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**3.6 Building Construction - 2025**

**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	0.0188	0.6877	0.1863	2.2500e-003	0.0565	7.4000e-004	0.0573	0.0164	7.0000e-004	0.0171	0.0000	216.4487	216.4487	9.0800e-003	0.0000	216.6756
Worker	0.0766	0.0452	0.5244	2.0300e-003	0.2547	1.5400e-003	0.2562	0.0678	1.4200e-003	0.0692	0.0000	183.7860	183.7860	3.1700e-003	0.0000	183.8652
<b>Total</b>	<b>0.0954</b>	<b>0.7329</b>	<b>0.7107</b>	<b>4.2800e-003</b>	<b>0.3112</b>	<b>2.2800e-003</b>	<b>0.3135</b>	<b>0.0841</b>	<b>2.1200e-003</b>	<b>0.0862</b>	<b>0.0000</b>	<b>400.2347</b>	<b>400.2347</b>	<b>0.0123</b>	<b>0.0000</b>	<b>400.5408</b>

**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	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>

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**3.6 Building Construction - 2025**

**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	0.0188	0.6877	0.1863	2.2500e-003	0.0565	7.4000e-004	0.0573	0.0164	7.0000e-004	0.0171	0.0000	216.4487	216.4487	9.0800e-003	0.0000	216.6756
Worker	0.0766	0.0452	0.5244	2.0300e-003	0.2547	1.5400e-003	0.2562	0.0678	1.4200e-003	0.0692	0.0000	183.7860	183.7860	3.1700e-003	0.0000	183.8652
<b>Total</b>	<b>0.0954</b>	<b>0.7329</b>	<b>0.7107</b>	<b>4.2800e-003</b>	<b>0.3112</b>	<b>2.2800e-003</b>	<b>0.3135</b>	<b>0.0841</b>	<b>2.1200e-003</b>	<b>0.0862</b>	<b>0.0000</b>	<b>400.2347</b>	<b>400.2347</b>	<b>0.0123</b>	<b>0.0000</b>	<b>400.5408</b>

**3.6 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	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
<b>Total</b>	<b>0.1785</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6549</b>	<b>302.6549</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4335</b>

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**3.6 Building Construction - 2026**

**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	0.0183	0.6799	0.1821	2.2300e-003	0.0565	7.2000e-004	0.0572	0.0164	6.9000e-004	0.0170	0.0000	215.1305	215.1305	8.9000e-003	0.0000	215.3531
Worker	0.0728	0.0414	0.4890	1.9600e-003	0.2547	1.5000e-003	0.2562	0.0678	1.3800e-003	0.0691	0.0000	176.9965	176.9965	2.8900e-003	0.0000	177.0686
<b>Total</b>	<b>0.0912</b>	<b>0.7212</b>	<b>0.6712</b>	<b>4.1900e-003</b>	<b>0.3112</b>	<b>2.2200e-003</b>	<b>0.3134</b>	<b>0.0841</b>	<b>2.0700e-003</b>	<b>0.0862</b>	<b>0.0000</b>	<b>392.1269</b>	<b>392.1269</b>	<b>0.0118</b>	<b>0.0000</b>	<b>392.4217</b>

**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	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
<b>Total</b>	<b>0.1784</b>	<b>1.6273</b>	<b>2.0991</b>	<b>3.5200e-003</b>		<b>0.0689</b>	<b>0.0689</b>		<b>0.0648</b>	<b>0.0648</b>	<b>0.0000</b>	<b>302.6545</b>	<b>302.6545</b>	<b>0.0711</b>	<b>0.0000</b>	<b>304.4331</b>



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**3.6 Building Construction - 2026**

**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	0.0183	0.6799	0.1821	2.2300e-003	0.0565	7.2000e-004	0.0572	0.0164	6.9000e-004	0.0170	0.0000	215.1305	215.1305	8.9000e-003	0.0000	215.3531
Worker	0.0728	0.0414	0.4890	1.9600e-003	0.2547	1.5000e-003	0.2562	0.0678	1.3800e-003	0.0691	0.0000	176.9965	176.9965	2.8900e-003	0.0000	177.0686
<b>Total</b>	<b>0.0912</b>	<b>0.7212</b>	<b>0.6712</b>	<b>4.1900e-003</b>	<b>0.3112</b>	<b>2.2200e-003</b>	<b>0.3134</b>	<b>0.0841</b>	<b>2.0700e-003</b>	<b>0.0862</b>	<b>0.0000</b>	<b>392.1269</b>	<b>392.1269</b>	<b>0.0118</b>	<b>0.0000</b>	<b>392.4217</b>

**3.6 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	0.0185	0.1683	0.2171	3.6000e-004		7.1200e-003	7.1200e-003		6.7000e-003	6.7000e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931
<b>Total</b>	<b>0.0185</b>	<b>0.1683</b>	<b>0.2171</b>	<b>3.6000e-004</b>		<b>7.1200e-003</b>	<b>7.1200e-003</b>		<b>6.7000e-003</b>	<b>6.7000e-003</b>	<b>0.0000</b>	<b>31.3091</b>	<b>31.3091</b>	<b>7.3600e-003</b>	<b>0.0000</b>	<b>31.4931</b>

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**3.6 Building Construction - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8500e-003	0.0695	0.0185	2.3000e-004	5.8500e-003	7.0000e-005	5.9200e-003	1.6900e-003	7.0000e-005	1.7600e-003	0.0000	22.1283	22.1283	9.0000e-004	0.0000	22.1509
Worker	7.1600e-003	3.9300e-003	0.0474	2.0000e-004	0.0264	1.5000e-004	0.0265	7.0100e-003	1.3000e-004	7.1400e-003	0.0000	17.6889	17.6889	2.7000e-004	0.0000	17.6958
<b>Total</b>	<b>9.0100e-003</b>	<b>0.0735</b>	<b>0.0658</b>	<b>4.3000e-004</b>	<b>0.0322</b>	<b>2.2000e-004</b>	<b>0.0324</b>	<b>8.7000e-003</b>	<b>2.0000e-004</b>	<b>8.9000e-003</b>	<b>0.0000</b>	<b>39.8172</b>	<b>39.8172</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>39.8466</b>

**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	0.0185	0.1683	0.2171	3.6000e-004		7.1200e-003	7.1200e-003		6.7000e-003	6.7000e-003	0.0000	31.3091	31.3091	7.3600e-003	0.0000	31.4931
<b>Total</b>	<b>0.0185</b>	<b>0.1683</b>	<b>0.2171</b>	<b>3.6000e-004</b>		<b>7.1200e-003</b>	<b>7.1200e-003</b>		<b>6.7000e-003</b>	<b>6.7000e-003</b>	<b>0.0000</b>	<b>31.3091</b>	<b>31.3091</b>	<b>7.3600e-003</b>	<b>0.0000</b>	<b>31.4931</b>

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**3.6 Building Construction - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8500e-003	0.0695	0.0185	2.3000e-004	5.8500e-003	7.0000e-005	5.9200e-003	1.6900e-003	7.0000e-005	1.7600e-003	0.0000	22.1283	22.1283	9.0000e-004	0.0000	22.1509
Worker	7.1600e-003	3.9300e-003	0.0474	2.0000e-004	0.0264	1.5000e-004	0.0265	7.0100e-003	1.3000e-004	7.1400e-003	0.0000	17.6889	17.6889	2.7000e-004	0.0000	17.6958
<b>Total</b>	<b>9.0100e-003</b>	<b>0.0735</b>	<b>0.0658</b>	<b>4.3000e-004</b>	<b>0.0322</b>	<b>2.2000e-004</b>	<b>0.0324</b>	<b>8.7000e-003</b>	<b>2.0000e-004</b>	<b>8.9000e-003</b>	<b>0.0000</b>	<b>39.8172</b>	<b>39.8172</b>	<b>1.1700e-003</b>	<b>0.0000</b>	<b>39.8466</b>

**3.7 Architectural Coating - 2021**

**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	1.3315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1855	0.2208	3.6000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	31.0220	31.0220	2.1300e-003	0.0000	31.0753
<b>Total</b>	<b>1.3581</b>	<b>0.1855</b>	<b>0.2208</b>	<b>3.6000e-004</b>		<b>0.0114</b>	<b>0.0114</b>		<b>0.0114</b>	<b>0.0114</b>	<b>0.0000</b>	<b>31.0220</b>	<b>31.0220</b>	<b>2.1300e-003</b>	<b>0.0000</b>	<b>31.0753</b>

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**3.7 Architectural Coating - 2021**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0126	0.1335	4.4000e-004	0.0470	3.1000e-004	0.0474	0.0125	2.8000e-004	0.0128	0.0000	39.7688	39.7688	8.9000e-004	0.0000	39.7911
<b>Total</b>	<b>0.0183</b>	<b>0.0126</b>	<b>0.1335</b>	<b>4.4000e-004</b>	<b>0.0470</b>	<b>3.1000e-004</b>	<b>0.0474</b>	<b>0.0125</b>	<b>2.8000e-004</b>	<b>0.0128</b>	<b>0.0000</b>	<b>39.7688</b>	<b>39.7688</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>39.7911</b>

**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	1.3315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1855	0.2208	3.6000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	31.0220	31.0220	2.1300e-003	0.0000	31.0752
<b>Total</b>	<b>1.3581</b>	<b>0.1855</b>	<b>0.2208</b>	<b>3.6000e-004</b>		<b>0.0114</b>	<b>0.0114</b>		<b>0.0114</b>	<b>0.0114</b>	<b>0.0000</b>	<b>31.0220</b>	<b>31.0220</b>	<b>2.1300e-003</b>	<b>0.0000</b>	<b>31.0752</b>

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**3.7 Architectural Coating - 2021**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0183	0.0126	0.1335	4.4000e-004	0.0470	3.1000e-004	0.0474	0.0125	2.8000e-004	0.0128	0.0000	39.7688	39.7688	8.9000e-004	0.0000	39.7911
<b>Total</b>	<b>0.0183</b>	<b>0.0126</b>	<b>0.1335</b>	<b>4.4000e-004</b>	<b>0.0470</b>	<b>3.1000e-004</b>	<b>0.0474</b>	<b>0.0125</b>	<b>2.8000e-004</b>	<b>0.0128</b>	<b>0.0000</b>	<b>39.7688</b>	<b>39.7688</b>	<b>8.9000e-004</b>	<b>0.0000</b>	<b>39.7911</b>

**3.7 Architectural Coating - 2022**

**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	1.4247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
<b>Total</b>	<b>1.4513</b>	<b>0.1831</b>	<b>0.2358</b>	<b>3.9000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>2.1600e-003</b>	<b>0.0000</b>	<b>33.2463</b>

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**3.7 Architectural Coating - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0121	0.1313	4.5000e-004	0.0503	3.2000e-004	0.0507	0.0134	3.0000e-004	0.0137	0.0000	40.9910	40.9910	8.6000e-004	0.0000	41.0124
<b>Total</b>	<b>0.0182</b>	<b>0.0121</b>	<b>0.1313</b>	<b>4.5000e-004</b>	<b>0.0503</b>	<b>3.2000e-004</b>	<b>0.0507</b>	<b>0.0134</b>	<b>3.0000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>40.9910</b>	<b>40.9910</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>41.0124</b>

**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	1.4247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
<b>Total</b>	<b>1.4513</b>	<b>0.1831</b>	<b>0.2358</b>	<b>3.9000e-004</b>		<b>0.0106</b>	<b>0.0106</b>		<b>0.0106</b>	<b>0.0106</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>2.1600e-003</b>	<b>0.0000</b>	<b>33.2463</b>

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**3.7 Architectural Coating - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0121	0.1313	4.5000e-004	0.0503	3.2000e-004	0.0507	0.0134	3.0000e-004	0.0137	0.0000	40.9910	40.9910	8.6000e-004	0.0000	41.0124
<b>Total</b>	<b>0.0182</b>	<b>0.0121</b>	<b>0.1313</b>	<b>4.5000e-004</b>	<b>0.0503</b>	<b>3.2000e-004</b>	<b>0.0507</b>	<b>0.0134</b>	<b>3.0000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>40.9910</b>	<b>40.9910</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>41.0124</b>

**3.7 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	1.4247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2355	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2419
<b>Total</b>	<b>1.4496</b>	<b>0.1694</b>	<b>0.2355</b>	<b>3.9000e-004</b>		<b>9.2100e-003</b>	<b>9.2100e-003</b>		<b>9.2100e-003</b>	<b>9.2100e-003</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>1.9900e-003</b>	<b>0.0000</b>	<b>33.2419</b>

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**3.7 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0109	0.1208	4.4000e-004	0.0503	3.1000e-004	0.0507	0.0134	2.9000e-004	0.0137	0.0000	39.4211	39.4211	7.7000e-004	0.0000	39.4403
<b>Total</b>	<b>0.0170</b>	<b>0.0109</b>	<b>0.1208</b>	<b>4.4000e-004</b>	<b>0.0503</b>	<b>3.1000e-004</b>	<b>0.0507</b>	<b>0.0134</b>	<b>2.9000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>39.4211</b>	<b>39.4211</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>39.4403</b>

**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	1.4247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0249	0.1694	0.2354	3.9000e-004		9.2100e-003	9.2100e-003		9.2100e-003	9.2100e-003	0.0000	33.1923	33.1923	1.9900e-003	0.0000	33.2419
<b>Total</b>	<b>1.4496</b>	<b>0.1694</b>	<b>0.2354</b>	<b>3.9000e-004</b>		<b>9.2100e-003</b>	<b>9.2100e-003</b>		<b>9.2100e-003</b>	<b>9.2100e-003</b>	<b>0.0000</b>	<b>33.1923</b>	<b>33.1923</b>	<b>1.9900e-003</b>	<b>0.0000</b>	<b>33.2419</b>



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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0109	0.1208	4.4000e-004	0.0503	3.1000e-004	0.0507	0.0134	2.9000e-004	0.0137	0.0000	39.4211	39.4211	7.7000e-004	0.0000	39.4403
<b>Total</b>	<b>0.0170</b>	<b>0.0109</b>	<b>0.1208</b>	<b>4.4000e-004</b>	<b>0.0503</b>	<b>3.1000e-004</b>	<b>0.0507</b>	<b>0.0134</b>	<b>2.9000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>39.4211</b>	<b>39.4211</b>	<b>7.7000e-004</b>	<b>0.0000</b>	<b>39.4403</b>

**3.7 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	1.4356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
<b>Total</b>	<b>1.4593</b>	<b>0.1597</b>	<b>0.2371</b>	<b>3.9000e-004</b>		<b>7.9800e-003</b>	<b>7.9800e-003</b>		<b>7.9800e-003</b>	<b>7.9800e-003</b>	<b>0.0000</b>	<b>33.4476</b>	<b>33.4476</b>	<b>1.8800e-003</b>	<b>0.0000</b>	<b>33.4947</b>

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**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	9.8900e-003	0.1127	4.2000e-004	0.0507	3.1000e-004	0.0510	0.0135	2.9000e-004	0.0138	0.0000	38.1522	38.1522	7.0000e-004	0.0000	38.1696
<b>Total</b>	<b>0.0161</b>	<b>9.8900e-003</b>	<b>0.1127</b>	<b>4.2000e-004</b>	<b>0.0507</b>	<b>3.1000e-004</b>	<b>0.0510</b>	<b>0.0135</b>	<b>2.9000e-004</b>	<b>0.0138</b>	<b>0.0000</b>	<b>38.1522</b>	<b>38.1522</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>38.1696</b>

**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	1.4356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0237	0.1597	0.2371	3.9000e-004		7.9800e-003	7.9800e-003		7.9800e-003	7.9800e-003	0.0000	33.4476	33.4476	1.8800e-003	0.0000	33.4947
<b>Total</b>	<b>1.4593</b>	<b>0.1597</b>	<b>0.2371</b>	<b>3.9000e-004</b>		<b>7.9800e-003</b>	<b>7.9800e-003</b>		<b>7.9800e-003</b>	<b>7.9800e-003</b>	<b>0.0000</b>	<b>33.4476</b>	<b>33.4476</b>	<b>1.8800e-003</b>	<b>0.0000</b>	<b>33.4947</b>

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**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	9.8900e-003	0.1127	4.2000e-004	0.0507	3.1000e-004	0.0510	0.0135	2.9000e-004	0.0138	0.0000	38.1522	38.1522	7.0000e-004	0.0000	38.1696
<b>Total</b>	<b>0.0161</b>	<b>9.8900e-003</b>	<b>0.1127</b>	<b>4.2000e-004</b>	<b>0.0507</b>	<b>3.1000e-004</b>	<b>0.0510</b>	<b>0.0135</b>	<b>2.9000e-004</b>	<b>0.0138</b>	<b>0.0000</b>	<b>38.1522</b>	<b>38.1522</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>38.1696</b>

**3.7 Architectural Coating - 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					
Archit. Coating	1.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
<b>Total</b>	<b>1.4525</b>	<b>0.1495</b>	<b>0.2361</b>	<b>3.9000e-004</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>	<b>0.0000</b>	<b>33.3200</b>	<b>33.3200</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>33.3654</b>

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**3.7 Architectural Coating - 2025**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.9600e-003	0.1040	4.0000e-004	0.0505	3.1000e-004	0.0508	0.0134	2.8000e-004	0.0137	0.0000	36.4596	36.4596	6.3000e-004	0.0000	36.4753
<b>Total</b>	<b>0.0152</b>	<b>8.9600e-003</b>	<b>0.1040</b>	<b>4.0000e-004</b>	<b>0.0505</b>	<b>3.1000e-004</b>	<b>0.0508</b>	<b>0.0134</b>	<b>2.8000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>36.4596</b>	<b>36.4596</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>36.4753</b>

**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	1.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
<b>Total</b>	<b>1.4525</b>	<b>0.1495</b>	<b>0.2361</b>	<b>3.9000e-004</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>33.3654</b>

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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	8.9600e-003	0.1040	4.0000e-004	0.0505	3.1000e-004	0.0508	0.0134	2.8000e-004	0.0137	0.0000	36.4596	36.4596	6.3000e-004	0.0000	36.4753
<b>Total</b>	<b>0.0152</b>	<b>8.9600e-003</b>	<b>0.1040</b>	<b>4.0000e-004</b>	<b>0.0505</b>	<b>3.1000e-004</b>	<b>0.0508</b>	<b>0.0134</b>	<b>2.8000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>36.4596</b>	<b>36.4596</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>36.4753</b>

**3.7 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	1.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3200	33.3200	1.8200e-003	0.0000	33.3654
<b>Total</b>	<b>1.4525</b>	<b>0.1495</b>	<b>0.2361</b>	<b>3.9000e-004</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>	<b>0.0000</b>	<b>33.3200</b>	<b>33.3200</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>33.3654</b>

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**3.7 Architectural Coating - 2026**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0145	8.2000e-003	0.0970	3.9000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.7000e-004	0.0137	0.0000	35.1127	35.1127	5.7000e-004	0.0000	35.1270
<b>Total</b>	<b>0.0145</b>	<b>8.2000e-003</b>	<b>0.0970</b>	<b>3.9000e-004</b>	<b>0.0505</b>	<b>3.0000e-004</b>	<b>0.0508</b>	<b>0.0134</b>	<b>2.7000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>35.1127</b>	<b>35.1127</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>35.1270</b>

**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	1.4302					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e-004		6.7200e-003	6.7200e-003		6.7200e-003	6.7200e-003	0.0000	33.3199	33.3199	1.8200e-003	0.0000	33.3654
<b>Total</b>	<b>1.4525</b>	<b>0.1495</b>	<b>0.2361</b>	<b>3.9000e-004</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>		<b>6.7200e-003</b>	<b>6.7200e-003</b>	<b>0.0000</b>	<b>33.3199</b>	<b>33.3199</b>	<b>1.8200e-003</b>	<b>0.0000</b>	<b>33.3654</b>

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**3.7 Architectural Coating - 2026**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0145	8.2000e-003	0.0970	3.9000e-004	0.0505	3.0000e-004	0.0508	0.0134	2.7000e-004	0.0137	0.0000	35.1127	35.1127	5.7000e-004	0.0000	35.1270
<b>Total</b>	<b>0.0145</b>	<b>8.2000e-003</b>	<b>0.0970</b>	<b>3.9000e-004</b>	<b>0.0505</b>	<b>3.0000e-004</b>	<b>0.0508</b>	<b>0.0134</b>	<b>2.7000e-004</b>	<b>0.0137</b>	<b>0.0000</b>	<b>35.1127</b>	<b>35.1127</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>35.1270</b>

**3.7 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	0.2027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0212	0.0335	5.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	4.7235	4.7235	2.6000e-004	0.0000	4.7300
<b>Total</b>	<b>0.2059</b>	<b>0.0212</b>	<b>0.0335</b>	<b>5.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>4.7235</b>	<b>4.7235</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>4.7300</b>

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**3.7 Architectural Coating - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9500e-003	1.0700e-003	0.0129	5.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9100e-003	4.0000e-005	1.9400e-003	0.0000	4.8088	4.8088	7.0000e-005	0.0000	4.8107
<b>Total</b>	<b>1.9500e-003</b>	<b>1.0700e-003</b>	<b>0.0129</b>	<b>5.0000e-005</b>	<b>7.1600e-003</b>	<b>4.0000e-005</b>	<b>7.2000e-003</b>	<b>1.9100e-003</b>	<b>4.0000e-005</b>	<b>1.9400e-003</b>	<b>0.0000</b>	<b>4.8088</b>	<b>4.8088</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>4.8107</b>

**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	0.2027					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0212	0.0335	5.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	4.7235	4.7235	2.6000e-004	0.0000	4.7300
<b>Total</b>	<b>0.2059</b>	<b>0.0212</b>	<b>0.0335</b>	<b>5.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>4.7235</b>	<b>4.7235</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>4.7300</b>



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**3.7 Architectural Coating - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9500e-003	1.0700e-003	0.0129	5.0000e-005	7.1600e-003	4.0000e-005	7.2000e-003	1.9100e-003	4.0000e-005	1.9400e-003	0.0000	4.8088	4.8088	7.0000e-005	0.0000	4.8107
<b>Total</b>	<b>1.9500e-003</b>	<b>1.0700e-003</b>	<b>0.0129</b>	<b>5.0000e-005</b>	<b>7.1600e-003</b>	<b>4.0000e-005</b>	<b>7.2000e-003</b>	<b>1.9100e-003</b>	<b>4.0000e-005</b>	<b>1.9400e-003</b>	<b>0.0000</b>	<b>4.8088</b>	<b>4.8088</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>4.8107</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

Historical Energy Use: N



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**5.2 Energy by Land Use - Natural Gas**

**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					
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	4.9672	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061
Unmitigated	4.9672	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061

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**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.8155					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1517	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061
<b>Total</b>	<b>4.9672</b>	<b>0.0585</b>	<b>5.0728</b>	<b>2.7000e-004</b>		<b>0.0282</b>	<b>0.0282</b>		<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>8.3082</b>	<b>8.3082</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>8.5061</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.8155					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1517	0.0585	5.0728	2.7000e-004		0.0282	0.0282		0.0282	0.0282	0.0000	8.3082	8.3082	7.9200e-003	0.0000	8.5061
<b>Total</b>	<b>4.9672</b>	<b>0.0585</b>	<b>5.0728</b>	<b>2.7000e-004</b>		<b>0.0282</b>	<b>0.0282</b>		<b>0.0282</b>	<b>0.0282</b>	<b>0.0000</b>	<b>8.3082</b>	<b>8.3082</b>	<b>7.9200e-003</b>	<b>0.0000</b>	<b>8.5061</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>



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**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**The Ranch (Construction Only  
Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	685.00	Dwelling Unit	150.00	1,233,000.00	1959

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

Project Characteristics -

Land Use - Applicant Information

Construction Phase - Construction of Phase 3 modeled

Grading - Applicant Information

Demolition -

Vehicle Trips - Project operations modeled separately

Woodstoves - Project operations modeled separately

Consumer Products - Project operations modeled separately

Area Coating -

Landscape Equipment -

Energy Use - Project operations modeled separately

Water And Wastewater - Project operations modeled separately

Solid Waste - Project operations modeled separately

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	1,584.00
tblConstructionPhase	NumDays	3,100.00	1,584.00
tblConstructionPhase	NumDays	200.00	3.00
tblConstructionPhase	NumDays	310.00	142.00
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	120.00	30.00
tblConstructionPhase	PhaseEndDate	3/25/2036	2/22/2027
tblConstructionPhase	PhaseEndDate	7/18/2034	2/8/2027
tblConstructionPhase	PhaseEndDate	1/5/2021	4/3/2020
tblConstructionPhase	PhaseEndDate	8/30/2022	12/1/2020
tblConstructionPhase	PhaseEndDate	5/22/2035	1/12/2021

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tblConstructionPhase	PhaseEndDate	6/22/2021	5/15/2020
tblConstructionPhase	PhaseStartDate	5/23/2035	1/27/2021
tblConstructionPhase	PhaseStartDate	8/31/2022	1/13/2021
tblConstructionPhase	PhaseStartDate	6/23/2021	5/16/2020
tblConstructionPhase	PhaseStartDate	7/19/2034	12/2/2020
tblConstructionPhase	PhaseStartDate	1/6/2021	4/4/2020
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	325.76	0.00
tblEnergyUse	T24NG	25,910.09	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	171.25	0.00
tblFireplaces	NumberNoFireplace	54.80	0.00
tblFireplaces	NumberWood	294.55	0.00
tblGrading	AcresOfGrading	355.00	150.00
tblLandUse	LotAcreage	222.40	150.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	822.78	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	44,630,507.55	0.00
tblWater	OutdoorWaterUseRate	28,136,624.33	0.00
tblWoodstoves	NumberCatalytic	27.40	0.00

The Ranch (Construction Only - Bay Area AQMD Air District, Summer)

tblWoodstoves	NumberNoncatalytic	27.40	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

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					
2020	4.5196	50.2396	32.4949	0.0637	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	6,170.0206	6,170.0206	1.9464	0.0000	6,218.6799
2021	14.2445	26.7539	27.3596	0.0718	2.8785	1.0830	3.9615	0.7737	1.0238	1.7974	0.0000	7,127.5179	7,127.5179	0.7829	0.0000	7,147.0911
2022	13.9551	24.3951	26.4701	0.0708	2.8785	0.9186	3.7972	0.7737	0.8690	1.6427	0.0000	7,023.5238	7,023.5238	0.7682	0.0000	7,042.7297
2023	13.7002	21.4908	25.6685	0.0694	2.8785	0.7910	3.6695	0.7737	0.7482	1.5219	0.0000	6,883.1639	6,883.1639	0.7443	0.0000	6,901.7701
2024	13.5319	20.3642	25.0926	0.0684	2.8786	0.6942	3.5728	0.7737	0.6564	1.4301	0.0000	6,784.5306	6,784.5306	0.7340	0.0000	6,802.8811
2025	13.3699	19.2199	24.5535	0.0674	2.8786	0.5988	3.4774	0.7737	0.5661	1.3398	0.0000	6,687.7885	6,687.7885	0.7251	0.0000	6,705.9149
2026	13.3289	19.1302	24.1726	0.0665	2.8786	0.5983	3.4768	0.7737	0.5656	1.3393	0.0000	6,602.4747	6,602.4747	0.7207	0.0000	6,620.4914
2027	13.2899	19.0434	23.8373	0.0658	2.8786	0.5974	3.4760	0.7737	0.5649	1.3385	0.0000	6,526.6264	6,526.6264	0.7167	0.0000	6,544.5441
<b>Maximum</b>	<b>14.2445</b>	<b>50.2396</b>	<b>32.4949</b>	<b>0.0718</b>	<b>18.2141</b>	<b>2.1984</b>	<b>20.4125</b>	<b>9.9699</b>	<b>2.0225</b>	<b>11.9924</b>	<b>0.0000</b>	<b>7,127.5179</b>	<b>7,127.5179</b>	<b>1.9464</b>	<b>0.0000</b>	<b>7,147.0911</b>





The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/3/2020	5	3	
2	Site Preparation	Site Preparation	4/4/2020	5/15/2020	5	30	
3	Grading	Grading	5/16/2020	12/1/2020	5	142	
4	Paving	Paving	12/2/2020	1/12/2021	5	30	
5	Building Construction	Building Construction	1/13/2021	2/8/2027	5	1584	
6	Architectural Coating	Architectural Coating	1/27/2021	2/22/2027	5	1584	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 2,496,825; Residential Outdoor: 832,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## The Ranch (Construction Only - Bay Area AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

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
Demolition	6	15.00	0.00	16.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	247.00	73.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	49.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1484	0.0000	1.1484	0.1739	0.0000	0.1739			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
<b>Total</b>	<b>3.3121</b>	<b>33.2010</b>	<b>21.7532</b>	<b>0.0388</b>	<b>1.1484</b>	<b>1.6587</b>	<b>2.8071</b>	<b>0.1739</b>	<b>1.5419</b>	<b>1.7157</b>		<b>3,747.7049</b>	<b>3,747.7049</b>	<b>1.0580</b>		<b>3,774.1536</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2020**

**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	0.0440	1.5277	0.3036	4.2400e-003	0.0932	4.9900e-003	0.0982	0.0255	4.7800e-003	0.0303		453.7512	453.7512	0.0227		454.3187
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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
<b>Total</b>	<b>0.0962</b>	<b>1.5593</b>	<b>0.7061</b>	<b>5.4800e-003</b>	<b>0.2164</b>	<b>5.7900e-003</b>	<b>0.2222</b>	<b>0.0582</b>	<b>5.5200e-003</b>	<b>0.0637</b>		<b>576.8677</b>	<b>576.8677</b>	<b>0.0257</b>		<b>577.5094</b>

**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					1.1484	0.0000	1.1484	0.1739	0.0000	0.1739			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
<b>Total</b>	<b>3.3121</b>	<b>33.2010</b>	<b>21.7532</b>	<b>0.0388</b>	<b>1.1484</b>	<b>1.6587</b>	<b>2.8071</b>	<b>0.1739</b>	<b>1.5419</b>	<b>1.7157</b>	<b>0.0000</b>	<b>3,747.7049</b>	<b>3,747.7049</b>	<b>1.0580</b>		<b>3,774.1536</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2020**

**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	0.0440	1.5277	0.3036	4.2400e-003	0.0932	4.9900e-003	0.0982	0.0255	4.7800e-003	0.0303		453.7512	453.7512	0.0227		454.3187
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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
<b>Total</b>	<b>0.0962</b>	<b>1.5593</b>	<b>0.7061</b>	<b>5.4800e-003</b>	<b>0.2164</b>	<b>5.7900e-003</b>	<b>0.2222</b>	<b>0.0582</b>	<b>5.5200e-003</b>	<b>0.0637</b>		<b>576.8677</b>	<b>576.8677</b>	<b>0.0257</b>		<b>577.5094</b>

**3.3 Site Preparation - 2020**

**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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2020**

**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	0.0626	0.0379	0.4830	1.4800e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		147.7398	147.7398	3.5600e-003		147.8288
<b>Total</b>	<b>0.0626</b>	<b>0.0379</b>	<b>0.4830</b>	<b>1.4800e-003</b>	<b>0.1479</b>	<b>9.6000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.8000e-004</b>	<b>0.0401</b>		<b>147.7398</b>	<b>147.7398</b>	<b>3.5600e-003</b>		<b>147.8288</b>

**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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.3 Site Preparation - 2020**

**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	0.0626	0.0379	0.4830	1.4800e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		147.7398	147.7398	3.5600e-003		147.8288
<b>Total</b>	<b>0.0626</b>	<b>0.0379</b>	<b>0.4830</b>	<b>1.4800e-003</b>	<b>0.1479</b>	<b>9.6000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.8000e-004</b>	<b>0.0401</b>		<b>147.7398</b>	<b>147.7398</b>	<b>3.5600e-003</b>		<b>147.8288</b>

**3.4 Grading - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1423	0.0000	7.1423	3.4312	0.0000	3.4312			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>7.1423</b>	<b>2.1739</b>	<b>9.3162</b>	<b>3.4312</b>	<b>2.0000</b>	<b>5.4312</b>		<b>6,005.8653</b>	<b>6,005.8653</b>	<b>1.9424</b>		<b>6,054.4257</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.4 Grading - 2020**

**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	0.0695	0.0421	0.5366	1.6500e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		164.1553	164.1553	3.9600e-003		164.2542
<b>Total</b>	<b>0.0695</b>	<b>0.0421</b>	<b>0.5366</b>	<b>1.6500e-003</b>	<b>0.1643</b>	<b>1.0600e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>9.8000e-004</b>	<b>0.0446</b>		<b>164.1553</b>	<b>164.1553</b>	<b>3.9600e-003</b>		<b>164.2542</b>

**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					7.1423	0.0000	7.1423	3.4312	0.0000	3.4312			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>7.1423</b>	<b>2.1739</b>	<b>9.3162</b>	<b>3.4312</b>	<b>2.0000</b>	<b>5.4312</b>	<b>0.0000</b>	<b>6,005.8653</b>	<b>6,005.8653</b>	<b>1.9424</b>		<b>6,054.4257</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.4 Grading - 2020**

**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	0.0695	0.0421	0.5366	1.6500e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		164.1553	164.1553	3.9600e-003		164.2542
<b>Total</b>	<b>0.0695</b>	<b>0.0421</b>	<b>0.5366</b>	<b>1.6500e-003</b>	<b>0.1643</b>	<b>1.0600e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>9.8000e-004</b>	<b>0.0446</b>		<b>164.1553</b>	<b>164.1553</b>	<b>3.9600e-003</b>		<b>164.2542</b>

**3.5 Paving - 2020**

**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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.5 Paving - 2020**

**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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
<b>Total</b>	<b>0.0521</b>	<b>0.0316</b>	<b>0.4025</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.0000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>123.1165</b>	<b>123.1165</b>	<b>2.9700e-003</b>		<b>123.1907</b>

**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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.5 Paving - 2020**

**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	0.0521	0.0316	0.4025	1.2400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		123.1165	123.1165	2.9700e-003		123.1907
<b>Total</b>	<b>0.0521</b>	<b>0.0316</b>	<b>0.4025</b>	<b>1.2400e-003</b>	<b>0.1232</b>	<b>8.0000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>123.1165</b>	<b>123.1165</b>	<b>2.9700e-003</b>		<b>123.1907</b>

**3.5 Paving - 2021**

**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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2556</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>		<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.5 Paving - 2021**

**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	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0482</b>	<b>0.0282</b>	<b>0.3685</b>	<b>1.1900e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>118.7939</b>	<b>118.7939</b>	<b>2.6600e-003</b>		<b>118.8603</b>

**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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2556</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>	<b>0.0000</b>	<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.5 Paving - 2021**

**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	0.0482	0.0282	0.3685	1.1900e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		118.7939	118.7939	2.6600e-003		118.8603
<b>Total</b>	<b>0.0482</b>	<b>0.0282</b>	<b>0.3685</b>	<b>1.1900e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>118.7939</b>	<b>118.7939</b>	<b>2.6600e-003</b>		<b>118.8603</b>

**3.6 Building Construction - 2021**

**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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2021**

**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	0.2139	7.2387	1.6961	0.0184	0.4469	0.0149	0.4619	0.1287	0.0143	0.1430		1,948.5058	1,948.5058	0.0952		1,950.8856
Worker	0.7942	0.4642	6.0671	0.0196	2.0291	0.0128	2.0418	0.5382	0.0118	0.5500		1,956.1400	1,956.1400	0.0437		1,957.2332
<b>Total</b>	<b>1.0081</b>	<b>7.7029</b>	<b>7.7632</b>	<b>0.0380</b>	<b>2.4760</b>	<b>0.0277</b>	<b>2.5037</b>	<b>0.6669</b>	<b>0.0261</b>	<b>0.6929</b>		<b>3,904.6458</b>	<b>3,904.6458</b>	<b>0.1389</b>		<b>3,908.1188</b>

**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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2021**

**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	0.2139	7.2387	1.6961	0.0184	0.4469	0.0149	0.4619	0.1287	0.0143	0.1430		1,948.5058	1,948.5058	0.0952		1,950.8856
Worker	0.7942	0.4642	6.0671	0.0196	2.0291	0.0128	2.0418	0.5382	0.0118	0.5500		1,956.1400	1,956.1400	0.0437		1,957.2332
<b>Total</b>	<b>1.0081</b>	<b>7.7029</b>	<b>7.7632</b>	<b>0.0380</b>	<b>2.4760</b>	<b>0.0277</b>	<b>2.5037</b>	<b>0.6669</b>	<b>0.0261</b>	<b>0.6929</b>		<b>3,904.6458</b>	<b>3,904.6458</b>	<b>0.1389</b>		<b>3,908.1188</b>

**3.6 Building Construction - 2022**

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2022**

**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	0.1993	6.8721	1.5936	0.0182	0.4470	0.0130	0.4599	0.1287	0.0124	0.1411		1,929.5719	1,929.5719	0.0909		1,931.8446
Worker	0.7392	0.4163	5.5905	0.0189	2.0291	0.0125	2.0415	0.5382	0.0115	0.5497		1,884.3516	1,884.3516	0.0393		1,885.3333
<b>Total</b>	<b>0.9386</b>	<b>7.2884</b>	<b>7.1841</b>	<b>0.0371</b>	<b>2.4760</b>	<b>0.0254</b>	<b>2.5014</b>	<b>0.6669</b>	<b>0.0239</b>	<b>0.6908</b>		<b>3,813.9235</b>	<b>3,813.9235</b>	<b>0.1302</b>		<b>3,817.1778</b>

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2022**

**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	0.1993	6.8721	1.5936	0.0182	0.4470	0.0130	0.4599	0.1287	0.0124	0.1411		1,929.5719	1,929.5719	0.0909		1,931.8446
Worker	0.7392	0.4163	5.5905	0.0189	2.0291	0.0125	2.0415	0.5382	0.0115	0.5497		1,884.3516	1,884.3516	0.0393		1,885.3333
<b>Total</b>	<b>0.9386</b>	<b>7.2884</b>	<b>7.1841</b>	<b>0.0371</b>	<b>2.4760</b>	<b>0.0254</b>	<b>2.5014</b>	<b>0.6669</b>	<b>0.0239</b>	<b>0.6908</b>		<b>3,813.9235</b>	<b>3,813.9235</b>	<b>0.1302</b>		<b>3,817.1778</b>

**3.6 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
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2023**

**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	0.1497	5.3542	1.4345	0.0177	0.4470	5.7600e-003	0.4527	0.1287	5.5000e-003	0.1342		1,874.9056	1,874.9056	0.0773		1,876.8384
Worker	0.6901	0.3744	5.1560	0.0182	2.0291	0.0122	2.0413	0.5382	0.0113	0.5494		1,812.1125	1,812.1125	0.0353		1,812.9939
<b>Total</b>	<b>0.8398</b>	<b>5.7286</b>	<b>6.5906</b>	<b>0.0358</b>	<b>2.4760</b>	<b>0.0180</b>	<b>2.4940</b>	<b>0.6669</b>	<b>0.0168</b>	<b>0.6836</b>		<b>3,687.0180</b>	<b>3,687.0180</b>	<b>0.1126</b>		<b>3,689.8323</b>

**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
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2023**

**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	0.1497	5.3542	1.4345	0.0177	0.4470	5.7600e-003	0.4527	0.1287	5.5000e-003	0.1342		1,874.9056	1,874.9056	0.0773		1,876.8384
Worker	0.6901	0.3744	5.1560	0.0182	2.0291	0.0122	2.0413	0.5382	0.0113	0.5494		1,812.1125	1,812.1125	0.0353		1,812.9939
<b>Total</b>	<b>0.8398</b>	<b>5.7286</b>	<b>6.5906</b>	<b>0.0358</b>	<b>2.4760</b>	<b>0.0180</b>	<b>2.4940</b>	<b>0.6669</b>	<b>0.0168</b>	<b>0.6836</b>		<b>3,687.0180</b>	<b>3,687.0180</b>	<b>0.1126</b>		<b>3,689.8323</b>

**3.6 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
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2024**

**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	0.1447	5.2963	1.3805	0.0175	0.4470	5.6600e-003	0.4527	0.1287	5.4100e-003	0.1341		1,861.8151	1,861.8151	0.0757		1,863.7081
Worker	0.6474	0.3383	4.7858	0.0175	2.0291	0.0120	2.0410	0.5382	0.0110	0.5492		1,740.3224	1,740.3224	0.0318		1,741.1172
<b>Total</b>	<b>0.7921</b>	<b>5.6346</b>	<b>6.1663</b>	<b>0.0350</b>	<b>2.4760</b>	<b>0.0176</b>	<b>2.4937</b>	<b>0.6669</b>	<b>0.0164</b>	<b>0.6833</b>		<b>3,602.1375</b>	<b>3,602.1375</b>	<b>0.1075</b>		<b>3,604.8253</b>

**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
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2024**

**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	0.1447	5.2963	1.3805	0.0175	0.4470	5.6600e-003	0.4527	0.1287	5.4100e-003	0.1341		1,861.8151	1,861.8151	0.0757		1,863.7081
Worker	0.6474	0.3383	4.7858	0.0175	2.0291	0.0120	2.0410	0.5382	0.0110	0.5492		1,740.3224	1,740.3224	0.0318		1,741.1172
<b>Total</b>	<b>0.7921</b>	<b>5.6346</b>	<b>6.1663</b>	<b>0.0350</b>	<b>2.4760</b>	<b>0.0176</b>	<b>2.4937</b>	<b>0.6669</b>	<b>0.0164</b>	<b>0.6833</b>		<b>3,602.1375</b>	<b>3,602.1375</b>	<b>0.1075</b>		<b>3,604.8253</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2025**

**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	0.1405	5.2362	1.3394	0.0174	0.4470	5.5500e-003	0.4526	0.1287	5.3100e-003	0.1340		1,849.2737	1,849.2737	0.0742		1,851.1288
Worker	0.6109	0.3075	4.4396	0.0167	2.0291	0.0118	2.0409	0.5382	0.0109	0.5491		1,669.4132	1,669.4132	0.0288		1,670.1340
<b>Total</b>	<b>0.7514</b>	<b>5.5437</b>	<b>5.7789</b>	<b>0.0341</b>	<b>2.4761</b>	<b>0.0174</b>	<b>2.4934</b>	<b>0.6669</b>	<b>0.0162</b>	<b>0.6831</b>		<b>3,518.6869</b>	<b>3,518.6869</b>	<b>0.1030</b>		<b>3,521.2629</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2025**

**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	0.1405	5.2362	1.3394	0.0174	0.4470	5.5500e-003	0.4526	0.1287	5.3100e-003	0.1340		1,849.2737	1,849.2737	0.0742		1,851.1288
Worker	0.6109	0.3075	4.4396	0.0167	2.0291	0.0118	2.0409	0.5382	0.0109	0.5491		1,669.4132	1,669.4132	0.0288		1,670.1340
<b>Total</b>	<b>0.7514</b>	<b>5.5437</b>	<b>5.7789</b>	<b>0.0341</b>	<b>2.4761</b>	<b>0.0174</b>	<b>2.4934</b>	<b>0.6669</b>	<b>0.0162</b>	<b>0.6831</b>		<b>3,518.6869</b>	<b>3,518.6869</b>	<b>0.1030</b>		<b>3,521.2629</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2026**

**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	0.1370	5.1775	1.3097	0.0173	0.4470	5.4500e-003	0.4525	0.1287	5.2100e-003	0.1339		1,837.8939	1,837.8939	0.0728		1,839.7149
Worker	0.5796	0.2817	4.1465	0.0161	2.0291	0.0115	2.0405	0.5382	0.0106	0.5488		1,607.7183	1,607.7183	0.0263		1,608.3760
<b>Total</b>	<b>0.7166</b>	<b>5.4591</b>	<b>5.4562</b>	<b>0.0334</b>	<b>2.4761</b>	<b>0.0169</b>	<b>2.4930</b>	<b>0.6669</b>	<b>0.0158</b>	<b>0.6827</b>		<b>3,445.6122</b>	<b>3,445.6122</b>	<b>0.0992</b>		<b>3,448.0909</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2026**

**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	0.1370	5.1775	1.3097	0.0173	0.4470	5.4500e-003	0.4525	0.1287	5.2100e-003	0.1339		1,837.8939	1,837.8939	0.0728		1,839.7149
Worker	0.5796	0.2817	4.1465	0.0161	2.0291	0.0115	2.0405	0.5382	0.0106	0.5488		1,607.7183	1,607.7183	0.0263		1,608.3760
<b>Total</b>	<b>0.7166</b>	<b>5.4591</b>	<b>5.4562</b>	<b>0.0334</b>	<b>2.4761</b>	<b>0.0169</b>	<b>2.4930</b>	<b>0.6669</b>	<b>0.0158</b>	<b>0.6827</b>		<b>3,445.6122</b>	<b>3,445.6122</b>	<b>0.0992</b>		<b>3,448.0909</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	5.1183	1.2854	0.0172	0.4470	5.3400e-003	0.4524	0.1287	5.1000e-003	0.1338		1,827.3534	1,827.3534	0.0716		1,829.1427
Worker	0.5496	0.2587	3.8870	0.0156	2.0291	0.0109	2.0399	0.5382	0.0100	0.5482		1,553.2216	1,553.2216	0.0241		1,553.8231
<b>Total</b>	<b>0.6836</b>	<b>5.3769</b>	<b>5.1724</b>	<b>0.0328</b>	<b>2.4761</b>	<b>0.0162</b>	<b>2.4923</b>	<b>0.6669</b>	<b>0.0151</b>	<b>0.6820</b>		<b>3,380.5750</b>	<b>3,380.5750</b>	<b>0.0956</b>		<b>3,382.9659</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.6 Building Construction - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1339	5.1183	1.2854	0.0172	0.4470	5.3400e-003	0.4524	0.1287	5.1000e-003	0.1338		1,827.3534	1,827.3534	0.0716		1,829.1427
Worker	0.5496	0.2587	3.8870	0.0156	2.0291	0.0109	2.0399	0.5382	0.0100	0.5482		1,553.2216	1,553.2216	0.0241		1,553.8231
<b>Total</b>	<b>0.6836</b>	<b>5.3769</b>	<b>5.1724</b>	<b>0.0328</b>	<b>2.4761</b>	<b>0.0162</b>	<b>2.4923</b>	<b>0.6669</b>	<b>0.0151</b>	<b>0.6820</b>		<b>3,380.5750</b>	<b>3,380.5750</b>	<b>0.0956</b>		<b>3,382.9659</b>

**3.7 Architectural Coating - 2021**

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>11.1780</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2021**

**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	0.1576	0.0921	1.2036	3.8900e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		388.0602	388.0602	8.6700e-003		388.2770
<b>Total</b>	<b>0.1576</b>	<b>0.0921</b>	<b>1.2036</b>	<b>3.8900e-003</b>	<b>0.4025</b>	<b>2.5300e-003</b>	<b>0.4051</b>	<b>0.1068</b>	<b>2.3300e-003</b>	<b>0.1091</b>		<b>388.0602</b>	<b>388.0602</b>	<b>8.6700e-003</b>		<b>388.2770</b>

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>11.1780</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2021**

**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	0.1576	0.0921	1.2036	3.8900e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		388.0602	388.0602	8.6700e-003		388.2770
<b>Total</b>	<b>0.1576</b>	<b>0.0921</b>	<b>1.2036</b>	<b>3.8900e-003</b>	<b>0.4025</b>	<b>2.5300e-003</b>	<b>0.4051</b>	<b>0.1068</b>	<b>2.3300e-003</b>	<b>0.1091</b>		<b>388.0602</b>	<b>388.0602</b>	<b>8.6700e-003</b>		<b>388.2770</b>

**3.7 Architectural Coating - 2022**

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>11.1636</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**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	0.1466	0.0826	1.1090	3.7500e-003	0.4025	2.4700e-003	0.4050	0.1068	2.2800e-003	0.1091		373.8187	373.8187	7.7900e-003		374.0135
<b>Total</b>	<b>0.1466</b>	<b>0.0826</b>	<b>1.1090</b>	<b>3.7500e-003</b>	<b>0.4025</b>	<b>2.4700e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2800e-003</b>	<b>0.1091</b>		<b>373.8187</b>	<b>373.8187</b>	<b>7.7900e-003</b>		<b>374.0135</b>

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>11.1636</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2022**

**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	0.1466	0.0826	1.1090	3.7500e-003	0.4025	2.4700e-003	0.4050	0.1068	2.2800e-003	0.1091		373.8187	373.8187	7.7900e-003		374.0135
<b>Total</b>	<b>0.1466</b>	<b>0.0826</b>	<b>1.1090</b>	<b>3.7500e-003</b>	<b>0.4025</b>	<b>2.4700e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2800e-003</b>	<b>0.1091</b>		<b>373.8187</b>	<b>373.8187</b>	<b>7.7900e-003</b>		<b>374.0135</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1507</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**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	0.1369	0.0743	1.0229	3.6000e-003	0.4025	2.4200e-003	0.4050	0.1068	2.2300e-003	0.1090		359.4879	359.4879	6.9900e-003		359.6628
<b>Total</b>	<b>0.1369</b>	<b>0.0743</b>	<b>1.0229</b>	<b>3.6000e-003</b>	<b>0.4025</b>	<b>2.4200e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2300e-003</b>	<b>0.1090</b>		<b>359.4879</b>	<b>359.4879</b>	<b>6.9900e-003</b>		<b>359.6628</b>

**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	10.9591					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
<b>Total</b>	<b>11.1507</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2023**

**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	0.1369	0.0743	1.0229	3.6000e-003	0.4025	2.4200e-003	0.4050	0.1068	2.2300e-003	0.1090		359.4879	359.4879	6.9900e-003		359.6628
<b>Total</b>	<b>0.1369</b>	<b>0.0743</b>	<b>1.0229</b>	<b>3.6000e-003</b>	<b>0.4025</b>	<b>2.4200e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2300e-003</b>	<b>0.1090</b>		<b>359.4879</b>	<b>359.4879</b>	<b>6.9900e-003</b>		<b>359.6628</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1398</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2024**

**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	0.1284	0.0671	0.9494	3.4600e-003	0.4025	2.3800e-003	0.4049	0.1068	2.1900e-003	0.1090		345.2461	345.2461	6.3100e-003		345.4038
<b>Total</b>	<b>0.1284</b>	<b>0.0671</b>	<b>0.9494</b>	<b>3.4600e-003</b>	<b>0.4025</b>	<b>2.3800e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1900e-003</b>	<b>0.1090</b>		<b>345.2461</b>	<b>345.2461</b>	<b>6.3100e-003</b>		<b>345.4038</b>

**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	10.9591					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
<b>Total</b>	<b>11.1398</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2024**

**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	0.1284	0.0671	0.9494	3.4600e-003	0.4025	2.3800e-003	0.4049	0.1068	2.1900e-003	0.1090		345.2461	345.2461	6.3100e-003		345.4038
<b>Total</b>	<b>0.1284</b>	<b>0.0671</b>	<b>0.9494</b>	<b>3.4600e-003</b>	<b>0.4025</b>	<b>2.3800e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1900e-003</b>	<b>0.1090</b>		<b>345.2461</b>	<b>345.2461</b>	<b>6.3100e-003</b>		<b>345.4038</b>

**3.7 Architectural Coating - 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					
Archit. Coating	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2025**

**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	0.1212	0.0610	0.8807	3.3200e-003	0.4025	2.3400e-003	0.4049	0.1068	2.1600e-003	0.1089		331.1791	331.1791	5.7200e-003		331.3221
<b>Total</b>	<b>0.1212</b>	<b>0.0610</b>	<b>0.8807</b>	<b>3.3200e-003</b>	<b>0.4025</b>	<b>2.3400e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1600e-003</b>	<b>0.1089</b>		<b>331.1791</b>	<b>331.1791</b>	<b>5.7200e-003</b>		<b>331.3221</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2025**

**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	0.1212	0.0610	0.8807	3.3200e-003	0.4025	2.3400e-003	0.4049	0.1068	2.1600e-003	0.1089		331.1791	331.1791	5.7200e-003		331.3221
<b>Total</b>	<b>0.1212</b>	<b>0.0610</b>	<b>0.8807</b>	<b>3.3200e-003</b>	<b>0.4025</b>	<b>2.3400e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1600e-003</b>	<b>0.1089</b>		<b>331.1791</b>	<b>331.1791</b>	<b>5.7200e-003</b>		<b>331.3221</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2026**

**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	0.1150	0.0559	0.8226	3.2000e-003	0.4025	2.2700e-003	0.4048	0.1068	2.0900e-003	0.1089		318.9401	318.9401	5.2200e-003		319.0705
<b>Total</b>	<b>0.1150</b>	<b>0.0559</b>	<b>0.8226</b>	<b>3.2000e-003</b>	<b>0.4025</b>	<b>2.2700e-003</b>	<b>0.4048</b>	<b>0.1068</b>	<b>2.0900e-003</b>	<b>0.1089</b>		<b>318.9401</b>	<b>318.9401</b>	<b>5.2200e-003</b>		<b>319.0705</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2026**

**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	0.1150	0.0559	0.8226	3.2000e-003	0.4025	2.2700e-003	0.4048	0.1068	2.0900e-003	0.1089		318.9401	318.9401	5.2200e-003		319.0705
<b>Total</b>	<b>0.1150</b>	<b>0.0559</b>	<b>0.8226</b>	<b>3.2000e-003</b>	<b>0.4025</b>	<b>2.2700e-003</b>	<b>0.4048</b>	<b>0.1068</b>	<b>2.0900e-003</b>	<b>0.1089</b>		<b>318.9401</b>	<b>318.9401</b>	<b>5.2200e-003</b>		<b>319.0705</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1090	0.0513	0.7711	3.0900e-003	0.4025	2.1600e-003	0.4047	0.1068	1.9800e-003	0.1088		308.1290	308.1290	4.7700e-003		308.2483
<b>Total</b>	<b>0.1090</b>	<b>0.0513</b>	<b>0.7711</b>	<b>3.0900e-003</b>	<b>0.4025</b>	<b>2.1600e-003</b>	<b>0.4047</b>	<b>0.1068</b>	<b>1.9800e-003</b>	<b>0.1088</b>		<b>308.1290</b>	<b>308.1290</b>	<b>4.7700e-003</b>		<b>308.2483</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**3.7 Architectural Coating - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1090	0.0513	0.7711	3.0900e-003	0.4025	2.1600e-003	0.4047	0.1068	1.9800e-003	0.1088		308.1290	308.1290	4.7700e-003		308.2483
<b>Total</b>	<b>0.1090</b>	<b>0.0513</b>	<b>0.7711</b>	<b>3.0900e-003</b>	<b>0.4025</b>	<b>2.1600e-003</b>	<b>0.4047</b>	<b>0.1068</b>	<b>1.9800e-003</b>	<b>0.1088</b>		<b>308.1290</b>	<b>308.1290</b>	<b>4.7700e-003</b>		<b>308.2483</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

Historical Energy Use: N

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**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					
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - Natural Gas**

**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	lb/day										lb/day					
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Unmitigated	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	26.3862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6859	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134		101.7583	101.7583	0.0970		104.1821
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>		<b>0.3134</b>	<b>0.3134</b>		<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	26.3862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6859	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134		101.7583	101.7583	0.0970		104.1821
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>		<b>0.3134</b>	<b>0.3134</b>		<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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The Ranch (Construction Only - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**The Ranch (Construction Only  
Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

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**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	685.00	Dwelling Unit	150.00	1,233,000.00	1959

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

Project Characteristics -

Land Use - Applicant Information

Construction Phase - Construction of Phase 3 modeled

Grading - Applicant Information

Demolition -

Vehicle Trips - Project operations modeled separately

Woodstoves - Project operations modeled separately

Consumer Products - Project operations modeled separately

Area Coating -

Landscape Equipment -

Energy Use - Project operations modeled separately

Water And Wastewater - Project operations modeled separately

Solid Waste - Project operations modeled separately

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	220.00	1,584.00
tblConstructionPhase	NumDays	3,100.00	1,584.00
tblConstructionPhase	NumDays	200.00	3.00
tblConstructionPhase	NumDays	310.00	142.00
tblConstructionPhase	NumDays	220.00	30.00
tblConstructionPhase	NumDays	120.00	30.00
tblConstructionPhase	PhaseEndDate	3/25/2036	2/22/2027
tblConstructionPhase	PhaseEndDate	7/18/2034	2/8/2027
tblConstructionPhase	PhaseEndDate	1/5/2021	4/3/2020
tblConstructionPhase	PhaseEndDate	8/30/2022	12/1/2020
tblConstructionPhase	PhaseEndDate	5/22/2035	1/12/2021

## The Ranch (Construction Only - Bay Area AQMD Air District, Winter)

tblConstructionPhase	PhaseEndDate	6/22/2021	5/15/2020
tblConstructionPhase	PhaseStartDate	5/23/2035	1/27/2021
tblConstructionPhase	PhaseStartDate	8/31/2022	1/13/2021
tblConstructionPhase	PhaseStartDate	6/23/2021	5/16/2020
tblConstructionPhase	PhaseStartDate	7/19/2034	12/2/2020
tblConstructionPhase	PhaseStartDate	1/6/2021	4/4/2020
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	325.76	0.00
tblEnergyUse	T24NG	25,910.09	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	171.25	0.00
tblFireplaces	NumberNoFireplace	54.80	0.00
tblFireplaces	NumberWood	294.55	0.00
tblGrading	AcresOfGrading	355.00	150.00
tblLandUse	LotAcreage	222.40	150.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblSolidWaste	SolidWasteGenerationRate	822.78	0.00
tblVehicleTrips	ST_TR	9.91	0.00
tblVehicleTrips	SU_TR	8.62	0.00
tblVehicleTrips	WD_TR	9.52	0.00
tblWater	IndoorWaterUseRate	44,630,507.55	0.00
tblWater	OutdoorWaterUseRate	28,136,624.33	0.00
tblWoodstoves	NumberCatalytic	27.40	0.00

The Ranch (Construction Only - Bay Area AQMD Air District, Winter)

tblWoodstoves	NumberNoncatalytic	27.40	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

## 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					
2020	4.5236	50.2495	32.4623	0.0635	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	6,157.0784	6,157.0784	1.9461	0.0000	6,205.7313
2021	14.3143	26.9319	27.1588	0.0695	2.8785	1.0835	3.9620	0.7737	1.0243	1.7980	0.0000	6,889.2270	6,889.2270	0.7875	0.0000	6,908.9148
2022	14.0226	24.5501	26.2635	0.0685	2.8785	0.9191	3.7977	0.7737	0.8695	1.6432	0.0000	6,792.2871	6,792.2871	0.7726	0.0000	6,811.6020
2023	13.7644	21.6127	25.4247	0.0672	2.8785	0.7912	3.6698	0.7737	0.7485	1.5221	0.0000	6,660.8521	6,660.8521	0.7471	0.0000	6,679.5299
2024	13.5957	20.4753	24.8546	0.0662	2.8786	0.6945	3.5731	0.7737	0.6567	1.4304	0.0000	6,569.8177	6,569.8177	0.7369	0.0000	6,588.2392
2025	13.4331	19.3214	24.3280	0.0654	2.8786	0.5990	3.4776	0.7737	0.5663	1.3400	0.0000	6,480.5160	6,480.5160	0.7279	0.0000	6,498.7129
2026	13.3921	19.2234	23.9584	0.0646	2.8786	0.5985	3.4770	0.7737	0.5658	1.3395	0.0000	6,401.6233	6,401.6233	0.7235	0.0000	6,419.7096
2027	13.3528	19.1289	23.6338	0.0638	2.8786	0.5976	3.4762	0.7737	0.5650	1.3387	0.0000	6,331.3446	6,331.3446	0.7195	0.0000	6,349.3313
<b>Maximum</b>	<b>14.3143</b>	<b>50.2495</b>	<b>32.4623</b>	<b>0.0695</b>	<b>18.2141</b>	<b>2.1984</b>	<b>20.4125</b>	<b>9.9699</b>	<b>2.0225</b>	<b>11.9924</b>	<b>0.0000</b>	<b>6,889.2270</b>	<b>6,889.2270</b>	<b>1.9461</b>	<b>0.0000</b>	<b>6,908.9148</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

## The Ranch (Construction Only - Bay Area AQMD Air District, Winter)

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/3/2020	5	3	
2	Site Preparation	Site Preparation	4/4/2020	5/15/2020	5	30	
3	Grading	Grading	5/16/2020	12/1/2020	5	142	
4	Paving	Paving	12/2/2020	1/12/2021	5	30	
5	Building Construction	Building Construction	1/13/2021	2/8/2027	5	1584	
6	Architectural Coating	Architectural Coating	1/27/2021	2/22/2027	5	1584	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 150

Acres of Paving: 0

Residential Indoor: 2,496,825; Residential Outdoor: 832,275; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

## The Ranch (Construction Only - Bay Area AQMD Air District, Winter)

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	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
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

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
Demolition	6	15.00	0.00	16.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	247.00	73.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	49.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.1484	0.0000	1.1484	0.1739	0.0000	0.1739			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
<b>Total</b>	<b>3.3121</b>	<b>33.2010</b>	<b>21.7532</b>	<b>0.0388</b>	<b>1.1484</b>	<b>1.6587</b>	<b>2.8071</b>	<b>0.1739</b>	<b>1.5419</b>	<b>1.7157</b>		<b>3,747.7049</b>	<b>3,747.7049</b>	<b>1.0580</b>		<b>3,774.1536</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2020**

**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	0.0452	1.5652	0.3269	4.1700e-003	0.0932	5.0800e-003	0.0983	0.0255	4.8600e-003	0.0304		446.1299	446.1299	0.0238		446.7259
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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
<b>Total</b>	<b>0.1004</b>	<b>1.6042</b>	<b>0.7048</b>	<b>5.3100e-003</b>	<b>0.2164</b>	<b>5.8800e-003</b>	<b>0.2223</b>	<b>0.0582</b>	<b>5.6000e-003</b>	<b>0.0638</b>		<b>559.5397</b>	<b>559.5397</b>	<b>0.0266</b>		<b>560.2051</b>

**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					1.1484	0.0000	1.1484	0.1739	0.0000	0.1739			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
<b>Total</b>	<b>3.3121</b>	<b>33.2010</b>	<b>21.7532</b>	<b>0.0388</b>	<b>1.1484</b>	<b>1.6587</b>	<b>2.8071</b>	<b>0.1739</b>	<b>1.5419</b>	<b>1.7157</b>	<b>0.0000</b>	<b>3,747.7049</b>	<b>3,747.7049</b>	<b>1.0580</b>		<b>3,774.1536</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2020**

**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	0.0452	1.5652	0.3269	4.1700e-003	0.0932	5.0800e-003	0.0983	0.0255	4.8600e-003	0.0304		446.1299	446.1299	0.0238		446.7259
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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
<b>Total</b>	<b>0.1004</b>	<b>1.6042</b>	<b>0.7048</b>	<b>5.3100e-003</b>	<b>0.2164</b>	<b>5.8800e-003</b>	<b>0.2223</b>	<b>0.0582</b>	<b>5.6000e-003</b>	<b>0.0638</b>		<b>559.5397</b>	<b>559.5397</b>	<b>0.0266</b>		<b>560.2051</b>

**3.3 Site Preparation - 2020**

**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	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>		<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2020**

**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	0.0662	0.0468	0.4536	1.3700e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.0918	136.0918	3.3300e-003		136.1750
<b>Total</b>	<b>0.0662</b>	<b>0.0468</b>	<b>0.4536</b>	<b>1.3700e-003</b>	<b>0.1479</b>	<b>9.6000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.8000e-004</b>	<b>0.0401</b>		<b>136.0918</b>	<b>136.0918</b>	<b>3.3300e-003</b>		<b>136.1750</b>

**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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
<b>Total</b>	<b>4.0765</b>	<b>42.4173</b>	<b>21.5136</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.1974</b>	<b>20.2637</b>	<b>9.9307</b>	<b>2.0216</b>	<b>11.9523</b>	<b>0.0000</b>	<b>3,685.1016</b>	<b>3,685.1016</b>	<b>1.1918</b>		<b>3,714.8975</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.3 Site Preparation - 2020**

**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	0.0662	0.0468	0.4536	1.3700e-003	0.1479	9.6000e-004	0.1488	0.0392	8.8000e-004	0.0401		136.0918	136.0918	3.3300e-003		136.1750
<b>Total</b>	<b>0.0662</b>	<b>0.0468</b>	<b>0.4536</b>	<b>1.3700e-003</b>	<b>0.1479</b>	<b>9.6000e-004</b>	<b>0.1488</b>	<b>0.0392</b>	<b>8.8000e-004</b>	<b>0.0401</b>		<b>136.0918</b>	<b>136.0918</b>	<b>3.3300e-003</b>		<b>136.1750</b>

**3.4 Grading - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.1423	0.0000	7.1423	3.4312	0.0000	3.4312			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>7.1423</b>	<b>2.1739</b>	<b>9.3162</b>	<b>3.4312</b>	<b>2.0000</b>	<b>5.4312</b>		<b>6,005.8653</b>	<b>6,005.8653</b>	<b>1.9424</b>		<b>6,054.4257</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.4 Grading - 2020**

**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	0.0735	0.0520	0.5040	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.2131	151.2131	3.7000e-003		151.3055
<b>Total</b>	<b>0.0735</b>	<b>0.0520</b>	<b>0.5040</b>	<b>1.5200e-003</b>	<b>0.1643</b>	<b>1.0600e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>9.8000e-004</b>	<b>0.0446</b>		<b>151.2131</b>	<b>151.2131</b>	<b>3.7000e-003</b>		<b>151.3055</b>

**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					7.1423	0.0000	7.1423	3.4312	0.0000	3.4312			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
<b>Total</b>	<b>4.4501</b>	<b>50.1975</b>	<b>31.9583</b>	<b>0.0620</b>	<b>7.1423</b>	<b>2.1739</b>	<b>9.3162</b>	<b>3.4312</b>	<b>2.0000</b>	<b>5.4312</b>	<b>0.0000</b>	<b>6,005.8653</b>	<b>6,005.8653</b>	<b>1.9424</b>		<b>6,054.4257</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.4 Grading - 2020**

**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	0.0735	0.0520	0.5040	1.5200e-003	0.1643	1.0600e-003	0.1654	0.0436	9.8000e-004	0.0446		151.2131	151.2131	3.7000e-003		151.3055
<b>Total</b>	<b>0.0735</b>	<b>0.0520</b>	<b>0.5040</b>	<b>1.5200e-003</b>	<b>0.1643</b>	<b>1.0600e-003</b>	<b>0.1654</b>	<b>0.0436</b>	<b>9.8000e-004</b>	<b>0.0446</b>		<b>151.2131</b>	<b>151.2131</b>	<b>3.7000e-003</b>		<b>151.3055</b>

**3.5 Paving - 2020**

**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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.5 Paving - 2020**

**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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
<b>Total</b>	<b>0.0552</b>	<b>0.0390</b>	<b>0.3780</b>	<b>1.1400e-003</b>	<b>0.1232</b>	<b>8.0000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>113.4098</b>	<b>113.4098</b>	<b>2.7700e-003</b>		<b>113.4792</b>

**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	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.3566</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.5 Paving - 2020**

**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	0.0552	0.0390	0.3780	1.1400e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		113.4098	113.4098	2.7700e-003		113.4792
<b>Total</b>	<b>0.0552</b>	<b>0.0390</b>	<b>0.3780</b>	<b>1.1400e-003</b>	<b>0.1232</b>	<b>8.0000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.4000e-004</b>	<b>0.0334</b>		<b>113.4098</b>	<b>113.4098</b>	<b>2.7700e-003</b>		<b>113.4792</b>

**3.5 Paving - 2021**

**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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2556</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>		<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.5 Paving - 2021**

**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	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0511</b>	<b>0.0348</b>	<b>0.3447</b>	<b>1.1000e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>109.4305</b>	<b>109.4305</b>	<b>2.4800e-003</b>		<b>109.4924</b>

**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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2556</b>	<b>12.9191</b>	<b>14.6532</b>	<b>0.0228</b>		<b>0.6777</b>	<b>0.6777</b>		<b>0.6235</b>	<b>0.6235</b>	<b>0.0000</b>	<b>2,207.2109</b>	<b>2,207.2109</b>	<b>0.7139</b>		<b>2,225.0573</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.5 Paving - 2021**

**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	0.0348	0.3447	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.1000e-004	0.0334		109.4305	109.4305	2.4800e-003		109.4924
<b>Total</b>	<b>0.0511</b>	<b>0.0348</b>	<b>0.3447</b>	<b>1.1000e-003</b>	<b>0.1232</b>	<b>7.8000e-004</b>	<b>0.1240</b>	<b>0.0327</b>	<b>7.1000e-004</b>	<b>0.0334</b>		<b>109.4305</b>	<b>109.4305</b>	<b>2.4800e-003</b>		<b>109.4924</b>

**3.6 Building Construction - 2021**

**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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>		<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2021**

**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	0.2271	7.2859	1.9636	0.0179	0.4469	0.0155	0.4625	0.1287	0.0148	0.1435		1,894.9866	1,894.9866	0.1033		1,897.5696
Worker	0.8413	0.5733	5.6764	0.0181	2.0291	0.0128	2.0418	0.5382	0.0118	0.5500		1,801.9555	1,801.9555	0.0408		1,802.9748
<b>Total</b>	<b>1.0685</b>	<b>7.8592</b>	<b>7.6400</b>	<b>0.0360</b>	<b>2.4760</b>	<b>0.0283</b>	<b>2.5043</b>	<b>0.6669</b>	<b>0.0266</b>	<b>0.6935</b>		<b>3,696.9421</b>	<b>3,696.9421</b>	<b>0.1441</b>		<b>3,700.5445</b>

**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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
<b>Total</b>	<b>1.9009</b>	<b>17.4321</b>	<b>16.5752</b>	<b>0.0269</b>		<b>0.9586</b>	<b>0.9586</b>		<b>0.9013</b>	<b>0.9013</b>	<b>0.0000</b>	<b>2,553.3639</b>	<b>2,553.3639</b>	<b>0.6160</b>		<b>2,568.7643</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2021**

**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	0.2271	7.2859	1.9636	0.0179	0.4469	0.0155	0.4625	0.1287	0.0148	0.1435		1,894.9866	1,894.9866	0.1033		1,897.5696
Worker	0.8413	0.5733	5.6764	0.0181	2.0291	0.0128	2.0418	0.5382	0.0118	0.5500		1,801.9555	1,801.9555	0.0408		1,802.9748
<b>Total</b>	<b>1.0685</b>	<b>7.8592</b>	<b>7.6400</b>	<b>0.0360</b>	<b>2.4760</b>	<b>0.0283</b>	<b>2.5043</b>	<b>0.6669</b>	<b>0.0266</b>	<b>0.6935</b>		<b>3,696.9421</b>	<b>3,696.9421</b>	<b>0.1441</b>		<b>3,700.5445</b>

**3.6 Building Construction - 2022**

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>		<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2022**

**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	0.2117	6.9100	1.8442	0.0177	0.4470	0.0135	0.4604	0.1287	0.0129	0.1416		1,876.2410	1,876.2410	0.0986		1,878.7055
Worker	0.7853	0.5140	5.2089	0.0174	2.0291	0.0125	2.0415	0.5382	0.0115	0.5497		1,735.8963	1,735.8963	0.0365		1,736.8090
<b>Total</b>	<b>0.9969</b>	<b>7.4240</b>	<b>7.0531</b>	<b>0.0351</b>	<b>2.4760</b>	<b>0.0259</b>	<b>2.5020</b>	<b>0.6669</b>	<b>0.0244</b>	<b>0.6912</b>		<b>3,612.1373</b>	<b>3,612.1373</b>	<b>0.1351</b>		<b>3,615.5145</b>

**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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
<b>Total</b>	<b>1.7062</b>	<b>15.6156</b>	<b>16.3634</b>	<b>0.0269</b>		<b>0.8090</b>	<b>0.8090</b>		<b>0.7612</b>	<b>0.7612</b>	<b>0.0000</b>	<b>2,554.3336</b>	<b>2,554.3336</b>	<b>0.6120</b>		<b>2,569.6322</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2022**

**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	0.2117	6.9100	1.8442	0.0177	0.4470	0.0135	0.4604	0.1287	0.0129	0.1416		1,876.2410	1,876.2410	0.0986		1,878.7055
Worker	0.7853	0.5140	5.2089	0.0174	2.0291	0.0125	2.0415	0.5382	0.0115	0.5497		1,735.8963	1,735.8963	0.0365		1,736.8090
<b>Total</b>	<b>0.9969</b>	<b>7.4240</b>	<b>7.0531</b>	<b>0.0351</b>	<b>2.4760</b>	<b>0.0259</b>	<b>2.5020</b>	<b>0.6669</b>	<b>0.0244</b>	<b>0.6912</b>		<b>3,612.1373</b>	<b>3,612.1373</b>	<b>0.1351</b>		<b>3,615.5145</b>

**3.6 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
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>		<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2023**

**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	0.1594	5.3710	1.6366	0.0172	0.4470	6.0400e-003	0.4530	0.1287	5.7700e-003	0.1345		1,823.5948	1,823.5948	0.0833		1,825.6769
Worker	0.7356	0.4621	4.7840	0.0167	2.0291	0.0122	2.0413	0.5382	0.0113	0.5494		1,669.4190	1,669.4190	0.0327		1,670.2357
<b>Total</b>	<b>0.8950</b>	<b>5.8331</b>	<b>6.4206</b>	<b>0.0339</b>	<b>2.4760</b>	<b>0.0183</b>	<b>2.4943</b>	<b>0.6669</b>	<b>0.0170</b>	<b>0.6839</b>		<b>3,493.0138</b>	<b>3,493.0138</b>	<b>0.1160</b>		<b>3,495.9126</b>

**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
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>	<b>0.0000</b>	<b>2,555.2099</b>	<b>2,555.2099</b>	<b>0.6079</b>		<b>2,570.4061</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2023**

**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	0.1594	5.3710	1.6366	0.0172	0.4470	6.0400e-003	0.4530	0.1287	5.7700e-003	0.1345		1,823.5948	1,823.5948	0.0833		1,825.6769
Worker	0.7356	0.4621	4.7840	0.0167	2.0291	0.0122	2.0413	0.5382	0.0113	0.5494		1,669.4190	1,669.4190	0.0327		1,670.2357
<b>Total</b>	<b>0.8950</b>	<b>5.8331</b>	<b>6.4206</b>	<b>0.0339</b>	<b>2.4760</b>	<b>0.0183</b>	<b>2.4943</b>	<b>0.6669</b>	<b>0.0170</b>	<b>0.6839</b>		<b>3,493.0138</b>	<b>3,493.0138</b>	<b>0.1160</b>		<b>3,495.9126</b>

**3.6 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
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>		<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>		<b>2,570.8077</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2024**

**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	0.1539	5.3126	1.5733	0.0171	0.4470	5.9100e-003	0.4529	0.1287	5.6500e-003	0.1343		1,811.2456	1,811.2456	0.0815			1,813.2821
Worker	0.6929	0.4173	4.4263	0.0161	2.0291	0.0120	2.0410	0.5382	0.0110	0.5492		1,603.3514	1,603.3514	0.0294			1,604.0857
<b>Total</b>	<b>0.8468</b>	<b>5.7299</b>	<b>5.9996</b>	<b>0.0331</b>	<b>2.4760</b>	<b>0.0179</b>	<b>2.4939</b>	<b>0.6669</b>	<b>0.0167</b>	<b>0.6836</b>		<b>3,414.5970</b>	<b>3,414.5970</b>	<b>0.1108</b>			<b>3,417.3678</b>

**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
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>	<b>0.0000</b>	<b>2,555.6989</b>	<b>2,555.6989</b>	<b>0.6044</b>			<b>2,570.8077</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2024**

**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	0.1539	5.3126	1.5733	0.0171	0.4470	5.9100e-003	0.4529	0.1287	5.6500e-003	0.1343		1,811.2456	1,811.2456	0.0815		1,813.2821
Worker	0.6929	0.4173	4.4263	0.0161	2.0291	0.0120	2.0410	0.5382	0.0110	0.5492		1,603.3514	1,603.3514	0.0294		1,604.0857
<b>Total</b>	<b>0.8468</b>	<b>5.7299</b>	<b>5.9996</b>	<b>0.0331</b>	<b>2.4760</b>	<b>0.0179</b>	<b>2.4939</b>	<b>0.6669</b>	<b>0.0167</b>	<b>0.6836</b>		<b>3,414.5970</b>	<b>3,414.5970</b>	<b>0.1108</b>		<b>3,417.3678</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2025**

**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	0.1493	5.2517	1.5251	0.0169	0.4470	5.7800e-003	0.4528	0.1287	5.5200e-003	0.1342		1,799.3746	1,799.3746	0.0797		1,801.3677
Worker	0.6563	0.3793	4.0964	0.0154	2.0291	0.0118	2.0409	0.5382	0.0109	0.5491		1,538.0916	1,538.0916	0.0266		1,538.7560
<b>Total</b>	<b>0.8056</b>	<b>5.6310</b>	<b>5.6215</b>	<b>0.0324</b>	<b>2.4761</b>	<b>0.0176</b>	<b>2.4936</b>	<b>0.6669</b>	<b>0.0164</b>	<b>0.6833</b>		<b>3,337.4661</b>	<b>3,337.4661</b>	<b>0.1063</b>		<b>3,340.1237</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2025**

**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	0.1493	5.2517	1.5251	0.0169	0.4470	5.7800e-003	0.4528	0.1287	5.5200e-003	0.1342		1,799.3746	1,799.3746	0.0797		1,801.3677
Worker	0.6563	0.3793	4.0964	0.0154	2.0291	0.0118	2.0409	0.5382	0.0109	0.5491		1,538.0916	1,538.0916	0.0266		1,538.7560
<b>Total</b>	<b>0.8056</b>	<b>5.6310</b>	<b>5.6215</b>	<b>0.0324</b>	<b>2.4761</b>	<b>0.0176</b>	<b>2.4936</b>	<b>0.6669</b>	<b>0.0164</b>	<b>0.6833</b>		<b>3,337.4661</b>	<b>3,337.4661</b>	<b>0.1063</b>		<b>3,340.1237</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2026**

**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	0.1455	5.1920	1.4901	0.0168	0.4470	5.6500e-003	0.4527	0.1287	5.4000e-003	0.1341		1,788.5779	1,788.5779	0.0782		1,790.5318
Worker	0.6253	0.3473	3.8172	0.0149	2.0291	0.0115	2.0405	0.5382	0.0106	0.5488		1,481.2682	1,481.2682	0.0242		1,481.8731
<b>Total</b>	<b>0.7707</b>	<b>5.5394</b>	<b>5.3073</b>	<b>0.0317</b>	<b>2.4761</b>	<b>0.0171</b>	<b>2.4932</b>	<b>0.6669</b>	<b>0.0160</b>	<b>0.6829</b>		<b>3,269.8461</b>	<b>3,269.8461</b>	<b>0.1024</b>		<b>3,272.4049</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2026**

**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	0.1455	5.1920	1.4901	0.0168	0.4470	5.6500e-003	0.4527	0.1287	5.4000e-003	0.1341		1,788.5779	1,788.5779	0.0782		1,790.5318
Worker	0.6253	0.3473	3.8172	0.0149	2.0291	0.0115	2.0405	0.5382	0.0106	0.5488		1,481.2682	1,481.2682	0.0242		1,481.8731
<b>Total</b>	<b>0.7707</b>	<b>5.5394</b>	<b>5.3073</b>	<b>0.0317</b>	<b>2.4761</b>	<b>0.0171</b>	<b>2.4932</b>	<b>0.6669</b>	<b>0.0160</b>	<b>0.6829</b>		<b>3,269.8461</b>	<b>3,269.8461</b>	<b>0.1024</b>		<b>3,272.4049</b>

**3.6 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		2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>		<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1422	5.1316	1.4616	0.0167	0.4470	5.5200e-003	0.4525	0.1287	5.2800e-003	0.1340		1,778.5183	1,778.5183	0.0767		1,780.4359
Worker	0.5952	0.3189	3.5701	0.0143	2.0291	0.0109	2.0399	0.5382	0.0100	0.5482		1,431.0177	1,431.0177	0.0221		1,431.5698
<b>Total</b>	<b>0.7374</b>	<b>5.4505</b>	<b>5.0318</b>	<b>0.0311</b>	<b>2.4761</b>	<b>0.0164</b>	<b>2.4925</b>	<b>0.6669</b>	<b>0.0153</b>	<b>0.6822</b>		<b>3,209.5360</b>	<b>3,209.5360</b>	<b>0.0988</b>		<b>3,212.0058</b>

**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	2,556.4744	2,556.4744	0.6010		2,571.4981
<b>Total</b>	<b>1.3674</b>	<b>12.4697</b>	<b>16.0847</b>	<b>0.0270</b>		<b>0.5276</b>	<b>0.5276</b>		<b>0.4963</b>	<b>0.4963</b>	<b>0.0000</b>	<b>2,556.4744</b>	<b>2,556.4744</b>	<b>0.6010</b>		<b>2,571.4981</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.6 Building Construction - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1422	5.1316	1.4616	0.0167	0.4470	5.5200e-003	0.4525	0.1287	5.2800e-003	0.1340		1,778.5183	1,778.5183	0.0767		1,780.4359
Worker	0.5952	0.3189	3.5701	0.0143	2.0291	0.0109	2.0399	0.5382	0.0100	0.5482		1,431.0177	1,431.0177	0.0221		1,431.5698
<b>Total</b>	<b>0.7374</b>	<b>5.4505</b>	<b>5.0318</b>	<b>0.0311</b>	<b>2.4761</b>	<b>0.0164</b>	<b>2.4925</b>	<b>0.6669</b>	<b>0.0153</b>	<b>0.6822</b>		<b>3,209.5360</b>	<b>3,209.5360</b>	<b>0.0988</b>		<b>3,212.0058</b>

**3.7 Architectural Coating - 2021**

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>11.1780</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2021**

**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	0.1669	0.1137	1.1261	3.5900e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		357.4730	357.4730	8.0900e-003		357.6752
<b>Total</b>	<b>0.1669</b>	<b>0.1137</b>	<b>1.1261</b>	<b>3.5900e-003</b>	<b>0.4025</b>	<b>2.5300e-003</b>	<b>0.4051</b>	<b>0.1068</b>	<b>2.3300e-003</b>	<b>0.1091</b>		<b>357.4730</b>	<b>357.4730</b>	<b>8.0900e-003</b>		<b>357.6752</b>

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
<b>Total</b>	<b>11.1780</b>	<b>1.5268</b>	<b>1.8176</b>	<b>2.9700e-003</b>		<b>0.0941</b>	<b>0.0941</b>		<b>0.0941</b>	<b>0.0941</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0193</b>		<b>281.9309</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2021**

**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	0.1669	0.1137	1.1261	3.5900e-003	0.4025	2.5300e-003	0.4051	0.1068	2.3300e-003	0.1091		357.4730	357.4730	8.0900e-003		357.6752
<b>Total</b>	<b>0.1669</b>	<b>0.1137</b>	<b>1.1261</b>	<b>3.5900e-003</b>	<b>0.4025</b>	<b>2.5300e-003</b>	<b>0.4051</b>	<b>0.1068</b>	<b>2.3300e-003</b>	<b>0.1091</b>		<b>357.4730</b>	<b>357.4730</b>	<b>8.0900e-003</b>		<b>357.6752</b>

**3.7 Architectural Coating - 2022**

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>11.1636</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**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	0.1558	0.1020	1.0334	3.4500e-003	0.4025	2.4700e-003	0.4050	0.1068	2.2800e-003	0.1091		344.3681	344.3681	7.2400e-003		344.5492
<b>Total</b>	<b>0.1558</b>	<b>0.1020</b>	<b>1.0334</b>	<b>3.4500e-003</b>	<b>0.4025</b>	<b>2.4700e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2800e-003</b>	<b>0.1091</b>		<b>344.3681</b>	<b>344.3681</b>	<b>7.2400e-003</b>		<b>344.5492</b>

**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	10.9591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
<b>Total</b>	<b>11.1636</b>	<b>1.4085</b>	<b>1.8136</b>	<b>2.9700e-003</b>		<b>0.0817</b>	<b>0.0817</b>		<b>0.0817</b>	<b>0.0817</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0183</b>		<b>281.9062</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2022**

**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	0.1558	0.1020	1.0334	3.4500e-003	0.4025	2.4700e-003	0.4050	0.1068	2.2800e-003	0.1091		344.3681	344.3681	7.2400e-003		344.5492
<b>Total</b>	<b>0.1558</b>	<b>0.1020</b>	<b>1.0334</b>	<b>3.4500e-003</b>	<b>0.4025</b>	<b>2.4700e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2800e-003</b>	<b>0.1091</b>		<b>344.3681</b>	<b>344.3681</b>	<b>7.2400e-003</b>		<b>344.5492</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1507</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**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	0.1459	0.0917	0.9491	3.3200e-003	0.4025	2.4200e-003	0.4050	0.1068	2.2300e-003	0.1090		331.1803	331.1803	6.4800e-003		331.3423
<b>Total</b>	<b>0.1459</b>	<b>0.0917</b>	<b>0.9491</b>	<b>3.3200e-003</b>	<b>0.4025</b>	<b>2.4200e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2300e-003</b>	<b>0.1090</b>		<b>331.1803</b>	<b>331.1803</b>	<b>6.4800e-003</b>		<b>331.3423</b>

**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	10.9591					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
<b>Total</b>	<b>11.1507</b>	<b>1.3030</b>	<b>1.8111</b>	<b>2.9700e-003</b>		<b>0.0708</b>	<b>0.0708</b>		<b>0.0708</b>	<b>0.0708</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0168</b>		<b>281.8690</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2023**

**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	0.1459	0.0917	0.9491	3.3200e-003	0.4025	2.4200e-003	0.4050	0.1068	2.2300e-003	0.1090		331.1803	331.1803	6.4800e-003		331.3423
<b>Total</b>	<b>0.1459</b>	<b>0.0917</b>	<b>0.9491</b>	<b>3.3200e-003</b>	<b>0.4025</b>	<b>2.4200e-003</b>	<b>0.4050</b>	<b>0.1068</b>	<b>2.2300e-003</b>	<b>0.1090</b>		<b>331.1803</b>	<b>331.1803</b>	<b>6.4800e-003</b>		<b>331.3423</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1398</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2024**

**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	0.1375	0.0828	0.8781	3.1900e-003	0.4025	2.3800e-003	0.4049	0.1068	2.1900e-003	0.1090		318.0738	318.0738	5.8300e-003		318.2194
<b>Total</b>	<b>0.1375</b>	<b>0.0828</b>	<b>0.8781</b>	<b>3.1900e-003</b>	<b>0.4025</b>	<b>2.3800e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1900e-003</b>	<b>0.1090</b>		<b>318.0738</b>	<b>318.0738</b>	<b>5.8300e-003</b>		<b>318.2194</b>

**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	10.9591					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
<b>Total</b>	<b>11.1398</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0159</b>		<b>281.8443</b>



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2024**

**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	0.1375	0.0828	0.8781	3.1900e-003	0.4025	2.3800e-003	0.4049	0.1068	2.1900e-003	0.1090		318.0738	318.0738	5.8300e-003		318.2194
<b>Total</b>	<b>0.1375</b>	<b>0.0828</b>	<b>0.8781</b>	<b>3.1900e-003</b>	<b>0.4025</b>	<b>2.3800e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1900e-003</b>	<b>0.1090</b>		<b>318.0738</b>	<b>318.0738</b>	<b>5.8300e-003</b>		<b>318.2194</b>

**3.7 Architectural Coating - 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					
Archit. Coating	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2025**

**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	0.1302	0.0753	0.8127	3.0600e-003	0.4025	2.3400e-003	0.4049	0.1068	2.1600e-003	0.1089		305.1275	305.1275	5.2700e-003		305.2593
<b>Total</b>	<b>0.1302</b>	<b>0.0753</b>	<b>0.8127</b>	<b>3.0600e-003</b>	<b>0.4025</b>	<b>2.3400e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1600e-003</b>	<b>0.1089</b>		<b>305.1275</b>	<b>305.1275</b>	<b>5.2700e-003</b>		<b>305.2593</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2025**

**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	0.1302	0.0753	0.8127	3.0600e-003	0.4025	2.3400e-003	0.4049	0.1068	2.1600e-003	0.1089		305.1275	305.1275	5.2700e-003		305.2593
<b>Total</b>	<b>0.1302</b>	<b>0.0753</b>	<b>0.8127</b>	<b>3.0600e-003</b>	<b>0.4025</b>	<b>2.3400e-003</b>	<b>0.4049</b>	<b>0.1068</b>	<b>2.1600e-003</b>	<b>0.1089</b>		<b>305.1275</b>	<b>305.1275</b>	<b>5.2700e-003</b>		<b>305.2593</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2026**

**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	0.1240	0.0689	0.7573	2.9400e-003	0.4025	2.2700e-003	0.4048	0.1068	2.0900e-003	0.1089		293.8548	293.8548	4.8000e-003		293.9748
<b>Total</b>	<b>0.1240</b>	<b>0.0689</b>	<b>0.7573</b>	<b>2.9400e-003</b>	<b>0.4025</b>	<b>2.2700e-003</b>	<b>0.4048</b>	<b>0.1068</b>	<b>2.0900e-003</b>	<b>0.1089</b>		<b>293.8548</b>	<b>293.8548</b>	<b>4.8000e-003</b>		<b>293.9748</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2026**

**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	0.1240	0.0689	0.7573	2.9400e-003	0.4025	2.2700e-003	0.4048	0.1068	2.0900e-003	0.1089		293.8548	293.8548	4.8000e-003		293.9748
<b>Total</b>	<b>0.1240</b>	<b>0.0689</b>	<b>0.7573</b>	<b>2.9400e-003</b>	<b>0.4025</b>	<b>2.2700e-003</b>	<b>0.4048</b>	<b>0.1068</b>	<b>2.0900e-003</b>	<b>0.1089</b>		<b>293.8548</b>	<b>293.8548</b>	<b>4.8000e-003</b>		<b>293.9748</b>

**3.7 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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2027**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1181	0.0633	0.7083	2.8400e-003	0.4025	2.1600e-003	0.4047	0.1068	1.9800e-003	0.1088		283.8861	283.8861	4.3800e-003		283.9956
<b>Total</b>	<b>0.1181</b>	<b>0.0633</b>	<b>0.7083</b>	<b>2.8400e-003</b>	<b>0.4025</b>	<b>2.1600e-003</b>	<b>0.4047</b>	<b>0.1068</b>	<b>1.9800e-003</b>	<b>0.1088</b>		<b>283.8861</b>	<b>283.8861</b>	<b>4.3800e-003</b>		<b>283.9956</b>

**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	10.9591					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
<b>Total</b>	<b>11.1299</b>	<b>1.1455</b>	<b>1.8091</b>	<b>2.9700e-003</b>		<b>0.0515</b>	<b>0.0515</b>		<b>0.0515</b>	<b>0.0515</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0154</b>		<b>281.8319</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**3.7 Architectural Coating - 2027**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1181	0.0633	0.7083	2.8400e-003	0.4025	2.1600e-003	0.4047	0.1068	1.9800e-003	0.1088		283.8861	283.8861	4.3800e-003		283.9956
<b>Total</b>	<b>0.1181</b>	<b>0.0633</b>	<b>0.7083</b>	<b>2.8400e-003</b>	<b>0.4025</b>	<b>2.1600e-003</b>	<b>0.4047</b>	<b>0.1068</b>	<b>1.9800e-003</b>	<b>0.1088</b>		<b>283.8861</b>	<b>283.8861</b>	<b>4.3800e-003</b>		<b>283.9956</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
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
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

Historical Energy Use: N



The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

**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					
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - Natural Gas**

**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	lb/day										lb/day					
Single Family Housing	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
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**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	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821
Unmitigated	28.0721	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134	0.0000	101.7583	101.7583	0.0970	0.0000	104.1821

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	26.3862					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Landscaping	1.6859	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134		101.7583	101.7583	0.0970			104.1821
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>		<b>0.3134</b>	<b>0.3134</b>		<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>		<b>104.1821</b>

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	26.3862					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6859	0.6498	56.3640	2.9800e-003		0.3134	0.3134		0.3134	0.3134		101.7583	101.7583	0.0970		104.1821
<b>Total</b>	<b>28.0721</b>	<b>0.6498</b>	<b>56.3640</b>	<b>2.9800e-003</b>		<b>0.3134</b>	<b>0.3134</b>		<b>0.3134</b>	<b>0.3134</b>	<b>0.0000</b>	<b>101.7583</b>	<b>101.7583</b>	<b>0.0970</b>	<b>0.0000</b>	<b>104.1821</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch (Construction Only - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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**The Ranch (Construction Only)**  
**Bay Area AQMD Air District, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	5	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	1.49540E-001	1.01783E+000	1.43482E+000	2.35000E-003	5.36400E-002	5.36400E-002	0.00000E+000	2.02218E+002	2.02218E+002	1.20500E-002	0.00000E+000	2.02519E+002
Concrete/Industrial Saws	6.30000E-004	4.95000E-003	5.53000E-003	1.00000E-005	3.00000E-004	3.00000E-004	0.00000E+000	8.06480E-001	8.06480E-001	5.00000E-005	0.00000E+000	8.07760E-001
Cranes	2.41260E-001	2.60932E+000	1.26390E+000	4.00000E-003	1.08740E-001	1.00040E-001	0.00000E+000	3.51311E+002	3.51311E+002	1.13620E-001	0.00000E+000	3.54152E+002
Excavators	3.58900E-002	3.53450E-001	4.78730E-001	7.60000E-004	1.71200E-002	1.57500E-002	0.00000E+000	6.64670E+001	6.64670E+001	2.15000E-002	0.00000E+000	6.70044E+001
Forklifts	2.41950E-001	2.25445E+000	2.72102E+000	3.63000E-003	1.38280E-001	1.27220E-001	0.00000E+000	3.19076E+002	3.19076E+002	1.03200E-001	0.00000E+000	3.21656E+002
Generator Sets	2.38340E-001	2.12510E+000	2.90551E+000	5.21000E-003	9.76800E-002	9.76800E-002	0.00000E+000	4.47644E+002	4.47644E+002	1.91000E-002	0.00000E+000	4.48122E+002
Graders	3.37800E-002	4.49110E-001	1.28830E-001	4.70000E-004	1.43600E-002	1.32100E-002	0.00000E+000	4.13976E+001	4.13976E+001	1.33900E-002	0.00000E+000	4.17323E+001
Pavers	7.75000E-003	8.25900E-002	8.70000E-002	1.40000E-004	4.01000E-003	3.69000E-003	0.00000E+000	1.23889E+001	1.23889E+001	4.01000E-003	0.00000E+000	1.24891E+001
Paving Equipment	6.10000E-003	6.26300E-002	7.60900E-002	1.20000E-004	3.12000E-003	2.87000E-003	0.00000E+000	1.07368E+001	1.07368E+001	3.47000E-003	0.00000E+000	1.08236E+001
Rollers	6.10000E-003	6.11800E-002	5.67000E-002	8.00000E-005	3.86000E-003	3.55000E-003	0.00000E+000	6.91472E+000	6.91472E+000	2.24000E-003	0.00000E+000	6.97063E+000
Rubber Tired Dozers	1.28460E-001	1.34854E+000	4.91660E-001	1.01000E-003	6.60400E-002	6.07600E-002	0.00000E+000	8.93158E+001	8.93158E+001	2.88900E-002	0.00000E+000	9.00379E+001
Scrapers	1.40990E-001	1.66880E+000	1.05912E+000	2.15000E-003	6.50900E-002	5.98800E-002	0.00000E+000	1.88981E+002	1.88981E+002	6.11200E-002	0.00000E+000	1.90509E+002
Tractors/Loaders/Backhoes	3.57060E-001	3.61066E+000	5.11155E+000	7.10000E-003	1.82470E-001	1.67870E-001	0.00000E+000	6.23965E+002	6.23965E+002	2.01800E-001	0.00000E+000	6.29010E+002
Welders	1.98570E-001	1.11500E+000	1.32734E+000	2.02000E-003	4.22900E-002	4.22900E-002	0.00000E+000	1.49071E+002	1.49071E+002	1.61200E-002	0.00000E+000	1.49474E+002



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	1.49540E-001	1.01783E+000	1.43482E+000	2.35000E-003	5.36400E-002	5.36400E-002	0.00000E+000	2.02217E+002	2.02217E+002	1.20500E-002	0.00000E+000	2.02519E+002
Concrete/Industrial Saws	6.30000E-004	4.95000E-003	5.53000E-003	1.00000E-005	3.00000E-004	3.00000E-004	0.00000E+000	8.06480E-001	8.06480E-001	5.00000E-005	0.00000E+000	8.07760E-001
Cranes	2.41260E-001	2.60931E+000	1.26390E+000	4.00000E-003	1.08740E-001	1.00040E-001	0.00000E+000	3.51311E+002	3.51311E+002	1.13620E-001	0.00000E+000	3.54151E+002
Excavators	3.58900E-002	3.53450E-001	4.78730E-001	7.60000E-004	1.71200E-002	1.57500E-002	0.00000E+000	6.64669E+001	6.64669E+001	2.15000E-002	0.00000E+000	6.70044E+001
Forklifts	2.41950E-001	2.25445E+000	2.72102E+000	3.63000E-003	1.38280E-001	1.27220E-001	0.00000E+000	3.19076E+002	3.19076E+002	1.03200E-001	0.00000E+000	3.21656E+002
Generator Sets	2.38340E-001	2.12510E+000	2.90550E+000	5.21000E-003	9.76800E-002	9.76800E-002	0.00000E+000	4.47644E+002	4.47644E+002	1.91000E-002	0.00000E+000	4.48121E+002
Graders	3.37800E-002	4.49110E-001	1.28830E-001	4.70000E-004	1.43600E-002	1.32100E-002	0.00000E+000	4.13975E+001	4.13975E+001	1.33900E-002	0.00000E+000	4.17323E+001
Pavers	7.75000E-003	8.25900E-002	8.70000E-002	1.40000E-004	4.01000E-003	3.69000E-003	0.00000E+000	1.23889E+001	1.23889E+001	4.01000E-003	0.00000E+000	1.24891E+001
Paving Equipment	6.10000E-003	6.26300E-002	7.60900E-002	1.20000E-004	3.12000E-003	2.87000E-003	0.00000E+000	1.07368E+001	1.07368E+001	3.47000E-003	0.00000E+000	1.08236E+001
Rollers	6.10000E-003	6.11800E-002	5.67000E-002	8.00000E-005	3.86000E-003	3.55000E-003	0.00000E+000	6.91471E+000	6.91471E+000	2.24000E-003	0.00000E+000	6.97062E+000
Rubber Tired Dozers	1.28460E-001	1.34854E+000	4.91660E-001	1.01000E-003	6.60400E-002	6.07600E-002	0.00000E+000	8.93156E+001	8.93156E+001	2.88900E-002	0.00000E+000	9.00378E+001
Scrapers	1.40990E-001	1.66879E+000	1.05912E+000	2.15000E-003	6.50900E-002	5.98800E-002	0.00000E+000	1.88981E+002	1.88981E+002	6.11200E-002	0.00000E+000	1.90509E+002
Tractors/Loaders/Balckhoes	3.57060E-001	3.61066E+000	5.11155E+000	7.10000E-003	1.82470E-001	1.67870E-001	0.00000E+000	6.23964E+002	6.23964E+002	2.01800E-001	0.00000E+000	6.29009E+002
Welders	1.98570E-001	1.11499E+000	1.32734E+000	2.02000E-003	4.22900E-002	4.22900E-002	0.00000E+000	1.49071E+002	1.49071E+002	1.61200E-002	0.00000E+000	1.49474E+002

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18684E-006	1.18684E-006	0.00000E+000	0.00000E+000	1.23445E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	3.83242E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19552E-006	1.19552E-006	0.00000E+000	0.00000E+000	1.18593E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20360E-006	1.20360E-006	0.00000E+000	0.00000E+000	1.19395E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19094E-006	1.19094E-006	0.00000E+000	0.00000E+000	1.21248E-006
Generator Sets	0.00000E+000	0.00000E+000	3.44174E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18398E-006	1.18398E-006	0.00000E+000	0.00000E+000	1.18271E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.66240E-007	9.66240E-007	0.00000E+000	0.00000E+000	9.58490E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.07172E-007	8.07172E-007	0.00000E+000	0.00000E+000	8.00698E-007
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.31379E-007	9.31379E-007	0.00000E+000	0.00000E+000	9.23909E-007
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.44619E-006	1.44619E-006	0.00000E+000	0.00000E+000	1.43459E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23159E-006	1.23159E-006	0.00000E+000	0.00000E+000	1.22171E-006
Scrapers	0.00000E+000	5.99233E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21705E-006	1.21705E-006	0.00000E+000	0.00000E+000	1.20729E-006
Tractors/Loaders/Balckhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18596E-006	1.18596E-006	0.00000E+000	0.00000E+000	1.19235E-006
Welders	0.00000E+000	8.96861E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20748E-006	1.20748E-006	0.00000E+000	0.00000E+000	1.13732E-006

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.31	0.08	0.31	0.08	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	1.89	0.51	1.89	0.51	0.00	0.00
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.51	0.24	0.51	0.24	0.00	0.00
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.27	0.15	0.27	0.15	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Annual

**The Ranch (Active Adult) Operations Only**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	4117
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	22.00	Acre	22.00	958,320.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity Factor adjusted based on PG&E Progress towards RPS

Land Use - Project Information

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	400.00	1.00
tblConstructionPhase	PhaseEndDate	10/12/2021	4/1/2020
tblLandUse	LotAcreage	424.35	288.00
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	3,738.00	4,117.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00

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tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	19.2115	0.2804	20.8814	0.0236		1.6692	1.6692		1.6692	1.6692	166.1341	56.6451	222.7791	0.3290	9.5000e-003	233.8343
Energy	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	3,512.1697	3,512.1697	0.1878	0.0682	3,537.1747
Mobile	1.6449	9.2523	18.2256	0.0877	9.7346	0.0506	9.7852	2.6111	0.0471	2.6582	0.0000	8,107.5634	8,107.5634	0.2524	0.0000	8,113.8744
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	364.0257	0.0000	364.0257	21.5133	0.0000	901.8583
Water						0.0000	0.0000		0.0000	0.0000	28.6633	101.5776	130.2409	2.9543	0.0716	225.4447
<b>Total</b>	<b>21.0690</b>	<b>11.3124</b>	<b>39.8847</b>	<b>0.1225</b>	<b>9.7346</b>	<b>1.8631</b>	<b>11.5977</b>	<b>2.6111</b>	<b>1.8596</b>	<b>4.4707</b>	<b>558.8231</b>	<b>11,780.9641</b>	<b>12,339.7872</b>	<b>25.2372</b>	<b>0.1493</b>	<b>13,015.2052</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.5193	0.2074	9.7205	1.1200e-003		0.0616	0.0616		0.0616	0.0616	0.0000	126.8060	126.8060	0.0172	2.0300e-003	127.8430
Energy	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	3,512.1697	3,512.1697	0.1878	0.0682	3,537.1747
Mobile	1.6001	9.0203	17.2808	0.0822	9.0629	0.0476	9.1105	2.4310	0.0444	2.4753	0.0000	7,597.6939	7,597.6939	0.2398	0.0000	7,603.6882
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	364.0257	0.0000	364.0257	21.5133	0.0000	901.8583
Water						0.0000	0.0000		0.0000	0.0000	28.6633	101.5776	130.2409	2.9543	0.0716	225.4447
<b>Total</b>	<b>13.3320</b>	<b>11.0073</b>	<b>27.7790</b>	<b>0.0945</b>	<b>9.0629</b>	<b>0.2525</b>	<b>9.3154</b>	<b>2.4310</b>	<b>0.2492</b>	<b>2.6802</b>	<b>392.6890</b>	<b>11,341.2555</b>	<b>11,733.9446</b>	<b>24.9128</b>	<b>0.1418</b>	<b>12,399.0278</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>36.72</b>	<b>2.70</b>	<b>30.35</b>	<b>22.85</b>	<b>6.90</b>	<b>86.45</b>	<b>19.68</b>	<b>6.90</b>	<b>86.60</b>	<b>40.05</b>	<b>29.73</b>	<b>3.73</b>	<b>4.91</b>	<b>1.29</b>	<b>5.00</b>	<b>4.73</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/1/2020	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

**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
Demolition	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**





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**3.2 Demolition - 2020**

**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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

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	1.6001	9.0203	17.2808	0.0822	9.0629	0.0476	9.1105	2.4310	0.0444	2.4753	0.0000	7,597.6939	7,597.6939	0.2398	0.0000	7,603.6882
Unmitigated	1.6449	9.2523	18.2256	0.0877	9.7346	0.0506	9.7852	2.6111	0.0471	2.6582	0.0000	8,107.5634	8,107.5634	0.2524	0.0000	8,113.8744

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	20,470,731
Total	11,830.20	11,830.20	11,830.20	26,176,132	24,369,979

**4.3 Trip Type Information**

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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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,472.9106	1,472.9106	0.1487	0.0308	1,485.7972
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,472.9106	1,472.9106	0.1487	0.0308	1,485.7972
NaturalGas Mitigated	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	2,039.2591	2,039.2591	0.0391	0.0374	2,051.3774
NaturalGas Unmitigated	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	2,039.2591	2,039.2591	0.0391	0.0374	2,051.3774

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**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.79881e+007	0.2048	1.7504	0.7449	0.0112		0.1415	0.1415		0.1415	0.1415	0.0000	2,027.1882	2,027.1882	0.0389	0.0372	2,039.2348
<b>Total</b>		<b>0.2061</b>	<b>1.7615</b>	<b>0.7542</b>	<b>0.0112</b>		<b>0.1424</b>	<b>0.1424</b>		<b>0.1424</b>	<b>0.1424</b>	<b>0.0000</b>	<b>2,039.2591</b>	<b>2,039.2591</b>	<b>0.0391</b>	<b>0.0374</b>	<b>2,051.3774</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.79881e+007	0.2048	1.7504	0.7449	0.0112		0.1415	0.1415		0.1415	0.1415	0.0000	2,027.1882	2,027.1882	0.0389	0.0372	2,039.2348
<b>Total</b>		<b>0.2061</b>	<b>1.7615</b>	<b>0.7542</b>	<b>0.0112</b>		<b>0.1424</b>	<b>0.1424</b>		<b>0.1424</b>	<b>0.1424</b>	<b>0.0000</b>	<b>2,039.2591</b>	<b>2,039.2591</b>	<b>0.0391</b>	<b>0.0374</b>	<b>2,051.3774</b>

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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05744e+007	1,377.6860	0.1391	0.0288	1,389.7395
<b>Total</b>		<b>1,472.9106</b>	<b>0.1487</b>	<b>0.0308</b>	<b>1,485.7972</b>

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**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05744e+007	1,377.6860	0.1391	0.0288	1,389.7395
<b>Total</b>		<b>1,472.9106</b>	<b>0.1487</b>	<b>0.0308</b>	<b>1,485.7972</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.5193	0.2074	9.7205	1.1200e-003		0.0616	0.0616		0.0616	0.0616	0.0000	126.8060	126.8060	0.0172	2.0300e-003	127.8430
Unmitigated	19.2115	0.2804	20.8814	0.0236		1.6692	1.6692		1.6692	1.6692	166.1341	56.6451	222.7791	0.3290	9.5000e-003	233.8343

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	1.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.5180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7034	0.1688	11.2016	0.0231		1.6154	1.6154		1.6154	1.6154	166.1341	40.7912	206.9253	0.3139	9.5000e-003	217.6027
Landscaping	0.2896	0.1116	9.6798	5.1000e-004		0.0538	0.0538		0.0538	0.0538	0.0000	15.8539	15.8539	0.0151	0.0000	16.2315
<b>Total</b>	<b>19.2116</b>	<b>0.2804</b>	<b>20.8814</b>	<b>0.0236</b>		<b>1.6692</b>	<b>1.6692</b>		<b>1.6692</b>	<b>1.6692</b>	<b>166.1341</b>	<b>56.6451</b>	<b>222.7791</b>	<b>0.3290</b>	<b>9.5000e-003</b>	<b>233.8343</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.5180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9522	110.9522	2.1300e-003	2.0300e-003	111.6115
Landscaping	0.2896	0.1116	9.6798	5.1000e-004		0.0538	0.0538		0.0538	0.0538	0.0000	15.8539	15.8539	0.0151	0.0000	16.2315
<b>Total</b>	<b>11.5193</b>	<b>0.2074</b>	<b>9.7205</b>	<b>1.1200e-003</b>		<b>0.0616</b>	<b>0.0616</b>		<b>0.0616</b>	<b>0.0616</b>	<b>0.0000</b>	<b>126.8060</b>	<b>126.8060</b>	<b>0.0172</b>	<b>2.0300e-003</b>	<b>127.8430</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	130.2409	2.9543	0.0716	225.4447
Unmitigated	130.2409	2.9543	0.0716	225.4447

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 26.2126	11.9529	1.2100e-003	2.5000e-004	12.0575
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	85.1563 / 53.6855	111.5297	2.7834	0.0673	201.1644
<b>Total</b>		<b>130.2409</b>	<b>2.9543</b>	<b>0.0716</b>	<b>225.4448</b>

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**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 26.2126	11.9529	1.2100e-003	2.5000e-004	12.0575
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	85.1563 / 53.6855	111.5297	2.7834	0.0673	201.1644
<b>Total</b>		<b>130.2409</b>	<b>2.9543</b>	<b>0.0716</b>	<b>225.4448</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	364.0257	21.5133	0.0000	901.8583
Unmitigated	364.0257	21.5133	0.0000	901.8583

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.89	0.3837	0.0227	0.0000	0.9505
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1729.14	350.9998	20.7435	0.0000	869.5871
<b>Total</b>		<b>364.0257</b>	<b>21.5133</b>	<b>0.0000</b>	<b>901.8583</b>

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**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.89	0.3837	0.0227	0.0000	0.9505
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1729.14	350.9998	20.7435	0.0000	869.5871
<b>Total</b>		<b>364.0257</b>	<b>21.5133</b>	<b>0.0000</b>	<b>901.8583</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

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Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**The Ranch (Active Adult) Operations Only**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	4117
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	22.00	Acre	22.00	958,320.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



## The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E Progress towards RPS

Land Use - Project Information

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	400.00	1.00
tblConstructionPhase	PhaseEndDate	10/12/2021	4/1/2020
tblLandUse	LotAcreage	424.35	288.00
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	3,738.00	4,117.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00

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tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28

## 2.0 Emissions Summary

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**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	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	10.4522	49.9365	104.4634	0.5080	55.5705	0.2780	55.8485	14.8583	0.2588	15.1171		51,745.2773	51,745.2773	1.5228		51,783.3461
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,430.7709</b>	<b>87.0025</b>	<b>1,968.0283</b>	<b>3.8744</b>	<b>55.5705</b>	<b>249.3683</b>	<b>304.9388</b>	<b>14.8583</b>	<b>249.3491</b>	<b>264.2074</b>	<b>26,634.4885</b>	<b>72,346.5959</b>	<b>98,981.0844</b>	<b>34.8786</b>	<b>2.1053</b>	<b>100,480.4146</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	10.2042	48.7369	98.6676	0.4759	51.7362	0.2617	51.9979	13.8331	0.2436	14.0767		48,488.1584	48,488.1584	1.4443		48,524.2648
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>78.0687</b>	<b>76.9233</b>	<b>217.7944</b>	<b>0.6531</b>	<b>51.7362</b>	<b>3.0354</b>	<b>54.7716</b>	<b>13.8331</b>	<b>3.0173</b>	<b>16.8504</b>	<b>0.0000</b>	<b>82,974.4300</b>	<b>82,974.4300</b>	<b>2.2886</b>	<b>0.6284</b>	<b>83,218.9008</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.54</b>	<b>11.58</b>	<b>88.93</b>	<b>83.14</b>	<b>6.90</b>	<b>98.78</b>	<b>82.04</b>	<b>6.90</b>	<b>98.79</b>	<b>93.62</b>	<b>100.00</b>	<b>-14.69</b>	<b>16.17</b>	<b>93.44</b>	<b>70.15</b>	<b>17.18</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

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**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

**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
Demolition	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**3.2 Demolition - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

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**3.2 Demolition - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**4.1 Mitigation Measures Mobile**

Increase Diversity

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	10.2042	48.7369	98.6676	0.4759	51.7362	0.2617	51.9979	13.8331	0.2436	14.0767		48,488.1584	48,488.1584	1.4443		48,524.2648
Unmitigated	10.4522	49.9365	104.4634	0.5080	55.5705	0.2780	55.8485	14.8583	0.2588	15.1171		51,745.2773	51,745.2773	1.5228		51,783.3461

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	20,470,731
<b>Total</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>26,176,132</b>	<b>24,369,979</b>

**4.3 Trip Type Information**

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
NaturalGas Unmitigated	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467

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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104.077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Unmitigated	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177

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	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,354.4669	26.0797	1,751.7573	3.2990		247.7072	247.7072		247.7072	247.7072	26,634.4885	8,072.6471	34,707.1356	32.9324	1.8794	36,090.5154
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>1,419.1559</b>	<b>27.3196</b>	<b>1,859.3101</b>	<b>3.3047</b>		<b>248.3052</b>	<b>248.3052</b>		<b>248.3052</b>	<b>248.3052</b>	<b>26,634.4885</b>	<b>8,266.8235</b>	<b>34,901.3120</b>	<b>33.1174</b>	<b>1.8794</b>	<b>36,289.3177</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0128	17.2001	7.3192	0.1098		1.3907	1.3907		1.3907	1.3907	0.0000	21,957.6000	21,957.6000	0.4209	0.4026	22,088.0830
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>66.7018</b>	<b>18.4400</b>	<b>114.8720</b>	<b>0.1155</b>		<b>1.9887</b>	<b>1.9887</b>		<b>1.9887</b>	<b>1.9887</b>	<b>0.0000</b>	<b>22,151.7765</b>	<b>22,151.7765</b>	<b>0.6059</b>	<b>0.4026</b>	<b>22,286.8853</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**The Ranch (Active Adult) Operations Only**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	4117
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	22.00	Acre	22.00	958,320.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



## The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 Intensity Factor adjusted based on PG&amp;E Progress towards RPS

Land Use - Project Information

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	400.00	1.00
tblConstructionPhase	PhaseEndDate	10/12/2021	4/1/2020
tblLandUse	LotAcreage	424.35	288.00
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	3,738.00	4,117.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00

## The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28

## 2.0 Emissions Summary

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## The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**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	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	8.9057	51.3092	104.4620	0.4770	55.5705	0.2789	55.8494	14.8583	0.2596	15.1179		48,610.4453	48,610.4453	1.5697		48,649.6873
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,429.2244</b>	<b>88.3752</b>	<b>1,968.0269</b>	<b>3.8434</b>	<b>55.5705</b>	<b>249.3691</b>	<b>304.9397</b>	<b>14.8583</b>	<b>249.3499</b>	<b>264.2082</b>	<b>26,634.4885</b>	<b>69,211.7639</b>	<b>95,846.2524</b>	<b>34.9256</b>	<b>2.1053</b>	<b>97,346.7558</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	8.6567	49.9838	99.2331	0.4468	51.7362	0.2626	51.9988	13.8331	0.2445	14.0775		45,539.1022	45,539.1022	1.4925		45,576.4148
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>76.5213</b>	<b>78.1702</b>	<b>218.3599</b>	<b>0.6240</b>	<b>51.7362</b>	<b>3.0363</b>	<b>54.7725</b>	<b>13.8331</b>	<b>3.0182</b>	<b>16.8513</b>	<b>0.0000</b>	<b>80,025.3737</b>	<b>80,025.3737</b>	<b>2.3369</b>	<b>0.6284</b>	<b>80,271.0509</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.65</b>	<b>11.55</b>	<b>88.90</b>	<b>83.76</b>	<b>6.90</b>	<b>98.78</b>	<b>82.04</b>	<b>6.90</b>	<b>98.79</b>	<b>93.62</b>	<b>100.00</b>	<b>-15.62</b>	<b>16.51</b>	<b>93.31</b>	<b>70.15</b>	<b>17.54</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	0	0.00	158	0.38
Demolition	Concrete/Industrial Saws	0	0.00	81	0.73
Demolition	Rubber Tired Dozers	0	0.00	247	0.40

**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
Demolition	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**3.2 Demolition - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**4.1 Mitigation Measures Mobile**

Increase Diversity

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	8.6567	49.9838	99.2331	0.4468	51.7362	0.2626	51.9988	13.8331	0.2445	14.0775		45,539.10 22	45,539.10 22	1.4925		45,576.41 48
Unmitigated	8.9057	51.3092	104.4620	0.4770	55.5705	0.2789	55.8494	14.8583	0.2596	15.1179		48,610.44 53	48,610.44 53	1.5697		48,649.68 73

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	20,470,731
Total	11,830.20	11,830.20	11,830.20	26,176,132	24,369,979

**4.3 Trip Type Information**

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
NaturalGas Unmitigated	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467

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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104.077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.77 65	22,151.77 65	0.6059	0.4026	22,286.88 53
Unmitigated	1,419.155 9	27.3196	1,859.310 1	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.48 85	8,266.823 5	34,901.31 20	33.1174	1.8794	36,289.31 77

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	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,354.466 9	26.0797	1,751.757 3	3.2990		247.7072	247.7072		247.7072	247.7072	26,634.48 85	8,072.647 1	34,707.13 56	32.9324	1.8794	36,090.51 54
Landscaping	3.2175	1.2399	107.5528	5.6900e- 003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>1,419.155 9</b>	<b>27.3196</b>	<b>1,859.310 1</b>	<b>3.3047</b>		<b>248.3052</b>	<b>248.3052</b>		<b>248.3052</b>	<b>248.3052</b>	<b>26,634.48 85</b>	<b>8,266.823 5</b>	<b>34,901.31 20</b>	<b>33.1174</b>	<b>1.8794</b>	<b>36,289.31 77</b>

The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0128	17.2001	7.3192	0.1098		1.3907	1.3907		1.3907	1.3907	0.0000	21,957.6000	21,957.6000	0.4209	0.4026	22,088.0830
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>66.7018</b>	<b>18.4400</b>	<b>114.8720</b>	<b>0.1155</b>		<b>1.9887</b>	<b>1.9887</b>		<b>1.9887</b>	<b>1.9887</b>	<b>0.0000</b>	<b>22,151.7765</b>	<b>22,151.7765</b>	<b>0.6059</b>	<b>0.4026</b>	<b>22,286.8853</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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The Ranch (Active Adult) Operations Only - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Mitigated tons/yr						Mitigated mt/yr							
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00		

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Demolition	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.26	99.64	97.36	99.52	99.52	100.00	-172.00	46.38	99.32	78.63	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.72	2.51	5.18	6.30	5.85	5.84	0.00	6.29	6.29	5.02	0.00	6.29
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	Land Use	Increase Diversity	0.19	0.46		

No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.05		
Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off- Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.07		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge			

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

### Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**The Ranch (Market Rate Unmitigated)**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -



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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78



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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	16.7596	0.2439	18.1654	0.0205		1.4521	1.4521		1.4521	1.4521	144.5252	49.2775	193.8026	0.2862	8.2600e-003	203.4198
Energy	0.1794	1.5338	0.6573	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	3,069.3016	3,069.3016	0.1647	0.0596	3,091.1719
Mobile	1.8294	10.2885	20.3008	0.0977	10.8546	0.0564	10.9110	2.9116	0.0525	2.9641	0.0000	9,036.9578	9,036.9578	0.2812	0.0000	9,043.9867
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	290.1999	0.0000	290.1999	17.1503	0.0000	718.9581
Water						0.0000	0.0000		0.0000	0.0000	25.1494	88.1401	113.2894	2.5920	0.0628	196.8132
<b>Total</b>	<b>18.7749</b>	<b>12.0844</b>	<b>39.1470</b>	<b>0.1281</b>	<b>10.8546</b>	<b>1.6334</b>	<b>12.4880</b>	<b>2.9116</b>	<b>1.6295</b>	<b>4.5410</b>	<b>459.8745</b>	<b>12,246.6853</b>	<b>12,706.5598</b>	<b>20.4747</b>	<b>0.1307</b>	<b>13,257.3685</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	10.0679	0.1804	8.4563	9.8000e-004		0.0536	0.0536		0.0536	0.0536	0.0000	110.3126	110.3126	0.0150	1.7700e-003	111.2148
Energy	0.1794	1.5338	0.6573	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	3,069.3016	3,069.3016	0.1647	0.0596	3,091.1719
Mobile	1.7795	10.0298	19.2472	0.0916	10.1057	0.0531	10.1588	2.7107	0.0494	2.7601	0.0000	8,468.4223	8,468.4223	0.2670	0.0000	8,475.0980
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	290.1999	0.0000	290.1999	17.1503	0.0000	718.9581
Water						0.0000	0.0000		0.0000	0.0000	25.1494	88.1401	113.2894	2.5920	0.0628	196.8132
<b>Total</b>	<b>12.0332</b>	<b>11.7621</b>	<b>28.3843</b>	<b>0.1024</b>	<b>10.1057</b>	<b>0.2316</b>	<b>10.3372</b>	<b>2.7107</b>	<b>0.2279</b>	<b>2.9386</b>	<b>315.3493</b>	<b>11,739.1850</b>	<b>12,054.5342</b>	<b>20.1894</b>	<b>0.1242</b>	<b>12,596.2747</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>35.91</b>	<b>2.67</b>	<b>27.49</b>	<b>20.07</b>	<b>6.90</b>	<b>85.82</b>	<b>17.22</b>	<b>6.90</b>	<b>86.01</b>	<b>35.29</b>	<b>31.43</b>	<b>4.14</b>	<b>5.13</b>	<b>1.39</b>	<b>4.97</b>	<b>4.99</b>

**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	10/13/2021	10/13/2021	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

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	1.7795	10.0298	19.2472	0.0916	10.1057	0.0531	10.1588	2.7107	0.0494	2.7601	0.0000	8,468.4223	8,468.4223	0.2670	0.0000	8,475.0980
Unmitigated	1.8294	10.2885	20.3008	0.0977	10.8546	0.0564	10.9110	2.9116	0.0525	2.9641	0.0000	9,036.9578	9,036.9578	0.2812	0.0000	9,043.9867

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
Total	13,134.25	13,134.25	13,134.25	29,187,980	27,174,009

**4.3 Trip Type Information**



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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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,293.7166	1,293.7166	0.1306	0.0270	1,305.0354
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,293.7166	1,293.7166	0.1306	0.0270	1,305.0354
NaturalGas Mitigated	0.1794	1.5338	0.6573	9.7900e-003			0.1240	0.1240		0.1240	0.1240	0.0000	1,775.5851	1,775.5851	0.0340	0.0326	1,786.1365
NaturalGas Unmitigated	0.1794	1.5338	0.6573	9.7900e-003			0.1240	0.1240		0.1240	0.1240	0.0000	1,775.5851	1,775.5851	0.0340	0.0326	1,786.1365

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**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.3047e+007	0.1782	1.5228	0.6480	9.7200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	1,763.5142	1,763.5142	0.0338	0.0323	1,773.9938
<b>Total</b>		<b>0.1794</b>	<b>1.5338</b>	<b>0.6573</b>	<b>9.7900e-003</b>		<b>0.1240</b>	<b>0.1240</b>		<b>0.1240</b>	<b>0.1240</b>	<b>0.0000</b>	<b>1,775.5851</b>	<b>1,775.5851</b>	<b>0.0340</b>	<b>0.0326</b>	<b>1,786.1365</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.3047e+007	0.1782	1.5228	0.6480	9.7200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	1,763.5142	1,763.5142	0.0338	0.0323	1,773.9938
<b>Total</b>		<b>0.1794</b>	<b>1.5338</b>	<b>0.6573</b>	<b>9.7900e-003</b>		<b>0.1240</b>	<b>0.1240</b>		<b>0.1240</b>	<b>0.1240</b>	<b>0.0000</b>	<b>1,775.5851</b>	<b>1,775.5851</b>	<b>0.0340</b>	<b>0.0326</b>	<b>1,786.1365</b>

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**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	9.19898e+006	1,198.4920	0.1210	0.0250	1,208.9777
<b>Total</b>		<b>1,293.7166</b>	<b>0.1306</b>	<b>0.0270</b>	<b>1,305.0354</b>

## The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	9.19898e+006	1,198.4920	0.1210	0.0250	1,208.9777
<b>Total</b>		<b>1,293.7166</b>	<b>0.1306</b>	<b>0.0270</b>	<b>1,305.0354</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	10.0679	0.1804	8.4563	9.8000e-004		0.0536	0.0536		0.0536	0.0536	0.0000	110.3126	110.3126	0.0150	1.7700e-003	111.2148
Unmitigated	16.7596	0.2439	18.1654	0.0205		1.4521	1.4521		1.4521	1.4521	144.5252	49.2775	193.8026	0.2862	8.2600e-003	203.4198

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	1.4852					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.7015	0.1469	9.7447	0.0201		1.4052	1.4052		1.4052	1.4052	144.5252	35.4856	180.0108	0.2731	8.2600e-003	189.2994
Landscaping	0.2519	0.0971	8.4208	4.5000e-004		0.0468	0.0468		0.0468	0.0468	0.0000	13.7919	13.7919	0.0131	0.0000	14.1204
<b>Total</b>	<b>16.7596</b>	<b>0.2439</b>	<b>18.1654</b>	<b>0.0205</b>		<b>1.4521</b>	<b>1.4521</b>		<b>1.4521</b>	<b>1.4521</b>	<b>144.5252</b>	<b>49.2775</b>	<b>193.8026</b>	<b>0.2862</b>	<b>8.2600e-003</b>	<b>203.4198</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.4852					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.7500e-003	0.0833	0.0355	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5208	96.5208	1.8500e-003	1.7700e-003	97.0943
Landscaping	0.2519	0.0971	8.4208	4.5000e-004		0.0468	0.0468		0.0468	0.0468	0.0000	13.7919	13.7919	0.0131	0.0000	14.1204
<b>Total</b>	<b>10.0679</b>	<b>0.1804</b>	<b>8.4563</b>	<b>9.8000e-004</b>		<b>0.0536</b>	<b>0.0536</b>		<b>0.0536</b>	<b>0.0536</b>	<b>0.0000</b>	<b>110.3126</b>	<b>110.3126</b>	<b>0.0150</b>	<b>1.7700e-003</b>	<b>111.2148</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**



The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	113.2894	2.5920	0.0628	196.8132
Unmitigated	113.2894	2.5920	0.0628	196.8132

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 20.8509	9.5080	9.6000e-004	2.0000e-004	9.5912
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	74.0801 / 46.7027	97.0231	2.4213	0.0585	174.9992
<b>Total</b>		<b>113.2894</b>	<b>2.5920</b>	<b>0.0628</b>	<b>196.8132</b>

## The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 20.8509	9.5080	9.6000e-004	2.0000e-004	9.5912
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	74.0801 / 46.7027	97.0231	2.4213	0.0585	174.9992
<b>Total</b>		<b>113.2894</b>	<b>2.5920</b>	<b>0.0628</b>	<b>196.8132</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	290.1999	17.1503	0.0000	718.9581
Unmitigated	290.1999	17.1503	0.0000	718.9581

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1365.84	277.2532	16.3852	0.0000	686.8830
<b>Total</b>		<b>290.2000</b>	<b>17.1503</b>	<b>0.0000</b>	<b>718.9581</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1365.84	277.2532	16.3852	0.0000	686.8830
<b>Total</b>		<b>290.2000</b>	<b>17.1503</b>	<b>0.0000</b>	<b>718.9581</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**The Ranch (Market Rate Unmitigated)**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

## The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78





The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,234.8247	23.7662	1,617.4724	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.1709	7,191.5687	30,361.7396	28.8098	1.6350	31,569.2090
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
Mobile	11.6218	55.5251	116.3842	0.5662	61.9645	0.3098	62.2743	16.5679	0.2884	16.8563		57,677.2012	57,677.2012	1.6961		57,719.6038
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,247.4633</b>	<b>87.7901</b>	<b>1,737.5806</b>	<b>3.4949</b>	<b>61.9645</b>	<b>217.0024</b>	<b>278.9669</b>	<b>16.5679</b>	<b>216.9810</b>	<b>233.5489</b>	<b>23,170.1709</b>	<b>75,610.6573</b>	<b>98,780.8282</b>	<b>30.7139</b>	<b>1.8316</b>	<b>100,094.4918</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.64 38	10,724.64 38	0.2056	0.1966	10,788.37 50
Mobile	11.3451	54.1874	109.9215	0.5305	57.6890	0.2916	57.9806	15.4247	0.2715	15.6962		54,045.31 55	54,045.31 55	1.6086		54,085.52 98
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>70.6447</b>	<b>78.7278</b>	<b>213.5769</b>	<b>0.6847</b>	<b>57.6890</b>	<b>2.7058</b>	<b>60.3948</b>	<b>15.4247</b>	<b>2.6857</b>	<b>18.1104</b>	<b>0.0000</b>	<b>84,057.72 45</b>	<b>84,057.72 45</b>	<b>2.3436</b>	<b>0.5468</b>	<b>84,279.26 59</b>

	ROG	NOx	CO	SO2	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	94.34	10.32	87.71	80.41	6.90	98.75	78.35	6.90	98.76	92.25	100.00	-11.17	14.90	92.37	70.15	15.80

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	11.3451	54.1874	109.9215	0.5305	57.6890	0.2916	57.9806	15.4247	0.2715	15.6962		54,045.31 55	54,045.31 55	1.6086		54,085.52 98
Unmitigated	11.6218	55.5251	116.3842	0.5662	61.9645	0.3098	62.2743	16.5679	0.2884	16.8563		57,677.20 12	57,677.20 12	1.6961		57,719.60 38

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
Total	13,134.25	13,134.25	13,134.25	29,187,980	27,174,009

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
NaturalGas Unmitigated	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750



The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90539.7	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90.5397	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Unmitigated	1,234.824 7	23.7662	1,617.472 4	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.17 09	7,191.568 7	30,361.73 96	28.8098	1.6350	31,569.20 90

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	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,178.293 0	22.6876	1,523.908 2	2.8699		215.4882	215.4882		215.4882	215.4882	23,170.17 09	7,022.647 1	30,192.81 80	28.6489	1.6350	31,396.26 32
Landscaping	2.7991	1.0786	93.5642	4.9500e- 003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>1,234.824 7</b>	<b>23.7662</b>	<b>1,617.472 4</b>	<b>2.8749</b>		<b>216.0085</b>	<b>216.0085</b>		<b>216.0085</b>	<b>216.0085</b>	<b>23,170.17 09</b>	<b>7,191.568 7</b>	<b>30,361.73 96</b>	<b>28.8099</b>	<b>1.6350</b>	<b>31,569.20 90</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.7510	14.9629	6.3672	0.0955		1.2098	1.2098		1.2098	1.2098	0.0000	19,101.6000	19,101.6000	0.3661	0.3502	19,215.1113
Landscaping	2.7991	1.0786	93.5642	4.9500e-003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>58.2827</b>	<b>16.0415</b>	<b>99.9314</b>	<b>0.1005</b>		<b>1.7300</b>	<b>1.7300</b>		<b>1.7300</b>	<b>1.7300</b>	<b>0.0000</b>	<b>19,270.5216</b>	<b>19,270.5216</b>	<b>0.5271</b>	<b>0.3502</b>	<b>19,388.0571</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**The Ranch (Market Rate Unmitigated)**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

## The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78





The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,234.8247	23.7662	1,617.4724	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.1709	7,191.5687	30,361.7396	28.8098	1.6350	31,569.2090
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
Mobile	9.9048	57.0579	116.3429	0.5317	61.9645	0.3107	62.2753	16.5679	0.2893	16.8572		54,183.8097	54,183.8097	1.7481		54,227.5126
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,245.7463</b>	<b>89.3228</b>	<b>1,737.5393</b>	<b>3.4603</b>	<b>61.9645</b>	<b>217.0034</b>	<b>278.9679</b>	<b>16.5679</b>	<b>216.9819</b>	<b>233.5499</b>	<b>23,170.1709</b>	<b>72,117.2658</b>	<b>95,287.4367</b>	<b>30.7659</b>	<b>1.8316</b>	<b>96,602.4006</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.64 38	10,724.64 38	0.2056	0.1966	10,788.37 50
Mobile	9.6272	55.5799	110.5124	0.4980	57.6890	0.2926	57.9816	15.4247	0.2724	15.6971		50,759.07 53	50,759.07 53	1.6621		50,800.62 67
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>68.9267</b>	<b>80.1203</b>	<b>214.1677</b>	<b>0.6522</b>	<b>57.6890</b>	<b>2.7068</b>	<b>60.3958</b>	<b>15.4247</b>	<b>2.6866</b>	<b>18.1113</b>	<b>0.0000</b>	<b>80,771.48 43</b>	<b>80,771.48 43</b>	<b>2.3971</b>	<b>0.5468</b>	<b>80,994.36 28</b>

	ROG	NOx	CO	SO2	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	94.47	10.30	87.67	81.15	6.90	98.75	78.35	6.90	98.76	92.25	100.00	-12.00	15.23	92.21	70.15	16.16

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	9.6272	55.5799	110.5124	0.4980	57.6890	0.2926	57.9816	15.4247	0.2724	15.6971		50,759.07 53	50,759.07 53	1.6621		50,800.62 67
Unmitigated	9.9048	57.0579	116.3429	0.5317	61.9645	0.3107	62.2753	16.5679	0.2893	16.8572		54,183.80 97	54,183.80 97	1.7481		54,227.51 26

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
<b>Total</b>	<b>13,134.25</b>	<b>13,134.25</b>	<b>13,134.25</b>	<b>29,187,980</b>	<b>27,174,009</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
NaturalGas Unmitigated	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750



The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90539.7	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90.5397	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Unmitigated	1,234.824 7	23.7662	1,617.472 4	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.17 09	7,191.568 7	30,361.73 96	28.8098	1.6350	31,569.20 90

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	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,178.293 0	22.6876	1,523.908 2	2.8699		215.4882	215.4882		215.4882	215.4882	23,170.17 09	7,022.647 1	30,192.81 80	28.6489	1.6350	31,396.26 32
Landscaping	2.7991	1.0786	93.5642	4.9500e- 003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>1,234.824 7</b>	<b>23.7662</b>	<b>1,617.472 4</b>	<b>2.8749</b>		<b>216.0085</b>	<b>216.0085</b>		<b>216.0085</b>	<b>216.0085</b>	<b>23,170.17 09</b>	<b>7,191.568 7</b>	<b>30,361.73 96</b>	<b>28.8099</b>	<b>1.6350</b>	<b>31,569.20 90</b>

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.7510	14.9629	6.3672	0.0955		1.2098	1.2098		1.2098	1.2098	0.0000	19,101.6000	19,101.6000	0.3661	0.3502	19,215.1113
Landscaping	2.7991	1.0786	93.5642	4.9500e-003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>58.2827</b>	<b>16.0415</b>	<b>99.9314</b>	<b>0.1005</b>		<b>1.7300</b>	<b>1.7300</b>		<b>1.7300</b>	<b>1.7300</b>	<b>0.0000</b>	<b>19,270.5216</b>	<b>19,270.5216</b>	<b>0.5271</b>	<b>0.3502</b>	<b>19,388.0571</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch (Market Rate Unmitigated) - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.26	99.64	97.36	99.52	99.52	100.00	-172.00	46.38	99.32	78.57	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.73	2.51	5.19	6.30	5.84	5.85	0.00	6.29	6.29	5.02	0.00	6.29
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	Land Use	Increase Diversity	0.19	0.46		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			



Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
Yes	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.07			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**The Ranch (Active Adult Mitigated)**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	22.00	Acre	22.00	958,320.00	0
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	3738

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Traffic Report from Fehr and Peers

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	424.35	288.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28





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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	19.2115	0.2804	20.8814	0.0236		1.6692	1.6692		1.6692	1.6692	166.1341	56.6451	222.7791	0.3290	9.5000e-003	233.8343
Energy	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	3,512.1697	3,512.1697	0.1878	0.0682	3,537.1747
Mobile	1.6449	9.2523	18.2256	0.0877	9.7346	0.0506	9.7852	2.6111	0.0471	2.6582	0.0000	8,107.5634	8,107.5634	0.2524	0.0000	8,113.8744
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	331.7136	0.0000	331.7136	19.6037	0.0000	821.8065
Water						0.0000	0.0000		0.0000	0.0000	28.6633	101.5776	130.2409	2.9543	0.0716	225.4447
<b>Total</b>	<b>21.0690</b>	<b>11.3124</b>	<b>39.8847</b>	<b>0.1225</b>	<b>9.7346</b>	<b>1.8631</b>	<b>11.5977</b>	<b>2.6111</b>	<b>1.8596</b>	<b>4.4707</b>	<b>526.5110</b>	<b>11,780.9641</b>	<b>12,307.4751</b>	<b>23.3276</b>	<b>0.1493</b>	<b>12,935.1533</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.5193	0.2074	9.7205	1.1200e-003		0.0616	0.0616		0.0616	0.0616	0.0000	126.8060	126.8060	0.0172	2.0300e-003	127.8430
Energy	0.2061	1.7615	0.7542	0.0112		0.1424	0.1424		0.1424	0.1424	0.0000	3,512.1697	3,512.1697	0.1878	0.0682	3,537.1747
Mobile	1.4719	8.3561	14.5758	0.0663	7.1401	0.0392	7.1793	1.9152	0.0365	1.9517	0.0000	6,138.0931	6,138.0931	0.2035	0.0000	6,143.1806
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	331.7136	0.0000	331.7136	19.6037	0.0000	821.8065
Water						0.0000	0.0000		0.0000	0.0000	22.9307	86.5280	109.4587	2.3639	0.0574	185.6678
<b>Total</b>	<b>13.2038</b>	<b>10.3432</b>	<b>25.0740</b>	<b>0.0787</b>	<b>7.1401</b>	<b>0.2441</b>	<b>7.3841</b>	<b>1.9152</b>	<b>0.2414</b>	<b>2.1565</b>	<b>354.6443</b>	<b>9,866.6051</b>	<b>10,221.2494</b>	<b>22.3766</b>	<b>0.1276</b>	<b>10,818.6914</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>37.33</b>	<b>8.57</b>	<b>37.13</b>	<b>35.76</b>	<b>26.65</b>	<b>86.90</b>	<b>36.33</b>	<b>26.65</b>	<b>87.02</b>	<b>51.76</b>	<b>32.64</b>	<b>16.25</b>	<b>16.95</b>	<b>4.08</b>	<b>14.53</b>	<b>16.36</b>

**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	10/13/2021	10/13/2021	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**4.1 Mitigation Measures Mobile**

Increase Diversity

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	1.4719	8.3561	14.5758	0.0663	7.1401	0.0392	7.1793	1.9152	0.0365	1.9517	0.0000	6,138.093 1	6,138.093 1	0.2035	0.0000	6,143.180 6
Unmitigated	1.6449	9.2523	18.2256	0.0877	9.7346	0.0506	9.7852	2.6111	0.0471	2.6582	0.0000	8,107.563 4	8,107.563 4	0.2524	0.0000	8,113.874 4

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,071,962
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	16,127,551
<b>Total</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>26,176,132</b>	<b>19,199,513</b>

**4.3 Trip Type Information**

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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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,472.9106	1,472.9106	0.1487	0.0308	1,485.7972
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,472.9106	1,472.9106	0.1487	0.0308	1,485.7972
NaturalGas Mitigated	0.2061	1.7615	0.7542	0.0112			0.1424	0.1424		0.1424	0.1424	0.0000	2,039.2591	2,039.2591	0.0391	0.0374	2,051.3774
NaturalGas Unmitigated	0.2061	1.7615	0.7542	0.0112			0.1424	0.1424		0.1424	0.1424	0.0000	2,039.2591	2,039.2591	0.0391	0.0374	2,051.3774



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**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.79881e+007	0.2048	1.7504	0.7449	0.0112		0.1415	0.1415		0.1415	0.1415	0.0000	2,027.1882	2,027.1882	0.0389	0.0372	2,039.2348
<b>Total</b>		<b>0.2061</b>	<b>1.7615</b>	<b>0.7542</b>	<b>0.0112</b>		<b>0.1424</b>	<b>0.1424</b>		<b>0.1424</b>	<b>0.1424</b>	<b>0.0000</b>	<b>2,039.2591</b>	<b>2,039.2591</b>	<b>0.0391</b>	<b>0.0374</b>	<b>2,051.3774</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.79881e+007	0.2048	1.7504	0.7449	0.0112		0.1415	0.1415		0.1415	0.1415	0.0000	2,027.1882	2,027.1882	0.0389	0.0372	2,039.2348
<b>Total</b>		<b>0.2061</b>	<b>1.7615</b>	<b>0.7542</b>	<b>0.0112</b>		<b>0.1424</b>	<b>0.1424</b>		<b>0.1424</b>	<b>0.1424</b>	<b>0.0000</b>	<b>2,039.2591</b>	<b>2,039.2591</b>	<b>0.0391</b>	<b>0.0374</b>	<b>2,051.3774</b>

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05744e+007	1,377.6860	0.1391	0.0288	1,389.7395
<b>Total</b>		<b>1,472.9106</b>	<b>0.1487</b>	<b>0.0308</b>	<b>1,485.7972</b>

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05744e+007	1,377.6860	0.1391	0.0288	1,389.7395
<b>Total</b>		<b>1,472.9106</b>	<b>0.1487</b>	<b>0.0308</b>	<b>1,485.7972</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	11.5193	0.2074	9.7205	1.1200e-003		0.0616	0.0616		0.0616	0.0616	0.0000	126.8060	126.8060	0.0172	2.0300e-003	127.8430
Unmitigated	19.2115	0.2804	20.8814	0.0236		1.6692	1.6692		1.6692	1.6692	166.1341	56.6451	222.7791	0.3290	9.5000e-003	233.8343

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	1.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.5180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7034	0.1688	11.2016	0.0231		1.6154	1.6154		1.6154	1.6154	166.1341	40.7912	206.9253	0.3139	9.5000e-003	217.6027
Landscaping	0.2896	0.1116	9.6798	5.1000e-004		0.0538	0.0538		0.0538	0.0538	0.0000	15.8539	15.8539	0.0151	0.0000	16.2315
<b>Total</b>	<b>19.2116</b>	<b>0.2804</b>	<b>20.8814</b>	<b>0.0236</b>		<b>1.6692</b>	<b>1.6692</b>		<b>1.6692</b>	<b>1.6692</b>	<b>166.1341</b>	<b>56.6451</b>	<b>222.7791</b>	<b>0.3290</b>	<b>9.5000e-003</b>	<b>233.8343</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.7006					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.5180					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9522	110.9522	2.1300e-003	2.0300e-003	111.6115
Landscaping	0.2896	0.1116	9.6798	5.1000e-004		0.0538	0.0538		0.0538	0.0538	0.0000	15.8539	15.8539	0.0151	0.0000	16.2315
<b>Total</b>	<b>11.5193</b>	<b>0.2074</b>	<b>9.7205</b>	<b>1.1200e-003</b>		<b>0.0616</b>	<b>0.0616</b>		<b>0.0616</b>	<b>0.0616</b>	<b>0.0000</b>	<b>126.8060</b>	<b>126.8060</b>	<b>0.0172</b>	<b>2.0300e-003</b>	<b>127.8430</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	109.4587	2.3639	0.0574	185.6678
Unmitigated	130.2409	2.9543	0.0716	225.4447

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 26.2126	11.9529	1.2100e-003	2.5000e-004	12.0575
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	85.1563 / 53.6855	111.5297	2.7834	0.0673	201.1644
<b>Total</b>		<b>130.2409</b>	<b>2.9543</b>	<b>0.0716</b>	<b>225.4448</b>

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 24.6136	11.2238	1.1300e-003	2.3000e-004	11.3220
Government Office Building	0.953566 / 0.685991	1.2876	0.0312	7.5000e-004	2.2916
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.19993 / 2.30202	4.3208	0.1046	2.5300e-003	7.6901
Single Family Housing	68.125 / 50.4107	92.6265	2.2270	0.0539	164.3641
<b>Total</b>		<b>109.4587</b>	<b>2.3639</b>	<b>0.0574</b>	<b>185.6678</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**



The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	331.7136	19.6037	0.0000	821.8065
Unmitigated	331.7136	19.6037	0.0000	821.8065

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.89	0.3837	0.0227	0.0000	0.9505
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1569.96	318.6877	18.8339	0.0000	789.5353
<b>Total</b>		<b>331.7136</b>	<b>19.6037</b>	<b>0.0000</b>	<b>821.8065</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.89	0.3837	0.0227	0.0000	0.9505
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1569.96	318.6877	18.8339	0.0000	789.5353
<b>Total</b>		<b>331.7136</b>	<b>19.6037</b>	<b>0.0000</b>	<b>821.8065</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**The Ranch (Active Adult Mitigated)**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	22.00	Acre	22.00	958,320.00	0
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	3738

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	287.23	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Traffic Report from Fehr and Peers

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	424.35	288.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28



The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	10.4522	49.9365	104.4634	0.5080	55.5705	0.2780	55.8485	14.8583	0.2588	15.1171		51,745.2773	51,745.2773	1.5228		51,783.3461
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,430.7709</b>	<b>87.0025</b>	<b>1,968.0283</b>	<b>3.8744</b>	<b>55.5705</b>	<b>249.3683</b>	<b>304.9388</b>	<b>14.8583</b>	<b>249.3491</b>	<b>264.2074</b>	<b>26,634.4885</b>	<b>72,346.5959</b>	<b>98,981.0844</b>	<b>34.8786</b>	<b>2.1053</b>	<b>100,480.4146</b>



The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	9.4940	45.3028	82.0759	0.3841	40.7596	0.2152	40.9748	10.8982	0.2003	11.0984		39,164.0209	39,164.0209	1.2195		39,194.5092
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>77.3586</b>	<b>73.4892</b>	<b>201.2027</b>	<b>0.5614</b>	<b>40.7596</b>	<b>2.9889</b>	<b>43.7485</b>	<b>10.8982</b>	<b>2.9740</b>	<b>13.8722</b>	<b>0.0000</b>	<b>73,650.2924</b>	<b>73,650.2924</b>	<b>2.0639</b>	<b>0.6284</b>	<b>73,889.1453</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.59</b>	<b>15.53</b>	<b>89.78</b>	<b>85.51</b>	<b>26.65</b>	<b>98.80</b>	<b>85.65</b>	<b>26.65</b>	<b>98.81</b>	<b>94.75</b>	<b>100.00</b>	<b>-1.80</b>	<b>25.59</b>	<b>94.08</b>	<b>70.15</b>	<b>26.46</b>

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	9.4940	45.3028	82.0759	0.3841	40.7596	0.2152	40.9748	10.8982	0.2003	11.0984		39,164.0209	39,164.0209	1.2195		39,194.5092
Unmitigated	10.4522	49.9365	104.4634	0.5080	55.5705	0.2780	55.8485	14.8583	0.2588	15.1171		51,745.2773	51,745.2773	1.5228		51,783.3461

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,071,962
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	16,127,551
<b>Total</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>11,830.20</b>	<b>26,176,132</b>	<b>19,199,513</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.25 15	12,317.25 15	0.2361	0.2258	12,390.44 67
NaturalGas Unmitigated	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.25 15	12,317.25 15	0.2361	0.2258	12,390.44 67

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104.077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths



The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Unmitigated	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177

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	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,354.4669	26.0797	1,751.7573	3.2990		247.7072	247.7072		247.7072	247.7072	26,634.4885	8,072.6471	34,707.1356	32.9324	1.8794	36,090.5154
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>1,419.1559</b>	<b>27.3196</b>	<b>1,859.3101</b>	<b>3.3047</b>		<b>248.3052</b>	<b>248.3052</b>		<b>248.3052</b>	<b>248.3052</b>	<b>26,634.4885</b>	<b>8,266.8235</b>	<b>34,901.3120</b>	<b>33.1174</b>	<b>1.8794</b>	<b>36,289.3177</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0128	17.2001	7.3192	0.1098		1.3907	1.3907		1.3907	1.3907	0.0000	21,957.6000	21,957.6000	0.4209	0.4026	22,088.0830
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>66.7018</b>	<b>18.4400</b>	<b>114.8720</b>	<b>0.1155</b>		<b>1.9887</b>	<b>1.9887</b>		<b>1.9887</b>	<b>1.9887</b>	<b>0.0000</b>	<b>22,151.7765</b>	<b>22,151.7765</b>	<b>0.6059</b>	<b>0.4026</b>	<b>22,286.8853</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Summer

## **11.0 Vegetation**

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The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**The Ranch (Active Adult Mitigated)**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	22.00	Acre	22.00	958,320.00	0
Single Family Housing	1,307.00	Dwelling Unit	288.00	2,352,600.00	3738

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 Intensity Factor adjusted based on PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Traffic Report from Fehr and Peers

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

## The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	424.35	288.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	7.28
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	7.28
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	7.28





The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,419.1559	27.3196	1,859.3101	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.4885	8,266.8235	34,901.3120	33.1174	1.8794	36,289.3177
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	8.9057	51.3092	104.4620	0.4770	55.5705	0.2789	55.8494	14.8583	0.2596	15.1179		48,610.4453	48,610.4453	1.5697		48,649.6873
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,429.2244</b>	<b>88.3752</b>	<b>1,968.0269</b>	<b>3.8434</b>	<b>55.5705</b>	<b>249.3691</b>	<b>304.9397</b>	<b>14.8583</b>	<b>249.3499</b>	<b>264.2082</b>	<b>26,634.4885</b>	<b>69,211.7639</b>	<b>95,846.2524</b>	<b>34.9256</b>	<b>2.1053</b>	<b>97,346.7558</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.7765	22,151.7765	0.6059	0.4026	22,286.8853
Energy	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.2515	12,317.2515	0.2361	0.2258	12,390.4467
Mobile	7.9439	46.1896	84.2643	0.3603	40.7596	0.2161	40.9756	10.8982	0.2011	11.0993		36,746.7840	36,746.7840	1.2716		36,778.5733
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>75.8084</b>	<b>74.3759</b>	<b>203.3912</b>	<b>0.5376</b>	<b>40.7596</b>	<b>2.9898</b>	<b>43.7493</b>	<b>10.8982</b>	<b>2.9748</b>	<b>13.8730</b>	<b>0.0000</b>	<b>71,233.0555</b>	<b>71,233.0555</b>	<b>2.1160</b>	<b>0.6284</b>	<b>71,473.2093</b>

	ROG	NOx	CO	SO2	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	94.70	15.84	89.67	86.01	26.65	98.80	85.65	26.65	98.81	94.75	100.00	-2.92	25.68	93.94	70.15	26.58

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	7.9439	46.1896	84.2643	0.3603	40.7596	0.2161	40.9756	10.8982	0.2011	11.0993		36,746.78 40	36,746.78 40	1.2716		36,778.57 33
Unmitigated	8.9057	51.3092	104.4620	0.4770	55.5705	0.2789	55.8494	14.8583	0.2596	15.1179		48,610.44 53	48,610.44 53	1.5697		48,649.68 73

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,071,962
Single Family Housing	9,520.19	9,520.19	9520.19	21,987,896	16,127,551
Total	11,830.20	11,830.20	11,830.20	26,176,132	19,199,513

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.25 15	12,317.25 15	0.2361	0.2258	12,390.44 67
NaturalGas Unmitigated	1.1291	9.6522	4.1325	0.0616		0.7801	0.7801		0.7801	0.7801		12,317.25 15	12,317.25 15	0.2361	0.2258	12,390.44 67

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>



The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	104.077	1.1224	9.5914	4.0815	0.0612		0.7755	0.7755		0.7755	0.7755		12,244.3425	12,244.3425	0.2347	0.2245	12,317.1045
<b>Total</b>		<b>1.1291</b>	<b>9.6522</b>	<b>4.1325</b>	<b>0.0616</b>		<b>0.7801</b>	<b>0.7801</b>		<b>0.7801</b>	<b>0.7801</b>		<b>12,317.2515</b>	<b>12,317.2515</b>	<b>0.2361</b>	<b>0.2258</b>	<b>12,390.4467</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	66.7018	18.4400	114.8720	0.1155		1.9887	1.9887		1.9887	1.9887	0.0000	22,151.77 65	22,151.77 65	0.6059	0.4026	22,286.88 53
Unmitigated	1,419.155 9	27.3196	1,859.310 1	3.3047		248.3052	248.3052		248.3052	248.3052	26,634.48 85	8,266.823 5	34,901.31 20	33.1174	1.8794	36,289.31 77

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	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,354.466 9	26.0797	1,751.757 3	3.2990		247.7072	247.7072		247.7072	247.7072	26,634.48 85	8,072.647 1	34,707.13 56	32.9324	1.8794	36,090.51 54
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>1,419.155 9</b>	<b>27.3196</b>	<b>1,859.310 1</b>	<b>3.3047</b>		<b>248.3052</b>	<b>248.3052</b>		<b>248.3052</b>	<b>248.3052</b>	<b>26,634.48 85</b>	<b>8,266.823 5</b>	<b>34,901.31 20</b>	<b>33.1174</b>	<b>1.8794</b>	<b>36,289.31 77</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.3183					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	52.1532					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0128	17.2001	7.3192	0.1098		1.3907	1.3907		1.3907	1.3907	0.0000	21,957.6000	21,957.6000	0.4209	0.4026	22,088.0830
Landscaping	3.2175	1.2399	107.5528	5.6900e-003		0.5980	0.5980		0.5980	0.5980		194.1765	194.1765	0.1850		198.8023
<b>Total</b>	<b>66.7018</b>	<b>18.4400</b>	<b>114.8720</b>	<b>0.1155</b>		<b>1.9887</b>	<b>1.9887</b>		<b>1.9887</b>	<b>1.9887</b>	<b>0.0000</b>	<b>22,151.7765</b>	<b>22,151.7765</b>	<b>0.6059</b>	<b>0.4026</b>	<b>22,286.8853</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

The Ranch (Active Adult Mitigated) - Bay Area AQMD Air District, Winter

## **11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.26	99.64	97.36	99.52	99.52	100.00	-172.00	46.38	99.32	78.63	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	10.52	9.69	20.03	24.34	22.55	22.59	0.00	24.29	24.29	19.39	0.00	24.29
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	14.82	15.96	19.98	19.85	17.64
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	Land Use	Increase Diversity	0.19	0.46		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
Yes	Land Use	Increase Transit Accessibility	0.08	0.50		
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.25			



Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.27		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.27		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**The Ranch (Market Rate Mitigated)**  
**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	287.23	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78





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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	16.7596	0.2439	18.1654	0.0205		1.4521	1.4521		1.4521	1.4521	144.5252	49.2775	193.8026	0.2862	8.2600e-003	203.4198
Energy	0.1794	1.5338	0.6573	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	3,069.3016	3,069.3016	0.1647	0.0596	3,091.1719
Mobile	1.8294	10.2885	20.3008	0.0977	10.8546	0.0564	10.9110	2.9116	0.0525	2.9641	0.0000	9,036.9578	9,036.9578	0.2812	0.0000	9,043.9867
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	290.1999	0.0000	290.1999	17.1503	0.0000	718.9581
Water						0.0000	0.0000		0.0000	0.0000	25.1494	88.1401	113.2894	2.5920	0.0628	196.8132
<b>Total</b>	<b>18.7749</b>	<b>12.0844</b>	<b>39.1470</b>	<b>0.1281</b>	<b>10.8546</b>	<b>1.6334</b>	<b>12.4880</b>	<b>2.9116</b>	<b>1.6295</b>	<b>4.5410</b>	<b>459.8745</b>	<b>12,246.6853</b>	<b>12,706.5598</b>	<b>20.4747</b>	<b>0.1307</b>	<b>13,257.3685</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	10.0679	0.1804	8.4563	9.8000e-004		0.0536	0.0536		0.0536	0.0536	0.0000	110.3126	110.3126	0.0150	1.7700e-003	111.2148
Energy	0.1794	1.5338	0.6573	9.7900e-003		0.1240	0.1240		0.1240	0.1240	0.0000	3,069.3016	3,069.3016	0.1647	0.0596	3,091.1719
Mobile	1.7795	10.0298	19.2472	0.0916	10.1057	0.0531	10.1588	2.7107	0.0494	2.7601	0.0000	8,468.4223	8,468.4223	0.2670	0.0000	8,475.0980
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	290.1999	0.0000	290.1999	17.1503	0.0000	718.9581
Water						0.0000	0.0000		0.0000	0.0000	20.1195	74.9956	95.1151	2.0740	0.0504	161.9733
<b>Total</b>	<b>12.0332</b>	<b>11.7621</b>	<b>28.3843</b>	<b>0.1024</b>	<b>10.1057</b>	<b>0.2316</b>	<b>10.3372</b>	<b>2.7107</b>	<b>0.2279</b>	<b>2.9386</b>	<b>310.3194</b>	<b>11,726.0404</b>	<b>12,036.3599</b>	<b>19.6715</b>	<b>0.1117</b>	<b>12,561.4348</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>35.91</b>	<b>2.67</b>	<b>27.49</b>	<b>20.07</b>	<b>6.90</b>	<b>85.82</b>	<b>17.22</b>	<b>6.90</b>	<b>86.01</b>	<b>35.29</b>	<b>32.52</b>	<b>4.25</b>	<b>5.27</b>	<b>3.92</b>	<b>14.51</b>	<b>5.25</b>

**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	10/13/2021	10/13/2021	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

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	1.7795	10.0298	19.2472	0.0916	10.1057	0.0531	10.1588	2.7107	0.0494	2.7601	0.0000	8,468.4223	8,468.4223	0.2670	0.0000	8,475.0980
Unmitigated	1.8294	10.2885	20.3008	0.0977	10.8546	0.0564	10.9110	2.9116	0.0525	2.9641	0.0000	9,036.9578	9,036.9578	0.2812	0.0000	9,043.9867

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
<b>Total</b>	<b>13,134.25</b>	<b>13,134.25</b>	<b>13,134.25</b>	<b>29,187,980</b>	<b>27,174,009</b>

**4.3 Trip Type Information**

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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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,293.7166	1,293.7166	0.1306	0.0270	1,305.0354
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	1,293.7166	1,293.7166	0.1306	0.0270	1,305.0354
NaturalGas Mitigated	0.1794	1.5338	0.6573	9.7900e-003			0.1240	0.1240		0.1240	0.1240	0.0000	1,775.5851	1,775.5851	0.0340	0.0326	1,786.1365
NaturalGas Unmitigated	0.1794	1.5338	0.6573	9.7900e-003			0.1240	0.1240		0.1240	0.1240	0.0000	1,775.5851	1,775.5851	0.0340	0.0326	1,786.1365



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**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.3047e+007	0.1782	1.5228	0.6480	9.7200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	1,763.5142	1,763.5142	0.0338	0.0323	1,773.9938
<b>Total</b>		<b>0.1794</b>	<b>1.5338</b>	<b>0.6573</b>	<b>9.7900e-003</b>		<b>0.1240</b>	<b>0.1240</b>		<b>0.1240</b>	<b>0.1240</b>	<b>0.0000</b>	<b>1,775.5851</b>	<b>1,775.5851</b>	<b>0.0340</b>	<b>0.0326</b>	<b>1,786.1365</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.3047e+007	0.1782	1.5228	0.6480	9.7200e-003		0.1231	0.1231		0.1231	0.1231	0.0000	1,763.5142	1,763.5142	0.0338	0.0323	1,773.9938
<b>Total</b>		<b>0.1794</b>	<b>1.5338</b>	<b>0.6573</b>	<b>9.7900e-003</b>		<b>0.1240</b>	<b>0.1240</b>		<b>0.1240</b>	<b>0.1240</b>	<b>0.0000</b>	<b>1,775.5851</b>	<b>1,775.5851</b>	<b>0.0340</b>	<b>0.0326</b>	<b>1,786.1365</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	9.19898e+006	1,198.4920	0.1210	0.0250	1,208.9777
<b>Total</b>		<b>1,293.7166</b>	<b>0.1306</b>	<b>0.0270</b>	<b>1,305.0354</b>

## The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	9.19898e+006	1,198.4920	0.1210	0.0250	1,208.9777
<b>Total</b>		<b>1,293.7166</b>	<b>0.1306</b>	<b>0.0270</b>	<b>1,305.0354</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	10.0679	0.1804	8.4563	9.8000e-004		0.0536	0.0536		0.0536	0.0536	0.0000	110.3126	110.3126	0.0150	1.7700e-003	111.2148
Unmitigated	16.7596	0.2439	18.1654	0.0205		1.4521	1.4521		1.4521	1.4521	144.5252	49.2775	193.8026	0.2862	8.2600e-003	203.4198

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	1.4852					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.7015	0.1469	9.7447	0.0201		1.4052	1.4052		1.4052	1.4052	144.5252	35.4856	180.0108	0.2731	8.2600e-003	189.2994
Landscaping	0.2519	0.0971	8.4208	4.5000e-004		0.0468	0.0468		0.0468	0.0468	0.0000	13.7919	13.7919	0.0131	0.0000	14.1204
<b>Total</b>	<b>16.7596</b>	<b>0.2439</b>	<b>18.1654</b>	<b>0.0205</b>		<b>1.4521</b>	<b>1.4521</b>		<b>1.4521</b>	<b>1.4521</b>	<b>144.5252</b>	<b>49.2775</b>	<b>193.8026</b>	<b>0.2862</b>	<b>8.2600e-003</b>	<b>203.4198</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.4852					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.3210					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	9.7500e-003	0.0833	0.0355	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5208	96.5208	1.8500e-003	1.7700e-003	97.0943
Landscaping	0.2519	0.0971	8.4208	4.5000e-004		0.0468	0.0468		0.0468	0.0468	0.0000	13.7919	13.7919	0.0131	0.0000	14.1204
<b>Total</b>	<b>10.0679</b>	<b>0.1804</b>	<b>8.4563</b>	<b>9.8000e-004</b>		<b>0.0536</b>	<b>0.0536</b>		<b>0.0536</b>	<b>0.0536</b>	<b>0.0000</b>	<b>110.3126</b>	<b>110.3126</b>	<b>0.0150</b>	<b>1.7700e-003</b>	<b>111.2148</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	95.1151	2.0740	0.0504	161.9733
Unmitigated	113.2894	2.5920	0.0628	196.8132

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 20.8509	9.5080	9.6000e-004	2.0000e-004	9.5912
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	74.0801 / 46.7027	97.0231	2.4213	0.0585	174.9992
<b>Total</b>		<b>113.2894</b>	<b>2.5920</b>	<b>0.0628</b>	<b>196.8132</b>

## The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 19.579	8.9280	9.0000e-004	1.9000e-004	9.0061
Government Office Building	0.953566 / 0.685991	1.2876	0.0312	7.5000e-004	2.2916
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.19993 / 2.30202	4.3208	0.1046	2.5300e-003	7.6901
Single Family Housing	59.2641 / 43.8538	80.5787	1.9374	0.0469	142.9854
<b>Total</b>		<b>95.1151</b>	<b>2.0740</b>	<b>0.0504</b>	<b>161.9733</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**



The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	290.1999	17.1503	0.0000	718.9581
Unmitigated	290.1999	17.1503	0.0000	718.9581

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1365.84	277.2532	16.3852	0.0000	686.8830
<b>Total</b>		<b>290.2000</b>	<b>17.1503</b>	<b>0.0000</b>	<b>718.9581</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1365.84	277.2532	16.3852	0.0000	686.8830
<b>Total</b>		<b>290.2000</b>	<b>17.1503</b>	<b>0.0000</b>	<b>718.9581</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**The Ranch (Market Rate Mitigated)**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	287.23	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

## The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78



The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,234.8247	23.7662	1,617.4724	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.1709	7,191.5687	30,361.7396	28.8098	1.6350	31,569.2090
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
Mobile	11.6218	55.5251	116.3842	0.5662	61.9645	0.3098	62.2743	16.5679	0.2884	16.8563		57,677.2012	57,677.2012	1.6961		57,719.6038
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,247.4633</b>	<b>87.7901</b>	<b>1,737.5806</b>	<b>3.4949</b>	<b>61.9645</b>	<b>217.0024</b>	<b>278.9669</b>	<b>16.5679</b>	<b>216.9810</b>	<b>233.5489</b>	<b>23,170.1709</b>	<b>75,610.6573</b>	<b>98,780.8282</b>	<b>30.7139</b>	<b>1.8316</b>	<b>100,094.4918</b>



The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.64 38	10,724.64 38	0.2056	0.1966	10,788.37 50
Mobile	11.3451	54.1874	109.9215	0.5305	57.6890	0.2916	57.9806	15.4247	0.2715	15.6962		54,045.31 55	54,045.31 55	1.6086		54,085.52 98
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>70.6447</b>	<b>78.7278</b>	<b>213.5769</b>	<b>0.6847</b>	<b>57.6890</b>	<b>2.7058</b>	<b>60.3948</b>	<b>15.4247</b>	<b>2.6857</b>	<b>18.1104</b>	<b>0.0000</b>	<b>84,057.72 45</b>	<b>84,057.72 45</b>	<b>2.3436</b>	<b>0.5468</b>	<b>84,279.26 59</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.34</b>	<b>10.32</b>	<b>87.71</b>	<b>80.41</b>	<b>6.90</b>	<b>98.75</b>	<b>78.35</b>	<b>6.90</b>	<b>98.76</b>	<b>92.25</b>	<b>100.00</b>	<b>-11.17</b>	<b>14.90</b>	<b>92.37</b>	<b>70.15</b>	<b>15.80</b>

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	11.3451	54.1874	109.9215	0.5305	57.6890	0.2916	57.9806	15.4247	0.2715	15.6962		54,045.31 55	54,045.31 55	1.6086		54,085.52 98
Unmitigated	11.6218	55.5251	116.3842	0.5662	61.9645	0.3098	62.2743	16.5679	0.2884	16.8563		57,677.20 12	57,677.20 12	1.6961		57,719.60 38

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
Total	13,134.25	13,134.25	13,134.25	29,187,980	27,174,009

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
NaturalGas Unmitigated	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90539.7	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90.5397	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths



The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Unmitigated	1,234.824 7	23.7662	1,617.472 4	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.17 09	7,191.568 7	30,361.73 96	28.8098	1.6350	31,569.20 90

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	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,178.293 0	22.6876	1,523.908 2	2.8699		215.4882	215.4882		215.4882	215.4882	23,170.17 09	7,022.647 1	30,192.81 80	28.6489	1.6350	31,396.26 32
Landscaping	2.7991	1.0786	93.5642	4.9500e- 003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>1,234.824 7</b>	<b>23.7662</b>	<b>1,617.472 4</b>	<b>2.8749</b>		<b>216.0085</b>	<b>216.0085</b>		<b>216.0085</b>	<b>216.0085</b>	<b>23,170.17 09</b>	<b>7,191.568 7</b>	<b>30,361.73 96</b>	<b>28.8099</b>	<b>1.6350</b>	<b>31,569.20 90</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.7510	14.9629	6.3672	0.0955		1.2098	1.2098		1.2098	1.2098	0.0000	19,101.6000	19,101.6000	0.3661	0.3502	19,215.1113
Landscaping	2.7991	1.0786	93.5642	4.9500e-003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>58.2827</b>	<b>16.0415</b>	<b>99.9314</b>	<b>0.1005</b>		<b>1.7300</b>	<b>1.7300</b>		<b>1.7300</b>	<b>1.7300</b>	<b>0.0000</b>	<b>19,270.5216</b>	<b>19,270.5216</b>	<b>0.5271</b>	<b>0.3502</b>	<b>19,388.0571</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Summer

**11.0 Vegetation**

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The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**The Ranch (Market Rate Mitigated)**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	1,137.00	Dwelling Unit	288.00	2,046,600.00	3252
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
City Park	17.50	Acre	17.50	762,300.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

Project Characteristics - CO2 Intensity adjusted per PG&E progress towards RPS

Land Use - Project Info

Construction Phase - Construction modeled separately

Off-road Equipment - Construction modeled separately

Trips and VMT - Construction modeled separately

Vehicle Trips - Based on Fehr and Peers report

Stationary Sources - Emergency Generators and Fire Pumps -

Mobile Land Use Mitigation -

Area Mitigation -

Water Mitigation -

## The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	240.00	1.00
tblConstructionPhase	PhaseEndDate	9/13/2022	10/13/2021
tblLandUse	LotAcreage	369.16	288.00
tblLandUse	LotAcreage	0.14	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78





The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1,234.8247	23.7662	1,617.4724	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.1709	7,191.5687	30,361.7396	28.8098	1.6350	31,569.2090
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
Mobile	9.9048	57.0579	116.3429	0.5317	61.9645	0.3107	62.2753	16.5679	0.2893	16.8572		54,183.8097	54,183.8097	1.7481		54,227.5126
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,245.7463</b>	<b>89.3228</b>	<b>1,737.5393</b>	<b>3.4603</b>	<b>61.9645</b>	<b>217.0034</b>	<b>278.9679</b>	<b>16.5679</b>	<b>216.9819</b>	<b>233.5499</b>	<b>23,170.1709</b>	<b>72,117.2658</b>	<b>95,287.4367</b>	<b>30.7659</b>	<b>1.8316</b>	<b>96,602.4006</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Energy	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.64 38	10,724.64 38	0.2056	0.1966	10,788.37 50
Mobile	9.6272	55.5799	110.5124	0.4980	57.6890	0.2926	57.9816	15.4247	0.2724	15.6971		50,759.07 53	50,759.07 53	1.6621		50,800.62 67
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>68.9267</b>	<b>80.1203</b>	<b>214.1677</b>	<b>0.6522</b>	<b>57.6890</b>	<b>2.7068</b>	<b>60.3958</b>	<b>15.4247</b>	<b>2.6866</b>	<b>18.1113</b>	<b>0.0000</b>	<b>80,771.48 43</b>	<b>80,771.48 43</b>	<b>2.3971</b>	<b>0.5468</b>	<b>80,994.36 28</b>

	ROG	NOx	CO	SO2	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	94.47	10.30	87.67	81.15	6.90	98.75	78.35	6.90	98.76	92.25	100.00	-12.00	15.23	92.21	70.15	16.16

**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	10/13/2021	10/13/2021	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

Acres of Paving: 3.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	0	0.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	0.00	247	0.40

**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	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Site Preparation - 2021**

**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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**3.2 Site Preparation - 2021**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Increase Transit Accessibility

Improve Pedestrian Network

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	9.6272	55.5799	110.5124	0.4980	57.6890	0.2926	57.9816	15.4247	0.2724	15.6971		50,759.07 53	50,759.07 53	1.6621		50,800.62 67
Unmitigated	9.9048	57.0579	116.3429	0.5317	61.9645	0.3107	62.2753	16.5679	0.2893	16.8572		54,183.80 97	54,183.80 97	1.7481		54,227.51 26

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	10,824.24	10,824.24	10824.24	24,999,744	23,274,761
Total	13,134.25	13,134.25	13,134.25	29,187,980	27,174,009

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750
NaturalGas Unmitigated	0.9831	8.4046	3.6016	0.0536		0.6792	0.6792		0.6792	0.6792		10,724.6438	10,724.6438	0.2056	0.1966	10,788.3750

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90539.7	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>



The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	90.5397	0.9764	8.3439	3.5506	0.0533		0.6746	0.6746		0.6746	0.6746		10,651.7348	10,651.7348	0.2042	0.1953	10,715.0328
<b>Total</b>		<b>0.9831</b>	<b>8.4046</b>	<b>3.6016</b>	<b>0.0536</b>		<b>0.6792</b>	<b>0.6792</b>		<b>0.6792</b>	<b>0.6792</b>		<b>10,724.6438</b>	<b>10,724.6438</b>	<b>0.2056</b>	<b>0.1966</b>	<b>10,788.3750</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	58.2827	16.0415	99.9314	0.1005		1.7300	1.7300		1.7300	1.7300	0.0000	19,270.52 16	19,270.52 16	0.5271	0.3502	19,388.05 71
Unmitigated	1,234.824 7	23.7662	1,617.472 4	2.8749		216.0085	216.0085		216.0085	216.0085	23,170.17 09	7,191.568 7	30,361.73 96	28.8098	1.6350	31,569.20 90

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	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,178.293 0	22.6876	1,523.908 2	2.8699		215.4882	215.4882		215.4882	215.4882	23,170.17 09	7,022.647 1	30,192.81 80	28.6489	1.6350	31,396.26 32
Landscaping	2.7991	1.0786	93.5642	4.9500e- 003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>1,234.824 7</b>	<b>23.7662</b>	<b>1,617.472 4</b>	<b>2.8749</b>		<b>216.0085</b>	<b>216.0085</b>		<b>216.0085</b>	<b>216.0085</b>	<b>23,170.17 09</b>	<b>7,191.568 7</b>	<b>30,361.73 96</b>	<b>28.8099</b>	<b>1.6350</b>	<b>31,569.20 90</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	8.1380					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	45.5947					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.7510	14.9629	6.3672	0.0955		1.2098	1.2098		1.2098	1.2098	0.0000	19,101.6000	19,101.6000	0.3661	0.3502	19,215.1113
Landscaping	2.7991	1.0786	93.5642	4.9500e-003		0.5202	0.5202		0.5202	0.5202		168.9216	168.9216	0.1610		172.9458
<b>Total</b>	<b>58.2827</b>	<b>16.0415</b>	<b>99.9314</b>	<b>0.1005</b>		<b>1.7300</b>	<b>1.7300</b>		<b>1.7300</b>	<b>1.7300</b>	<b>0.0000</b>	<b>19,270.5216</b>	<b>19,270.5216</b>	<b>0.5271</b>	<b>0.3502</b>	<b>19,388.0571</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

The Ranch (Market Rate Mitigated) - Bay Area AQMD Air District, Winter

## **11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

**Fugitive Dust Mitigation**

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction		
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00	
No	Clean Paved Road	% PM Reduction	0.00			

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.26	99.64	97.36	99.52	99.52	100.00	-172.00	46.38	99.32	78.57	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.73	2.51	5.19	6.30	5.84	5.85	0.00	6.29	6.29	5.02	0.00	6.29
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	14.91	16.04	19.98	19.85	17.70
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Mobile Mitigation

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
Yes	Land Use	Increase Diversity	0.19	0.46		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
Yes	Land Use	Increase Transit Accessibility	0.16	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.05			



Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures	0.00		
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00	0.00	
No	Transit Improvements	Expand Transit Network	0.00	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00		0.00
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.07		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge		0.00	
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**The Ranch - No Project (Existing General Plan) Alternative  
Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	1.35	Acre	1.35	58,806.00	0
Single Family Housing	1,020.00	Dwelling Unit	331.17	1,836,000.00	3213
Golf Course	212.00	Acre	212.00	9,234,720.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	13,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	39,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	3,528.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,239,300.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,717,900.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	660.00	1.00
tblConstructionPhase	PhaseEndDate	10/11/2022	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	2,917.00	3,213.00

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	854.00	1.00
tblVehicleTrips	ST_TR	9.91	7.30
tblVehicleTrips	SU_TR	8.62	7.30
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	9.52	7.30

## 2.0 Emissions Summary

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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	0.0000	0.0000
		Highest	0.0000	0.0000

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	14.9077	0.2189	16.2975	0.0184		1.3027	1.3027		1.3027	1.3027	129.6532	44.2093	173.8625	0.2568	7.4100e-003	182.4902
Energy	0.1604	1.3709	0.5854	8.7500e-003		0.1108	0.1108		0.1108	0.1108	0.0000	2,679.0695	2,679.0695	0.1407	0.0519	2,698.0541
Mobile	1.2052	6.7723	13.4976	0.0653	7.2631	0.0376	7.3007	1.9482	0.0350	1.9832	0.0000	6,033.1661	6,033.1661	0.1868	0.0000	6,037.8365
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	315.0826	0.0000	315.0826	18.6209	0.0000	780.6037
Water						0.0000	0.0000		0.0000	0.0000	21.4619	182.3114	203.7734	2.2228	0.0559	275.9878
<b>Total</b>	<b>16.2797</b>	<b>8.3801</b>	<b>30.4039</b>	<b>0.0925</b>	<b>7.2631</b>	<b>1.4520</b>	<b>8.7151</b>	<b>1.9482</b>	<b>1.4494</b>	<b>3.3976</b>	<b>466.1977</b>	<b>8,941.7646</b>	<b>9,407.9623</b>	<b>21.4283</b>	<b>0.1152</b>	<b>9,977.9912</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.9046	0.1619	7.5874	8.8000e-004		0.0481	0.0481		0.0481	0.0481	0.0000	98.9638	98.9638	0.0135	1.5900e-003	99.7733
Energy	0.1604	1.3709	0.5854	8.7500e-003		0.1108	0.1108		0.1108	0.1108	0.0000	2,679.0695	2,679.0695	0.1407	0.0519	2,698.0541
Mobile	1.1717	6.5992	12.7926	0.0611	6.7619	0.0354	6.7973	1.8138	0.0329	1.8467	0.0000	5,652.7472	5,652.7472	0.1774	0.0000	5,657.1813
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	315.0826	0.0000	315.0826	18.6209	0.0000	780.6037
Water						0.0000	0.0000		0.0000	0.0000	21.4619	182.3114	203.7734	2.2228	0.0559	275.9878
<b>Total</b>	<b>10.2432</b>	<b>8.1500</b>	<b>20.9889</b>	<b>0.0708</b>	<b>6.7619</b>	<b>0.1952</b>	<b>6.9571</b>	<b>1.8138</b>	<b>0.1927</b>	<b>2.0065</b>	<b>336.5445</b>	<b>8,616.1002</b>	<b>8,952.6447</b>	<b>21.1755</b>	<b>0.1094</b>	<b>9,514.6190</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>37.08</b>	<b>2.75</b>	<b>30.97</b>	<b>23.44</b>	<b>6.90</b>	<b>86.56</b>	<b>20.17</b>	<b>6.90</b>	<b>86.70</b>	<b>40.94</b>	<b>27.81</b>	<b>3.64</b>	<b>4.84</b>	<b>1.18</b>	<b>5.05</b>	<b>4.64</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1.35**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4600e-003	3.4600e-003	0.0000	0.0000	3.4600e-003
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>	<b>3.4600e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>

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**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4600e-003	3.4600e-003	0.0000	0.0000	3.4600e-003
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>	<b>3.4600e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

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	1.1717	6.5992	12.7926	0.0611	6.7619	0.0354	6.7973	1.8138	0.0329	1.8467	0.0000	5,652.747 2	5,652.747 2	0.1774	0.0000	5,657.181 3
Unmitigated	1.2052	6.7723	13.4976	0.0653	7.2631	0.0376	7.3007	1.9482	0.0350	1.9832	0.0000	6,033.166 1	6,033.166 1	0.1868	0.0000	6,037.836 5

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	1,068.48	1,233.84	1246.56	2,332,947	2,171,974
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Single Family Housing	7,446.00	7,446.00	7446.00	17,197,336	16,010,720
Total	8,514.48	8,679.84	8,692.56	19,530,283	18,182,693

**4.3 Trip Type Information**

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	14.70	6.60	6.60	33.00	48.00	19.00	52	39	9
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
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
Golf Course	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1,091.7838	1,091.7838	0.1102	0.0228	1,101.3359
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,091.7838	1,091.7838	0.1102	0.0228	1,101.3359
NaturalGas Mitigated	0.1604	1.3709	0.5854	8.7500e-003		0.1108	0.1108		0.1108	0.1108	0.0000	1,587.2858	1,587.2858	0.0304	0.0291	1,596.7182
NaturalGas Unmitigated	0.1604	1.3709	0.5854	8.7500e-003		0.1108	0.1108		0.1108	0.1108	0.0000	1,587.2858	1,587.2858	0.0304	0.0291	1,596.7182

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					
Golf Course	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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.96464e+007	0.1599	1.3661	0.5813	8.7200e-003		0.1105	0.1105		0.1105	0.1105	0.0000	1,582.0444	1,582.0444	0.0303	0.0290	1,591.4457
<b>Total</b>		<b>0.1604</b>	<b>1.3709</b>	<b>0.5853</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>	<b>0.0000</b>	<b>1,587.2858</b>	<b>1,587.2858</b>	<b>0.0304</b>	<b>0.0291</b>	<b>1,596.7182</b>



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Golf Course	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	0.0000
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	2.96464e+007	0.1599	1.3661	0.5813	8.7200e-003		0.1105	0.1105		0.1105	0.1105	0.0000	1,582.0444	1,582.0444	0.0303	0.0290	1,591.4457	
<b>Total</b>		<b>0.1604</b>	<b>1.3709</b>	<b>0.5853</b>	<b>8.7500e-003</b>		<b>0.1108</b>	<b>0.1108</b>		<b>0.1108</b>	<b>0.1108</b>	<b>0.0000</b>	<b>1,587.2858</b>	<b>1,587.2858</b>	<b>0.0304</b>	<b>0.0291</b>	<b>1,596.7182</b>	

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	20582.1	2.6816	2.7000e-004	6.0000e-005	2.7050
Single Family Housing	8.25238e+006	1,075.1643	0.1086	0.0225	1,084.5710
<b>Total</b>		<b>1,091.7838</b>	<b>0.1102</b>	<b>0.0228</b>	<b>1,101.3359</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity**

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Golf Course	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	20582.1	2.6816	2.7000e-004	6.0000e-005	2.7050
Single Family Housing	8.25238e+006	1,075.1643	0.1086	0.0225	1,084.5710
<b>Total</b>		<b>1,091.7838</b>	<b>0.1102</b>	<b>0.0228</b>	<b>1,101.3359</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	8.9046	0.1619	7.5874	8.8000e-004		0.0481	0.0481		0.0481	0.0481	0.0000	98.9638	98.9638	0.0135	1.5900e-003	99.7733
Unmitigated	14.9077	0.2189	16.2975	0.0184		1.3027	1.3027		1.3027	1.3027	129.6532	44.2093	173.8625	0.2568	7.4100e-003	182.4902

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	1.3072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.0119	0.1318	8.7419	0.0180		1.2606	1.2606		1.2606	1.2606	129.6532	31.8340	161.4872	0.2450	7.4100e-003	169.8200
Landscaping	0.2261	0.0871	7.5556	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	12.3753	12.3753	0.0118	0.0000	12.6702
<b>Total</b>	<b>14.9077</b>	<b>0.2189</b>	<b>16.2975</b>	<b>0.0184</b>		<b>1.3027</b>	<b>1.3027</b>		<b>1.3027</b>	<b>1.3027</b>	<b>129.6532</b>	<b>44.2093</b>	<b>173.8625</b>	<b>0.2568</b>	<b>7.4100e-003</b>	<b>182.4902</b>

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.3072					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3625					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.7500e-003	0.0748	0.0318	4.8000e-004		6.0500e-003	6.0500e-003		6.0500e-003	6.0500e-003	0.0000	86.5885	86.5885	1.6600e-003	1.5900e-003	87.1031
Landscaping	0.2261	0.0871	7.5556	4.0000e-004		0.0420	0.0420		0.0420	0.0420	0.0000	12.3753	12.3753	0.0118	0.0000	12.6702
<b>Total</b>	<b>8.9046</b>	<b>0.1619</b>	<b>7.5874</b>	<b>8.8000e-004</b>		<b>0.0481</b>	<b>0.0481</b>		<b>0.0481</b>	<b>0.0481</b>	<b>0.0000</b>	<b>98.9638</b>	<b>98.9638</b>	<b>0.0135</b>	<b>1.5900e-003</b>	<b>99.7733</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	203.7734	2.2228	0.0559	275.9878
Unmitigated	203.7734	2.2228	0.0559	275.9878

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 252.594	115.1826	0.0116	2.4100e-003	116.1903
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	66.4571 / 41.8969	87.0392	2.1722	0.0525	156.9913
<b>Total</b>		<b>203.7734</b>	<b>2.2228</b>	<b>0.0559</b>	<b>275.9878</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Golf Course	0 / 252.594	115.1826	0.0116	2.4100e-003	116.1903
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	66.4571 / 41.8969	87.0392	2.1722	0.0525	156.9913
<b>Total</b>		<b>203.7734</b>	<b>2.2228</b>	<b>0.0559</b>	<b>275.9878</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	315.0826	18.6209	0.0000	780.6037
Unmitigated	315.0826	18.6209	0.0000	780.6037

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	197.16	40.0217	2.3652	0.0000	99.1521
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1349.46	273.9282	16.1887	0.0000	678.6455
<b>Total</b>		<b>315.0826</b>	<b>18.6208</b>	<b>0.0000</b>	<b>780.6037</b>



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Golf Course	197.16	40.0217	2.3652	0.0000	99.1521
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1349.46	273.9282	16.1887	0.0000	678.6455
<b>Total</b>		<b>315.0826</b>	<b>18.6208</b>	<b>0.0000</b>	<b>780.6037</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Annual

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**The Ranch - No Project (Existing General Plan) Alternative**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	1.35	Acre	1.35	58,806.00	0
Single Family Housing	1,020.00	Dwelling Unit	331.17	1,836,000.00	3213
Golf Course	212.00	Acre	212.00	9,234,720.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	13,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	39,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	3,528.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,239,300.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,717,900.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	660.00	1.00
tblConstructionPhase	PhaseEndDate	10/11/2022	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	2,917.00	3,213.00

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	854.00	1.00
tblVehicleTrips	ST_TR	9.91	7.30
tblVehicleTrips	SU_TR	8.62	7.30
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	9.52	7.30

## 2.0 Emissions Summary

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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**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	1,107.0614	21.3207	1,451.0456	2.5790		193.7807	193.7807		193.7807	193.7807	20,785.9053	6,451.5714	27,237.4767	25.8453	1.4667	28,320.6967
Energy	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769
Mobile	7.7578	37.0682	78.5736	0.3833	42.0335	0.2094	42.2429	11.2388	0.1949	11.4337		39,041.9258	39,041.9258	1.1435		39,070.5129
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,115.7318</b>	<b>65.9947</b>	<b>1,532.9489</b>	<b>3.0104</b>	<b>42.0335</b>	<b>194.6022</b>	<b>236.6358</b>	<b>11.2388</b>	<b>194.5878</b>	<b>205.8266</b>	<b>20,785.9053</b>	<b>55,098.0451</b>	<b>75,883.9504</b>	<b>27.1750</b>	<b>1.6425</b>	<b>77,052.7905</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	51.5884	14.3909	89.6632	0.0901		1.5520	1.5520		1.5520	1.5520	0.0000	17,287.57 14	17,287.57 14	0.4729	0.3142	17,393.01 42
Energy	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.304 4	9,587.304 4	0.1838	0.1758	9,644.276 9
Mobile	7.5702	36.1608	74.1896	0.3590	39.1332	0.1971	39.3303	10.4634	0.1834	10.6468		36,578.24 24	36,578.24 24	1.0841		36,605.34 51
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>60.0711</b>	<b>58.1576</b>	<b>167.1825</b>	<b>0.4973</b>	<b>39.1332</b>	<b>2.3613</b>	<b>41.4945</b>	<b>10.4634</b>	<b>2.3476</b>	<b>12.8110</b>	<b>0.0000</b>	<b>63,470.36 18</b>	<b>63,470.36 18</b>	<b>1.7432</b>	<b>0.4899</b>	<b>63,659.94 03</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.62</b>	<b>11.88</b>	<b>89.09</b>	<b>83.48</b>	<b>6.90</b>	<b>98.79</b>	<b>82.46</b>	<b>6.90</b>	<b>98.79</b>	<b>93.78</b>	<b>100.00</b>	<b>-15.20</b>	<b>16.36</b>	<b>93.59</b>	<b>70.17</b>	<b>17.38</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**Acres of Paving: 1.35**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	3.4800e-003	2.1000e-003	0.0268	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.2078	8.2078	2.0000e-004		8.2127
<b>Total</b>	<b>3.4800e-003</b>	<b>2.1000e-003</b>	<b>0.0268</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>8.2078</b>	<b>8.2078</b>	<b>2.0000e-004</b>		<b>8.2127</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	3.4800e-003	2.1000e-003	0.0268	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.2078	8.2078	2.0000e-004		8.2127
<b>Total</b>	<b>3.4800e-003</b>	<b>2.1000e-003</b>	<b>0.0268</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>8.2078</b>	<b>8.2078</b>	<b>2.0000e-004</b>		<b>8.2127</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	7.5702	36.1608	74.1896	0.3590	39.1332	0.1971	39.3303	10.4634	0.1834	10.6468		36,578.24 24	36,578.24 24	1.0841		36,605.34 51
Unmitigated	7.7578	37.0682	78.5736	0.3833	42.0335	0.2094	42.2429	11.2388	0.1949	11.4337		39,041.92 58	39,041.92 58	1.1435		39,070.51 29

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	1,068.48	1,233.84	1246.56	2,332,947	2,171,974
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Single Family Housing	7,446.00	7,446.00	7446.00	17,197,336	16,010,720
Total	8,514.48	8,679.84	8,692.56	19,530,283	18,182,693

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	14.70	6.60	6.60	33.00	48.00	19.00	52	39	9
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769
NaturalGas Unmitigated	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**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						
Golf Course	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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	81223	0.8759	7.4853	3.1852	0.0478		0.6052	0.6052		0.6052	0.6052		9,555.6460	9,555.6460	0.1832	0.1752	9,612.4305	
<b>Total</b>		<b>0.8788</b>	<b>7.5116</b>	<b>3.2074</b>	<b>0.0479</b>		<b>0.6072</b>	<b>0.6072</b>		<b>0.6072</b>	<b>0.6072</b>		<b>9,587.3044</b>	<b>9,587.3044</b>	<b>0.1838</b>	<b>0.1758</b>	<b>9,644.2769</b>	

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - Natural Gas**

**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	lb/day										lb/day							
Golf Course	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	
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Single Family Housing	81.223	0.8759	7.4853	3.1852	0.0478		0.6052	0.6052		0.6052	0.6052		9,555.6460	9,555.6460	0.1832	0.1752	9,612.4305		
<b>Total</b>		<b>0.8788</b>	<b>7.5116</b>	<b>3.2074</b>	<b>0.0479</b>		<b>0.6072</b>	<b>0.6072</b>		<b>0.6072</b>	<b>0.6072</b>		<b>9,587.3044</b>	<b>9,587.3044</b>	<b>0.1838</b>	<b>0.1758</b>	<b>9,644.2769</b>		

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	51.5884	14.3909	89.6632	0.0901		1.5520	1.5520		1.5520	1.5520	0.0000	17,287.57 14	17,287.57 14	0.4729	0.3142	17,393.01 42
Unmitigated	1,107.061 4	21.3207	1,451.045 6	2.5790		193.7807	193.7807		193.7807	193.7807	20,785.90 53	6,451.571 4	27,237.47 67	25.8453	1.4667	28,320.69 67

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	7.1628					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,057.043 8	20.3530	1,367.094 4	2.5746		193.3140	193.3140		193.3140	193.3140	20,785.90 53	6,300.000 0	27,085.90 53	25.7008	1.4667	28,165.51 32
Landscaping	2.5124	0.9677	83.9512	4.4500e-003		0.4668	0.4668		0.4668	0.4668		151.5714	151.5714	0.1445		155.1835
<b>Total</b>	<b>1,107.061 4</b>	<b>21.3207</b>	<b>1,451.045 6</b>	<b>2.5791</b>		<b>193.7807</b>	<b>193.7807</b>		<b>193.7807</b>	<b>193.7807</b>	<b>20,785.90 53</b>	<b>6,451.571 4</b>	<b>27,237.47 67</b>	<b>25.8453</b>	<b>1.4667</b>	<b>28,320.69 67</b>



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1628					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5708	13.4232	5.7120	0.0857		1.0853	1.0853		1.0853	1.0853	0.0000	17,136.0000	17,136.0000	0.3284	0.3142	17,237.8307
Landscaping	2.5124	0.9677	83.9512	4.4500e-003		0.4668	0.4668		0.4668	0.4668		151.5714	151.5714	0.1445		155.1835
<b>Total</b>	<b>51.5884</b>	<b>14.3909</b>	<b>89.6632</b>	<b>0.0901</b>		<b>1.5520</b>	<b>1.5520</b>		<b>1.5520</b>	<b>1.5520</b>	<b>0.0000</b>	<b>17,287.5714</b>	<b>17,287.5714</b>	<b>0.4729</b>	<b>0.3142</b>	<b>17,393.0142</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**The Ranch - No Project (Existing General Plan) Alternative**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	1.35	Acre	1.35	58,806.00	0
Single Family Housing	1,020.00	Dwelling Unit	331.17	1,836,000.00	3213
Golf Course	212.00	Acre	212.00	9,234,720.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	13,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	39,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	3,528.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,239,300.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,717,900.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	660.00	1.00
tblConstructionPhase	PhaseEndDate	10/11/2022	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	Population	2,917.00	3,213.00

## The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	854.00	1.00
tblVehicleTrips	ST_TR	9.91	7.30
tblVehicleTrips	SU_TR	8.62	7.30
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	9.52	7.30

## 2.0 Emissions Summary

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The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**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	1,107.0614	21.3207	1,451.0456	2.5790		193.7807	193.7807		193.7807	193.7807	20,785.9053	6,451.5714	27,237.4767	25.8453	1.4667	28,320.6967
Energy	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769
Mobile	6.6218	38.1162	78.3948	0.3599	42.0335	0.2100	42.2435	11.2388	0.1955	11.4343		36,680.3066	36,680.3066	1.1776		36,709.7454
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,114.5957</b>	<b>67.0427</b>	<b>1,532.7701</b>	<b>2.9871</b>	<b>42.0335</b>	<b>194.6029</b>	<b>236.6364</b>	<b>11.2388</b>	<b>194.5884</b>	<b>205.8272</b>	<b>20,785.9053</b>	<b>52,736.4259</b>	<b>73,522.3312</b>	<b>27.2091</b>	<b>1.6425</b>	<b>74,692.0231</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	51.5884	14.3909	89.6632	0.0901		1.5520	1.5520		1.5520	1.5520	0.0000	17,287.57 14	17,287.57 14	0.4729	0.3142	17,393.01 42
Energy	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.304 4	9,587.304 4	0.1838	0.1758	9,644.276 9
Mobile	6.4334	37.1136	74.4397	0.3371	39.1332	0.1977	39.3309	10.4634	0.1840	10.6474		34,357.14 40	34,357.14 40	1.1192		34,385.12 33
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>58.9344</b>	<b>59.1104</b>	<b>167.4326</b>	<b>0.4753</b>	<b>39.1332</b>	<b>2.3619</b>	<b>41.4951</b>	<b>10.4634</b>	<b>2.3482</b>	<b>12.8116</b>	<b>0.0000</b>	<b>61,249.26 33</b>	<b>61,249.26 33</b>	<b>1.7783</b>	<b>0.4899</b>	<b>61,439.71 85</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.71</b>	<b>11.83</b>	<b>89.08</b>	<b>84.09</b>	<b>6.90</b>	<b>98.79</b>	<b>82.46</b>	<b>6.90</b>	<b>98.79</b>	<b>93.78</b>	<b>100.00</b>	<b>-16.14</b>	<b>16.69</b>	<b>93.46</b>	<b>70.17</b>	<b>17.74</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**Acres of Paving: 1.35**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	3.6800e-003	2.6000e-003	0.0252	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5607	7.5607	1.8000e-004		7.5653
<b>Total</b>	<b>3.6800e-003</b>	<b>2.6000e-003</b>	<b>0.0252</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.5607</b>	<b>7.5607</b>	<b>1.8000e-004</b>		<b>7.5653</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	3.6800e-003	2.6000e-003	0.0252	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5607	7.5607	1.8000e-004		7.5653
<b>Total</b>	<b>3.6800e-003</b>	<b>2.6000e-003</b>	<b>0.0252</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.5607</b>	<b>7.5607</b>	<b>1.8000e-004</b>		<b>7.5653</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	6.4334	37.1136	74.4397	0.3371	39.1332	0.1977	39.3309	10.4634	0.1840	10.6474		34,357.14 40	34,357.14 40	1.1192		34,385.12 33
Unmitigated	6.6218	38.1162	78.3948	0.3599	42.0335	0.2100	42.2435	11.2388	0.1955	11.4343		36,680.30 66	36,680.30 66	1.1776		36,709.74 54

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Golf Course	1,068.48	1,233.84	1246.56	2,332,947	2,171,974
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Single Family Housing	7,446.00	7,446.00	7446.00	17,197,336	16,010,720
Total	8,514.48	8,679.84	8,692.56	19,530,283	18,182,693

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Golf Course	14.70	6.60	6.60	33.00	48.00	19.00	52	39	9
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Golf Course	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769
NaturalGas Unmitigated	0.8788	7.5116	3.2074	0.0479		0.6072	0.6072		0.6072	0.6072		9,587.3044	9,587.3044	0.1838	0.1758	9,644.2769

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**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						
Golf Course	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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	81223	0.8759	7.4853	3.1852	0.0478		0.6052	0.6052		0.6052	0.6052		9,555.6460	9,555.6460	0.1832	0.1752	9,612.4305	
<b>Total</b>		<b>0.8788</b>	<b>7.5116</b>	<b>3.2074</b>	<b>0.0479</b>		<b>0.6072</b>	<b>0.6072</b>		<b>0.6072</b>	<b>0.6072</b>		<b>9,587.3044</b>	<b>9,587.3044</b>	<b>0.1838</b>	<b>0.1758</b>	<b>9,644.2769</b>	

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Golf Course	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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	81.223	0.8759	7.4853	3.1852	0.0478		0.6052	0.6052		0.6052	0.6052		9,555.6460	9,555.6460	0.1832	0.1752	9,612.4305
<b>Total</b>		<b>0.8788</b>	<b>7.5116</b>	<b>3.2074</b>	<b>0.0479</b>		<b>0.6072</b>	<b>0.6072</b>		<b>0.6072</b>	<b>0.6072</b>		<b>9,587.3044</b>	<b>9,587.3044</b>	<b>0.1838</b>	<b>0.1758</b>	<b>9,644.2769</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	51.5884	14.3909	89.6632	0.0901		1.5520	1.5520		1.5520	1.5520	0.0000	17,287.57 14	17,287.57 14	0.4729	0.3142	17,393.01 42
Unmitigated	1,107.061 4	21.3207	1,451.045 6	2.5790		193.7807	193.7807		193.7807	193.7807	20,785.90 53	6,451.571 4	27,237.47 67	25.8453	1.4667	28,320.69 67

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	7.1628					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,057.043 8	20.3530	1,367.094 4	2.5746		193.3140	193.3140		193.3140	193.3140	20,785.90 53	6,300.000 0	27,085.90 53	25.7008	1.4667	28,165.51 32
Landscaping	2.5124	0.9677	83.9512	4.4500e-003		0.4668	0.4668		0.4668	0.4668		151.5714	151.5714	0.1445		155.1835
<b>Total</b>	<b>1,107.061 4</b>	<b>21.3207</b>	<b>1,451.045 6</b>	<b>2.5791</b>		<b>193.7807</b>	<b>193.7807</b>		<b>193.7807</b>	<b>193.7807</b>	<b>20,785.90 53</b>	<b>6,451.571 4</b>	<b>27,237.47 67</b>	<b>25.8453</b>	<b>1.4667</b>	<b>28,320.69 67</b>



The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	7.1628					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.3424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5708	13.4232	5.7120	0.0857		1.0853	1.0853		1.0853	1.0853	0.0000	17,136.0000	17,136.0000	0.3284	0.3142	17,237.8307
Landscaping	2.5124	0.9677	83.9512	4.4500e-003		0.4668	0.4668		0.4668	0.4668		151.5714	151.5714	0.1445		155.1835
<b>Total</b>	<b>51.5884</b>	<b>14.3909</b>	<b>89.6632</b>	<b>0.0901</b>		<b>1.5520</b>	<b>1.5520</b>		<b>1.5520</b>	<b>1.5520</b>	<b>0.0000</b>	<b>17,287.5714</b>	<b>17,287.5714</b>	<b>0.4729</b>	<b>0.3142</b>	<b>17,393.0142</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch - No Project (Existing General Plan) Alternative - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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## The Ranch - No Project (Existing General Plan) Alternative Bay Area AQMD Air District, Mitigation Report

### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	
No	Clean Paved Road	% PM Reduction	0.00		

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.25	99.64	97.34	99.52	99.52	100.00	-172.00	46.38	99.32	78.54	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.01	1.85	3.78	4.58	4.26	4.26	0.00	4.57	4.57	3.67	0.00	4.57
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	Land Use	Increase Diversity	0.12	0.36		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.05			

No	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.05		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.05		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**Bay Area AQMD Air District, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	17.50	Acre	17.50	762,300.00	0
Single Family Housing	968.00	Dwelling Unit	242.00	1,742,400.00	3049
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation - Per BAAQMD regulations

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	120,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	7,998.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,176,120.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,528,360.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	330.00	1.00
tblConstructionPhase	PhaseEndDate	7/6/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	314.29	242.00

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tblLandUse	Population	2,768.00	3,049.00
tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	149.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	3.68
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	3.68
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	3.68

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	0.0000	0.0000
		Highest	0.0000	0.0000

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	14.3239	0.2077	15.4655	0.0175		1.2362	1.2362		1.2362	1.2362	123.0434	41.9532	164.9967	0.2437	7.0300e-003	173.1844
Energy	0.1529	1.3075	0.5610	8.3400e-003		0.1057	0.1057		0.1057	0.1057	0.0000	2,629.0386	2,629.0386	0.1416	0.0511	2,647.7926
Mobile	0.8022	4.5185	8.7448	0.0418	4.6173	0.0242	4.6415	1.2385	0.0225	1.2610	0.0000	3,861.4114	3,861.4114	0.1213	0.0000	3,864.4428
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	272.8929	0.0000	272.8929	16.1275	0.0000	676.0807
Water						0.0000	0.0000		0.0000	0.0000	21.6561	77.2122	98.8682	2.2321	0.0541	170.8019
<b>Total</b>	<b>15.2855</b>	<b>6.0518</b>	<b>24.7947</b>	<b>0.0676</b>	<b>4.6173</b>	<b>1.3670</b>	<b>5.9843</b>	<b>1.2385</b>	<b>1.3653</b>	<b>2.6038</b>	<b>417.5924</b>	<b>6,612.6237</b>	<b>7,030.2161</b>	<b>18.8666</b>	<b>0.1122</b>	<b>7,535.3212</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6268	0.1536	7.1995	8.3000e-004		0.0456	0.0456		0.0456	0.0456	0.0000	93.9163	93.9163	0.0128	1.5100e-003	94.6844
Energy	0.1529	1.3075	0.5610	8.3400e-003		0.1057	0.1057		0.1057	0.1057	0.0000	2,629.0386	2,629.0386	0.1416	0.0511	2,647.7926
Mobile	0.7810	4.4085	8.2966	0.0391	4.2987	0.0228	4.3215	1.1531	0.0212	1.1742	0.0000	3,619.5712	3,619.5712	0.1153	0.0000	3,622.4523
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	272.8929	0.0000	272.8929	16.1275	0.0000	676.0807
Water						0.0000	0.0000		0.0000	0.0000	21.6561	77.2122	98.8682	2.2321	0.0541	170.8019
<b>Total</b>	<b>9.5672</b>	<b>5.8877</b>	<b>16.0805</b>	<b>0.0483</b>	<b>4.2987</b>	<b>0.1750</b>	<b>4.4737</b>	<b>1.1531</b>	<b>0.1734</b>	<b>1.3265</b>	<b>294.5490</b>	<b>6,422.7466</b>	<b>6,717.2956</b>	<b>18.6297</b>	<b>0.1067</b>	<b>7,214.8308</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>37.41</b>	<b>2.71</b>	<b>35.15</b>	<b>28.51</b>	<b>6.90</b>	<b>87.20</b>	<b>25.24</b>	<b>6.90</b>	<b>87.30</b>	<b>49.06</b>	<b>29.46</b>	<b>2.87</b>	<b>4.45</b>	<b>1.26</b>	<b>4.92</b>	<b>4.25</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4600e-003	3.4600e-003	0.0000	0.0000	3.4600e-003
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>	<b>3.4600e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>

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**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4600e-003	3.4600e-003	0.0000	0.0000	3.4600e-003
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>	<b>3.4600e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>3.4600e-003</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

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	0.7810	4.4085	8.2966	0.0391	4.2987	0.0228	4.3215	1.1531	0.0212	1.1742	0.0000	3,619.5712	3,619.5712	0.1153	0.0000	3,622.4523
Unmitigated	0.8022	4.5185	8.7448	0.0418	4.6173	0.0242	4.6415	1.2385	0.0225	1.2610	0.0000	3,861.4114	3,861.4114	0.1213	0.0000	3,864.4428

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.12	2,310.12	2310.12	4,188,432	3,899,430
Single Family Housing	3,562.24	3,562.24	3562.24	8,227,376	7,659,687
<b>Total</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>12,415,807</b>	<b>11,559,117</b>

**4.3 Trip Type Information**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1,115.5766	1,115.5766	0.1126	0.0233	1,125.3369
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	1,115.5766	1,115.5766	0.1126	0.0233	1,125.3369
NaturalGas Mitigated	0.1529	1.3075	0.5610	8.3400e-003			0.1057	0.1057		0.1057	0.0000	1,513.4620	1,513.4620	0.0290	0.0278	1,522.4558
NaturalGas Unmitigated	0.1529	1.3075	0.5610	8.3400e-003			0.1057	0.1057		0.1057	0.0000	1,513.4620	1,513.4620	0.0290	0.0278	1,522.4558

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	2.8135e+007	0.1517	1.2964	0.5517	8.2800e-003		0.1048	0.1048		0.1048	0.1048	0.0000	1,501.3911	1,501.3911	0.0288	0.0275	1,510.3131
<b>Total</b>		<b>0.1529</b>	<b>1.3075</b>	<b>0.5610</b>	<b>8.3500e-003</b>		<b>0.1057</b>	<b>0.1057</b>		<b>0.1057</b>	<b>0.1057</b>	<b>0.0000</b>	<b>1,513.4620</b>	<b>1,513.4620</b>	<b>0.0290</b>	<b>0.0278</b>	<b>1,522.4558</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	2.8135e+007	0.1517	1.2964	0.5517	8.2800e-003		0.1048	0.1048		0.1048	0.1048	0.0000	1,501.3911	1,501.3911	0.0288	0.0275	1,510.3131
<b>Total</b>		<b>0.1529</b>	<b>1.3075</b>	<b>0.5610</b>	<b>8.3500e-003</b>		<b>0.1057</b>	<b>0.1057</b>		<b>0.1057</b>	<b>0.1057</b>	<b>0.0000</b>	<b>1,513.4620</b>	<b>1,513.4620</b>	<b>0.0290</b>	<b>0.0278</b>	<b>1,522.4558</b>

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	7.83167e+006	1,020.3520	0.1030	0.0213	1,029.2791
<b>Total</b>		<b>1,115.5766</b>	<b>0.1126</b>	<b>0.0233</b>	<b>1,125.3369</b>



## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	46652.8	6.0782	6.1000e-004	1.3000e-004	6.1314
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	7.83167e+006	1,020.3520	0.1030	0.0213	1,029.2791
<b>Total</b>		<b>1,115.5766</b>	<b>0.1126</b>	<b>0.0233</b>	<b>1,125.3369</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	8.6268	0.1536	7.1995	8.3000e-004		0.0456	0.0456		0.0456	0.0456	0.0000	93.9163	93.9163	0.0128	1.5100e-003	94.6844
Unmitigated	14.3239	0.2077	15.4655	0.0175		1.2362	1.2362		1.2362	1.2362	123.0434	41.9532	164.9967	0.2437	7.0300e-003	173.1844

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	1.2710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	5.7054	0.1250	8.2962	0.0171		1.1964	1.1964		1.1964	1.1964	123.0434	30.2111	153.2545	0.2325	7.0300e-003	161.1625
Landscaping	0.2145	0.0827	7.1693	3.8000e-004		0.0399	0.0399		0.0399	0.0399	0.0000	11.7421	11.7421	0.0112	0.0000	12.0219
<b>Total</b>	<b>14.3239</b>	<b>0.2077</b>	<b>15.4655</b>	<b>0.0175</b>		<b>1.2362</b>	<b>1.2362</b>		<b>1.2362</b>	<b>1.2362</b>	<b>123.0434</b>	<b>41.9532</b>	<b>164.9967</b>	<b>0.2437</b>	<b>7.0300e-003</b>	<b>173.1844</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2710					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.1330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	8.3000e-003	0.0710	0.0302	4.5000e-004		5.7400e-003	5.7400e-003		5.7400e-003	5.7400e-003	0.0000	82.1742	82.1742	1.5800e-003	1.5100e-003	82.6625
Landscaping	0.2145	0.0827	7.1693	3.8000e-004		0.0399	0.0399		0.0399	0.0399	0.0000	11.7421	11.7421	0.0112	0.0000	12.0219
<b>Total</b>	<b>8.6268</b>	<b>0.1536</b>	<b>7.1994</b>	<b>8.3000e-004</b>		<b>0.0456</b>	<b>0.0456</b>		<b>0.0456</b>	<b>0.0456</b>	<b>0.0000</b>	<b>93.9163</b>	<b>93.9163</b>	<b>0.0128</b>	<b>1.5100e-003</b>	<b>94.6844</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	98.8682	2.2321	0.0541	170.8019
Unmitigated	98.8682	2.2321	0.0541	170.8019

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 20.8509	9.5080	9.6000e-004	2.0000e-004	9.5912
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	63.0691 / 39.761	82.6019	2.0614	0.0498	148.9879
<b>Total</b>		<b>98.8682</b>	<b>2.2321</b>	<b>0.0541</b>	<b>170.8019</b>

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 20.8509	9.5080	9.6000e-004	2.0000e-004	9.5912
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	63.0691 / 39.761	82.6019	2.0614	0.0498	148.9879
<b>Total</b>		<b>98.8682</b>	<b>2.2321</b>	<b>0.0541</b>	<b>170.8019</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	272.8929	16.1275	0.0000	676.0807
Unmitigated	272.8929	16.1275	0.0000	676.0807

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1280.58	259.9462	15.3624	0.0000	644.0056
<b>Total</b>		<b>272.8929</b>	<b>16.1275</b>	<b>0.0000</b>	<b>676.0807</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.5	0.3045	0.0180	0.0000	0.7544
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1280.58	259.9462	15.3624	0.0000	644.0056
<b>Total</b>		<b>272.8929</b>	<b>16.1275</b>	<b>0.0000</b>	<b>676.0807</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**The Ranch - Senior Housing Alternative**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	17.50	Acre	17.50	762,300.00	0
Single Family Housing	968.00	Dwelling Unit	242.00	1,742,400.00	3049
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation - Per BAAQMD regulations

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	120,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	7,998.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,176,120.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,528,360.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	330.00	1.00
tblConstructionPhase	PhaseEndDate	7/6/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	314.29	242.00

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

tblLandUse	Population	2,768.00	3,049.00
tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	149.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	3.68
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	3.68
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	3.68

## 2.0 Emissions Summary

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## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**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	1,051.5879	20.2337	1,377.0578	2.4476		183.9017	183.9017		183.9017	183.9017	19,726.2317	6,122.6398	25,848.8715	24.5277	1.3920	26,876.8668
Energy	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
Mobile	5.1090	24.4042	50.0005	0.2419	26.3581	0.1328	26.4909	7.0476	0.1236	7.1712		24,643.9194	24,643.9194	0.7308		24,662.1886
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,057.5686</b>	<b>51.8964</b>	<b>1,430.2545</b>	<b>2.7353</b>	<b>26.3581</b>	<b>184.6184</b>	<b>210.9765</b>	<b>7.0476</b>	<b>184.6092</b>	<b>191.6568</b>	<b>19,726.2317</b>	<b>39,925.2072</b>	<b>59,651.4390</b>	<b>25.4361</b>	<b>1.5596</b>	<b>60,752.0866</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.9233	13.6572	85.0792	0.0855		1.4729	1.4729		1.4729	1.4729	0.0000	16,406.2163	16,406.2163	0.4488	0.2981	16,506.2818
Energy	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
Mobile	4.9914	23.8352	47.2515	0.2267	24.5394	0.1251	24.6645	6.5613	0.1164	6.6777		23,099.0097	23,099.0097	0.6935		23,116.3481
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>55.7863</b>	<b>44.7510</b>	<b>135.5268</b>	<b>0.3581</b>	<b>24.5394</b>	<b>2.1819</b>	<b>26.7213</b>	<b>6.5613</b>	<b>2.1732</b>	<b>8.7345</b>	<b>0.0000</b>	<b>48,663.8740</b>	<b>48,663.8740</b>	<b>1.3199</b>	<b>0.4657</b>	<b>48,835.6611</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.73</b>	<b>13.77</b>	<b>90.52</b>	<b>86.91</b>	<b>6.90</b>	<b>98.82</b>	<b>87.33</b>	<b>6.90</b>	<b>98.82</b>	<b>95.44</b>	<b>100.00</b>	<b>-21.89</b>	<b>18.42</b>	<b>94.81</b>	<b>70.14</b>	<b>19.61</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	3.4800e-003	2.1000e-003	0.0268	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.2078	8.2078	2.0000e-004		8.2127
<b>Total</b>	<b>3.4800e-003</b>	<b>2.1000e-003</b>	<b>0.0268</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>8.2078</b>	<b>8.2078</b>	<b>2.0000e-004</b>		<b>8.2127</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>



The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	3.4800e-003	2.1000e-003	0.0268	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		8.2078	8.2078	2.0000e-004		8.2127
<b>Total</b>	<b>3.4800e-003</b>	<b>2.1000e-003</b>	<b>0.0268</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>8.2078</b>	<b>8.2078</b>	<b>2.0000e-004</b>		<b>8.2127</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	4.9914	23.8352	47.2515	0.2267	24.5394	0.1251	24.6645	6.5613	0.1164	6.6777		23,099.00 97	23,099.00 97	0.6935		23,116.34 81
Unmitigated	5.1090	24.4042	50.0005	0.2419	26.3581	0.1328	26.4909	7.0476	0.1236	7.1712		24,643.91 94	24,643.91 94	0.7308		24,662.18 86

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.12	2,310.12	2310.12	4,188,432	3,899,430
Single Family Housing	3,562.24	3,562.24	3562.24	8,227,376	7,659,687
<b>Total</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>12,415,807</b>	<b>11,559,117</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
NaturalGas Unmitigated	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	77082.2	0.8313	7.1037	3.0228	0.0453		0.5743	0.5743		0.5743	0.5743		9,068.4955	9,068.4955	0.1738	0.1663	9,122.3850
<b>Total</b>		<b>0.8380</b>	<b>7.1644</b>	<b>3.0739</b>	<b>0.0457</b>		<b>0.5790</b>	<b>0.5790</b>		<b>0.5790</b>	<b>0.5790</b>		<b>9,141.4044</b>	<b>9,141.4044</b>	<b>0.1752</b>	<b>0.1676</b>	<b>9,195.7272</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	77.0822	0.8313	7.1037	3.0228	0.0453		0.5743	0.5743		0.5743	0.5743		9,068.4955	9,068.4955	0.1738	0.1663	9,122.3850
<b>Total</b>		<b>0.8380</b>	<b>7.1644</b>	<b>3.0739</b>	<b>0.0457</b>		<b>0.5790</b>	<b>0.5790</b>		<b>0.5790</b>	<b>0.5790</b>		<b>9,141.4044</b>	<b>9,141.4044</b>	<b>0.1752</b>	<b>0.1676</b>	<b>9,195.7272</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	49.9233	13.6572	85.0792	0.0855		1.4729	1.4729		1.4729	1.4729	0.0000	16,406.2163	16,406.2163	0.4488	0.2981	16,506.2818
Unmitigated	1,051.5879	20.2337	1,377.0578	2.4476		183.9017	183.9017		183.9017	183.9017	19,726.2317	6,122.6398	25,848.8715	24.5277	1.3920	26,876.8668

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	6.9646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	39.0848					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,003.1553	19.3154	1,297.3994	2.4433		183.4588	183.4588		183.4588	183.4588	19,726.2317	5,978.8235	25,705.0553	24.3906	1.3920	26,729.6243
Landscaping	2.3832	0.9183	79.6584	4.2200e-003		0.4429	0.4429		0.4429	0.4429		143.8163	143.8163	0.1371		147.2425
<b>Total</b>	<b>1,051.5879</b>	<b>20.2337</b>	<b>1,377.0578</b>	<b>2.4476</b>		<b>183.9017</b>	<b>183.9017</b>		<b>183.9017</b>	<b>183.9017</b>	<b>19,726.2317</b>	<b>6,122.6398</b>	<b>25,848.8715</b>	<b>24.5277</b>	<b>1.3920</b>	<b>26,876.8668</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.9646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	39.0848					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.4907	12.7389	5.4208	0.0813		1.0300	1.0300		1.0300	1.0300	0.0000	16,262.4000	16,262.4000	0.3117	0.2981	16,359.0393
Landscaping	2.3832	0.9183	79.6584	4.2200e-003		0.4429	0.4429		0.4429	0.4429		143.8163	143.8163	0.1371		147.2425
<b>Total</b>	<b>49.9233</b>	<b>13.6572</b>	<b>85.0792</b>	<b>0.0855</b>		<b>1.4729</b>	<b>1.4729</b>		<b>1.4729</b>	<b>1.4729</b>	<b>0.0000</b>	<b>16,406.2163</b>	<b>16,406.2163</b>	<b>0.4488</b>	<b>0.2981</b>	<b>16,506.2818</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**The Ranch - Senior Housing Alternative**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	3.06	Acre	3.06	133,293.60	0
City Park	17.50	Acre	17.50	762,300.00	0
Single Family Housing	968.00	Dwelling Unit	242.00	1,742,400.00	3049
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Applicant provided

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation - Per BAAQMD regulations

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	40,000.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	120,000.00	0.00
tblArchitecturalCoating	ConstArea_Parking	7,998.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	1,176,120.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	3,528,360.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	330.00	1.00
tblConstructionPhase	PhaseEndDate	7/6/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	314.29	242.00

## The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

tblLandUse	Population	2,768.00	3,049.00
tblOffRoadEquipment	HorsePower	78.00	1.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	149.00	1.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	3.68
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	3.68
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78
tblVehicleTrips	WD_TR	9.52	3.68

## 2.0 Emissions Summary

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The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**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	1,051.5879	20.2337	1,377.0578	2.4476		183.9017	183.9017		183.9017	183.9017	19,726.2317	6,122.6398	25,848.8715	24.5277	1.3920	26,876.8668
Energy	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
Mobile	4.3410	25.0453	50.1812	0.2271	26.3581	0.1332	26.4913	7.0476	0.1240	7.1716		23,147.2484	23,147.2484	0.7545		23,166.1106
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,056.8006</b>	<b>52.5376</b>	<b>1,430.4351</b>	<b>2.7205</b>	<b>26.3581</b>	<b>184.6188</b>	<b>210.9769</b>	<b>7.0476</b>	<b>184.6096</b>	<b>191.6572</b>	<b>19,726.2317</b>	<b>38,428.5362</b>	<b>58,154.7680</b>	<b>25.4598</b>	<b>1.5596</b>	<b>59,256.0086</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	49.9233	13.6572	85.0792	0.0855		1.4729	1.4729		1.4729	1.4729	0.0000	16,406.2163	16,406.2163	0.4488	0.2981	16,506.2818
Energy	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
Mobile	4.2229	24.4167	47.7010	0.2128	24.5394	0.1255	24.6649	6.5613	0.1168	6.6781		21,690.4555	21,690.4555	0.7179		21,708.4025
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>55.0179</b>	<b>45.3324</b>	<b>135.9763</b>	<b>0.3442</b>	<b>24.5394</b>	<b>2.1823</b>	<b>26.7217</b>	<b>6.5613</b>	<b>2.1736</b>	<b>8.7349</b>	<b>0.0000</b>	<b>47,255.3198</b>	<b>47,255.3198</b>	<b>1.3443</b>	<b>0.4657</b>	<b>47,427.7155</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.79</b>	<b>13.71</b>	<b>90.49</b>	<b>87.35</b>	<b>6.90</b>	<b>98.82</b>	<b>87.33</b>	<b>6.90</b>	<b>98.82</b>	<b>95.44</b>	<b>100.00</b>	<b>-22.97</b>	<b>18.74</b>	<b>94.72</b>	<b>70.14</b>	<b>19.96</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**Acres of Paving: 3.06**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	1	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
Architectural Coating	1	1.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	3.6800e-003	2.6000e-003	0.0252	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5607	7.5607	1.8000e-004		7.5653
<b>Total</b>	<b>3.6800e-003</b>	<b>2.6000e-003</b>	<b>0.0252</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.5607</b>	<b>7.5607</b>	<b>1.8000e-004</b>		<b>7.5653</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.0000</b>					<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>			<b>0.0000</b>



The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	3.6800e-003	2.6000e-003	0.0252	8.0000e-005	8.2100e-003	5.0000e-005	8.2700e-003	2.1800e-003	5.0000e-005	2.2300e-003		7.5607	7.5607	1.8000e-004		7.5653
<b>Total</b>	<b>3.6800e-003</b>	<b>2.6000e-003</b>	<b>0.0252</b>	<b>8.0000e-005</b>	<b>8.2100e-003</b>	<b>5.0000e-005</b>	<b>8.2700e-003</b>	<b>2.1800e-003</b>	<b>5.0000e-005</b>	<b>2.2300e-003</b>		<b>7.5607</b>	<b>7.5607</b>	<b>1.8000e-004</b>		<b>7.5653</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Diversity

Improve Pedestrian Network

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	4.2229	24.4167	47.7010	0.2128	24.5394	0.1255	24.6649	6.5613	0.1168	6.6781		21,690.45 55	21,690.45 55	0.7179		21,708.40 25
Unmitigated	4.3410	25.0453	50.1812	0.2271	26.3581	0.1332	26.4913	7.0476	0.1240	7.1716		23,147.24 84	23,147.24 84	0.7545		23,166.11 06

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.12	2,310.12	2310.12	4,188,432	3,899,430
Single Family Housing	3,562.24	3,562.24	3562.24	8,227,376	7,659,687
<b>Total</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>5,872.36</b>	<b>12,415,807</b>	<b>11,559,117</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272
NaturalGas Unmitigated	0.8380	7.1644	3.0739	0.0457		0.5790	0.5790		0.5790	0.5790		9,141.4044	9,141.4044	0.1752	0.1676	9,195.7272

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	77082.2	0.8313	7.1037	3.0228	0.0453		0.5743	0.5743		0.5743	0.5743		9,068.4955	9,068.4955	0.1738	0.1663	9,122.3850
<b>Total</b>		<b>0.8380</b>	<b>7.1644</b>	<b>3.0739</b>	<b>0.0457</b>		<b>0.5790</b>	<b>0.5790</b>		<b>0.5790</b>	<b>0.5790</b>		<b>9,141.4044</b>	<b>9,141.4044</b>	<b>0.1752</b>	<b>0.1676</b>	<b>9,195.7272</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	77.0822	0.8313	7.1037	3.0228	0.0453		0.5743	0.5743		0.5743	0.5743		9,068.4955	9,068.4955	0.1738	0.1663	9,122.3850
<b>Total</b>		<b>0.8380</b>	<b>7.1644</b>	<b>3.0739</b>	<b>0.0457</b>		<b>0.5790</b>	<b>0.5790</b>		<b>0.5790</b>	<b>0.5790</b>		<b>9,141.4044</b>	<b>9,141.4044</b>	<b>0.1752</b>	<b>0.1676</b>	<b>9,195.7272</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	49.9233	13.6572	85.0792	0.0855		1.4729	1.4729		1.4729	1.4729	0.0000	16,406.2163	16,406.2163	0.4488	0.2981	16,506.2818
Unmitigated	1,051.5879	20.2337	1,377.0578	2.4476		183.9017	183.9017		183.9017	183.9017	19,726.2317	6,122.6398	25,848.8715	24.5277	1.3920	26,876.8668

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	6.9646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	39.0848					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,003.1553	19.3154	1,297.3994	2.4433		183.4588	183.4588		183.4588	183.4588	19,726.2317	5,978.8235	25,705.0553	24.3906	1.3920	26,729.6243
Landscaping	2.3832	0.9183	79.6584	4.2200e-003		0.4429	0.4429		0.4429	0.4429		143.8163	143.8163	0.1371		147.2425
<b>Total</b>	<b>1,051.5879</b>	<b>20.2337</b>	<b>1,377.0578</b>	<b>2.4476</b>		<b>183.9017</b>	<b>183.9017</b>		<b>183.9017</b>	<b>183.9017</b>	<b>19,726.2317</b>	<b>6,122.6398</b>	<b>25,848.8715</b>	<b>24.5277</b>	<b>1.3920</b>	<b>26,876.8668</b>

The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.9646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	39.0848					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.4907	12.7389	5.4208	0.0813		1.0300	1.0300		1.0300	1.0300	0.0000	16,262.4000	16,262.4000	0.3117	0.2981	16,359.0393
Landscaping	2.3832	0.9183	79.6584	4.2200e-003		0.4429	0.4429		0.4429	0.4429		143.8163	143.8163	0.1371		147.2425
<b>Total</b>	<b>49.9233</b>	<b>13.6572</b>	<b>85.0792</b>	<b>0.0855</b>		<b>1.4729</b>	<b>1.4729</b>		<b>1.4729</b>	<b>1.4729</b>	<b>0.0000</b>	<b>16,406.2163</b>	<b>16,406.2163</b>	<b>0.4488</b>	<b>0.2981</b>	<b>16,506.2818</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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The Ranch - Senior Housing Alternative - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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## The Ranch - Senior Housing Alternative

### Bay Area AQMD Air District, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

#### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	
No	Clean Paved Road	% PM Reduction	0.00		

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.25	99.64	97.37	99.52	99.52	100.00	-172.00	46.38	99.32	78.52	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.65	2.44	5.13	6.28	5.79	5.82	0.00	6.26	6.26	4.96	0.00	6.26
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00	0.00	0.00	
Yes	Land Use	Increase Diversity	0.20	0.48		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
No	Land Use	Increase Transit Accessibility	0.25	0.00		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00	0.00	
No	Transit Improvements	Expand Transit Network	0.00	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00		0.00
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.07		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge		0.00	
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	190.00	Space	1.71	76,000.00	0
City Park	15.00	Acre	15.00	653,400.00	0
Single Family Housing	1,300.00	Dwelling Unit	160.00	2,340,000.00	4095
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**



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Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	220.00	1.00
tblConstructionPhase	PhaseEndDate	2/2/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	422.08	160.00
tblLandUse	Population	3,718.00	4,095.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	159.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78

## 2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**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	19.0147	0.2789	20.7712	0.0235		1.6602	1.6602		1.6602	1.6602	165.2443	56.3449	221.5892	0.3273	9.4500e-003	232.5853
Energy	0.2050	1.7521	0.7502	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	3,491.3214	3,491.3214	0.1866	0.0678	3,516.1744
Mobile	2.0489	11.5214	22.7702	0.1097	12.1875	0.0633	12.2507	3.2691	0.0589	3.3280	0.0000	10,142.8931	10,142.8931	0.3153	0.0000	10,150.7761
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	362.0283	0.0000	362.0283	21.3953	0.0000	896.9098
Water						0.0000	0.0000		0.0000	0.0000	28.5186	97.3218	125.8404	2.9390	0.0712	220.5309
<b>Total</b>	<b>21.2750</b>	<b>13.5706</b>	<b>44.3151</b>	<b>0.1444</b>	<b>12.1875</b>	<b>1.8661</b>	<b>14.0535</b>	<b>3.2691</b>	<b>1.8617</b>	<b>5.1308</b>	<b>555.7912</b>	<b>13,790.8895</b>	<b>14,346.6807</b>	<b>25.1638</b>	<b>0.1484</b>	<b>15,019.9953</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.3637	0.2063	9.6701	1.1200e-003		0.0612	0.0612		0.0612	0.0612	0.0000	126.1301	126.1301	0.0172	2.0200e-003	127.1618
Energy	0.2050	1.7521	0.7502	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	3,491.3214	3,491.3214	0.1866	0.0678	3,516.1744
Mobile	1.9928	11.2309	21.5872	0.1028	11.3465	0.0596	11.4061	3.0435	0.0555	3.0990	0.0000	9,504.5478	9,504.5478	0.2995	0.0000	9,512.0343
Stationary	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
Waste						0.0000	0.0000		0.0000	0.0000	362.0283	0.0000	362.0283	21.3953	0.0000	896.9098
Water						0.0000	0.0000		0.0000	0.0000	28.5186	97.3218	125.8404	2.9390	0.0712	220.5309
<b>Total</b>	<b>13.5679</b>	<b>13.2075</b>	<b>32.0310</b>	<b>0.1151</b>	<b>11.3465</b>	<b>0.2634</b>	<b>11.6099</b>	<b>3.0435</b>	<b>0.2593</b>	<b>3.3028</b>	<b>390.5469</b>	<b>13,222.3293</b>	<b>13,612.8763</b>	<b>24.8378</b>	<b>0.1410</b>	<b>14,275.8299</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>36.23</b>	<b>2.68</b>	<b>27.72</b>	<b>20.27</b>	<b>6.90</b>	<b>85.89</b>	<b>17.39</b>	<b>6.90</b>	<b>86.07</b>	<b>35.63</b>	<b>29.73</b>	<b>4.12</b>	<b>5.11</b>	<b>1.30</b>	<b>5.01</b>	<b>4.95</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 1.71**

**Residential Indoor: 4,738,500; Residential Outdoor: 1,579,500; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 4,560 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	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
Architectural Coating	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



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**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**4.1 Mitigation Measures Mobile**

Increase Density

Increase Diversity

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	1.9928	11.2309	21.5872	0.1028	11.3465	0.0596	11.4061	3.0435	0.0555	3.0990	0.0000	9,504.5478	9,504.5478	0.2995	0.0000	9,512.0343
Unmitigated	2.0489	11.5214	22.7702	0.1097	12.1875	0.0633	12.2507	3.2691	0.0589	3.3280	0.0000	10,142.8931	10,142.8931	0.3153	0.0000	10,150.7761

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	12,376.00	12,376.00	12376.00	28,583,700	26,611,425
<b>Total</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>32,771,936</b>	<b>30,510,672</b>

**4.3 Trip Type Information**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
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
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

5.0 Energy Detail

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Historical Energy Use: N

5.1 Mitigation Measures Energy

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1,462.9195	1,462.9195	0.1477	0.0306	1,475.7187
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	1,462.9195	1,462.9195	0.1477	0.0306	1,475.7187
NaturalGas Mitigated	0.2050	1.7521	0.7502	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,028.4020	2,028.4020	0.0389	0.0372	2,040.4557
NaturalGas Unmitigated	0.2050	1.7521	0.7502	0.0112		0.1416	0.1416		0.1416	0.1416	0.0000	2,028.4020	2,028.4020	0.0389	0.0372	2,040.4557

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**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					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.77846e+007	0.2037	1.7411	0.7409	0.0111		0.1408	0.1408		0.1408	0.1408	0.0000	2,016.3311	2,016.3311	0.0387	0.0370	2,028.3131
<b>Total</b>		<b>0.2050</b>	<b>1.7521</b>	<b>0.7502</b>	<b>0.0112</b>		<b>0.1416</b>	<b>0.1416</b>		<b>0.1416</b>	<b>0.1416</b>	<b>0.0000</b>	<b>2,028.4020</b>	<b>2,028.4020</b>	<b>0.0389</b>	<b>0.0372</b>	<b>2,040.4557</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Government Office Building	98220	5.3000e-004	4.8100e-003	4.0400e-003	3.0000e-005		3.7000e-004	3.7000e-004		3.7000e-004	3.7000e-004	0.0000	5.2414	5.2414	1.0000e-004	1.0000e-004	5.2725
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	127980	6.9000e-004	6.2700e-003	5.2700e-003	4.0000e-005		4.8000e-004	4.8000e-004		4.8000e-004	4.8000e-004	0.0000	6.8295	6.8295	1.3000e-004	1.3000e-004	6.8701
Single Family Housing	3.77846e+007	0.2037	1.7411	0.7409	0.0111		0.1408	0.1408		0.1408	0.1408	0.0000	2,016.3311	2,016.3311	0.0387	0.0370	2,028.3131
<b>Total</b>		<b>0.2050</b>	<b>1.7521</b>	<b>0.7502</b>	<b>0.0112</b>		<b>0.1416</b>	<b>0.1416</b>		<b>0.1416</b>	<b>0.1416</b>	<b>0.0000</b>	<b>2,028.4020</b>	<b>2,028.4020</b>	<b>0.0389</b>	<b>0.0372</b>	<b>2,040.4557</b>

## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	26600	3.4656	3.5000e-004	7.0000e-005	3.4959
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05177e+007	1,370.3074	0.1384	0.0286	1,382.2964
<b>Total</b>		<b>1,462.9195</b>	<b>0.1477</b>	<b>0.0306</b>	<b>1,475.7187</b>

## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	106980	13.9379	1.4100e-003	2.9000e-004	14.0599
Parking Lot	26600	3.4656	3.5000e-004	7.0000e-005	3.4959
Regional Shopping Center	577260	75.2085	7.5900e-003	1.5700e-003	75.8665
Single Family Housing	1.05177e+007	1,370.3074	0.1384	0.0286	1,382.2964
<b>Total</b>		<b>1,462.9195</b>	<b>0.1477</b>	<b>0.0306</b>	<b>1,475.7187</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	11.3637	0.2063	9.6701	1.1200e-003		0.0612	0.0612		0.0612	0.0612	0.0000	126.1301	126.1301	0.0172	2.0200e-003	127.1618
Unmitigated	19.0147	0.2789	20.7712	0.0235		1.6602	1.6602		1.6602	1.6602	165.2443	56.3449	221.5892	0.3273	9.4500e-003	232.5853

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	1.6801					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.3843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.6622	0.1679	11.1416	0.0230		1.6067	1.6067		1.6067	1.6067	165.2443	40.5728	205.8171	0.3122	9.4500e-003	216.4373
Landscaping	0.2882	0.1110	9.6296	5.1000e-004		0.0535	0.0535		0.0535	0.0535	0.0000	15.7722	15.7722	0.0150	0.0000	16.1480
<b>Total</b>	<b>19.0147</b>	<b>0.2789</b>	<b>20.7712</b>	<b>0.0235</b>		<b>1.6602</b>	<b>1.6602</b>		<b>1.6602</b>	<b>1.6602</b>	<b>165.2443</b>	<b>56.3449</b>	<b>221.5892</b>	<b>0.3272</b>	<b>9.4500e-003</b>	<b>232.5853</b>



The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6801					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.3843					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0112	0.0953	0.0406	6.1000e-004		7.7000e-003	7.7000e-003		7.7000e-003	7.7000e-003	0.0000	110.3579	110.3579	2.1200e-003	2.0200e-003	111.0137
Landscaping	0.2882	0.1110	9.6296	5.1000e-004		0.0535	0.0535		0.0535	0.0535	0.0000	15.7722	15.7722	0.0150	0.0000	16.1480
<b>Total</b>	<b>11.3637</b>	<b>0.2063</b>	<b>9.6701</b>	<b>1.1200e-003</b>		<b>0.0612</b>	<b>0.0612</b>		<b>0.0612</b>	<b>0.0612</b>	<b>0.0000</b>	<b>126.1301</b>	<b>126.1301</b>	<b>0.0172</b>	<b>2.0200e-003</b>	<b>127.1618</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	125.8404	2.9390	0.0712	220.5309
Unmitigated	125.8404	2.9390	0.0712	220.5309

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	8.1497	8.2000e-004	1.7000e-004	8.2210
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	84.7002 / 53.398	110.9323	2.7685	0.0669	200.0870
<b>Total</b>		<b>125.8404</b>	<b>2.9390</b>	<b>0.0712</b>	<b>220.5309</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 17.8722	8.1497	8.2000e-004	1.7000e-004	8.2210
Government Office Building	1.19196 / 0.730555	1.5516	0.0390	9.4000e-004	2.8062
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	3.99992 / 2.45156	5.2067	0.1307	3.1600e-003	9.4167
Single Family Housing	84.7002 / 53.398	110.9323	2.7685	0.0669	200.0870
<b>Total</b>		<b>125.8404</b>	<b>2.9390</b>	<b>0.0712</b>	<b>220.5309</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	362.0283	21.3953	0.0000	896.9098
Unmitigated	362.0283	21.3953	0.0000	896.9098

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1719.9	349.1242	20.6327	0.0000	864.9403
<b>Total</b>		<b>362.0283</b>	<b>21.3953</b>	<b>0.0000</b>	<b>896.9098</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.29	0.2619	0.0155	0.0000	0.6487
Government Office Building	5.58	1.1327	0.0669	0.0000	2.8062
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	56.7	11.5096	0.6802	0.0000	28.5145
Single Family Housing	1719.9	349.1242	20.6327	0.0000	864.9403
<b>Total</b>		<b>362.0283</b>	<b>21.3953</b>	<b>0.0000</b>	<b>896.9098</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

**Unmitigated/Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.4800e-003	0.0181	0.0235	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	3.0083	3.0083	4.2000e-004	0.0000	3.0188
<b>Total</b>	<b>6.4800e-003</b>	<b>0.0181</b>	<b>0.0235</b>	<b>3.0000e-005</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>		<b>9.5000e-004</b>	<b>9.5000e-004</b>	<b>0.0000</b>	<b>3.0083</b>	<b>3.0083</b>	<b>4.2000e-004</b>	<b>0.0000</b>	<b>3.0188</b>

**11.0 Vegetation**

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**The Ranch - Reduced Footprint Alternative**  
**Bay Area AQMD Air District, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	190.00	Space	1.71	76,000.00	0
City Park	15.00	Acre	15.00	653,400.00	0
Single Family Housing	1,300.00	Dwelling Unit	160.00	2,340,000.00	4095
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	220.00	1.00
tblConstructionPhase	PhaseEndDate	2/2/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	422.08	160.00
tblLandUse	Population	3,718.00	4,095.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural



## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	159.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78

## 2.0 Emissions Summary

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**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	1,411.041 2	27.1734	1,849.370 4	3.2870		246.9754	246.9754		246.9754	246.9754	26,491.84 01	8,222.587 8	34,714.42 79	32.9401	1.8694	36,095.00 22
Energy	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.67 35	12,251.67 35	0.2348	0.2246	12,324.47 91
Mobile	13.0134	62.1751	130.5694	0.6355	69.5731	0.3476	69.9207	18.6023	0.3236	18.9259		64,735.90 92	64,735.90 92	1.9024		64,783.46 87
Stationary	0.0337	0.0942	0.1223	1.6000e- 004		4.9600e- 003	4.9600e- 003		4.9600e- 003	4.9600e- 003		17.2436	17.2436	2.4200e- 003		17.3041
<b>Total</b>	<b>1,425.211 4</b>	<b>99.0436</b>	<b>1,984.172 7</b>	<b>3.9840</b>	<b>69.5731</b>	<b>248.1039</b>	<b>317.6770</b>	<b>18.6023</b>	<b>248.0799</b>	<b>266.6822</b>	<b>26,491.84 01</b>	<b>85,227.41 41</b>	<b>111,719.2 542</b>	<b>35.0797</b>	<b>2.0940</b>	<b>113,220.2 541</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.8305	18.3414	114.2751	0.1149		1.9781	1.9781		1.9781	1.9781	0.0000	22,033.1760	22,033.1760	0.6027	0.4004	22,167.5637
Energy	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791
Mobile	12.7029	60.6733	123.3131	0.5954	64.7725	0.3272	65.0998	17.3187	0.3046	17.6233		60,658.0687	60,658.0687	1.8041		60,703.1712
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>79.6902</b>	<b>88.7096</b>	<b>241.8212</b>	<b>0.7717</b>	<b>64.7725</b>	<b>3.0862</b>	<b>67.8587</b>	<b>17.3187</b>	<b>3.0636</b>	<b>20.3823</b>	<b>0.0000</b>	<b>94,960.1618</b>	<b>94,960.1618</b>	<b>2.6441</b>	<b>0.6250</b>	<b>95,212.5181</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.41</b>	<b>10.43</b>	<b>87.81</b>	<b>80.63</b>	<b>6.90</b>	<b>98.76</b>	<b>78.64</b>	<b>6.90</b>	<b>98.77</b>	<b>92.36</b>	<b>100.00</b>	<b>-11.42</b>	<b>15.00</b>	<b>92.46</b>	<b>70.15</b>	<b>15.91</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**Acres of Paving: 1.71**

**Residential Indoor: 4,738,500; Residential Outdoor: 1,579,500; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 4,560 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	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
Architectural Coating	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**3.2 Architectural Coating - 2020**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density

Increase Diversity

Improve Pedestrian Network

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	12.7029	60.6733	123.3131	0.5954	64.7725	0.3272	65.0998	17.3187	0.3046	17.6233		60,658.06 87	60,658.06 87	1.8041		60,703.17 12
Unmitigated	13.0134	62.1751	130.5694	0.6355	69.5731	0.3476	69.9207	18.6023	0.3236	18.9259		64,735.90 92	64,735.90 92	1.9024		64,783.46 87

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	12,376.00	12,376.00	12376.00	28,583,700	26,611,425
<b>Total</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>32,771,936</b>	<b>30,510,672</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3



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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791
NaturalGas Unmitigated	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	103519	1.1164	9.5400	4.0596	0.0609		0.7713	0.7713		0.7713	0.7713		12,178.7645	12,178.7645	0.2334	0.2233	12,251.1369
<b>Total</b>		<b>1.1231</b>	<b>9.6008</b>	<b>4.1106</b>	<b>0.0613</b>		<b>0.7759</b>	<b>0.7759</b>		<b>0.7759</b>	<b>0.7759</b>		<b>12,251.6735</b>	<b>12,251.6735</b>	<b>0.2348</b>	<b>0.2246</b>	<b>12,324.4791</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	103.519	1.1164	9.5400	4.0596	0.0609		0.7713	0.7713		0.7713	0.7713		12,178.7645	12,178.7645	0.2334	0.2233	12,251.1369
<b>Total</b>		<b>1.1231</b>	<b>9.6008</b>	<b>4.1106</b>	<b>0.0613</b>		<b>0.7759</b>	<b>0.7759</b>		<b>0.7759</b>	<b>0.7759</b>		<b>12,251.6735</b>	<b>12,251.6735</b>	<b>0.2348</b>	<b>0.2246</b>	<b>12,324.4791</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive 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	65.8305	18.3414	114.2751	0.1149		1.9781	1.9781		1.9781	1.9781	0.0000	22,033.1760	22,033.1760	0.6027	0.4004	22,167.5637
Unmitigated	1,411.0412	27.1734	1,849.3704	3.2870		246.9754	246.9754		246.9754	246.9754	26,491.8401	8,222.5878	34,714.4279	32.9401	1.8694	36,095.0022

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	9.2060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.4206					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,347.2127	25.9400	1,742.3752	3.2814		246.3806	246.3806		246.3806	246.3806	26,491.8401	8,029.4118	34,521.2519	32.7560	1.8694	35,897.2227
Landscaping	3.2020	1.2334	106.9951	5.6700e-003		0.5949	0.5949		0.5949	0.5949		193.1760	193.1760	0.1841		197.7795
<b>Total</b>	<b>1,411.0412</b>	<b>27.1734</b>	<b>1,849.3704</b>	<b>3.2870</b>		<b>246.9754</b>	<b>246.9754</b>		<b>246.9754</b>	<b>246.9754</b>	<b>26,491.8401</b>	<b>8,222.5878</b>	<b>34,714.4279</b>	<b>32.9401</b>	<b>1.8694</b>	<b>36,095.0022</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.4206					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0020	17.1080	7.2800	0.1092		1.3832	1.3832		1.3832	1.3832	0.0000	21,840.0000	21,840.0000	0.4186	0.4004	21,969.7842
Landscaping	3.2020	1.2334	106.9951	5.6700e-003		0.5949	0.5949		0.5949	0.5949		193.1760	193.1760	0.1841		197.7795
<b>Total</b>	<b>65.8305</b>	<b>18.3414</b>	<b>114.2751</b>	<b>0.1149</b>		<b>1.9781</b>	<b>1.9781</b>		<b>1.9781</b>	<b>1.9781</b>	<b>0.0000</b>	<b>22,033.1760</b>	<b>22,033.1760</b>	<b>0.6027</b>	<b>0.4004</b>	<b>22,167.5637</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**The Ranch - Reduced Footprint Alternative**  
**Bay Area AQMD Air District, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	6.00	1000sqft	2.00	6,000.00	0
Parking Lot	190.00	Space	1.71	76,000.00	0
City Park	15.00	Acre	15.00	653,400.00	0
Single Family Housing	1,300.00	Dwelling Unit	160.00	2,340,000.00	4095
Regional Shopping Center	54.00	1000sqft	1.24	54,000.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Rural	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	64
<b>Climate Zone</b>	4			<b>Operational Year</b>	2033
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	287.23	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

Project Characteristics - Intensity Factors for CO2 adjusted based on PG&E RPS reductions

Land Use - Per current Antioch General Plan land use designations

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT - Construction not modeled

On-road Fugitive Dust - Construction not modeled

Architectural Coating - Construction not modeled

Vehicle Trips - Based on applicable ITE rates and Fehr & Peers Transportation Impact Analysis

Mobile Land Use Mitigation -

Area Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps - Based on fire station site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	0.00
tblConstructionPhase	NumDays	220.00	1.00
tblConstructionPhase	PhaseEndDate	2/2/2021	4/1/2020
tblLandUse	LotAcreage	0.14	2.00
tblLandUse	LotAcreage	422.08	160.00
tblLandUse	Population	3,718.00	4,095.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	287.23
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural



## The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	158.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.13
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	159.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	49.97	42.78
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	25.24	42.78
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	68.93	0.00
tblVehicleTrips	WD_TR	42.70	42.78

## 2.0 Emissions Summary

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The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**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	1,411.0412	27.1734	1,849.3704	3.2870		246.9754	246.9754		246.9754	246.9754	26,491.8401	8,222.5878	34,714.4279	32.9401	1.8694	36,095.0022
Energy	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791
Mobile	11.0937	63.8985	130.4807	0.5967	69.5731	0.3487	69.9217	18.6023	0.3246	18.9269		60,815.8490	60,815.8490	1.9604		60,864.8599
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>1,423.2917</b>	<b>100.7669</b>	<b>1,984.0840</b>	<b>3.9452</b>	<b>69.5731</b>	<b>248.1050</b>	<b>317.6781</b>	<b>18.6023</b>	<b>248.0809</b>	<b>266.6832</b>	<b>26,491.8401</b>	<b>81,307.3539</b>	<b>107,799.1940</b>	<b>35.1378</b>	<b>2.0940</b>	<b>109,301.6452</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.8305	18.3414	114.2751	0.1149		1.9781	1.9781		1.9781	1.9781	0.0000	22,033.1760	22,033.1760	0.6027	0.4004	22,167.5637
Energy	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791
Mobile	10.7820	62.2391	123.9342	0.5589	64.7725	0.3283	65.1009	17.3187	0.3056	17.6244		56,970.5956	56,970.5956	1.8638		57,017.1909
Stationary	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>77.7693</b>	<b>90.2755</b>	<b>242.4423</b>	<b>0.7352</b>	<b>64.7725</b>	<b>3.0873</b>	<b>67.8598</b>	<b>17.3187</b>	<b>3.0646</b>	<b>20.3833</b>	<b>0.0000</b>	<b>91,272.6887</b>	<b>91,272.6887</b>	<b>2.7038</b>	<b>0.6250</b>	<b>91,526.5378</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>94.54</b>	<b>10.41</b>	<b>87.78</b>	<b>81.36</b>	<b>6.90</b>	<b>98.76</b>	<b>78.64</b>	<b>6.90</b>	<b>98.76</b>	<b>92.36</b>	<b>100.00</b>	<b>-12.26</b>	<b>15.33</b>	<b>92.31</b>	<b>70.15</b>	<b>16.26</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	4/1/2020	4/1/2020	5	1	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**Acres of Paving: 1.71**

**Residential Indoor: 4,738,500; Residential Outdoor: 1,579,500; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 4,560 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	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
Architectural Coating	0	0.00	0.00	0.00	10.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Architectural Coating - 2020**

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**3.2 Architectural Coating - 2020**

**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density

Increase Diversity

Improve Pedestrian Network

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	10.7820	62.2391	123.9342	0.5589	64.7725	0.3283	65.1009	17.3187	0.3056	17.6244		56,970.59 56	56,970.59 56	1.8638		57,017.19 09
Unmitigated	11.0937	63.8985	130.4807	0.5967	69.5731	0.3487	69.9217	18.6023	0.3246	18.9269		60,815.84 90	60,815.84 90	1.9604		60,864.85 99

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Government Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,310.01	2,310.01	2310.01	4,188,236	3,899,248
Single Family Housing	12,376.00	12,376.00	12376.00	28,583,700	26,611,425
<b>Total</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>14,686.01</b>	<b>32,771,936</b>	<b>30,510,672</b>

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-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	14.70	6.60	6.60	33.00	48.00	19.00	66	28	6
Government Office Building	14.70	6.60	6.60	33.00	62.00	5.00	50	34	16
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Regional Shopping Center	14.70	6.60	6.60	16.30	64.70	19.00	54	35	11
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3



The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Government Office Building	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Parking Lot	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Regional Shopping Center	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667
Single Family Housing	0.586643	0.036118	0.193230	0.105941	0.012194	0.005279	0.019838	0.029138	0.002724	0.001715	0.005583	0.000929	0.000667

**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	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791
NaturalGas Unmitigated	1.1231	9.6008	4.1106	0.0613		0.7759	0.7759		0.7759	0.7759		12,251.6735	12,251.6735	0.2348	0.2246	12,324.4791

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**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					
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
Government Office Building	269.096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	350.63	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	103519	1.1164	9.5400	4.0596	0.0609		0.7713	0.7713		0.7713	0.7713		12,178.7645	12,178.7645	0.2334	0.2233	12,251.1369
<b>Total</b>		<b>1.1231</b>	<b>9.6008</b>	<b>4.1106</b>	<b>0.0613</b>		<b>0.7759</b>	<b>0.7759</b>		<b>0.7759</b>	<b>0.7759</b>		<b>12,251.6735</b>	<b>12,251.6735</b>	<b>0.2348</b>	<b>0.2246</b>	<b>12,324.4791</b>

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Government Office Building	0.269096	2.9000e-003	0.0264	0.0222	1.6000e-004		2.0100e-003	2.0100e-003		2.0100e-003	2.0100e-003		31.6583	31.6583	6.1000e-004	5.8000e-004	31.8465
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.35063	3.7800e-003	0.0344	0.0289	2.1000e-004		2.6100e-003	2.6100e-003		2.6100e-003	2.6100e-003		41.2506	41.2506	7.9000e-004	7.6000e-004	41.4957
Single Family Housing	103.519	1.1164	9.5400	4.0596	0.0609		0.7713	0.7713		0.7713	0.7713		12,178.7645	12,178.7645	0.2334	0.2233	12,251.1369
<b>Total</b>		<b>1.1231</b>	<b>9.6008</b>	<b>4.1106</b>	<b>0.0613</b>		<b>0.7759</b>	<b>0.7759</b>		<b>0.7759</b>	<b>0.7759</b>		<b>12,251.6735</b>	<b>12,251.6735</b>	<b>0.2348</b>	<b>0.2246</b>	<b>12,324.4791</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive 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	65.8305	18.3414	114.2751	0.1149		1.9781	1.9781		1.9781	1.9781	0.0000	22,033.1760	22,033.1760	0.6027	0.4004	22,167.5637
Unmitigated	1,411.0412	27.1734	1,849.3704	3.2870		246.9754	246.9754		246.9754	246.9754	26,491.8401	8,222.5878	34,714.4279	32.9401	1.8694	36,095.0022

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	9.2060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.4206					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,347.2127	25.9400	1,742.3752	3.2814		246.3806	246.3806		246.3806	246.3806	26,491.8401	8,029.4118	34,521.2519	32.7560	1.8694	35,897.2227
Landscaping	3.2020	1.2334	106.9951	5.6700e-003		0.5949	0.5949		0.5949	0.5949		193.1760	193.1760	0.1841		197.7795
<b>Total</b>	<b>1,411.0412</b>	<b>27.1734</b>	<b>1,849.3704</b>	<b>3.2870</b>		<b>246.9754</b>	<b>246.9754</b>		<b>246.9754</b>	<b>246.9754</b>	<b>26,491.8401</b>	<b>8,222.5878</b>	<b>34,714.4279</b>	<b>32.9401</b>	<b>1.8694</b>	<b>36,095.0022</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	51.4206					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	2.0020	17.1080	7.2800	0.1092		1.3832	1.3832		1.3832	1.3832	0.0000	21,840.0000	21,840.0000	0.4186	0.4004	21,969.7842
Landscaping	3.2020	1.2334	106.9951	5.6700e-003		0.5949	0.5949		0.5949	0.5949		193.1760	193.1760	0.1841		197.7795
<b>Total</b>	<b>65.8305</b>	<b>18.3414</b>	<b>114.2751</b>	<b>0.1149</b>		<b>1.9781</b>	<b>1.9781</b>		<b>1.9781</b>	<b>1.9781</b>	<b>0.0000</b>	<b>22,033.1760</b>	<b>22,033.1760</b>	<b>0.6027</b>	<b>0.4004</b>	<b>22,167.5637</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

The Ranch - Reduced Footprint Alternative - Bay Area AQMD Air District, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.13	50	158	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources**

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (100 - 175 HP)	0.0337	0.0942	0.1223	1.6000e-004		4.9600e-003	4.9600e-003		4.9600e-003	4.9600e-003		17.2436	17.2436	2.4200e-003		17.3041
<b>Total</b>	<b>0.0337</b>	<b>0.0942</b>	<b>0.1223</b>	<b>1.6000e-004</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>4.9600e-003</b>	<b>4.9600e-003</b>		<b>17.2436</b>	<b>17.2436</b>	<b>2.4200e-003</b>		<b>17.3041</b>

**11.0 Vegetation**

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Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	
No	Clean Paved Road	% PM Reduction	0.00	

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**



Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	99.85	43.25	99.64	97.34	99.52	99.52	100.00	-172.00	46.38	99.32	78.62	48.71
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.74	2.52	5.20	6.31	5.85	5.86	0.00	6.29	6.29	5.03	0.00	6.29
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Mobile Mitigation**

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
Yes	Land Use	Increase Density	0.00	8.13	0.00	
Yes	Land Use	Increase Diversity	0.16	0.42		
No	Land Use	Improve Walkability Design	0.00	0.00		
No	Land Use	Improve Destination Accessibility	0.00	0.00		
No	Land Use	Increase Transit Accessibility	0.25	0.00		
No	Land Use	Integrate Below Market Rate Housing	0.00	0.00		
	Land Use	Land Use SubTotal	0.05			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site	
No	Neighborhood Enhancements	Provide Traffic Calming Measures	0.00		
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02		
Yes	Parking Policy Pricing	Limit Parking Supply	0.00	0.00	
No	Parking Policy Pricing	Unbundle Parking Costs	0.00	0.00	
No	Parking Policy Pricing	On-street Market Pricing	0.00	0.00	
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00	0.00	
No	Transit Improvements	Expand Transit Network	0.00	0.00	
No	Transit Improvements	Increase Transit Frequency	0.00		0.00
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.07		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"	3.00		
No	Commute	Workplace Parking Charge		0.00	
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program	5.00		
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.07		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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