

## Appendix C: Air Quality Calculations

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## Merced Gateway Construction Phase 1 Merced County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.90	Acre	1.90	82,764.00	0
Parking Lot	13.80	Acre	13.80	601,128.00	0
Regional Shopping Center	143.03	1000sqft	3.10	143,028.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Project Characteristics -

Land Use - Phase 1

Construction Phase - Phase 1 construction expected to start in 2017 and end in 2020

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

Vehicle Trips - Construction only

Area Coating - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	0
tblConstructionPhase	NumDays	300.00	703.00
tblEnergyUse	LightingElect	4.22	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	T24E	2.61	0.00
tblEnergyUse	T24NG	9.07	0.00
tblLandUse	LandUseSquareFeet	143,030.00	143,028.00
tblLandUse	LotAcreage	3.28	3.10
tblProjectCharacteristics	OperationalYear	2014	2020
tblSolidWaste	SolidWasteGenerationRate	150.18	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.94	0.00
tblWater	IndoorWaterUseRate	10,594,592.75	0.00
tblWater	OutdoorWaterUseRate	6,493,460.07	0.00

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.8116	5.7040	7.4865	0.0112	0.6124	0.2833	0.8957	0.2098	0.2644	0.4742	0.0000	935.5022	935.5022	0.1136	0.0000	937.8883
2018	0.7117	4.6273	7.1804	0.0119	0.4613	0.2211	0.6824	0.1249	0.2073	0.3322	0.0000	963.7596	963.7596	0.0942	0.0000	965.7382
2019	2.1565	3.7230	5.6730	0.0104	0.3986	0.1725	0.5711	0.1079	0.1617	0.2696	0.0000	829.8728	829.8728	0.0849	0.0000	831.6550
2020	0.0850	9.6000e-004	2.0700e-003	0.0000	2.7000e-004	6.0000e-005	3.2000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	0.3327	0.3327	2.0000e-005	0.0000	0.3331
<b>Total</b>	<b>3.7648</b>	<b>14.0553</b>	<b>20.3419</b>	<b>0.0335</b>	<b>1.4725</b>	<b>0.6770</b>	<b>2.1495</b>	<b>0.4427</b>	<b>0.6335</b>	<b>1.0761</b>	<b>0.0000</b>	<b>2,729.4673</b>	<b>2,729.4673</b>	<b>0.2927</b>	<b>0.0000</b>	<b>2,735.6146</b>

### 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					
2017	0.8116	5.7040	7.4865	0.0112	0.6124	0.2833	0.8957	0.2098	0.2644	0.4742	0.0000	935.5018	935.5018	0.1136	0.0000	937.8879
2018	0.7117	4.6273	7.1804	0.0119	0.4613	0.2211	0.6824	0.1249	0.2073	0.3322	0.0000	963.7593	963.7593	0.0942	0.0000	965.7378
2019	2.1565	3.7230	5.6730	0.0104	0.3986	0.1725	0.5711	0.1079	0.1617	0.2696	0.0000	829.8725	829.8725	0.0849	0.0000	831.6547
2020	0.0850	9.6000e-004	2.0700e-003	0.0000	2.7000e-004	6.0000e-005	3.2000e-004	7.0000e-005	6.0000e-005	1.3000e-004	0.0000	0.3327	0.3327	2.0000e-005	0.0000	0.3331
<b>Total</b>	<b>3.7648</b>	<b>14.0553</b>	<b>20.3419</b>	<b>0.0335</b>	<b>1.4725</b>	<b>0.6770</b>	<b>2.1495</b>	<b>0.4427</b>	<b>0.6335</b>	<b>1.0761</b>	<b>0.0000</b>	<b>2,729.4661</b>	<b>2,729.4661</b>	<b>0.2927</b>	<b>0.0000</b>	<b>2,735.6134</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>

### 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	1/1/2017	1/13/2017	5	10	
2	Grading	Grading	1/14/2017	2/24/2017	5	30	
3	Building Construction	Building Construction	2/25/2017	11/6/2019	5	703	
4	Paving	Paving	11/7/2019	12/4/2019	5	20	
5	Architectural Coating	Architectural Coating	12/5/2019	1/1/2020	5	20	

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

**Acres of Grading (Grading Phase): 75**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 365,739; Non-Residential Outdoor: 121,913 (Architectural Coating**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	333.00	136.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	67.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Site Preparation - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
<b>Total</b>	<b>0.0242</b>	<b>0.2588</b>	<b>0.1970</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>0.0138</b>	<b>0.1041</b>	<b>0.0497</b>	<b>0.0127</b>	<b>0.0623</b>	<b>0.0000</b>	<b>18.1577</b>	<b>18.1577</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>18.2745</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	3.0000e-004	4.1000e-004	4.1300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6132	0.6132	3.0000e-005	0.0000	0.6139
<b>Total</b>	<b>3.0000e-004</b>	<b>4.1000e-004</b>	<b>4.1300e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6132</b>	<b>0.6132</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6139</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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
<b>Total</b>	<b>0.0242</b>	<b>0.2588</b>	<b>0.1970</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>0.0138</b>	<b>0.1041</b>	<b>0.0497</b>	<b>0.0127</b>	<b>0.0623</b>	<b>0.0000</b>	<b>18.1577</b>	<b>18.1577</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>18.2745</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	3.0000e-004	4.1000e-004	4.1300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6132	0.6132	3.0000e-005	0.0000	0.6139
<b>Total</b>	<b>3.0000e-004</b>	<b>4.1000e-004</b>	<b>4.1300e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6132</b>	<b>0.6132</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6139</b>

### 3.3 Grading - 2017

#### 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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0915	1.0439	0.7021	9.3000e-004		0.0498	0.0498		0.0458	0.0458	0.0000	85.9109	85.9109	0.0263	0.0000	86.4637
<b>Total</b>	<b>0.0915</b>	<b>1.0439</b>	<b>0.7021</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0498</b>	<b>0.1799</b>	<b>0.0540</b>	<b>0.0458</b>	<b>0.0997</b>	<b>0.0000</b>	<b>85.9109</b>	<b>85.9109</b>	<b>0.0263</b>	<b>0.0000</b>	<b>86.4637</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	9.8000e-004	1.3800e-003	0.0138	3.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0439	2.0439	1.2000e-004	0.0000	2.0464
<b>Total</b>	<b>9.8000e-004</b>	<b>1.3800e-003</b>	<b>0.0138</b>	<b>3.0000e-005</b>	<b>2.3900e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>6.4000e-004</b>	<b>2.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>2.0439</b>	<b>2.0439</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.0464</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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0915	1.0439	0.7021	9.3000e-004		0.0498	0.0498		0.0458	0.0458	0.0000	85.9108	85.9108	0.0263	0.0000	86.4636
<b>Total</b>	<b>0.0915</b>	<b>1.0439</b>	<b>0.7021</b>	<b>9.3000e-004</b>	<b>0.1301</b>	<b>0.0498</b>	<b>0.1799</b>	<b>0.0540</b>	<b>0.0458</b>	<b>0.0997</b>	<b>0.0000</b>	<b>85.9108</b>	<b>85.9108</b>	<b>0.0263</b>	<b>0.0000</b>	<b>86.4636</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	9.8000e-004	1.3800e-003	0.0138	3.0000e-005	2.3900e-003	2.0000e-005	2.4100e-003	6.4000e-004	2.0000e-005	6.5000e-004	0.0000	2.0439	2.0439	1.2000e-004	0.0000	2.0464
<b>Total</b>	<b>9.8000e-004</b>	<b>1.3800e-003</b>	<b>0.0138</b>	<b>3.0000e-005</b>	<b>2.3900e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>6.4000e-004</b>	<b>2.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>2.0439</b>	<b>2.0439</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>2.0464</b>

### 3.4 Building Construction - 2017

#### 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	0.3413	2.9046	1.9942	2.9500e-003		0.1959	0.1959		0.1840	0.1840	0.0000	263.4270	263.4270	0.0648	0.0000	264.7885
<b>Total</b>	<b>0.3413</b>	<b>2.9046</b>	<b>1.9942</b>	<b>2.9500e-003</b>		<b>0.1959</b>	<b>0.1959</b>		<b>0.1840</b>	<b>0.1840</b>	<b>0.0000</b>	<b>263.4270</b>	<b>263.4270</b>	<b>0.0648</b>	<b>0.0000</b>	<b>264.7885</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	0.2333	1.3263	2.8925	3.5500e-003	0.0967	0.0216	0.1183	0.0277	0.0198	0.0475	0.0000	315.7859	315.7859	2.5800e-003	0.0000	315.8402
Worker	0.1201	0.1686	1.6828	3.5300e-003	0.2921	2.3100e-003	0.2944	0.0777	2.1300e-003	0.0798	0.0000	249.5636	249.5636	0.0142	0.0000	249.8611
<b>Total</b>	<b>0.3534</b>	<b>1.4949</b>	<b>4.5753</b>	<b>7.0800e-003</b>	<b>0.3889</b>	<b>0.0239</b>	<b>0.4127</b>	<b>0.1053</b>	<b>0.0219</b>	<b>0.1273</b>	<b>0.0000</b>	<b>565.3495</b>	<b>565.3495</b>	<b>0.0168</b>	<b>0.0000</b>	<b>565.7013</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	0.3413	2.9046	1.9942	2.9500e-003		0.1959	0.1959		0.1840	0.1840	0.0000	263.4267	263.4267	0.0648	0.0000	264.7882
<b>Total</b>	<b>0.3413</b>	<b>2.9046</b>	<b>1.9942</b>	<b>2.9500e-003</b>		<b>0.1959</b>	<b>0.1959</b>		<b>0.1840</b>	<b>0.1840</b>	<b>0.0000</b>	<b>263.4267</b>	<b>263.4267</b>	<b>0.0648</b>	<b>0.0000</b>	<b>264.7882</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	0.2333	1.3263	2.8925	3.5500e-003	0.0967	0.0216	0.1183	0.0277	0.0198	0.0475	0.0000	315.7859	315.7859	2.5800e-003	0.0000	315.8402
Worker	0.1201	0.1686	1.6828	3.5300e-003	0.2921	2.3100e-003	0.2944	0.0777	2.1300e-003	0.0798	0.0000	249.5636	249.5636	0.0142	0.0000	249.8611
<b>Total</b>	<b>0.3534</b>	<b>1.4949</b>	<b>4.5753</b>	<b>7.0800e-003</b>	<b>0.3889</b>	<b>0.0239</b>	<b>0.4127</b>	<b>0.1053</b>	<b>0.0219</b>	<b>0.1273</b>	<b>0.0000</b>	<b>565.3495</b>	<b>565.3495</b>	<b>0.0168</b>	<b>0.0000</b>	<b>565.7013</b>

### 3.4 Building Construction - 2018

#### 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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
<b>Total</b>	<b>0.3483</b>	<b>3.0355</b>	<b>2.2880</b>	<b>3.5000e-003</b>		<b>0.1950</b>	<b>0.1950</b>		<b>0.1833</b>	<b>0.1833</b>	<b>0.0000</b>	<b>308.9844</b>	<b>308.9844</b>	<b>0.0756</b>	<b>0.0000</b>	<b>310.5723</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	0.2381	1.4123	3.1026	4.1900e-003	0.1147	0.0234	0.1381	0.0328	0.0215	0.0543	0.0000	367.7995	367.7995	2.9800e-003	0.0000	367.8620
Worker	0.1253	0.1794	1.7899	4.2200e-003	0.3466	2.6900e-003	0.3493	0.0921	2.4900e-003	0.0946	0.0000	286.9758	286.9758	0.0156	0.0000	287.3039
<b>Total</b>	<b>0.3634</b>	<b>1.5917</b>	<b>4.8924</b>	<b>8.4100e-003</b>	<b>0.4613</b>	<b>0.0261</b>	<b>0.4873</b>	<b>0.1249</b>	<b>0.0240</b>	<b>0.1489</b>	<b>0.0000</b>	<b>654.7752</b>	<b>654.7752</b>	<b>0.0186</b>	<b>0.0000</b>	<b>655.1658</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	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
<b>Total</b>	<b>0.3483</b>	<b>3.0355</b>	<b>2.2880</b>	<b>3.5000e-003</b>		<b>0.1950</b>	<b>0.1950</b>		<b>0.1833</b>	<b>0.1833</b>	<b>0.0000</b>	<b>308.9841</b>	<b>308.9841</b>	<b>0.0756</b>	<b>0.0000</b>	<b>310.5720</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	0.2381	1.4123	3.1026	4.1900e-003	0.1147	0.0234	0.1381	0.0328	0.0215	0.0543	0.0000	367.7995	367.7995	2.9800e-003	0.0000	367.8620
Worker	0.1253	0.1794	1.7899	4.2200e-003	0.3466	2.6900e-003	0.3493	0.0921	2.4900e-003	0.0946	0.0000	286.9758	286.9758	0.0156	0.0000	287.3039
<b>Total</b>	<b>0.3634</b>	<b>1.5917</b>	<b>4.8924</b>	<b>8.4100e-003</b>	<b>0.4613</b>	<b>0.0261</b>	<b>0.4873</b>	<b>0.1249</b>	<b>0.0240</b>	<b>0.1489</b>	<b>0.0000</b>	<b>654.7752</b>	<b>654.7752</b>	<b>0.0186</b>	<b>0.0000</b>	<b>655.1658</b>

**3.4 Building Construction - 2019**

**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	0.2610	2.3271	1.9004	2.9800e-003		0.1426	0.1426		0.1341	0.1341	0.0000	259.8763	259.8763	0.0632	0.0000	261.2041
<b>Total</b>	<b>0.2610</b>	<b>2.3271</b>	<b>1.9004</b>	<b>2.9800e-003</b>		<b>0.1426</b>	<b>0.1426</b>		<b>0.1341</b>	<b>0.1341</b>	<b>0.0000</b>	<b>259.8763</b>	<b>259.8763</b>	<b>0.0632</b>	<b>0.0000</b>	<b>261.2041</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	0.1524	1.0876	2.2011	3.5500e-003	0.0975	0.0182	0.1158	0.0279	0.0168	0.0446	0.0000	307.1130	307.1130	2.4400e-003	0.0000	307.1644
Worker	0.0957	0.1385	1.3810	3.5900e-003	0.2948	2.2500e-003	0.2970	0.0784	2.0800e-003	0.0805	0.0000	235.4094	235.4094	0.0124	0.0000	235.6695
<b>Total</b>	<b>0.2481</b>	<b>1.2262</b>	<b>3.5821</b>	<b>7.1400e-003</b>	<b>0.3923</b>	<b>0.0205</b>	<b>0.4128</b>	<b>0.1063</b>	<b>0.0188</b>	<b>0.1251</b>	<b>0.0000</b>	<b>542.5224</b>	<b>542.5224</b>	<b>0.0148</b>	<b>0.0000</b>	<b>542.8339</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	0.2610	2.3271	1.9004	2.9800e-003		0.1426	0.1426		0.1341	0.1341	0.0000	259.8760	259.8760	0.0632	0.0000	261.2038
<b>Total</b>	<b>0.2610</b>	<b>2.3271</b>	<b>1.9004</b>	<b>2.9800e-003</b>		<b>0.1426</b>	<b>0.1426</b>		<b>0.1341</b>	<b>0.1341</b>	<b>0.0000</b>	<b>259.8760</b>	<b>259.8760</b>	<b>0.0632</b>	<b>0.0000</b>	<b>261.2038</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	0.1524	1.0876	2.2011	3.5500e-003	0.0975	0.0182	0.1158	0.0279	0.0168	0.0446	0.0000	307.1130	307.1130	2.4400e-003	0.0000	307.1644
Worker	0.0957	0.1385	1.3810	3.5900e-003	0.2948	2.2500e-003	0.2970	0.0784	2.0800e-003	0.0805	0.0000	235.4094	235.4094	0.0124	0.0000	235.6695
<b>Total</b>	<b>0.2481</b>	<b>1.2262</b>	<b>3.5821</b>	<b>7.1400e-003</b>	<b>0.3923</b>	<b>0.0205</b>	<b>0.4128</b>	<b>0.1063</b>	<b>0.0188</b>	<b>0.1251</b>	<b>0.0000</b>	<b>542.5224</b>	<b>542.5224</b>	<b>0.0148</b>	<b>0.0000</b>	<b>542.8339</b>

**3.5 Paving - 2019**

**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	0.0143	0.1494	0.1437	2.2000e-004		8.0900e-003	8.0900e-003		7.4500e-003	7.4500e-003	0.0000	20.0395	20.0395	6.3400e-003	0.0000	20.1726
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0323</b>	<b>0.1494</b>	<b>0.1437</b>	<b>2.2000e-004</b>		<b>8.0900e-003</b>	<b>8.0900e-003</b>		<b>7.4500e-003</b>	<b>7.4500e-003</b>	<b>0.0000</b>	<b>20.0395</b>	<b>20.0395</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.1726</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	3.9000e-004	5.6000e-004	5.6000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9553	0.9553	5.0000e-005	0.0000	0.9564
<b>Total</b>	<b>3.9000e-004</b>	<b>5.6000e-004</b>	<b>5.6000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9553</b>	<b>0.9553</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9564</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	0.0143	0.1494	0.1437	2.2000e-004		8.0900e-003	8.0900e-003		7.4500e-003	7.4500e-003	0.0000	20.0394	20.0394	6.3400e-003	0.0000	20.1726
Paving	0.0181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0323</b>	<b>0.1494</b>	<b>0.1437</b>	<b>2.2000e-004</b>		<b>8.0900e-003</b>	<b>8.0900e-003</b>		<b>7.4500e-003</b>	<b>7.4500e-003</b>	<b>0.0000</b>	<b>20.0394</b>	<b>20.0394</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.1726</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	3.9000e-004	5.6000e-004	5.6000e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9553	0.9553	5.0000e-005	0.0000	0.9564
<b>Total</b>	<b>3.9000e-004</b>	<b>5.6000e-004</b>	<b>5.6000e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9553</b>	<b>0.9553</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9564</b>

### 3.6 Architectural Coating - 2019

#### 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	1.6104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0174	0.0175	3.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	2.4256	2.4256	2.0000e-004	0.0000	2.4299
<b>Total</b>	<b>1.6130</b>	<b>0.0174</b>	<b>0.0175</b>	<b>3.0000e-005</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.4299</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	1.6500e-003	2.3900e-003	0.0238	6.0000e-005	5.0800e-003	4.0000e-005	5.1100e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.0537	4.0537	2.1000e-004	0.0000	4.0582
<b>Total</b>	<b>1.6500e-003</b>	<b>2.3900e-003</b>	<b>0.0238</b>	<b>6.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.0537</b>	<b>4.0537</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>4.0582</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	1.6104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5300e-003	0.0174	0.0175	3.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	2.4256	2.4256	2.0000e-004	0.0000	2.4299
<b>Total</b>	<b>1.6130</b>	<b>0.0174</b>	<b>0.0175</b>	<b>3.0000e-005</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>		<b>1.2200e-003</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.4299</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	1.6500e-003	2.3900e-003	0.0238	6.0000e-005	5.0800e-003	4.0000e-005	5.1100e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.0537	4.0537	2.1000e-004	0.0000	4.0582
<b>Total</b>	<b>1.6500e-003</b>	<b>2.3900e-003</b>	<b>0.0238</b>	<b>6.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1100e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.0537</b>	<b>4.0537</b>	<b>2.1000e-004</b>	<b>0.0000</b>	<b>4.0582</b>

### **3.6 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	0.0848					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	8.4000e-004	9.2000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>0.0849</b>	<b>8.4000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</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	8.0000e-005	1.2000e-004	1.1500e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2050	0.2050	1.0000e-005	0.0000	0.2052
<b>Total</b>	<b>8.0000e-005</b>	<b>1.2000e-004</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2050</b>	<b>0.2050</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2052</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	0.0848					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2000e-004	8.4000e-004	9.2000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>0.0849</b>	<b>8.4000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</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	8.0000e-005	1.2000e-004	1.1500e-003	0.0000	2.7000e-004	0.0000	2.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2050	0.2050	1.0000e-005	0.0000	0.2052
<b>Total</b>	<b>8.0000e-005</b>	<b>1.2000e-004</b>	<b>1.1500e-003</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.7000e-004</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.2050</b>	<b>0.2050</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2052</b>



**Merced Gateway Phase 2 Construction  
Merced County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.70	Acre	1.70	74,052.00	0
Parking Lot	16.40	Acre	16.40	714,384.00	0
Regional Shopping Center	242.59	1000sqft	5.70	242,592.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2023
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

- Project Characteristics -
- Land Use - Phase 2
- Construction Phase - Estimated construction schedule for phase to is 2020-2023
- Vehicle Trips - Construction only
- Area Coating - Construction only
- Energy Use - Construction only
- Water And Wastewater - Construction only
- Solid Waste - Construction only
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	0
tblConstructionPhase	NumDays	370.00	698.00
tblEnergyUse	LightingElect	4.22	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	T24E	2.61	0.00
tblEnergyUse	T24NG	9.07	0.00
tblLandUse	LandUseSquareFeet	242,590.00	242,592.00
tblLandUse	LotAcreage	5.57	5.70
tblProjectCharacteristics	OperationalYear	2014	2023
tblSolidWaste	SolidWasteGenerationRate	254.72	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.94	0.00
tblWater	IndoorWaterUseRate	17,969,252.99	0.00
tblWater	OutdoorWaterUseRate	11,013,413.12	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	0.5986	4.3883	6.7027	0.0128	0.7158	0.1915	0.9073	0.2409	0.1786	0.4195	0.0000	996.9788	996.9788	0.1139	0.0000	999.3698
2021	0.5542	3.5311	6.7968	0.0139	0.5682	0.1485	0.7166	0.1539	0.1392	0.2931	0.0000	1,061.1051	1,061.1051	0.0920	0.0000	1,063.0379
2022	2.7055	2.7979	5.7172	0.0121	0.4885	0.1153	0.6038	0.1323	0.1080	0.2403	0.0000	921.4862	921.4862	0.0837	0.0000	923.2435

2023	0.1177	7.6000e-004	2.0500e-003	1.0000e-005	3.3000e-004	4.0000e-005	3.6000e-004	9.0000e-005	4.0000e-005	1.2000e-004	0.0000	0.3683	0.3683	2.0000e-005	0.0000	0.3687
<b>Total</b>	<b>3.9760</b>	<b>10.7181</b>	<b>19.2188</b>	<b>0.0387</b>	<b>1.7728</b>	<b>0.4553</b>	<b>2.2281</b>	<b>0.5271</b>	<b>0.4258</b>	<b>0.9530</b>	<b>0.0000</b>	<b>2,979.9384</b>	<b>2,979.9384</b>	<b>0.2896</b>	<b>0.0000</b>	<b>2,986.0200</b>

### 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	0.5986	4.3883	6.7027	0.0128	0.7158	0.1915	0.9073	0.2409	0.1786	0.4195	0.0000	996.9783	996.9783	0.1139	0.0000	999.3694
2021	0.5542	3.5311	6.7968	0.0139	0.5682	0.1485	0.7166	0.1539	0.1392	0.2931	0.0000	1,061.1048	1,061.1048	0.0920	0.0000	1,063.0376
2022	2.7055	2.7979	5.7172	0.0121	0.4885	0.1153	0.6038	0.1323	0.1080	0.2403	0.0000	921.4858	921.4858	0.0837	0.0000	923.2432
2023	0.1177	7.6000e-004	2.0500e-003	1.0000e-005	3.3000e-004	4.0000e-005	3.6000e-004	9.0000e-005	4.0000e-005	1.2000e-004	0.0000	0.3683	0.3683	2.0000e-005	0.0000	0.3687
<b>Total</b>	<b>3.9760</b>	<b>10.7180</b>	<b>19.2188</b>	<b>0.0387</b>	<b>1.7728</b>	<b>0.4553</b>	<b>2.2281</b>	<b>0.5271</b>	<b>0.4258</b>	<b>0.9530</b>	<b>0.0000</b>	<b>2,979.9372</b>	<b>2,979.9372</b>	<b>0.2896</b>	<b>0.0000</b>	<b>2,986.0189</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>

## 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	1/2/2020	1/15/2020	5	10	
2	Grading	Grading	1/16/2020	3/4/2020	5	35	
3	Building Construction	Building Construction	3/5/2020	11/7/2022	5	698	
4	Paving	Paving	11/8/2022	12/5/2022	5	20	
5	Architectural Coating	Architectural Coating	12/6/2022	1/2/2023	5	20	

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

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 507,113; Non-Residential Outdoor: 169,038 (Architectural Coating**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	409.00	169.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	82.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1943	0.1646	2.0000e-004		9.6500e-003	9.6500e-003		8.8800e-003	8.8800e-003	0.0000	17.2015	17.2015	5.5600e-003	0.0000	17.3183
<b>Total</b>	<b>0.0186</b>	<b>0.1943</b>	<b>0.1646</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>9.6500e-003</b>	<b>0.1000</b>	<b>0.0497</b>	<b>8.8800e-003</b>	<b>0.0585</b>	<b>0.0000</b>	<b>17.2015</b>	<b>17.2015</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>17.3183</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	2.1000e-004	3.1000e-004	3.0900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.5507	0.5507	3.0000e-005	0.0000	0.5513
<b>Total</b>	<b>2.1000e-004</b>	<b>3.1000e-004</b>	<b>3.0900e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.5507</b>	<b>0.5507</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5513</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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0186	0.1943	0.1646	2.0000e-004		9.6500e-003	9.6500e-003		8.8800e-003	8.8800e-003	0.0000	17.2015	17.2015	5.5600e-003	0.0000	17.3183
<b>Total</b>	<b>0.0186</b>	<b>0.1943</b>	<b>0.1646</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>9.6500e-003</b>	<b>0.1000</b>	<b>0.0497</b>	<b>8.8800e-003</b>	<b>0.0585</b>	<b>0.0000</b>	<b>17.2015</b>	<b>17.2015</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>17.3183</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	2.1000e-004	3.1000e-004	3.0900e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.5507	0.5507	3.0000e-005	0.0000	0.5513
<b>Total</b>	<b>2.1000e-004</b>	<b>3.1000e-004</b>	<b>3.0900e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.5507</b>	<b>0.5507</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5513</b>

**3.3 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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8642	0.6725	1.0800e-003		0.0396	0.0396		0.0364	0.0364	0.0000	94.9005	94.9005	0.0307	0.0000	95.5451
<b>Total</b>	<b>0.0796</b>	<b>0.8642</b>	<b>0.6725</b>	<b>1.0800e-003</b>	<b>0.1518</b>	<b>0.0396</b>	<b>0.1914</b>	<b>0.0629</b>	<b>0.0364</b>	<b>0.0994</b>	<b>0.0000</b>	<b>94.9005</b>	<b>94.9005</b>	<b>0.0307</b>	<b>0.0000</b>	<b>95.5451</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	8.3000e-004	1.2000e-003	0.0120	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.1416	2.1416	1.1000e-004	0.0000	2.1439
<b>Total</b>	<b>8.3000e-004</b>	<b>1.2000e-003</b>	<b>0.0120</b>	<b>3.0000e-005</b>	<b>2.7900e-003</b>	<b>2.0000e-005</b>	<b>2.8100e-003</b>	<b>7.4000e-004</b>	<b>2.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>2.1416</b>	<b>2.1416</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>2.1439</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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8642	0.6725	1.0800e-003		0.0396	0.0396		0.0364	0.0364	0.0000	94.9004	94.9004	0.0307	0.0000	95.5449
<b>Total</b>	<b>0.0796</b>	<b>0.8642</b>	<b>0.6725</b>	<b>1.0800e-003</b>	<b>0.1518</b>	<b>0.0396</b>	<b>0.1914</b>	<b>0.0629</b>	<b>0.0364</b>	<b>0.0994</b>	<b>0.0000</b>	<b>94.9004</b>	<b>94.9004</b>	<b>0.0307</b>	<b>0.0000</b>	<b>95.5449</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	8.3000e-004	1.2000e-003	0.0120	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.1416	2.1416	1.1000e-004	0.0000	2.1439
<b>Total</b>	<b>8.3000e-004</b>	<b>1.2000e-003</b>	<b>0.0120</b>	<b>3.0000e-005</b>	<b>2.7900e-003</b>	<b>2.0000e-005</b>	<b>2.8100e-003</b>	<b>7.4000e-004</b>	<b>2.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>2.1416</b>	<b>2.1416</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>2.1439</b>

**3.4 Building Construction - 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	0.2280	2.0611	1.8153	2.8900e-003		0.1202	0.1202		0.1130	0.1130	0.0000	249.1019	249.1019	0.0607	0.0000	250.3764
<b>Total</b>	<b>0.2280</b>	<b>2.0611</b>	<b>1.8153</b>	<b>2.8900e-003</b>		<b>0.1202</b>	<b>0.1202</b>		<b>0.1130</b>	<b>0.1130</b>	<b>0.0000</b>	<b>249.1019</b>	<b>249.1019</b>	<b>0.0607</b>	<b>0.0000</b>	<b>250.3764</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	0.1666	1.1153	2.5193	4.2900e-003	0.1179	0.0194	0.1373	0.0337	0.0178	0.0515	0.0000	362.7990	362.7990	2.8200e-003	0.0000	362.8582
Worker	0.1046	0.1519	1.5160	4.2800e-003	0.3523	2.6600e-003	0.3549	0.0937	2.4600e-003	0.0961	0.0000	270.2835	270.2835	0.0140	0.0000	270.5767
<b>Total</b>	<b>0.2713</b>	<b>1.2671</b>	<b>4.0352</b>	<b>8.5700e-003</b>	<b>0.4702</b>	<b>0.0220</b>	<b>0.4922</b>	<b>0.1274</b>	<b>0.0203</b>	<b>0.1476</b>	<b>0.0000</b>	<b>633.0826</b>	<b>633.0826</b>	<b>0.0168</b>	<b>0.0000</b>	<b>633.4348</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	0.2280	2.0611	1.8153	2.8900e-003		0.1202	0.1202		0.1130	0.1130	0.0000	249.1016	249.1016	0.0607	0.0000	250.3761
<b>Total</b>	<b>0.2280</b>	<b>2.0611</b>	<b>1.8153</b>	<b>2.8900e-003</b>		<b>0.1202</b>	<b>0.1202</b>		<b>0.1130</b>	<b>0.1130</b>	<b>0.0000</b>	<b>249.1016</b>	<b>249.1016</b>	<b>0.0607</b>	<b>0.0000</b>	<b>250.3761</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	0.1666	1.1153	2.5193	4.2900e-003	0.1179	0.0194	0.1373	0.0337	0.0178	0.0515	0.0000	362.7990	362.7990	2.8200e-003	0.0000	362.8582
Worker	0.1046	0.1519	1.5160	4.2800e-003	0.3523	2.6600e-003	0.3549	0.0937	2.4600e-003	0.0961	0.0000	270.2835	270.2835	0.0140	0.0000	270.5767
<b>Total</b>	<b>0.2713</b>	<b>1.2671</b>	<b>4.0352</b>	<b>8.5700e-003</b>	<b>0.4702</b>	<b>0.0220</b>	<b>0.4922</b>	<b>0.1274</b>	<b>0.0203</b>	<b>0.1476</b>	<b>0.0000</b>	<b>633.0826</b>	<b>633.0826</b>	<b>0.0168</b>	<b>0.0000</b>	<b>633.4348</b>

### 3.4 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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0339	301.0339	0.0725	0.0000	302.5568
<b>Total</b>	<b>0.2471</b>	<b>2.2629</b>	<b>2.1582</b>	<b>3.5000e-003</b>		<b>0.1246</b>	<b>0.1246</b>		<b>0.1172</b>	<b>0.1172</b>	<b>0.0000</b>	<b>301.0339</b>	<b>301.0339</b>	<b>0.0725</b>	<b>0.0000</b>	<b>302.5568</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	0.1895	1.0989	2.9310	5.1700e-003	0.1425	0.0206	0.1631	0.0407	0.0190	0.0597	0.0000	437.5298	437.5298	3.3500e-003	0.0000	437.6002
Worker	0.1176	0.1693	1.7076	5.2000e-003	0.4257	3.2500e-003	0.4289	0.1132	3.0100e-003	0.1162	0.0000	322.5415	322.5415	0.0162	0.0000	322.8809
<b>Total</b>	<b>0.3072</b>	<b>1.2682</b>	<b>4.6386</b>	<b>0.0104</b>	<b>0.5682</b>	<b>0.0239</b>	<b>0.5920</b>	<b>0.1539</b>	<b>0.0220</b>	<b>0.1759</b>	<b>0.0000</b>	<b>760.0713</b>	<b>760.0713</b>	<b>0.0195</b>	<b>0.0000</b>	<b>760.4811</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	0.2471	2.2629	2.1582	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.0335	301.0335	0.0725	0.0000	302.5565
<b>Total</b>	<b>0.2471</b>	<b>2.2629</b>	<b>2.1582</b>	<b>3.5000e-003</b>		<b>0.1246</b>	<b>0.1246</b>		<b>0.1172</b>	<b>0.1172</b>	<b>0.0000</b>	<b>301.0335</b>	<b>301.0335</b>	<b>0.0725</b>	<b>0.0000</b>	<b>302.5565</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	0.1895	1.0989	2.9310	5.1700e-003	0.1425	0.0206	0.1631	0.0407	0.0190	0.0597	0.0000	437.5298	437.5298	3.3500e-003	0.0000	437.6002
Worker	0.1176	0.1693	1.7076	5.2000e-003	0.4257	3.2500e-003	0.4289	0.1132	3.0100e-003	0.1162	0.0000	322.5415	322.5415	0.0162	0.0000	322.8809
<b>Total</b>	<b>0.3072</b>	<b>1.2682</b>	<b>4.6386</b>	<b>0.0104</b>	<b>0.5682</b>	<b>0.0239</b>	<b>0.5920</b>	<b>0.1539</b>	<b>0.0220</b>	<b>0.1759</b>	<b>0.0000</b>	<b>760.0713</b>	<b>760.0713</b>	<b>0.0195</b>	<b>0.0000</b>	<b>760.4811</b>

### 3.4 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	0.1878	1.7168	1.8042	2.9600e-003		0.0890	0.0890		0.0838	0.0838	0.0000	254.9954	254.9954	0.0610	0.0000	256.2764
<b>Total</b>	<b>0.1878</b>	<b>1.7168</b>	<b>1.8042</b>	<b>2.9600e-003</b>		<b>0.0890</b>	<b>0.0890</b>		<b>0.0838</b>	<b>0.0838</b>	<b>0.0000</b>	<b>254.9954</b>	<b>254.9954</b>	<b>0.0610</b>	<b>0.0000</b>	<b>256.2764</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	0.1535	0.8228	2.3776	4.3700e-003	0.1206	0.0171	0.1377	0.0345	0.0157	0.0502	0.0000	370.0012	370.0012	2.8800e-003	0.0000	370.0616
Worker	0.0930	0.1332	1.3477	4.4000e-003	0.3604	2.7500e-003	0.3632	0.0958	2.5500e-003	0.0984	0.0000	268.9344	268.9344	0.0130	0.0000	269.2083
<b>Total</b>	<b>0.2464</b>	<b>0.9559</b>	<b>3.7253</b>	<b>8.7700e-003</b>	<b>0.4811</b>	<b>0.0198</b>	<b>0.5009</b>	<b>0.1303</b>	<b>0.0183</b>	<b>0.1486</b>	<b>0.0000</b>	<b>638.9356</b>	<b>638.9356</b>	<b>0.0159</b>	<b>0.0000</b>	<b>639.2699</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	0.1878	1.7168	1.8042	2.9600e-003		0.0890	0.0890		0.0838	0.0838	0.0000	254.9951	254.9951	0.0610	0.0000	256.2761
<b>Total</b>	<b>0.1878</b>	<b>1.7168</b>	<b>1.8042</b>	<b>2.9600e-003</b>		<b>0.0890</b>	<b>0.0890</b>		<b>0.0838</b>	<b>0.0838</b>	<b>0.0000</b>	<b>254.9951</b>	<b>254.9951</b>	<b>0.0610</b>	<b>0.0000</b>	<b>256.2761</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	0.1535	0.8228	2.3776	4.3700e-003	0.1206	0.0171	0.1377	0.0345	0.0157	0.0502	0.0000	370.0012	370.0012	2.8800e-003	0.0000	370.0616
Worker	0.0930	0.1332	1.3477	4.4000e-003	0.3604	2.7500e-003	0.3632	0.0958	2.5500e-003	0.0984	0.0000	268.9344	268.9344	0.0130	0.0000	269.2083
<b>Total</b>	<b>0.2464</b>	<b>0.9559</b>	<b>3.7253</b>	<b>8.7700e-003</b>	<b>0.4811</b>	<b>0.0198</b>	<b>0.5009</b>	<b>0.1303</b>	<b>0.0183</b>	<b>0.1486</b>	<b>0.0000</b>	<b>638.9356</b>	<b>638.9356</b>	<b>0.0159</b>	<b>0.0000</b>	<b>639.2699</b>

### 3.5 Paving - 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	0.0108	0.1091	0.1428	2.2000e-004		5.5800e-003	5.5800e-003		5.1300e-003	5.1300e-003	0.0000	19.6014	19.6014	6.3400e-003	0.0000	19.7346
Paving	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0345</b>	<b>0.1091</b>	<b>0.1428</b>	<b>2.2000e-004</b>		<b>5.5800e-003</b>	<b>5.5800e-003</b>		<b>5.1300e-003</b>	<b>5.1300e-003</b>	<b>0.0000</b>	<b>19.6014</b>	<b>19.6014</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>19.7346</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	3.1000e-004	4.4000e-004	4.4700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8926	0.8926	4.0000e-005	0.0000	0.8935
<b>Total</b>	<b>3.1000e-004</b>	<b>4.4000e-004</b>	<b>4.4700e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.8926</b>	<b>0.8926</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8935</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	0.0108	0.1091	0.1428	2.2000e-004		5.5800e-003	5.5800e-003		5.1300e-003	5.1300e-003	0.0000	19.6014	19.6014	6.3400e-003	0.0000	19.7345
Paving	0.0237					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0345</b>	<b>0.1091</b>	<b>0.1428</b>	<b>2.2000e-004</b>		<b>5.5800e-003</b>	<b>5.5800e-003</b>		<b>5.1300e-003</b>	<b>5.1300e-003</b>	<b>0.0000</b>	<b>19.6014</b>	<b>19.6014</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>19.7345</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	3.1000e-004	4.4000e-004	4.4700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8926	0.8926	4.0000e-005	0.0000	0.8935
<b>Total</b>	<b>3.1000e-004</b>	<b>4.4000e-004</b>	<b>4.4700e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.8926</b>	<b>0.8926</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8935</b>

**3.6 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	2.2330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9400e-003	0.0134	0.0172	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.4256	2.4256	1.6000e-004	0.0000	2.4289
<b>Total</b>	<b>2.2349</b>	<b>0.0134</b>	<b>0.0172</b>	<b>3.0000e-005</b>		<b>7.8000e-004</b>	<b>7.8000e-004</b>		<b>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.4289</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	1.6000e-003	2.3000e-003	0.0232	8.0000e-005	6.2100e-003	5.0000e-005	6.2600e-003	1.6500e-003	4.0000e-005	1.7000e-003	0.0000	4.6355	4.6355	2.2000e-004	0.0000	4.6402
<b>Total</b>	<b>1.6000e-003</b>	<b>2.3000e-003</b>	<b>0.0232</b>	<b>8.0000e-005</b>	<b>6.2100e-003</b>	<b>5.0000e-005</b>	<b>6.2600e-003</b>	<b>1.6500e-003</b>	<b>4.0000e-005</b>	<b>1.7000e-003</b>	<b>0.0000</b>	<b>4.6355</b>	<b>4.6355</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>4.6402</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	2.2330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9400e-003	0.0134	0.0172	3.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004	0.0000	2.4256	2.4256	1.6000e-004	0.0000	2.4289
<b>Total</b>	<b>2.2349</b>	<b>0.0134</b>	<b>0.0172</b>	<b>3.0000e-005</b>		<b>7.8000e-004</b>	<b>7.8000e-004</b>		<b>7.8000e-004</b>	<b>7.8000e-004</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>2.4289</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	1.6000e-003	2.3000e-003	0.0232	8.0000e-005	6.2100e-003	5.0000e-005	6.2600e-003	1.6500e-003	4.0000e-005	1.7000e-003	0.0000	4.6355	4.6355	2.2000e-004	0.0000	4.6402
<b>Total</b>	<b>1.6000e-003</b>	<b>2.3000e-003</b>	<b>0.0232</b>	<b>8.0000e-005</b>	<b>6.2100e-003</b>	<b>5.0000e-005</b>	<b>6.2600e-003</b>	<b>1.6500e-003</b>	<b>4.0000e-005</b>	<b>1.7000e-003</b>	<b>0.0000</b>	<b>4.6355</b>	<b>4.6355</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>4.6402</b>

**3.6 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-004	6.5000e-004	9.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.1176</b>	<b>6.5000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</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	8.0000e-005	1.1000e-004	1.1400e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2407	0.2407	1.0000e-005	0.0000	0.2409
<b>Total</b>	<b>8.0000e-005</b>	<b>1.1000e-004</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2407</b>	<b>0.2407</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2409</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	0.1175					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-004	6.5000e-004	9.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.1176</b>	<b>6.5000e-004</b>	<b>9.1000e-004</b>	<b>0.0000</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>		<b>4.0000e-005</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</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	8.0000e-005	1.1000e-004	1.1400e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2407	0.2407	1.0000e-005	0.0000	0.2409
<b>Total</b>	<b>8.0000e-005</b>	<b>1.1000e-004</b>	<b>1.1400e-003</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>3.3000e-004</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>0.2407</b>	<b>0.2407</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2409</b>



## Merced Gateway Phase 3 Construction Merced County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.40	Acre	5.40	235,224.00	0
Parking Lot	10.50	Acre	10.50	457,380.00	0
Regional Shopping Center	215.51	1000sqft	4.80	215,507.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

- Project Characteristics -
- Land Use - Phase 3
- Construction Phase - Phase 3 to start in 2023 and be completed in 2026
- Vehicle Trips - Construction only
- Area Coating - Construction only
- Energy Use - Construction only
- Water And Wastewater - Construction only
- Solid Waste - Construction only
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	0
tblConstructionPhase	NumDays	370.00	698.00
tblEnergyUse	LightingElect	4.22	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	T24E	2.61	0.00
tblEnergyUse	T24NG	9.07	0.00
tblLandUse	LandUseSquareFeet	215,510.00	215,507.00
tblLandUse	LotAcreage	4.95	4.80
tblProjectCharacteristics	OperationalYear	2014	2025
tblSolidWaste	SolidWasteGenerationRate	226.29	0.00
tblVehicleTrips	ST_TR	49.97	0.00
tblVehicleTrips	SU_TR	25.24	0.00
tblVehicleTrips	WD_TR	42.94	0.00
tblWater	IndoorWaterUseRate	15,963,369.11	0.00
tblWater	OutdoorWaterUseRate	9,784,000.42	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					
2023	0.4358	3.0072	5.4319	0.0117	0.6558	0.1246	0.7804	0.2246	0.1163	0.3409	0.0000	903.0548	903.0548	0.1080	0.0000	905.3230
2024	0.4077	2.6129	5.4707	0.0127	0.5021	0.0996	0.6017	0.1360	0.0933	0.2293	0.0000	962.7826	962.7826	0.0869	0.0000	964.6072
2025	3.4205	2.1963	4.7056	0.0111	0.4321	0.0796	0.5117	0.1170	0.0745	0.1915	0.0000	840.2611	840.2611	0.0797	0.0000	841.9337

2026	0.1616	6.6000e-004	1.7900e-003	1.0000e-005	2.9000e-004	3.0000e-005	3.2000e-004	8.0000e-005	3.0000e-005	1.0000e-004	0.0000	0.3348	0.3348	2.0000e-005	0.0000	0.3351
<b>Total</b>	<b>4.4255</b>	<b>7.8170</b>	<b>15.6100</b>	<b>0.0354</b>	<b>1.5903</b>	<b>0.3038</b>	<b>1.8941</b>	<b>0.4777</b>	<b>0.2840</b>	<b>0.7617</b>	<b>0.0000</b>	<b>2,706.4333</b>	<b>2,706.4333</b>	<b>0.2746</b>	<b>0.0000</b>	<b>2,712.1990</b>

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.4358	3.0072	5.4319	0.0117	0.6558	0.1246	0.7804	0.2246	0.1163	0.3409	0.0000	903.0544	903.0544	0.1080	0.0000	905.3226
2024	0.4077	2.6129	5.4707	0.0127	0.5021	0.0996	0.6017	0.1360	0.0933	0.2293	0.0000	962.7822	962.7822	0.0869	0.0000	964.6069
2025	3.4205	2.1963	4.7056	0.0111	0.4321	0.0796	0.5117	0.1170	0.0745	0.1915	0.0000	840.2607	840.2607	0.0797	0.0000	841.9334
2026	0.1616	6.6000e-004	1.7900e-003	1.0000e-005	2.9000e-004	3.0000e-005	3.2000e-004	8.0000e-005	3.0000e-005	1.0000e-004	0.0000	0.3348	0.3348	2.0000e-005	0.0000	0.3351
<b>Total</b>	<b>4.4255</b>	<b>7.8170</b>	<b>15.6100</b>	<b>0.0354</b>	<b>1.5903</b>	<b>0.3038</b>	<b>1.8941</b>	<b>0.4777</b>	<b>0.2840</b>	<b>0.7617</b>	<b>0.0000</b>	<b>2,706.4321</b>	<b>2,706.4321</b>	<b>0.2746</b>	<b>0.0000</b>	<b>2,712.1979</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>

## 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	1/3/2023	1/16/2023	5	10	
2	Grading	Grading	1/17/2023	3/6/2023	5	35	
3	Building Construction	Building Construction	3/7/2023	11/6/2025	5	698	
4	Paving	Paving	11/7/2025	12/4/2025	5	20	
5	Architectural Coating	Architectural Coating	12/5/2025	1/1/2026	5	20	

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

**Acres of Grading (Grading Phase): 87.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 696,679; Non-Residential Outdoor: 232,226 (Architectural Coating**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	360.00	149.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	72.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Site Preparation - 2023

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1497	0.1441	2.0000e-004		6.9500e-003	6.9500e-003		6.4000e-003	6.4000e-003	0.0000	17.2091	17.2091	5.5700e-003	0.0000	17.3260
<b>Total</b>	<b>0.0151</b>	<b>0.1497</b>	<b>0.1441</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>6.9500e-003</b>	<b>0.0973</b>	<b>0.0497</b>	<b>6.4000e-003</b>	<b>0.0561</b>	<b>0.0000</b>	<b>17.2091</b>	<b>17.2091</b>	<b>5.5700e-003</b>	<b>0.0000</b>	<b>17.3260</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	1.7000e-004	2.5000e-004	2.5100e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.5283	0.5283	2.0000e-005	0.0000	0.5288
<b>Total</b>	<b>1.7000e-004</b>	<b>2.5000e-004</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.5283</b>	<b>0.5283</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5288</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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0151	0.1497	0.1441	2.0000e-004		6.9500e-003	6.9500e-003		6.4000e-003	6.4000e-003	0.0000	17.2091	17.2091	5.5700e-003	0.0000	17.3259
<b>Total</b>	<b>0.0151</b>	<b>0.1497</b>	<b>0.1441</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>6.9500e-003</b>	<b>0.0973</b>	<b>0.0497</b>	<b>6.4000e-003</b>	<b>0.0561</b>	<b>0.0000</b>	<b>17.2091</b>	<b>17.2091</b>	<b>5.5700e-003</b>	<b>0.0000</b>	<b>17.3259</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	1.7000e-004	2.5000e-004	2.5100e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.5283	0.5283	2.0000e-005	0.0000	0.5288
<b>Total</b>	<b>1.7000e-004</b>	<b>2.5000e-004</b>	<b>2.5100e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.5283</b>	<b>0.5283</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5288</b>

**3.3 Grading - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0618	0.6114	0.5983	1.0800e-003		0.0272	0.0272		0.0250	0.0250	0.0000	95.0232	95.0232	0.0307	0.0000	95.6686
<b>Total</b>	<b>0.0618</b>	<b>0.6114</b>	<b>0.5983</b>	<b>1.0800e-003</b>	<b>0.1518</b>	<b>0.0272</b>	<b>0.1790</b>	<b>0.0629</b>	<b>0.0250</b>	<b>0.0880</b>	<b>0.0000</b>	<b>95.0232</b>	<b>95.0232</b>	<b>0.0307</b>	<b>0.0000</b>	<b>95.6686</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	6.7000e-004	9.6000e-004	9.7500e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.0544	2.0544	1.0000e-004	0.0000	2.0565
<b>Total</b>	<b>6.7000e-004</b>	<b>9.6000e-004</b>	<b>9.7500e-003</b>	<b>3.0000e-005</b>	<b>2.7900e-003</b>	<b>2.0000e-005</b>	<b>2.8100e-003</b>	<b>7.4000e-004</b>	<b>2.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>2.0544</b>	<b>2.0544</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.0565</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					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0618	0.6114	0.5983	1.0800e-003		0.0272	0.0272		0.0250	0.0250	0.0000	95.0231	95.0231	0.0307	0.0000	95.6685
<b>Total</b>	<b>0.0618</b>	<b>0.6114</b>	<b>0.5983</b>	<b>1.0800e-003</b>	<b>0.1518</b>	<b>0.0272</b>	<b>0.1790</b>	<b>0.0629</b>	<b>0.0250</b>	<b>0.0880</b>	<b>0.0000</b>	<b>95.0231</b>	<b>95.0231</b>	<b>0.0307</b>	<b>0.0000</b>	<b>95.6685</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	6.7000e-004	9.6000e-004	9.7500e-003	3.0000e-005	2.7900e-003	2.0000e-005	2.8100e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.0544	2.0544	1.0000e-004	0.0000	2.0565
<b>Total</b>	<b>6.7000e-004</b>	<b>9.6000e-004</b>	<b>9.7500e-003</b>	<b>3.0000e-005</b>	<b>2.7900e-003</b>	<b>2.0000e-005</b>	<b>2.8100e-003</b>	<b>7.4000e-004</b>	<b>2.0000e-005</b>	<b>7.6000e-004</b>	<b>0.0000</b>	<b>2.0544</b>	<b>2.0544</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.0565</b>

**3.4 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	0.1676	1.5315	1.7344	2.8700e-003		0.0746	0.0746		0.0702	0.0702	0.0000	247.0037	247.0037	0.0587	0.0000	248.2358
<b>Total</b>	<b>0.1676</b>	<b>1.5315</b>	<b>1.7344</b>	<b>2.8700e-003</b>		<b>0.0746</b>	<b>0.0746</b>		<b>0.0702</b>	<b>0.0702</b>	<b>0.0000</b>	<b>247.0037</b>	<b>247.0037</b>	<b>0.0587</b>	<b>0.0000</b>	<b>248.2358</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	0.1164	0.6074	1.8695	3.7200e-003	0.1030	0.0136	0.1165	0.0294	0.0125	0.0419	0.0000	315.1327	315.1327	2.2700e-003	0.0000	315.1804
Worker	0.0741	0.1060	1.0733	3.7500e-003	0.3072	2.3400e-003	0.3095	0.0817	2.1700e-003	0.0838	0.0000	226.1035	226.1035	0.0107	0.0000	226.3270
<b>Total</b>	<b>0.1905</b>	<b>0.7135</b>	<b>2.9428</b>	<b>7.4700e-003</b>	<b>0.4102</b>	<b>0.0159</b>	<b>0.4261</b>	<b>0.1111</b>	<b>0.0147</b>	<b>0.1258</b>	<b>0.0000</b>	<b>541.2362</b>	<b>541.2362</b>	<b>0.0129</b>	<b>0.0000</b>	<b>541.5074</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	0.1676	1.5315	1.7344	2.8700e-003		0.0746	0.0746		0.0702	0.0702	0.0000	247.0034	247.0034	0.0587	0.0000	248.2355
<b>Total</b>	<b>0.1676</b>	<b>1.5315</b>	<b>1.7344</b>	<b>2.8700e-003</b>		<b>0.0746</b>	<b>0.0746</b>		<b>0.0702</b>	<b>0.0702</b>	<b>0.0000</b>	<b>247.0034</b>	<b>247.0034</b>	<b>0.0587</b>	<b>0.0000</b>	<b>248.2355</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	0.1164	0.6074	1.8695	3.7200e-003	0.1030	0.0136	0.1165	0.0294	0.0125	0.0419	0.0000	315.1327	315.1327	2.2700e-003	0.0000	315.1804
Worker	0.0741	0.1060	1.0733	3.7500e-003	0.3072	2.3400e-003	0.3095	0.0817	2.1700e-003	0.0838	0.0000	226.1035	226.1035	0.0107	0.0000	226.3270
<b>Total</b>	<b>0.1905</b>	<b>0.7135</b>	<b>2.9428</b>	<b>7.4700e-003</b>	<b>0.4102</b>	<b>0.0159</b>	<b>0.4261</b>	<b>0.1111</b>	<b>0.0147</b>	<b>0.1258</b>	<b>0.0000</b>	<b>541.2362</b>	<b>541.2362</b>	<b>0.0129</b>	<b>0.0000</b>	<b>541.5074</b>

### 3.4 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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4646	302.4646	0.0714	0.0000	303.9643
<b>Total</b>	<b>0.1920</b>	<b>1.7524</b>	<b>2.1135</b>	<b>3.5200e-003</b>		<b>0.0800</b>	<b>0.0800</b>		<b>0.0752</b>	<b>0.0752</b>	<b>0.0000</b>	<b>302.4646</b>	<b>302.4646</b>	<b>0.0714</b>	<b>0.0000</b>	<b>303.9643</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	0.1302	0.7380	2.1101	4.5500e-003	0.1260	0.0167	0.1427	0.0360	0.0153	0.0514	0.0000	385.6962	385.6962	2.7900e-003	0.0000	385.7547
Worker	0.0855	0.1224	1.2472	4.6100e-003	0.3761	2.9000e-003	0.3790	0.1000	2.6900e-003	0.1027	0.0000	274.6218	274.6218	0.0127	0.0000	274.8882
<b>Total</b>	<b>0.2157</b>	<b>0.8605</b>	<b>3.3573</b>	<b>9.1600e-003</b>	<b>0.5021</b>	<b>0.0196</b>	<b>0.5217</b>	<b>0.1360</b>	<b>0.0180</b>	<b>0.1540</b>	<b>0.0000</b>	<b>660.3180</b>	<b>660.3180</b>	<b>0.0155</b>	<b>0.0000</b>	<b>660.6430</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	0.1920	1.7524	2.1135	3.5200e-003		0.0800	0.0800		0.0752	0.0752	0.0000	302.4642	302.4642	0.0714	0.0000	303.9639
<b>Total</b>	<b>0.1920</b>	<b>1.7524</b>	<b>2.1135</b>	<b>3.5200e-003</b>		<b>0.0800</b>	<b>0.0800</b>		<b>0.0752</b>	<b>0.0752</b>	<b>0.0000</b>	<b>302.4642</b>	<b>302.4642</b>	<b>0.0714</b>	<b>0.0000</b>	<b>303.9639</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	0.1302	0.7380	2.1101	4.5500e-003	0.1260	0.0167	0.1427	0.0360	0.0153	0.0514	0.0000	385.6962	385.6962	2.7900e-003	0.0000	385.7547
Worker	0.0855	0.1224	1.2472	4.6100e-003	0.3761	2.9000e-003	0.3790	0.1000	2.6900e-003	0.1027	0.0000	274.6218	274.6218	0.0127	0.0000	274.8882
<b>Total</b>	<b>0.2157</b>	<b>0.8605</b>	<b>3.3573</b>	<b>9.1600e-003</b>	<b>0.5021</b>	<b>0.0196</b>	<b>0.5217</b>	<b>0.1360</b>	<b>0.0180</b>	<b>0.1540</b>	<b>0.0000</b>	<b>660.3180</b>	<b>660.3180</b>	<b>0.0155</b>	<b>0.0000</b>	<b>660.6430</b>

### **3.4 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	0.1511	1.3775	1.7818	2.9800e-003		0.0583	0.0583		0.0548	0.0548	0.0000	256.3648	256.3648	0.0602	0.0000	257.6284
<b>Total</b>	<b>0.1511</b>	<b>1.3775</b>	<b>1.7818</b>	<b>2.9800e-003</b>		<b>0.0583</b>	<b>0.0583</b>		<b>0.0548</b>	<b>0.0548</b>	<b>0.0000</b>	<b>256.3648</b>	<b>256.3648</b>	<b>0.0602</b>	<b>0.0000</b>	<b>257.6284</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	0.1071	0.6231	1.7350	3.8500e-003	0.1068	0.0142	0.1210	0.0305	0.0130	0.0436	0.0000	326.7582	326.7582	2.3700e-003	0.0000	326.8079
Worker	0.0688	0.0986	1.0078	3.9100e-003	0.3187	2.4700e-003	0.3212	0.0847	2.2900e-003	0.0870	0.0000	230.3123	230.3123	0.0104	0.0000	230.5312
<b>Total</b>	<b>0.1759</b>	<b>0.7217</b>	<b>2.7428</b>	<b>7.7600e-003</b>	<b>0.4255</b>	<b>0.0166</b>	<b>0.4421</b>	<b>0.1152</b>	<b>0.0153</b>	<b>0.1306</b>	<b>0.0000</b>	<b>557.0705</b>	<b>557.0705</b>	<b>0.0128</b>	<b>0.0000</b>	<b>557.3391</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	0.1511	1.3775	1.7818	2.9800e-003		0.0583	0.0583		0.0548	0.0548	0.0000	256.3645	256.3645	0.0602	0.0000	257.6281
<b>Total</b>	<b>0.1511</b>	<b>1.3775</b>	<b>1.7818</b>	<b>2.9800e-003</b>		<b>0.0583</b>	<b>0.0583</b>		<b>0.0548</b>	<b>0.0548</b>	<b>0.0000</b>	<b>256.3645</b>	<b>256.3645</b>	<b>0.0602</b>	<b>0.0000</b>	<b>257.6281</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	0.1071	0.6231	1.7350	3.8500e-003	0.1068	0.0142	0.1210	0.0305	0.0130	0.0436	0.0000	326.7582	326.7582	2.3700e-003	0.0000	326.8079
Worker	0.0688	0.0986	1.0078	3.9100e-003	0.3187	2.4700e-003	0.3212	0.0847	2.2900e-003	0.0870	0.0000	230.3123	230.3123	0.0104	0.0000	230.5312
<b>Total</b>	<b>0.1759</b>	<b>0.7217</b>	<b>2.7428</b>	<b>7.7600e-003</b>	<b>0.4255</b>	<b>0.0166</b>	<b>0.4421</b>	<b>0.1152</b>	<b>0.0153</b>	<b>0.1306</b>	<b>0.0000</b>	<b>557.0705</b>	<b>557.0705</b>	<b>0.0128</b>	<b>0.0000</b>	<b>557.3391</b>

### 3.5 Paving - 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	8.9700e-003	0.0842	0.1428	2.2000e-004		4.1100e-003	4.1100e-003		3.7800e-003	3.7800e-003	0.0000	19.5934	19.5934	6.3400e-003	0.0000	19.7264
Paving	0.0138					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0227</b>	<b>0.0842</b>	<b>0.1428</b>	<b>2.2000e-004</b>		<b>4.1100e-003</b>	<b>4.1100e-003</b>		<b>3.7800e-003</b>	<b>3.7800e-003</b>	<b>0.0000</b>	<b>19.5934</b>	<b>19.5934</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>19.7264</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	2.6000e-004	3.7000e-004	3.7800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8645	0.8645	4.0000e-005	0.0000	0.8654
<b>Total</b>	<b>2.6000e-004</b>	<b>3.7000e-004</b>	<b>3.7800e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.8645</b>	<b>0.8645</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8654</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	8.9700e-003	0.0842	0.1428	2.2000e-004		4.1100e-003	4.1100e-003		3.7800e-003	3.7800e-003	0.0000	19.5933	19.5933	6.3400e-003	0.0000	19.7264
Paving	0.0138					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0227</b>	<b>0.0842</b>	<b>0.1428</b>	<b>2.2000e-004</b>		<b>4.1100e-003</b>	<b>4.1100e-003</b>		<b>3.7800e-003</b>	<b>3.7800e-003</b>	<b>0.0000</b>	<b>19.5933</b>	<b>19.5933</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>19.7264</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	2.6000e-004	3.7000e-004	3.7800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8645	0.8645	4.0000e-005	0.0000	0.8654
<b>Total</b>	<b>2.6000e-004</b>	<b>3.7000e-004</b>	<b>3.7800e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.8645</b>	<b>0.8645</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.8654</b>

**3.6 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	3.0677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6200e-003	0.0109	0.0172	3.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	2.4256	2.4256	1.3000e-004	0.0000	2.4284
<b>Total</b>	<b>3.0693</b>	<b>0.0109</b>	<b>0.0172</b>	<b>3.0000e-005</b>		<b>4.9000e-004</b>	<b>4.9000e-004</b>		<b>4.9000e-004</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.4284</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	1.1800e-003	1.6900e-003	0.0173	7.0000e-005	5.4600e-003	4.0000e-005	5.5000e-003	1.4500e-003	4.0000e-005	1.4900e-003	0.0000	3.9423	3.9423	1.8000e-004	0.0000	3.9460
<b>Total</b>	<b>1.1800e-003</b>	<b>1.6900e-003</b>	<b>0.0173</b>	<b>7.0000e-005</b>	<b>5.4600e-003</b>	<b>4.0000e-005</b>	<b>5.5000e-003</b>	<b>1.4500e-003</b>	<b>4.0000e-005</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>3.9423</b>	<b>3.9423</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>3.9460</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	3.0677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6200e-003	0.0109	0.0172	3.0000e-005		4.9000e-004	4.9000e-004		4.9000e-004	4.9000e-004	0.0000	2.4256	2.4256	1.3000e-004	0.0000	2.4284
<b>Total</b>	<b>3.0693</b>	<b>0.0109</b>	<b>0.0172</b>	<b>3.0000e-005</b>		<b>4.9000e-004</b>	<b>4.9000e-004</b>		<b>4.9000e-004</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>2.4284</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	1.1800e-003	1.6900e-003	0.0173	7.0000e-005	5.4600e-003	4.0000e-005	5.5000e-003	1.4500e-003	4.0000e-005	1.4900e-003	0.0000	3.9423	3.9423	1.8000e-004	0.0000	3.9460
<b>Total</b>	<b>1.1800e-003</b>	<b>1.6900e-003</b>	<b>0.0173</b>	<b>7.0000e-005</b>	<b>5.4600e-003</b>	<b>4.0000e-005</b>	<b>5.5000e-003</b>	<b>1.4500e-003</b>	<b>4.0000e-005</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>3.9423</b>	<b>3.9423</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>3.9460</b>

**3.6 Architectural Coating - 2026**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1615					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	5.7000e-004	9.0000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.1616</b>	<b>5.7000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</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	6.0000e-005	9.0000e-005	8.8000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2071	0.2071	1.0000e-005	0.0000	0.2073
<b>Total</b>	<b>6.0000e-005</b>	<b>9.0000e-005</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>2.9000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2071</b>	<b>0.2071</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2073</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	0.1615					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-005	5.7000e-004	9.0000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1278
<b>Total</b>	<b>0.1616</b>	<b>5.7000e-004</b>	<b>9.0000e-004</b>	<b>0.0000</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>		<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1278</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	6.0000e-005	9.0000e-005	8.8000e-004	0.0000	2.9000e-004	0.0000	2.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2071	0.2071	1.0000e-005	0.0000	0.2073
<b>Total</b>	<b>6.0000e-005</b>	<b>9.0000e-005</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>2.9000e-004</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.2071</b>	<b>0.2071</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.2073</b>



**Merced Gateway Phase 4 Construction  
Merced County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.90	Acre	2.90	126,324.00	0
Single Family Housing	178.00	Dwelling Unit	5.50	320,400.00	509

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2019
<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**

- Project Characteristics -
- Land Use - Phase 4 - 178 dwelling units on 8.4 gross acres
- Construction Phase - Phase 4 expected to be constructed 2017-2019
- Architectural Coating -
- Vehicle Trips - Construction only
- Area Coating - Construction only
- Energy Use - Construction only
- Water And Wastewater - Construction only
- Solid Waste - Construction only
- Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	0
tblConstructionPhase	NumDays	230.00	452.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	5,093.98	0.00
tblEnergyUse	NT24NG	6,005.20	0.00
tblEnergyUse	T24E	960.89	0.00
tblEnergyUse	T24NG	25,333.33	0.00
tblLandUse	LotAcreage	57.79	5.50
tblProjectCharacteristics	OperationalYear	2014	2019
tblSolidWaste	SolidWasteGenerationRate	183.24	0.00
tblVehicleTrips	ST_TR	10.08	0.00
tblVehicleTrips	SU_TR	8.77	0.00
tblVehicleTrips	WD_TR	9.57	0.00
tblWater	IndoorWaterUseRate	11,597,416.56	0.00
tblWater	OutdoorWaterUseRate	7,311,414.79	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					
2017	0.5322	4.1261	4.0542	5.9900e-003	0.2948	0.2465	0.5413	0.1209	0.2307	0.3516	0.0000	511.5756	511.5756	0.0879	0.0000	513.4214
2018	4.1083	3.1811	3.4349	5.5700e-003	0.1352	0.1834	0.3186	0.0365	0.1721	0.2087	0.0000	465.8171	465.8171	0.0764	0.0000	467.4222
2019	0.1944	9.6000e-004	1.3500e-003	0.0000	9.0000e-005	7.0000e-005	1.6000e-004	2.0000e-005	7.0000e-005	9.0000e-005	0.0000	0.2009	0.2009	1.0000e-005	0.0000	0.2012
<b>Total</b>	<b>4.8349</b>	<b>7.3082</b>	<b>7.4905</b>	<b>0.0116</b>	<b>0.4301</b>	<b>0.4299</b>	<b>0.8600</b>	<b>0.1574</b>	<b>0.4029</b>	<b>0.5603</b>	<b>0.0000</b>	<b>977.5936</b>	<b>977.5936</b>	<b>0.1643</b>	<b>0.0000</b>	<b>981.0448</b>

**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					
2017	0.5322	4.1261	4.0542	5.9900e-003	0.2948	0.2465	0.5413	0.1209	0.2307	0.3516	0.0000	511.5752	511.5752	0.0879	0.0000	513.4210
2018	4.1083	3.1811	3.4349	5.5700e-003	0.1352	0.1834	0.3186	0.0365	0.1721	0.2087	0.0000	465.8167	465.8167	0.0764	0.0000	467.4218
2019	0.1944	9.6000e-004	1.3500e-003	0.0000	9.0000e-005	7.0000e-005	1.6000e-004	2.0000e-005	7.0000e-005	9.0000e-005	0.0000	0.2009	0.2009	1.0000e-005	0.0000	0.2012
<b>Total</b>	<b>4.8349</b>	<b>7.3082</b>	<b>7.4905</b>	<b>0.0116</b>	<b>0.4301</b>	<b>0.4299</b>	<b>0.8600</b>	<b>0.1574</b>	<b>0.4029</b>	<b>0.5603</b>	<b>0.0000</b>	<b>977.5928</b>	<b>977.5928</b>	<b>0.1643</b>	<b>0.0000</b>	<b>981.0441</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>

**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	1/1/2017	1/13/2017	5	10	
2	Grading	Grading	1/14/2017	2/10/2017	5	20	
3	Building Construction	Building Construction	2/11/2017	11/6/2018	5	452	
4	Paving	Paving	11/7/2018	12/4/2018	5	20	
5	Architectural Coating	Architectural Coating	12/5/2018	1/1/2019	5	20	

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

**Acres of Grading (Grading Phase): 10**

Acres of Paving: 0

Residential Indoor: 648,810; Residential Outdoor: 216,270; Non-Residential Indoor: 189,486; Non-Residential Outdoor: 63,162

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	117.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	23.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Site Preparation - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
<b>Total</b>	<b>0.0242</b>	<b>0.2588</b>	<b>0.1970</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>0.0138</b>	<b>0.1041</b>	<b>0.0497</b>	<b>0.0127</b>	<b>0.0623</b>	<b>0.0000</b>	<b>18.1577</b>	<b>18.1577</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>18.2745</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	3.0000e-004	4.1000e-004	4.1300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6132	0.6132	3.0000e-005	0.0000	0.6139
<b>Total</b>	<b>3.0000e-004</b>	<b>4.1000e-004</b>	<b>4.1300e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6132</b>	<b>0.6132</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6139</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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0242	0.2588	0.1970	2.0000e-004		0.0138	0.0138		0.0127	0.0127	0.0000	18.1577	18.1577	5.5600e-003	0.0000	18.2745
<b>Total</b>	<b>0.0242</b>	<b>0.2588</b>	<b>0.1970</b>	<b>2.0000e-004</b>	<b>0.0903</b>	<b>0.0138</b>	<b>0.1041</b>	<b>0.0497</b>	<b>0.0127</b>	<b>0.0623</b>	<b>0.0000</b>	<b>18.1577</b>	<b>18.1577</b>	<b>5.5600e-003</b>	<b>0.0000</b>	<b>18.2745</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	3.0000e-004	4.1000e-004	4.1300e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.2000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6132	0.6132	3.0000e-005	0.0000	0.6139
<b>Total</b>	<b>3.0000e-004</b>	<b>4.1000e-004</b>	<b>4.1300e-003</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>	<b>7.2000e-004</b>	<b>1.9000e-004</b>	<b>1.0000e-005</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.6132</b>	<b>0.6132</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.6139</b>

### 3.3 Grading - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
<b>Total</b>	<b>0.0346</b>	<b>0.3598</b>	<b>0.2538</b>	<b>3.0000e-004</b>	<b>0.0655</b>	<b>0.0204</b>	<b>0.0859</b>	<b>0.0337</b>	<b>0.0188</b>	<b>0.0524</b>	<b>0.0000</b>	<b>27.6117</b>	<b>27.6117</b>	<b>8.4600e-003</b>	<b>0.0000</b>	<b>27.7893</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	4.9000e-004	6.9000e-004	6.8900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0220	1.0220	6.0000e-005	0.0000	1.0232
<b>Total</b>	<b>4.9000e-004</b>	<b>6.9000e-004</b>	<b>6.8900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.0220</b>	<b>1.0220</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.0232</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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0346	0.3598	0.2538	3.0000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	27.6117	27.6117	8.4600e-003	0.0000	27.7893
<b>Total</b>	<b>0.0346</b>	<b>0.3598</b>	<b>0.2538</b>	<b>3.0000e-004</b>	<b>0.0655</b>	<b>0.0204</b>	<b>0.0859</b>	<b>0.0337</b>	<b>0.0188</b>	<b>0.0524</b>	<b>0.0000</b>	<b>27.6117</b>	<b>27.6117</b>	<b>8.4600e-003</b>	<b>0.0000</b>	<b>27.7893</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	4.9000e-004	6.9000e-004	6.8900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0220	1.0220	6.0000e-005	0.0000	1.0232
<b>Total</b>	<b>4.9000e-004</b>	<b>6.9000e-004</b>	<b>6.8900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>1.0220</b>	<b>1.0220</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.0232</b>

### 3.4 Building Construction - 2017

#### 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	0.3568	3.0367	2.0849	3.0800e-003		0.2048	0.2048		0.1924	0.1924	0.0000	275.4010	275.4010	0.0678	0.0000	276.8244
<b>Total</b>	<b>0.3568</b>	<b>3.0367</b>	<b>2.0849</b>	<b>3.0800e-003</b>		<b>0.2048</b>	<b>0.2048</b>		<b>0.1924</b>	<b>0.1924</b>	<b>0.0000</b>	<b>275.4010</b>	<b>275.4010</b>	<b>0.0678</b>	<b>0.0000</b>	<b>276.8244</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	0.0717	0.4078	0.8894	1.0900e-003	0.0297	6.6300e-003	0.0364	8.5000e-003	6.0900e-003	0.0146	0.0000	97.1000	97.1000	7.9000e-004	0.0000	97.1166
Worker	0.0441	0.0619	0.6181	1.3000e-003	0.1073	8.5000e-004	0.1082	0.0285	7.8000e-004	0.0293	0.0000	91.6702	91.6702	5.2000e-003	0.0000	91.7795
<b>Total</b>	<b>0.1159</b>	<b>0.4698</b>	<b>1.5075</b>	<b>2.3900e-003</b>	<b>0.1371</b>	<b>7.4800e-003</b>	<b>0.1445</b>	<b>0.0370</b>	<b>6.8700e-003</b>	<b>0.0439</b>	<b>0.0000</b>	<b>188.7701</b>	<b>188.7701</b>	<b>5.9900e-003</b>	<b>0.0000</b>	<b>188.8961</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	0.3568	3.0367	2.0849	3.0800e-003		0.2048	0.2048		0.1924	0.1924	0.0000	275.4007	275.4007	0.0678	0.0000	276.8240
<b>Total</b>	<b>0.3568</b>	<b>3.0367</b>	<b>2.0849</b>	<b>3.0800e-003</b>		<b>0.2048</b>	<b>0.2048</b>		<b>0.1924</b>	<b>0.1924</b>	<b>0.0000</b>	<b>275.4007</b>	<b>275.4007</b>	<b>0.0678</b>	<b>0.0000</b>	<b>276.8240</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	0.0717	0.4078	0.8894	1.0900e-003	0.0297	6.6300e-003	0.0364	8.5000e-003	6.0900e-003	0.0146	0.0000	97.1000	97.1000	7.9000e-004	0.0000	97.1166
Worker	0.0441	0.0619	0.6181	1.3000e-003	0.1073	8.5000e-004	0.1082	0.0285	7.8000e-004	0.0293	0.0000	91.6702	91.6702	5.2000e-003	0.0000	91.7795
<b>Total</b>	<b>0.1159</b>	<b>0.4698</b>	<b>1.5075</b>	<b>2.3900e-003</b>	<b>0.1371</b>	<b>7.4800e-003</b>	<b>0.1445</b>	<b>0.0370</b>	<b>6.8700e-003</b>	<b>0.0439</b>	<b>0.0000</b>	<b>188.7701</b>	<b>188.7701</b>	<b>5.9900e-003</b>	<b>0.0000</b>	<b>188.8961</b>

**3.4 Building Construction - 2018**

**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	0.2962	2.5820	1.9461	2.9800e-003		0.1659	0.1659		0.1559	0.1559	0.0000	262.8143	262.8143	0.0643	0.0000	264.1650
<b>Total</b>	<b>0.2962</b>	<b>2.5820</b>	<b>1.9461</b>	<b>2.9800e-003</b>		<b>0.1659</b>	<b>0.1659</b>		<b>0.1559</b>	<b>0.1559</b>	<b>0.0000</b>	<b>262.8143</b>	<b>262.8143</b>	<b>0.0643</b>	<b>0.0000</b>	<b>264.1650</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	0.0596	0.3533	0.7762	1.0500e-003	0.0287	5.8500e-003	0.0345	8.2000e-003	5.3800e-003	0.0136	0.0000	92.0120	92.0120	7.4000e-004	0.0000	92.0277
Worker	0.0375	0.0536	0.5349	1.2600e-003	0.1036	8.0000e-004	0.1044	0.0275	7.4000e-004	0.0283	0.0000	85.7629	85.7629	4.6700e-003	0.0000	85.8609
<b>Total</b>	<b>0.0970</b>	<b>0.4069</b>	<b>1.3111</b>	<b>2.3100e-003</b>	<b>0.1323</b>	<b>6.6500e-003</b>	<b>0.1389</b>	<b>0.0357</b>	<b>6.1200e-003</b>	<b>0.0419</b>	<b>0.0000</b>	<b>177.7749</b>	<b>177.7749</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>177.8886</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	0.2962	2.5820	1.9461	2.9800e-003		0.1659	0.1659		0.1559	0.1559	0.0000	262.8140	262.8140	0.0643	0.0000	264.1647
<b>Total</b>	<b>0.2962</b>	<b>2.5820</b>	<b>1.9461</b>	<b>2.9800e-003</b>		<b>0.1659</b>	<b>0.1659</b>		<b>0.1559</b>	<b>0.1559</b>	<b>0.0000</b>	<b>262.8140</b>	<b>262.8140</b>	<b>0.0643</b>	<b>0.0000</b>	<b>264.1647</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	0.0596	0.3533	0.7762	1.0500e-003	0.0287	5.8500e-003	0.0345	8.2000e-003	5.3800e-003	0.0136	0.0000	92.0120	92.0120	7.4000e-004	0.0000	92.0277
Worker	0.0375	0.0536	0.5349	1.2600e-003	0.1036	8.0000e-004	0.1044	0.0275	7.4000e-004	0.0283	0.0000	85.7629	85.7629	4.6700e-003	0.0000	85.8609
<b>Total</b>	<b>0.0970</b>	<b>0.4069</b>	<b>1.3111</b>	<b>2.3100e-003</b>	<b>0.1323</b>	<b>6.6500e-003</b>	<b>0.1389</b>	<b>0.0357</b>	<b>6.1200e-003</b>	<b>0.0419</b>	<b>0.0000</b>	<b>177.7749</b>	<b>177.7749</b>	<b>5.4100e-003</b>	<b>0.0000</b>	<b>177.8886</b>

**3.5 Paving - 2018**

**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	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0199</b>	<b>0.1716</b>	<b>0.1449</b>	<b>2.2000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>8.6400e-003</b>	<b>8.6400e-003</b>	<b>0.0000</b>	<b>20.3687</b>	<b>20.3687</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.5019</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	4.3000e-004	6.2000e-004	6.1800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9906	0.9906	5.0000e-005	0.0000	0.9917
<b>Total</b>	<b>4.3000e-004</b>	<b>6.2000e-004</b>	<b>6.1800e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9906</b>	<b>0.9906</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9917</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	0.0161	0.1716	0.1449	2.2000e-004		9.3900e-003	9.3900e-003		8.6400e-003	8.6400e-003	0.0000	20.3687	20.3687	6.3400e-003	0.0000	20.5019
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0199</b>	<b>0.1716</b>	<b>0.1449</b>	<b>2.2000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>8.6400e-003</b>	<b>8.6400e-003</b>	<b>0.0000</b>	<b>20.3687</b>	<b>20.3687</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.5019</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	4.3000e-004	6.2000e-004	6.1800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9906	0.9906	5.0000e-005	0.0000	0.9917
<b>Total</b>	<b>4.3000e-004</b>	<b>6.2000e-004</b>	<b>6.1800e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>	<b>0.0000</b>	<b>0.9906</b>	<b>0.9906</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.9917</b>

### 3.6 Architectural Coating - 2018

#### 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	3.6912					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0191	0.0176	3.0000e-005		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003	0.0000	2.4256	2.4256	2.3000e-004	0.0000	2.4304
<b>Total</b>	<b>3.6941</b>	<b>0.0191</b>	<b>0.0176</b>	<b>3.0000e-005</b>		<b>1.4300e-003</b>	<b>1.4300e-003</b>		<b>1.4300e-003</b>	<b>1.4300e-003</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.4304</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	6.3000e-004	9.0000e-004	9.0000e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.8000e-004	0.0000	1.4429	1.4429	8.0000e-005	0.0000	1.4446
<b>Total</b>	<b>6.3000e-004</b>	<b>9.0000e-004</b>	<b>9.0000e-003</b>	<b>2.0000e-005</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>1.7600e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.4429</b>	<b>1.4429</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4446</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	3.6912					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8400e-003	0.0191	0.0176	3.0000e-005		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003	0.0000	2.4256	2.4256	2.3000e-004	0.0000	2.4304
<b>Total</b>	<b>3.6941</b>	<b>0.0191</b>	<b>0.0176</b>	<b>3.0000e-005</b>		<b>1.4300e-003</b>	<b>1.4300e-003</b>		<b>1.4300e-003</b>	<b>1.4300e-003</b>	<b>0.0000</b>	<b>2.4256</b>	<b>2.4256</b>	<b>2.3000e-004</b>	<b>0.0000</b>	<b>2.4304</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	6.3000e-004	9.0000e-004	9.0000e-003	2.0000e-005	1.7400e-003	1.0000e-005	1.7600e-003	4.6000e-004	1.0000e-005	4.8000e-004	0.0000	1.4429	1.4429	8.0000e-005	0.0000	1.4446
<b>Total</b>	<b>6.3000e-004</b>	<b>9.0000e-004</b>	<b>9.0000e-003</b>	<b>2.0000e-005</b>	<b>1.7400e-003</b>	<b>1.0000e-005</b>	<b>1.7600e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.8000e-004</b>	<b>0.0000</b>	<b>1.4429</b>	<b>1.4429</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4446</b>

### 3.6 Architectural Coating - 2019

#### 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	0.1943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-004	9.2000e-004	9.2000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>0.1944</b>	<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</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	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0732	0.0732	0.0000	0.0000	0.0733
<b>Total</b>	<b>3.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0732</b>	<b>0.0732</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0733</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	0.1943					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-004	9.2000e-004	9.2000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1279
<b>Total</b>	<b>0.1944</b>	<b>9.2000e-004</b>	<b>9.2000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.1277</b>	<b>0.1277</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1279</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	3.0000e-005	4.0000e-005	4.3000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.0732	0.0732	0.0000	0.0000	0.0733
<b>Total</b>	<b>3.0000e-005</b>	<b>4.0000e-005</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>9.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0732</b>	<b>0.0732</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0733</b>

## Merced Gateway Phase 5 Construction Merced County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	9.21	User Defined Unit	0.30	9,209.00	0
Parking Lot	1.40	Acre	1.40	60,984.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<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

Project Characteristics -

Land Use - Phase 5 - User Defined Commercial used to represent a 9,209 sq. ft. fire station

Construction Phase - Phase 5 - fire station construction to start end in 2020

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	0.00	9,209.00
tblLandUse	LotAcreage	0.00	0.30
tblProjectCharacteristics	OperationalYear	2014	2020

### 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	0.3090	1.6512	1.6741	2.9000e-003	0.0475	0.0860	0.1335	0.0166	0.0828	0.0995	0.0000	234.0916	234.0916	0.0378	0.0000	234.8853
<b>Total</b>	<b>0.3090</b>	<b>1.6512</b>	<b>1.6741</b>	<b>2.9000e-003</b>	<b>0.0475</b>	<b>0.0860</b>	<b>0.1335</b>	<b>0.0166</b>	<b>0.0828</b>	<b>0.0995</b>	<b>0.0000</b>	<b>234.0916</b>	<b>234.0916</b>	<b>0.0378</b>	<b>0.0000</b>	<b>234.8853</b>

### 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	0.3090	1.6512	1.6741	2.9000e-003	0.0475	0.0860	0.1335	0.0166	0.0828	0.0995	0.0000	234.0914	234.0914	0.0378	0.0000	234.8851
<b>Total</b>	<b>0.3090</b>	<b>1.6512</b>	<b>1.6741</b>	<b>2.9000e-003</b>	<b>0.0475</b>	<b>0.0860</b>	<b>0.1335</b>	<b>0.0166</b>	<b>0.0828</b>	<b>0.0995</b>	<b>0.0000</b>	<b>234.0914</b>	<b>234.0914</b>	<b>0.0378</b>	<b>0.0000</b>	<b>234.8851</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>

## 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	1/1/2020	1/2/2020	5	2	
2	Grading	Grading	1/3/2020	1/8/2020	5	4	
3	Building Construction	Building Construction	1/9/2020	10/14/2020	5	200	
4	Paving	Paving	10/15/2020	10/28/2020	5	10	
5	Architectural Coating	Architectural Coating	10/29/2020	11/11/2020	5	10	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 16,558; Non-Residential Outdoor: 5,519 (Architectural Coating –**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38

Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7600e-003	0.0179	0.0138	2.0000e-005		9.3000e-004	9.3000e-004		8.5000e-004	8.5000e-004	0.0000	1.5036	1.5036	4.9000e-004	0.0000	1.5138
<b>Total</b>	<b>1.7600e-003</b>	<b>0.0179</b>	<b>0.0138</b>	<b>2.0000e-005</b>	<b>5.8000e-003</b>	<b>9.3000e-004</b>	<b>6.7300e-003</b>	<b>2.9500e-003</b>	<b>8.5000e-004</b>	<b>3.8000e-003</b>	<b>0.0000</b>	<b>1.5036</b>	<b>1.5036</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5138</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	2.0000e-005	3.0000e-005	2.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0490
<b>Total</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0490</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					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7600e-003	0.0179	0.0138	2.0000e-005		9.3000e-004	9.3000e-004		8.5000e-004	8.5000e-004	0.0000	1.5036	1.5036	4.9000e-004	0.0000	1.5138
<b>Total</b>	<b>1.7600e-003</b>	<b>0.0179</b>	<b>0.0138</b>	<b>2.0000e-005</b>	<b>5.8000e-003</b>	<b>9.3000e-004</b>	<b>6.7300e-003</b>	<b>2.9500e-003</b>	<b>8.5000e-004</b>	<b>3.8000e-003</b>	<b>0.0000</b>	<b>1.5036</b>	<b>1.5036</b>	<b>4.9000e-004</b>	<b>0.0000</b>	<b>1.5138</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	2.0000e-005	3.0000e-005	2.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0490	0.0490	0.0000	0.0000	0.0490
<b>Total</b>	<b>2.0000e-005</b>	<b>3.0000e-005</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>6.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0490</b>	<b>0.0490</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0490</b>

### 3.3 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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8800e-003	0.0293	0.0227	3.0000e-005		1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003	0.0000	2.4704	2.4704	8.0000e-004	0.0000	2.4872
<b>Total</b>	<b>2.8800e-003</b>	<b>0.0293</b>	<b>0.0227</b>	<b>3.0000e-005</b>	<b>9.8300e-003</b>	<b>1.5100e-003</b>	<b>0.0113</b>	<b>5.0500e-003</b>	<b>1.3900e-003</b>	<b>6.4400e-003</b>	<b>0.0000</b>	<b>2.4704</b>	<b>2.4704</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4872</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	4.0000e-005	6.0000e-005	5.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0979	0.0979	1.0000e-005	0.0000	0.0980
<b>Total</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0979</b>	<b>0.0979</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0980</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					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8800e-003	0.0293	0.0227	3.0000e-005		1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003	0.0000	2.4704	2.4704	8.0000e-004	0.0000	2.4872
<b>Total</b>	<b>2.8800e-003</b>	<b>0.0293</b>	<b>0.0227</b>	<b>3.0000e-005</b>	<b>9.8300e-003</b>	<b>1.5100e-003</b>	<b>0.0113</b>	<b>5.0500e-003</b>	<b>1.3900e-003</b>	<b>6.4400e-003</b>	<b>0.0000</b>	<b>2.4704</b>	<b>2.4704</b>	<b>8.0000e-004</b>	<b>0.0000</b>	<b>2.4872</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	4.0000e-005	6.0000e-005	5.5000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0979	0.0979	1.0000e-005	0.0000	0.0980
<b>Total</b>	<b>4.0000e-005</b>	<b>6.0000e-005</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>1.3000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0979</b>	<b>0.0979</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0980</b>

### 3.4 Building Construction - 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	0.2023	1.4701	1.3154	2.2000e-003		0.0792	0.0792		0.0766	0.0766	0.0000	180.7192	180.7192	0.0334	0.0000	181.4213
<b>Total</b>	<b>0.2023</b>	<b>1.4701</b>	<b>1.3154</b>	<b>2.2000e-003</b>		<b>0.0792</b>	<b>0.0792</b>		<b>0.0766</b>	<b>0.0766</b>	<b>0.0000</b>	<b>180.7192</b>	<b>180.7192</b>	<b>0.0334</b>	<b>0.0000</b>	<b>181.4213</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	0.0110	0.0733	0.1656	2.8000e-004	7.7500e-003	1.2700e-003	9.0300e-003	2.2200e-003	1.1700e-003	3.3900e-003	0.0000	23.8527	23.8527	1.9000e-004	0.0000	23.8566
Worker	6.8700e-003	9.9700e-003	0.0995	2.8000e-004	0.0231	1.7000e-004	0.0233	6.1500e-003	1.6000e-004	6.3100e-003	0.0000	17.7448	17.7448	9.2000e-004	0.0000	17.7640
<b>Total</b>	<b>0.0178</b>	<b>0.0833</b>	<b>0.2652</b>	<b>5.6000e-004</b>	<b>0.0309</b>	<b>1.4400e-003</b>	<b>0.0323</b>	<b>8.3700e-003</b>	<b>1.3300e-003</b>	<b>9.7000e-003</b>	<b>0.0000</b>	<b>41.5974</b>	<b>41.5974</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>41.6206</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	0.2023	1.4701	1.3154	2.2000e-003		0.0792	0.0792		0.0766	0.0766	0.0000	180.7190	180.7190	0.0334	0.0000	181.4211
<b>Total</b>	<b>0.2023</b>	<b>1.4701</b>	<b>1.3154</b>	<b>2.2000e-003</b>		<b>0.0792</b>	<b>0.0792</b>		<b>0.0766</b>	<b>0.0766</b>	<b>0.0000</b>	<b>180.7190</b>	<b>180.7190</b>	<b>0.0334</b>	<b>0.0000</b>	<b>181.4211</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	0.0110	0.0733	0.1656	2.8000e-004	7.7500e-003	1.2700e-003	9.0300e-003	2.2200e-003	1.1700e-003	3.3900e-003	0.0000	23.8527	23.8527	1.9000e-004	0.0000	23.8566
Worker	6.8700e-003	9.9700e-003	0.0995	2.8000e-004	0.0231	1.7000e-004	0.0233	6.1500e-003	1.6000e-004	6.3100e-003	0.0000	17.7448	17.7448	9.2000e-004	0.0000	17.7640
<b>Total</b>	<b>0.0178</b>	<b>0.0833</b>	<b>0.2652</b>	<b>5.6000e-004</b>	<b>0.0309</b>	<b>1.4400e-003</b>	<b>0.0323</b>	<b>8.3700e-003</b>	<b>1.3300e-003</b>	<b>9.7000e-003</b>	<b>0.0000</b>	<b>41.5974</b>	<b>41.5974</b>	<b>1.1100e-003</b>	<b>0.0000</b>	<b>41.6206</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	4.1500e-003	0.0417	0.0438	7.0000e-005		2.3200e-003	2.3200e-003		2.1400e-003	2.1400e-003	0.0000	5.7962	5.7962	1.8400e-003	0.0000	5.8347
Paving	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.9800e-003</b>	<b>0.0417</b>	<b>0.0438</b>	<b>7.0000e-005</b>		<b>2.3200e-003</b>	<b>2.3200e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>5.7962</b>	<b>5.7962</b>	<b>1.8400e-003</b>	<b>0.0000</b>	<b>5.8347</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	1.5000e-004	2.2000e-004	2.2300e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3977	0.3977	2.0000e-005	0.0000	0.3982
<b>Total</b>	<b>1.5000e-004</b>	<b>2.2000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.3977</b>	<b>0.3977</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.3982</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	4.1500e-003	0.0417	0.0438	7.0000e-005		2.3200e-003	2.3200e-003		2.1400e-003	2.1400e-003	0.0000	5.7962	5.7962	1.8400e-003	0.0000	5.8347
Paving	1.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>5.9800e-003</b>	<b>0.0417</b>	<b>0.0438</b>	<b>7.0000e-005</b>		<b>2.3200e-003</b>	<b>2.3200e-003</b>		<b>2.1400e-003</b>	<b>2.1400e-003</b>	<b>0.0000</b>	<b>5.7962</b>	<b>5.7962</b>	<b>1.8400e-003</b>	<b>0.0000</b>	<b>5.8347</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	1.5000e-004	2.2000e-004	2.2300e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.3977	0.3977	2.0000e-005	0.0000	0.3982
<b>Total</b>	<b>1.5000e-004</b>	<b>2.2000e-004</b>	<b>2.2300e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.3977</b>	<b>0.3977</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.3982</b>

**3.6 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	0.0768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2787
<b>Total</b>	<b>0.0780</b>	<b>8.4200e-003</b>	<b>9.1600e-003</b>	<b>1.0000e-005</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2787</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	7.0000e-005	1.0000e-004	1.0300e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1836	0.1836	1.0000e-005	0.0000	0.1838
<b>Total</b>	<b>7.0000e-005</b>	<b>1.0000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1836</b>	<b>0.1836</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1838</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	0.0768					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e-003	8.4200e-003	9.1600e-003	1.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	1.2766	1.2766	1.0000e-004	0.0000	1.2787
<b>Total</b>	<b>0.0780</b>	<b>8.4200e-003</b>	<b>9.1600e-003</b>	<b>1.0000e-005</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>		<b>5.5000e-004</b>	<b>5.5000e-004</b>	<b>0.0000</b>	<b>1.2766</b>	<b>1.2766</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.2787</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	7.0000e-005	1.0000e-004	1.0300e-003	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1836	0.1836	1.0000e-005	0.0000	0.1838
<b>Total</b>	<b>7.0000e-005</b>	<b>1.0000e-004</b>	<b>1.0300e-003</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1836</b>	<b>0.1836</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1838</b>

**Merced Gateway Operational Phase 4 Year 2019**  
**Merced County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	2.90	Acre	2.90	126,324.00	0
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2019
<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

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Apartments - 178 DU on 5.5 acres and 178,000 sq ft. Parking 2.9 acres.

Construction Phase -

Vehicle Trips - Apartments - 6.31 daily trips per unit. Primary Trip 89%, Divert Trip 11% and Pass-by Trips 0%.

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site.

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	11.13	5.50
tblProjectCharacteristics	OperationalYear	2014	2019
tblVehicleEF	HHD	0.15	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.7470e-003	0.00
tblVehicleEF	MCY	6.6100e-003	9.0000e-003
tblVehicleEF	MDV	0.16	0.21
tblVehicleEF	MH	1.7720e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003
tblVehicleEF	OBUS	2.1020e-003	0.00
tblVehicleEF	SBUS	1.3200e-003	0.00
tblVehicleEF	UBUS	1.6460e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	WD_TR	6.59	6.31

## 2.0 Emissions Summary

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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										M1/yr					
Area	1.5188	0.0320	2.3466	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2699	101.5049	0.1075	1.4100e-003	104.2015
Energy	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	371.3344	371.3344	0.0131	4.7300e-003	373.0771
Mobile	0.6400	0.9228	7.4557	0.0170	1.2540	0.0124	1.2664	0.3343	0.0115	0.3457	0.0000	1,154.6646	1,154.6646	0.0580	0.0000	1,155.8831
Waste						0.0000	0.0000		0.0000	0.0000	16.6209	0.0000	16.6209	0.9823	0.0000	37.2485
Water						0.0000	0.0000		0.0000	0.0000	3.6793	25.7002	29.3795	0.3791	9.1600e-003	40.1805
<b>Total</b>	<b>2.1729</b>	<b>1.0757</b>	<b>9.8537</b>	<b>0.0211</b>	<b>1.2540</b>	<b>0.2009</b>	<b>1.4549</b>	<b>0.3343</b>	<b>0.1999</b>	<b>0.5342</b>	<b>42.5352</b>	<b>1,630.9691</b>	<b>1,673.5043</b>	<b>1.5400</b>	<b>0.0153</b>	<b>1,710.5907</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	tons/yr										M1/yr					
Area	1.5188	0.0320	2.3466	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2699	101.5049	0.1075	1.4100e-003	104.2015
Energy	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	337.0664	337.0664	0.0124	4.1500e-003	338.6121
Mobile	0.6375	0.9140	7.3899	0.0168	1.2399	0.0123	1.2522	0.3305	0.0114	0.3419	0.0000	1,142.0478	1,142.0478	0.0574	0.0000	1,143.2538
Waste						0.0000	0.0000		0.0000	0.0000	8.3105	0.0000	8.3105	0.4911	0.0000	18.6243
Water						0.0000	0.0000		0.0000	0.0000	2.9435	21.5949	24.5384	0.3032	7.3300e-003	33.1785
<b>Total</b>	<b>2.1675</b>	<b>1.0418</b>	<b>9.7773</b>	<b>0.0208</b>	<b>1.2399</b>	<b>0.1988</b>	<b>1.4387</b>	<b>0.3305</b>	<b>0.1978</b>	<b>0.5283</b>	<b>33.4889</b>	<b>1,579.9789</b>	<b>1,613.4678</b>	<b>0.9717</b>	<b>0.0129</b>	<b>1,637.8701</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>0.25</b>	<b>3.16</b>	<b>0.78</b>	<b>1.61</b>	<b>1.12</b>	<b>1.07</b>	<b>1.11</b>	<b>1.12</b>	<b>1.07</b>	<b>1.10</b>	<b>21.27</b>	<b>3.13</b>	<b>3.59</b>	<b>36.90</b>	<b>15.75</b>	<b>4.25</b>

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

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	0.6375	0.9140	7.3899	0.0168	1.2399	0.0123	1.2522	0.3305	0.0114	0.3419	0.0000	1,142.0478	1,142.0478	0.0574	0.0000	1,143.2538
Unmitigated	0.6400	0.9228	7.4557	0.0170	1.2540	0.0124	1.2664	0.3343	0.0115	0.3457	0.0000	1,154.6646	1,154.6646	0.0580	0.0000	1,155.8831

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1,123.18	3,380,815	3,342,876
Parking Lot	0.00	0.00	0.00		
Total	1,123.18	1,123.18	1,123.18	3,380,815	3,342,876

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	226.0966	226.0966	0.0102	2.1200e-003	226.9670
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	231.2840	231.2840	0.0105	2.1600e-003	232.1744
NaturalGas Mitigated	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
NaturalGas Unmitigated	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028

### 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					
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
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
<b>Total</b>		<b>0.0142</b>	<b>0.1209</b>	<b>0.0515</b>	<b>7.7000e-004</b>		<b>9.7800e-003</b>	<b>9.7800e-003</b>		<b>9.7800e-003</b>	<b>9.7800e-003</b>	<b>0.0000</b>	<b>140.0505</b>	<b>140.0505</b>	<b>2.6800e-003</b>	<b>2.5700e-003</b>	<b>140.9028</b>

### 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					
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
Apartments Low Rise	2.0795e+06	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
<b>Total</b>		<b>0.0112</b>	<b>0.0958</b>	<b>0.0408</b>	<b>6.1000e-004</b>		<b>7.7500e-003</b>	<b>7.7500e-003</b>		<b>7.7500e-003</b>	<b>7.7500e-003</b>	<b>0.0000</b>	<b>110.9698</b>	<b>110.9698</b>	<b>2.1300e-003</b>	<b>2.0300e-003</b>	<b>111.6452</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	198.9448	9.0000e-003	1.8600e-003	199.7107
Parking Lot	111165	32.3392	1.4600e-003	3.0000e-004	32.4637
<b>Total</b>		<b>231.2840</b>	<b>0.0105</b>	<b>2.1600e-003</b>	<b>232.1744</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	193.7574	8.7600e-003	1.8100e-003	194.5033
Parking Lot	111165	32.3392	1.4600e-003	3.0000e-004	32.4637
<b>Total</b>		<b>226.0966</b>	<b>0.0102</b>	<b>2.1100e-003</b>	<b>226.9670</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	1.5188	0.0320	2.3466	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2699	101.5049	0.1075	1.4100e-003	104.2015
Unmitigated	1.5188	0.0320	2.3466	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2699	101.5049	0.1075	1.4100e-003	104.2015

### 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	0.1697					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1885					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0407	0.0154	1.3282	7.0000e-005		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003	0.0000	2.1590	2.1590	2.1200e-003	0.0000	2.2035
<b>Total</b>	<b>1.5188</b>	<b>0.0320</b>	<b>2.3466</b>	<b>3.3900e-003</b>		<b>0.1787</b>	<b>0.1787</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2699</b>	<b>101.5049</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2015</b>

**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										M1/yr					
Architectural Coating	0.1697					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1885					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0407	0.0154	1.3282	7.0000e-005		7.2800e-003	7.2800e-003		7.2800e-003	7.2800e-003	0.0000	2.1590	2.1590	2.1200e-003	0.0000	2.2035
<b>Total</b>	<b>1.5188</b>	<b>0.0320</b>	<b>2.3466</b>	<b>3.3900e-003</b>		<b>0.1787</b>	<b>0.1787</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2699</b>	<b>101.5049</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2015</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.5384	0.3032	7.3300e-003	33.1785
Unmitigated	29.3795	0.3791	9.1600e-003	40.1805

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	29.3795	0.3791	9.1600e-003	40.1805
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>29.3795</b>	<b>0.3791</b>	<b>9.1600e-003</b>	<b>40.1805</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	24.5384	0.3032	7.3300e-003	33.1785
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>24.5384</b>	<b>0.3032</b>	<b>7.3300e-003</b>	<b>33.1785</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	16.6209	0.9823	0.0000	37.2485
Mitigated	8.3105	0.4911	0.0000	18.6243

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>16.6209</b>	<b>0.9823</b>	<b>0.0000</b>	<b>37.2485</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>8.3105</b>	<b>0.4911</b>	<b>0.0000</b>	<b>18.6243</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 Vegetation

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**Merced Gateway Operational Phases 1 4 5 Year 2020  
Merced County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509
Parking Lot	2.90	Acre	2.90	126,324.00	0
Supermarket	54.18	1000sqft	2.76	54,176.00	0
Regional Shopping Center	71.33	1000sqft	3.65	71,330.00	0
High Turnover (Sit Down Restaurant)	17.52	1000sqft	0.89	17,522.00	0
Parking Lot	11.50	Acre	11.50	500,940.00	0
Government Office Building	9.21	1000sqft	1.10	9,209.00	0
Parking Lot	0.60	Acre	0.60	26,136.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3			<b>Operational Year</b>	2020
<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**

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Phases 1, 4, and 5

Construction Phase -

Vehicle Trips - Pass-by trips % moved to Primary Trips %

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site.

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	11.13	5.50
tblLandUse	LotAcreage	1.24	2.76
tblLandUse	LotAcreage	1.64	3.65
tblLandUse	LotAcreage	0.40	0.89
tblLandUse	LotAcreage	0.21	1.10
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleEF	HHD	0.15	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.7520e-003	0.00
tblVehicleEF	MCY	6.6330e-003	9.0000e-003
tblVehicleEF	MDV	0.16	0.21
tblVehicleEF	MH	1.7770e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003
tblVehicleEF	OBUS	2.0940e-003	0.00
tblVehicleEF	SBUS	1.2990e-003	0.00
tblVehicleEF	UBUS	1.6450e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00

tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	36.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	50.00	66.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	54.00	65.00
tblVehicleTrips	PR_TP	34.00	70.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	0.00	1.75
tblVehicleTrips	ST_TR	158.37	78.52
tblVehicleTrips	ST_TR	49.97	33.75
tblVehicleTrips	ST_TR	177.59	60.34
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	SU_TR	0.00	1.75
tblVehicleTrips	SU_TR	131.84	78.52
tblVehicleTrips	SU_TR	25.24	33.75
tblVehicleTrips	SU_TR	166.44	60.34
tblVehicleTrips	WD_TR	6.59	6.31
tblVehicleTrips	WD_TR	68.93	1.75
tblVehicleTrips	WD_TR	127.15	78.52
tblVehicleTrips	WD_TR	42.94	33.75
tblVehicleTrips	WD_TR	102.24	60.34

## 2.0 Emissions Summary

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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	4.2885	0.0320	2.3460	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2728	101.5078	0.1075	1.4100e-003	104.2043
Energy	0.0478	0.4271	0.3086	2.6100e-003		0.0330	0.0330		0.0330	0.0330	0.0000	1,761.4913	1,761.4913	0.0673	0.0207	1,769.3309
Mobile	4.0089	4.8350	40.5231	0.0932	6.8307	0.0692	6.8998	1.8207	0.0640	1.8847	0.0000	6,107.4499	6,107.4499	0.3062	0.0000	6,113.8789
Waste						0.0000	0.0000		0.0000	0.0000	137.9161	0.0000	137.9161	8.1506	0.0000	309.0789
Water						0.0000	0.0000		0.0000	0.0000	9.7420	60.7763	70.5183	1.0033	0.0242	99.0890
<b>Total</b>	<b>8.3452</b>	<b>5.2940</b>	<b>43.1777</b>	<b>0.0992</b>	<b>6.8307</b>	<b>0.2809</b>	<b>7.1116</b>	<b>1.8207</b>	<b>0.2757</b>	<b>2.0964</b>	<b>169.8931</b>	<b>8,008.9904</b>	<b>8,178.8834</b>	<b>9.6350</b>	<b>0.0463</b>	<b>8,395.5820</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	tons/yr										MT/yr					
Area	4.2885	0.0320	2.3460	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2728	101.5078	0.1075	1.4100e-003	104.2043
Energy	0.0418	0.3741	0.2745	2.2800e-003		0.0289	0.0289		0.0289	0.0289	0.0000	1,652.2285	1,652.2285	0.0639	0.0192	1,659.5147
Mobile	3.9965	4.7907	40.1883	0.0922	6.7540	0.0685	6.8225	1.8003	0.0634	1.8637	0.0000	6,041.3041	6,041.3041	0.3031	0.0000	6,047.6690
Waste						0.0000	0.0000		0.0000	0.0000	68.9581	0.0000	68.9581	4.0753	0.0000	154.5395
Water						0.0000	0.0000		0.0000	0.0000	7.7936	50.3501	58.1437	0.8026	0.0193	80.9945
<b>Total</b>	<b>8.3269</b>	<b>5.1968</b>	<b>42.8088</b>	<b>0.0979</b>	<b>6.7540</b>	<b>0.2762</b>	<b>7.0302</b>	<b>1.8003</b>	<b>0.2710</b>	<b>2.0713</b>	<b>98.9866</b>	<b>7,823.1556</b>	<b>7,922.1422</b>	<b>5.3525</b>	<b>0.0399</b>	<b>8,046.9219</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>0.22</b>	<b>1.84</b>	<b>0.85</b>	<b>1.35</b>	<b>1.12</b>	<b>1.70</b>	<b>1.15</b>	<b>1.12</b>	<b>1.71</b>	<b>1.20</b>	<b>41.74</b>	<b>2.32</b>	<b>3.14</b>	<b>44.45</b>	<b>13.84</b>	<b>4.15</b>

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

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	3.9965	4.7907	40.1883	0.0922	6.7540	0.0685	6.8225	1.8003	0.0634	1.8637	0.0000	6,041.3041	6,041.3041	0.3031	0.0000	6,047.6690
Unmitigated	4.0089	4.8350	40.5231	0.0932	6.8307	0.0692	6.8998	1.8207	0.0640	1.8847	0.0000	6,107.4499	6,107.4499	0.3062	0.0000	6,113.8789

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1123.18	3,380,815	3,342,876
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Government Office Building	16.12	16.12	16.12	35,076	34,682
High Turnover (Sit Down Restaurant)	1,375.83	1,375.83	1375.83	3,187,074	3,151,309
Regional Shopping Center	2,407.39	2,407.39	2407.39	4,949,471	4,893,929
Supermarket	3,268.98	3,268.98	3268.98	6,863,780	6,786,755
<b>Total</b>	<b>8,191.49</b>	<b>8,191.49</b>	<b>8,191.49</b>	<b>18,416,215</b>	<b>18,209,551</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
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	66	34	0
High Turnover (Sit Down)	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	70	30	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

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
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,238.3228	1,238.3228	0.0560	0.0116	1,243.0899
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,288.1822	1,288.1822	0.0583	0.0121	1,293.1413
NaturalGas Mitigated	0.0418	0.3741	0.2745	2.2800e-003		0.0289	0.0289		0.0289	0.0289	0.0000	413.9058	413.9058	7.9300e-003	7.5900e-003	416.4248
NaturalGas Unmitigated	0.0478	0.4271	0.3086	2.6100e-003		0.0330	0.0330		0.0330	0.0330	0.0000	473.3091	473.3091	9.0700e-003	8.6800e-003	476.1896

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	126347	6.8000e-004	6.1900e-003	5.2000e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7424	6.7424	1.3000e-004	1.2000e-004	6.7834
High Turnover (Sit Down Restaurant)	3.71975e+006	0.0201	0.1823	0.1532	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4998	198.4998	3.8000e-003	3.6400e-003	199.7078
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	795330	4.2900e-003	0.0390	0.0328	2.3000e-004		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	42.4418	42.4418	8.1000e-004	7.8000e-004	42.7001
Supermarket	1.60361e+006	8.6500e-003	0.0786	0.0660	4.7000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	85.5747	85.5747	1.6400e-003	1.5700e-003	86.0955
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
<b>Total</b>		<b>0.0478</b>	<b>0.4271</b>	<b>0.3086</b>	<b>2.6000e-003</b>		<b>0.0330</b>	<b>0.0330</b>		<b>0.0330</b>	<b>0.0330</b>	<b>0.0000</b>	<b>473.3091</b>	<b>473.3091</b>	<b>9.0600e-003</b>	<b>8.6800e-003</b>	<b>476.1896</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	95405.2	5.1000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.0912	5.0912	1.0000e-004	9.0000e-005	5.1222
High Turnover (Sit Down Restaurant)	3.55508e+006	0.0192	0.1743	0.1464	1.0500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.7127	189.7127	3.6400e-003	3.4800e-003	190.8673
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	633589	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8107	33.8107	6.5000e-004	6.2000e-004	34.0165
Supermarket	1.39273e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3214	74.3214	1.4200e-003	1.3600e-003	74.7737
Apartments Low Rise	2.0795e+006	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
<b>Total</b>		<b>0.0418</b>	<b>0.3741</b>	<b>0.2745</b>	<b>2.2900e-003</b>		<b>0.0289</b>	<b>0.0289</b>		<b>0.0289</b>	<b>0.0289</b>	<b>0.0000</b>	<b>413.9058</b>	<b>413.9058</b>	<b>7.9400e-003</b>	<b>7.5800e-003</b>	<b>416.4247</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	198.9448	9.0000e-003	1.8600e-003	199.7107
Government Office Building	93195.1	27.1115	1.2300e-003	2.5000e-004	27.2159
High Turnover (Sit Down Restaurant)	546511	158.9864	7.1900e-003	1.4900e-003	159.5984
Parking Lot	111165	32.3392	1.4600e-003	3.0000e-004	32.4637
Parking Lot	22999.7	6.6909	3.0000e-004	6.0000e-005	6.7166
Parking Lot	440827	128.2417	5.8000e-003	1.2000e-003	128.7354
Regional Shopping Center	651243	189.4540	8.5700e-003	1.7700e-003	190.1834
Supermarket	1.87828e+006	546.4138	0.0247	5.1100e-003	548.5173
<b>Total</b>		<b>1,288.1822</b>	<b>0.0583</b>	<b>0.0120</b>	<b>1,293.1413</b>

#### Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	193.7574	8.7600e-003	1.8100e-003	194.5033
Government Office Building	85827.9	24.9683	1.1300e-003	2.3000e-004	25.0644
High Turnover (Sit Down Restaurant)	511467	148.7917	6.7300e-003	1.3900e-003	149.3645
Parking Lot	111165	32.3392	1.4600e-003	3.0000e-004	32.4637

Parking Lot	22999.7	6.6909	3.0000e-004	6.0000e-005	6.7166
Parking Lot	440827	128.2417	5.8000e-003	1.2000e-003	128.7354
Regional Shopping Center	604700	175.9142	7.9500e-003	1.6500e-003	176.5914
Supermarket	1.81368e+006	527.6195	0.0239	4.9400e-003	529.6506
<b>Total</b>		<b>1,238.3228</b>	<b>0.0560</b>	<b>0.0116</b>	<b>1,243.0899</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	4.2885	0.0320	2.3460	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2728	101.5078	0.1075	1.4100e-003	104.2043
Unmitigated	4.2885	0.0320	2.3460	3.3900e-003		0.1787	0.1787		0.1787	0.1787	22.2350	79.2728	101.5078	0.1075	1.4100e-003	104.2043

### 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	0.2865					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.8416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0405	0.0154	1.3276	7.0000e-005		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	2.1619	2.1619	2.1100e-003	0.0000	2.2063
<b>Total</b>	<b>4.2885</b>	<b>0.0320</b>	<b>2.3460</b>	<b>3.3900e-003</b>		<b>0.1787</b>	<b>0.1787</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2728</b>	<b>101.5078</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2043</b>

**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	0.2865					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.8416					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0405	0.0154	1.3276	7.0000e-005		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	2.1619	2.1619	2.1100e-003	0.0000	2.2063
<b>Total</b>	<b>4.2885</b>	<b>0.0320</b>	<b>2.3460</b>	<b>3.3900e-003</b>		<b>0.1787</b>	<b>0.1787</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2728</b>	<b>101.5078</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2043</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	58.1437	0.8026	0.0193	80.9945
Unmitigated	70.5183	1.0033	0.0242	99.0890

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	29.3795	0.3791	9.1600e-003	40.1805
Government Office Building	1.82966 / 1.1214	4.6024	0.0598	1.4500e-003	6.3063
High Turnover (Sit Down Restaurant)	5.31791 / 0.339441	10.4038	0.1737	4.1700e-003	15.3447
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.28359 / 3.23833	13.2905	0.1727	4.1700e-003	18.2109
Supermarket	6.67867 / 0.206557	12.8422	0.2181	5.2400e-003	19.0466
<b>Total</b>		<b>70.5183</b>	<b>1.0033</b>	<b>0.0242</b>	<b>99.0890</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	24.5384	0.3032	7.3300e-003	33.1785
Government Office Building	1.46372 / 1.053	3.8406	0.0478	1.1600e-003	5.2036
High Turnover (Sit Down Restaurant)	4.25433 / 0.318735	8.3711	0.1389	3.3300e-003	12.3218
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.22687 / 3.04079	11.0907	0.1382	3.3400e-003	15.0267
Supermarket	5.34294 / 0.193957	10.3030	0.1745	4.1800e-003	15.2639
<b>Total</b>		<b>58.1437</b>	<b>0.8026</b>	<b>0.0193</b>	<b>80.9945</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	137.9161	8.1506	0.0000	309.0789
Mitigated	68.9581	4.0753	0.0000	154.5395

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Government Office Building	8.57	1.7396	0.1028	0.0000	3.8986
High Turnover (Sit Down Restaurant)	208.49	42.3216	2.5011	0.0000	94.8454
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	74.9	15.2040	0.8985	0.0000	34.0732
Supermarket	305.58	62.0300	3.6659	0.0000	139.0132
<b>Total</b>		<b>137.9161</b>	<b>8.1506</b>	<b>0.0000</b>	<b>309.0789</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Government Office Building	4.285	0.8698	0.0514	0.0000	1.9493
High Turnover (Sit Down Restaurant)	104.245	21.1608	1.2506	0.0000	47.4227
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	37.45	7.6020	0.4493	0.0000	17.0366
Supermarket	152.79	31.0150	1.8329	0.0000	69.5066
<b>Total</b>		<b>68.9581</b>	<b>4.0753</b>	<b>0.0000</b>	<b>154.5395</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 Vegetation

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## Merced Gateway Operational Phases 1 2 4 5 Year 2023 Merced County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	9.21	1000sqft	1.10	9,209.00	0
Parking Lot	2.90	Acre	2.90	126,324.00	0
Parking Lot	11.50	Acre	11.50	500,940.00	0
Parking Lot	0.60	Acre	0.60	26,136.00	0
Parking Lot	11.50	Acre	11.50	500,940.00	0
Fast Food Restaurant with Drive Thru	21.45	1000sqft	0.86	21,450.00	0
High Turnover (Sit Down Restaurant)	17.52	1000sqft	0.89	17,522.00	0
High Turnover (Sit Down Restaurant)	4.33	1000sqft	0.18	4,330.00	0
Hotel	81.00	Room	4.73	49,900.00	0
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509
Convenience Market With Gas Pumps	12.00	Pump	0.07	6,305.00	0
Discount Club	21.28	1000sqft	0.86	21,280.00	0
Free-Standing Discount Superstore	131.19	1000sqft	5.27	131,190.00	0
Regional Shopping Center	71.33	1000sqft	3.65	71,330.00	0
Regional Shopping Center	8.24	1000sqft	0.33	8,240.00	0
Supermarket	54.18	1000sqft	2.76	54,176.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3	<b>Operational Year</b>	2023		
<b>Utility Company</b>	Pacific Gas & Electric Company				

CO2 Intensity (lb/MWhr) 491.65

CH4 Intensity (lb/MWhr) 0.022

N2O Intensity (lb/MWhr) 0.005

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

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Phases 1, 2, 4, and 5

Construction Phase -

Vehicle Trips - Pass-by trips % moved to Primary Trips %

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site.

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	9,210.00	9,209.00
tblLandUse	LandUseSquareFeet	17,520.00	17,522.00
tblLandUse	LandUseSquareFeet	117,612.00	49,900.00
tblLandUse	LandUseSquareFeet	1,694.10	6,305.00
tblLandUse	LandUseSquareFeet	54,180.00	54,176.00
tblLandUse	LotAcreage	0.21	1.10
tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	0.40	0.89
tblLandUse	LotAcreage	0.10	0.18
tblLandUse	LotAcreage	2.70	4.73
tblLandUse	LotAcreage	11.13	5.50
tblLandUse	LotAcreage	0.04	0.07
tblLandUse	LotAcreage	0.49	0.86

tblLandUse	LotAcreage	3.01	5.27
tblLandUse	LotAcreage	1.64	3.65
tblLandUse	LotAcreage	0.19	0.33
tblLandUse	LotAcreage	1.24	2.76
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2023
tblVehicleEF	HHD	0.14	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.8460e-003	0.00
tblVehicleEF	MCY	6.7070e-003	9.0000e-003
tblVehicleEF	MDV	0.17	0.21
tblVehicleEF	MH	1.7980e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003
tblVehicleEF	OBUS	2.0380e-003	0.00
tblVehicleEF	SBUS	1.2150e-003	0.00
tblVehicleEF	UBUS	1.6490e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00

tblVehicleTrips	PB_TP	36.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	14.00	79.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	PR_TP	29.00	79.00
tblVehicleTrips	PR_TP	47.50	64.50
tblVehicleTrips	PR_TP	50.00	66.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	54.00	65.00
tblVehicleTrips	PR_TP	34.00	70.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	204.47	72.61
tblVehicleTrips	ST_TR	53.75	11.31
tblVehicleTrips	ST_TR	722.03	248.06
tblVehicleTrips	ST_TR	64.07	14.86
tblVehicleTrips	ST_TR	0.00	1.75
tblVehicleTrips	ST_TR	158.37	78.55
tblVehicleTrips	ST_TR	8.19	7.76
tblVehicleTrips	ST_TR	49.97	33.73
tblVehicleTrips	ST_TR	177.59	60.34
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	SU_TR	166.88	72.61
tblVehicleTrips	SU_TR	33.67	11.31
tblVehicleTrips	SU_TR	542.72	248.06
tblVehicleTrips	SU_TR	56.12	14.86
tblVehicleTrips	SU_TR	0.00	1.75
tblVehicleTrips	SU_TR	131.84	78.55
tblVehicleTrips	SU_TR	5.95	7.76
tblVehicleTrips	SU_TR	25.24	33.73

tblVehicleTrips	SU_TR	166.44	60.34
tblVehicleTrips	WD_TR	6.59	6.31
tblVehicleTrips	WD_TR	542.60	72.61
tblVehicleTrips	WD_TR	41.80	11.31
tblVehicleTrips	WD_TR	496.12	248.06
tblVehicleTrips	WD_TR	53.13	14.86
tblVehicleTrips	WD_TR	68.93	1.75
tblVehicleTrips	WD_TR	127.15	78.55
tblVehicleTrips	WD_TR	8.17	7.76
tblVehicleTrips	WD_TR	42.94	33.73
tblVehicleTrips	WD_TR	102.24	60.34

## 2.0 Emissions Summary

### 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Area	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Energy	0.0944	0.8504	0.6643	5.1500e-003		0.0652	0.0652		0.0652	0.0652	0.0000	2,641.2132	2,641.2132	0.0943	0.0345	2,653.8843
Mobile	7.3683	8.1811	71.5905	0.2004	14.6160	0.1460	14.7619	3.8959	0.1352	4.0311	0.0000	12,585.2536	12,585.2536	0.5635	0.0000	12,597.0873
Waste						0.0000	0.0000		0.0000	0.0000	342.3970	0.0000	342.3970	20.2351	0.0000	767.3338
Water						0.0000	0.0000		0.0000	0.0000	16.6929	79.3514	96.0443	1.7181	0.0413	144.9237
<b>Total</b>	<b>14.8344</b>	<b>9.0634</b>	<b>74.5992</b>	<b>0.2090</b>	<b>14.6160</b>	<b>0.3900</b>	<b>15.0059</b>	<b>3.8959</b>	<b>0.3791</b>	<b>4.2750</b>	<b>381.3249</b>	<b>15,385.0963</b>	<b>15,766.4212</b>	<b>22.7185</b>	<b>0.0772</b>	<b>16,267.4383</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	tons/yr										MT/yr					
Area	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Energy	0.0838	0.7555	0.5949	4.5700e-003		0.0579	0.0579		0.0579	0.0579	0.0000	2,447.9983	2,447.9983	0.0883	0.0317	2,459.6691
Mobile	7.3456	8.1058	70.9925	0.1983	14.4519	0.1447	14.5966	3.8522	0.1340	3.9862	0.0000	12,448.9974	12,448.9974	0.5578	0.0000	12,460.7114
Waste						0.0000	0.0000		0.0000	0.0000	171.1985	0.0000	171.1985	10.1175	0.0000	383.6669
Water						0.0000	0.0000		0.0000	0.0000	13.3543	65.6855	79.0398	1.3744	0.0330	118.1350
<b>Total</b>	<b>14.8011</b>	<b>8.8931</b>	<b>73.9319</b>	<b>0.2062</b>	<b>14.4519</b>	<b>0.3813</b>	<b>14.8333</b>	<b>3.8522</b>	<b>0.3706</b>	<b>4.2228</b>	<b>206.7878</b>	<b>15,041.9593</b>	<b>15,248.7471</b>	<b>12.2456</b>	<b>0.0661</b>	<b>15,526.3916</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>0.22</b>	<b>1.88</b>	<b>0.89</b>	<b>1.31</b>	<b>1.12</b>	<b>2.21</b>	<b>1.15</b>	<b>1.12</b>	<b>2.25</b>	<b>1.22</b>	<b>45.77</b>	<b>2.23</b>	<b>3.28</b>	<b>46.10</b>	<b>14.39</b>	<b>4.56</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Increase Density

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	7.3456	8.1058	70.9925	0.1983	14.4519	0.1447	14.5966	3.8522	0.1340	3.9862	0.0000	12,448.9974	12,448.9974	0.5578	0.0000	12,460.7114
Unmitigated	7.3683	8.1811	71.5905	0.2004	14.6160	0.1460	14.7619	3.8959	0.1352	4.0311	0.0000	12,585.2536	12,585.2536	0.5635	0.0000	12,597.0873

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1123.18	3,380,815	3,342,876
Convenience Market With Gas Pumps	871.32	871.32	871.32	1,955,319	1,933,377
Discount Club	240.68	240.68	240.68	470,199	464,923
Fast Food Restaurant with Drive Thru	5,320.89	5,320.89	5320.89	11,990,799	11,856,240
Free-Standing Discount Superstore	1,949.48	1,949.48	1949.48	3,952,153	3,907,802
Government Office Building	16.12	16.12	16.12	35,080	34,686
High Turnover (Sit Down Restaurant)	1,376.20	1,376.20	1376.20	3,187,927	3,152,153
High Turnover (Sit Down Restaurant)	340.12	340.12	340.12	787,884	779,042
Hotel	628.56	628.56	628.56	1,264,020	1,249,835
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,405.96	2,405.96	2405.96	4,946,538	4,891,029
Regional Shopping Center	277.94	277.94	277.94	571,421	565,009
Supermarket	3,269.22	3,269.22	3269.22	6,864,287	6,787,257
<b>Total</b>	<b>17,819.66</b>	<b>17,819.66</b>	<b>17,819.66</b>	<b>39,406,441</b>	<b>38,964,227</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
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	79	21	0
Discount Club	9.50	7.30	7.30	16.70	64.30	19.00	60	40	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	79	21	0
Free-Standing Discount	9.50	7.30	7.30	13.20	67.80	19.00	64.5	35.5	0

Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	66	34	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	70	30	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

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
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,618.9318	1,618.9318	0.0724	0.0165	1,625.5570
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,707.0039	1,707.0039	0.0764	0.0174	1,713.9895
NaturalGas Mitigated	0.0838	0.7555	0.5949	4.5700e-003		0.0579	0.0579		0.0579	0.0579	0.0000	829.0665	829.0665	0.0159	0.0152	834.1121
NaturalGas Unmitigated	0.0944	0.8504	0.6643	5.1500e-003		0.0652	0.0652		0.0652	0.0652	0.0000	934.2094	934.2094	0.0179	0.0171	939.8948

## 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					
Convenience Market With Gas	70300.8	3.8000e-004	3.4500e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7515	3.7515	7.0000e-005	7.0000e-005	3.7744
Discount Club	237272	1.2800e-003	0.0116	9.7700e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6617	12.6617	2.4000e-004	2.3000e-004	12.7388
Fast Food Restaurant with Drive Thru	4.55362e+006	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9985	242.9985	4.6600e-003	4.4500e-003	244.4774
Free-Standing Discount Supermarket	1.46277e+006	7.8900e-003	0.0717	0.0602	4.3000e-004		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003	0.0000	78.0589	78.0589	1.5000e-003	1.4300e-003	78.5340
Government Office Building	126347	6.8000e-004	6.1900e-003	5.2000e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7424	6.7424	1.3000e-004	1.2000e-004	6.7834
High Turnover (Sit Down Restaurant)	3.71975e+006	0.0201	0.1823	0.1532	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4998	198.4998	3.8000e-003	3.6400e-003	199.7078
High Turnover (Sit Down Restaurant)	919216	4.9600e-003	0.0451	0.0379	2.7000e-004		3.4200e-003	3.4200e-003		3.4200e-003	3.4200e-003	0.0000	49.0529	49.0529	9.4000e-004	9.0000e-004	49.3514
Hotel	1.30189e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	69.4739	69.4739	1.3300e-003	1.2700e-003	69.8967
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	795330	4.2900e-003	0.0390	0.0328	2.3000e-004		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	42.4418	42.4418	8.1000e-004	7.8000e-004	42.7001
Regional Shopping Center	91876	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9029	4.9029	9.0000e-005	9.0000e-005	4.9327
Supermarket	1.60361e+006	8.6500e-003	0.0786	0.0660	4.7000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	85.5747	85.5747	1.6400e-003	1.5700e-003	86.0955
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
<b>Total</b>		<b>0.0944</b>	<b>0.8504</b>	<b>0.6642</b>	<b>5.1400e-003</b>		<b>0.0652</b>	<b>0.0652</b>		<b>0.0652</b>	<b>0.0652</b>	<b>0.0000</b>	<b>934.2094</b>	<b>934.2094</b>	<b>0.0179</b>	<b>0.0171</b>	<b>939.8948</b>

### 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					
Convenience Market With Gas Pump	56004.2	3.0000e-004	2.7500e-003	2.3100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9886	2.9886	6.0000e-005	5.0000e-005	3.0068
Discount Club	189020	1.0200e-003	9.2700e-003	7.7800e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0868	10.0868	1.9000e-004	1.8000e-004	10.1482
Fast Food Restaurant with Drive-Thru	4.35204e+006	0.0235	0.2133	0.1792	1.2800e-003		0.0162	0.0162		0.0162	0.0162	0.0000	232.2417	232.2417	4.4500e-003	4.2600e-003	233.6550
Free-Standing Discount Supermarket	1.1653e+006	6.2800e-003	0.0571	0.0480	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1846	62.1846	1.1900e-003	1.1400e-003	62.5630
Government Office Building	95405.2	5.1000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.0912	5.0912	1.0000e-004	9.0000e-005	5.1222
High Turnover (Sit Down Restaurant)	3.55508e+006	0.0192	0.1743	0.1464	1.0500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.7127	189.7127	3.6400e-003	3.4800e-003	190.8673
High Turnover (Sit Down Restaurant)	878525	4.7400e-003	0.0431	0.0362	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8814	46.8814	9.0000e-004	8.6000e-004	47.1667
Hotel	1.06574e+006	5.7500e-003	0.0522	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003	0.0000	56.8719	56.8719	1.0900e-003	1.0400e-003	57.2180
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	633589	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8107	33.8107	6.5000e-004	6.2000e-004	34.0165
Regional Shopping Center	73191.8	3.9000e-004	3.5900e-003	3.0100e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9058	3.9058	7.0000e-005	7.0000e-005	3.9296
Supermarket	1.39273e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3214	74.3214	1.4200e-003	1.3600e-003	74.7737
Apartments Low Rise	2.0795e+006	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
<b>Total</b>		<b>0.0838</b>	<b>0.7555</b>	<b>0.5949</b>	<b>4.5800e-003</b>		<b>0.0579</b>	<b>0.0579</b>		<b>0.0579</b>	<b>0.0579</b>	<b>0.0000</b>	<b>829.0665</b>	<b>829.0665</b>	<b>0.0159</b>	<b>0.0152</b>	<b>834.1121</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	152.5083	6.8200e-003	1.5500e-003	153.1324
Convenience Market With Gas	57564.6	12.8374	5.7000e-004	1.3000e-004	12.8900
Discount Club	194286	43.3276	1.9400e-003	4.4000e-004	43.5049
Fast Food Restaurant with Drive-Thru	669026	149.1985	6.6800e-003	1.5200e-003	149.8091
Free-Standing Discount Supermarket	1.19776e+006	267.1119	0.0120	2.7200e-003	268.2051
Government Office Building	93195.1	20.7833	9.3000e-004	2.1000e-004	20.8684
High Turnover (Sit Down Restaurant)	135053	30.1179	1.3500e-003	3.1000e-004	30.2412
High Turnover (Sit Down Restaurant)	546511	121.8767	5.4500e-003	1.2400e-003	122.3755
Hotel	456585	101.8224	4.5600e-003	1.0400e-003	102.2391
Parking Lot	111165	24.7908	1.1100e-003	2.5000e-004	24.8922
Parking Lot	22999.7	5.1291	2.3000e-004	5.0000e-005	5.1501
Parking Lot	440827	196.6166	8.8000e-003	2.0000e-003	197.4212
Regional Shopping Center	651243	145.2328	6.5000e-003	1.4800e-003	145.8272
Regional Shopping Center	75231.2	16.7772	7.5000e-004	1.7000e-004	16.8459
Supermarket	1.87828e+006	418.8732	0.0187	4.2600e-003	420.5874
<b>Total</b>		<b>1,707.0039</b>	<b>0.0764</b>	<b>0.0174</b>	<b>1,713.9895</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	148.5317	6.6500e-003	1.5100e-003	149.1396
Convenience Market With Gas	53450.6	11.9200	5.3000e-004	1.2000e-004	11.9687
Discount Club	180401	40.2310	1.8000e-003	4.1000e-004	40.3957
Fast Food Restaurant with Drive-Thru	626126	139.6314	6.2500e-003	1.4200e-003	140.2029
Free-Standing Discount Supermarket	1.11216e+006	248.0221	0.0111	2.5200e-003	249.0371
Government Office Building	85827.9	19.1404	8.6000e-004	1.9000e-004	19.2187
High Turnover (Sit Down Restaurant)	126393	28.1867	1.2600e-003	2.9000e-004	28.3020
High Turnover (Sit Down Restaurant)	511467	114.0616	5.1000e-003	1.1600e-003	114.5284
Hotel	393586	87.7732	3.9300e-003	8.9000e-004	88.1324
Parking Lot	111165	24.7908	1.1100e-003	2.5000e-004	24.8922
Parking Lot	22999.7	5.1291	2.3000e-004	5.0000e-005	5.1501
Parking Lot	440827	196.6166	8.8000e-003	2.0000e-003	197.4212
Regional Shopping Center	604700	134.8534	6.0300e-003	1.3700e-003	135.4052
Regional Shopping Center	69854.6	15.5782	7.0000e-004	1.6000e-004	15.6419
Supermarket	1.81368e+006	404.4657	0.0181	4.1100e-003	406.1210
<b>Total</b>		<b>1,618.9318</b>	<b>0.0725</b>	<b>0.0165</b>	<b>1,625.5570</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	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Unmitigated	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092

## 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	0.4657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7459					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0402	0.0153	1.3262	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003	0.0000	2.1671	2.1671	2.1000e-003	0.0000	2.2112
<b>Total</b>	<b>7.3717</b>	<b>0.0319</b>	<b>2.3445</b>	<b>3.3900e-003</b>		<b>0.1788</b>	<b>0.1788</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2780</b>	<b>101.5130</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2092</b>

### 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	0.4657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7459					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0402	0.0153	1.3262	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003	0.0000	2.1671	2.1671	2.1000e-003	0.0000	2.2112
<b>Total</b>	<b>7.3717</b>	<b>0.0319</b>	<b>2.3445</b>	<b>3.3900e-003</b>		<b>0.1788</b>	<b>0.1788</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2780</b>	<b>101.5130</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2092</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	79.0398	1.3744	0.0330	118.1350
Unmitigated	96.0443	1.7181	0.0413	144.9237

### 7.2 Water by Land Use

**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	23.3807	0.3788	9.1200e- 003	34.1634
Convenience Market With Gas	0.125486 / 0.0769109	0.2513	4.1000e- 003	1.0000e- 004	0.3679
Discount Club	1.57626 / 0.966097	3.1562	0.0515	1.2400e- 003	4.6217
Fast Food Restaurant with Drive Thru	6.5108 / 0.415583	10.2465	0.2125	5.0900e- 003	16.2882
Free-Standing Discount Supermarket	9.71757 / 5.95593	19.4579	0.3174	7.6400e- 003	28.4923
Government Office Building	1.82966 / 1.1214	3.6636	0.0598	1.4400e- 003	5.3646
High Turnover (Sit Down Restaurant)	6.63221 / 0.423333	10.4376	0.2165	5.1900e- 003	16.5919
Hotel	2.05471 / 0.228301	3.3095	0.0671	1.6100e- 003	5.2164
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.89395 / 3.61242	11.8017	0.1925	4.6400e- 003	17.2813
Supermarket	6.67867 / 0.206557	10.3392	0.2180	5.2200e- 003	16.5359
<b>Total</b>		<b>96.0443</b>	<b>1.7181</b>	<b>0.0413</b>	<b>144.9237</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	19.4978	0.3030	7.3000e-003	28.1234
Convenience Market With Gas Discount Club	0.100389 / 0.0722193	0.2094	3.2800e-003	8.0000e-005	0.3027
Fast Food Restaurant with Drive Thru	1.26101 / 0.907165	2.6298	0.0412	9.9000e-004	3.8021
Free-Standing Discount Supermarket	5.20864 / 0.390232	8.2423	0.1700	4.0700e-003	13.0737
Government Office Building	7.77406 / 5.59262	16.2125	0.2539	6.1100e-003	23.4395
High Turnover (Sit Down Restaurant)	1.46372 / 1.053	3.0525	0.0478	1.1500e-003	4.4133
Hotel	5.30577 / 0.397509	8.3960	0.1732	4.1500e-003	13.3175
Parking Lot	1.64377 / 0.214375	2.6724	0.0537	1.2800e-003	4.1973
Regional Shopping Center	0 / 0	0.0000	0.0000	0.0000	0.0000
Supermarket	4.71516 / 3.39206	9.8333	0.1540	3.7100e-003	14.2166
<b>Total</b>	5.34294 / 0.193957	<b>79.0398</b>	<b>1.3744</b>	<b>0.0330</b>	<b>118.1350</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	342.3970	20.2351	0.0000	767.3338
Mitigated	171.1985	10.1175	0.0000	383.6669

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Discount Club	91.52	18.5777	1.0979	0.0000	41.6339
Fast Food Restaurant with Drive-Through	247.08	50.1550	2.9641	0.0000	112.4006
Free-Standing Discount Superstore	564.21	114.5295	6.7685	0.0000	256.6681
Government Office Building	8.57	1.7396	0.1028	0.0000	3.8986
High Turnover (Sit Down Restaurant)	260.02	52.7817	3.1193	0.0000	118.2872
Hotel	44.35	9.0027	0.5320	0.0000	20.1755
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83.55	16.9599	1.0023	0.0000	38.0082
Supermarket	305.58	62.0300	3.6659	0.0000	139.0132
<b>Total</b>		<b>342.3970</b>	<b>20.2351</b>	<b>0.0000</b>	<b>767.3338</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Discount Club	45.76	9.2889	0.5490	0.0000	20.8170
Fast Food Restaurant with Drive Thru	123.54	25.0775	1.4820	0.0000	56.2003
Free-Standing Discount Supermarket	282.105	57.2648	3.3843	0.0000	128.3340
Government Office Building	4.285	0.8698	0.0514	0.0000	1.9493
High Turnover (Sit Down Restaurant)	130.01	26.3909	1.5597	0.0000	59.1436
Hotel	22.175	4.5013	0.2660	0.0000	10.0878
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	41.775	8.4800	0.5012	0.0000	19.0041
Supermarket	152.79	31.0150	1.8329	0.0000	69.5066
<b>Total</b>		<b>171.1985</b>	<b>10.1175</b>	<b>0.0000</b>	<b>383.6669</b>

**9.0 Operational Offroad**

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

## Mitigated Merced Gateway Operational Phases 1 2 4 5 Year 2023 Merced County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	9.21	1000sqft	1.10	9,209.00	0
Parking Lot	2.90	Acre	2.90	126,324.00	0
Parking Lot	11.50	Acre	11.50	500,940.00	0
Parking Lot	0.60	Acre	0.60	26,136.00	0
Parking Lot	11.50	Acre	11.50	500,940.00	0
Fast Food Restaurant with Drive Thru	21.45	1000sqft	0.86	21,450.00	0
High Turnover (Sit Down Restaurant)	17.52	1000sqft	0.89	17,522.00	0
High Turnover (Sit Down Restaurant)	4.33	1000sqft	0.18	4,330.00	0
Hotel	81.00	Room	4.73	49,900.00	0
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509
Convenience Market With Gas Pumps	12.00	Pump	0.07	6,305.00	0
Discount Club	21.28	1000sqft	0.86	21,280.00	0
Free-Standing Discount Superstore	131.19	1000sqft	5.27	131,190.00	0
Regional Shopping Center	71.33	1000sqft	3.65	71,330.00	0
Regional Shopping Center	8.24	1000sqft	0.33	8,240.00	0
Supermarket	54.18	1000sqft	2.76	54,176.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3	<b>Operational Year</b>	2023		
<b>Utility Company</b>	Pacific Gas & Electric Company				

CO2 Intensity (lb/MWhr) 491.65

CH4 Intensity (lb/MWhr) 0.022

N2O Intensity (lb/MWhr) 0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Phases 1, 2, 4, and 5

Construction Phase -

Vehicle Trips - Pass-by trips % moved to Primary Trips %

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site. Implement NEV Network with 9 charging stations

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Mobile Commute Mitigation - Implement Voluntary Trip Reduction Program 50% Eligible. Provide Ride Sharing Program 50% Eligible

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	9,210.00	9,209.00
tblLandUse	LandUseSquareFeet	17,520.00	17,522.00
tblLandUse	LandUseSquareFeet	117,612.00	49,900.00
tblLandUse	LandUseSquareFeet	1,694.10	6,305.00
tblLandUse	LandUseSquareFeet	54,180.00	54,176.00
tblLandUse	LotAcreage	0.21	1.10
tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	0.40	0.89
tblLandUse	LotAcreage	0.10	0.18
tblLandUse	LotAcreage	2.70	4.73
tblLandUse	LotAcreage	11.13	5.50
tblLandUse	LotAcreage	0.04	0.07

tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	3.01	5.27
tblLandUse	LotAcreage	1.64	3.65
tblLandUse	LotAcreage	0.19	0.33
tblLandUse	LotAcreage	1.24	2.76
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2023
tblVehicleEF	HHD	0.14	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.8460e-003	0.00
tblVehicleEF	MCY	6.7070e-003	9.0000e-003
tblVehicleEF	MDV	0.17	0.21
tblVehicleEF	MH	1.7980e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003
tblVehicleEF	OBUS	2.0380e-003	0.00
tblVehicleEF	SBUS	1.2150e-003	0.00
tblVehicleEF	UBUS	1.6490e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	36.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	14.00	79.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	PR_TP	29.00	79.00
tblVehicleTrips	PR_TP	47.50	64.50
tblVehicleTrips	PR_TP	50.00	66.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	54.00	65.00
tblVehicleTrips	PR_TP	34.00	70.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	204.47	72.61
tblVehicleTrips	ST_TR	53.75	11.31
tblVehicleTrips	ST_TR	722.03	248.06
tblVehicleTrips	ST_TR	64.07	14.86
tblVehicleTrips	ST_TR	0.00	1.75
tblVehicleTrips	ST_TR	158.37	78.55
tblVehicleTrips	ST_TR	8.19	7.76
tblVehicleTrips	ST_TR	49.97	33.73
tblVehicleTrips	ST_TR	177.59	60.34
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	SU_TR	166.88	72.61
tblVehicleTrips	SU_TR	33.67	11.31
tblVehicleTrips	SU_TR	542.72	248.06
tblVehicleTrips	SU_TR	56.12	14.86
tblVehicleTrips	SU_TR	0.00	1.75
tblVehicleTrips	SU_TR	131.84	78.55
tblVehicleTrips	SU_TR	5.95	7.76

tblVehicleTrips	SU_TR	25.24	33.73
tblVehicleTrips	SU_TR	166.44	60.34
tblVehicleTrips	WD_TR	6.59	6.31
tblVehicleTrips	WD_TR	542.60	72.61
tblVehicleTrips	WD_TR	41.80	11.31
tblVehicleTrips	WD_TR	496.12	248.06
tblVehicleTrips	WD_TR	53.13	14.86
tblVehicleTrips	WD_TR	68.93	1.75
tblVehicleTrips	WD_TR	127.15	78.55
tblVehicleTrips	WD_TR	8.17	7.76
tblVehicleTrips	WD_TR	42.94	33.73
tblVehicleTrips	WD_TR	102.24	60.34
tblWoodstoves	NumberCatalytic	0.00	5.50
tblWoodstoves	NumberNoncatalytic	0.00	5.50

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Energy	0.0944	0.8504	0.6643	5.1500e-003		0.0652	0.0652		0.0652	0.0652	0.0000	2,641.2132	2,641.2132	0.0943	0.0345	2,653.8843
Mobile	7.3683	8.1811	71.5905	0.2004	14.6160	0.1460	14.7619	3.8959	0.1352	4.0311	0.0000	12,585.2536	12,585.2536	0.5635	0.0000	12,597.8173
Waste						0.0000	0.0000		0.0000	0.0000	342.3970	0.0000	342.3970	20.2351	0.0000	767.3338
Water						0.0000	0.0000		0.0000	0.0000	16.6929	79.3514	96.0443	1.7181	0.0413	144.9237
<b>Total</b>	<b>14.8344</b>	<b>9.0634</b>	<b>74.5992</b>	<b>0.2090</b>	<b>14.6160</b>	<b>0.3900</b>	<b>15.0059</b>	<b>3.8959</b>	<b>0.3791</b>	<b>4.2750</b>	<b>381.3249</b>	<b>15,385.0963</b>	<b>15,766.4212</b>	<b>22.7185</b>	<b>0.0772</b>	<b>16,267.4383</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	tons/yr										MT/yr					
Area	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Energy	0.0838	0.7555	0.5949	4.5700e-003		0.0579	0.0579		0.0579	0.0579	0.0000	2,447.9983	2,447.9983	0.0883	0.0317	2,459.6691
Mobile	7.1015	7.2953	64.5527	0.1749	12.6856	0.1308	12.8164	3.3814	0.1211	3.5025	0.0000	10,981.6586	10,981.6586	0.4964	0.0000	10,992.0835
Waste						0.0000	0.0000		0.0000	0.0000	171.1985	0.0000	171.1985	10.1175	0.0000	383.6669
Water						0.0000	0.0000		0.0000	0.0000	13.3543	65.6855	79.0398	1.3744	0.0330	118.1350
<b>Total</b>	<b>14.5570</b>	<b>8.0826</b>	<b>67.4921</b>	<b>0.1829</b>	<b>12.6856</b>	<b>0.3674</b>	<b>13.0530</b>	<b>3.3814</b>	<b>0.3577</b>	<b>3.7391</b>	<b>206.7878</b>	<b>13,574.6205</b>	<b>13,781.4082</b>	<b>12.1842</b>	<b>0.0661</b>	<b>14,057.7637</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>1.87</b>	<b>10.82</b>	<b>9.53</b>	<b>12.49</b>	<b>13.21</b>	<b>5.78</b>	<b>13.01</b>	<b>13.21</b>	<b>5.65</b>	<b>12.54</b>	<b>45.77</b>	<b>11.77</b>	<b>12.59</b>	<b>46.37</b>	<b>14.39</b>	<b>13.58</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Increase Density
- Improve Pedestrian Network
- Implement NEV Network
- Implement Trip Reduction Program
- Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	7.1015	7.2953	64.5527	0.1749	12.6856	0.1308	12.8164	3.3814	0.1211	3.5025	0.0000	10,981.6586	10,981.6586	0.4964	0.0000	10,992.0835
Unmitigated	7.3683	8.1811	71.5905	0.2004	14.6160	0.1460	14.7619	3.8959	0.1352	4.0311	0.0000	12,585.2536	12,585.2536	0.5635	0.0000	12,597.0873

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1123.18	3,380,815	3,048,386
Convenience Market With Gas Pumps	871.32	871.32	871.32	1,955,319	1,692,030
Discount Club	240.68	240.68	240.68	470,199	406,291
Fast Food Restaurant with Drive Thru	5,320.89	5,320.89	5320.89	11,990,799	10,374,812
Free-Standing Discount Superstore	1,949.48	1,949.48	1949.48	3,952,153	3,416,048
Government Office Building	16.12	16.12	16.12	35,080	29,617
High Turnover (Sit Down Restaurant)	1,376.20	1,376.20	1376.20	3,187,927	2,756,665
High Turnover (Sit Down Restaurant)	340.12	340.12	340.12	787,884	681,299
Hotel	628.56	628.56	628.56	1,264,020	1,091,961
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,405.96	2,405.96	2405.96	4,946,538	4,274,370
Regional Shopping Center	277.94	277.94	277.94	571,421	493,773
Supermarket	3,269.22	3,269.22	3269.22	6,864,287	5,936,787
<b>Total</b>	<b>17,819.66</b>	<b>17,819.66</b>	<b>17,819.66</b>	<b>39,406,441</b>	<b>34,202,039</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
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	79	21	0
Discount Club	9.50	7.30	7.30	16.70	64.30	19.00	60	40	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	79	21	0
Free-Standing Discount	9.50	7.30	7.30	13.20	67.80	19.00	64.5	35.5	0

Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	66	34	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	70	30	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

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
	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	1,618.9318	1,618.9318	0.0724	0.0165	1,625.5570
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	1,707.0039	1,707.0039	0.0764	0.0174	1,713.9895
NaturalGas Mitigated	0.0838	0.7555	0.5949	4.5700e-003		0.0579	0.0579		0.0579	0.0579	0.0000	829.0665	829.0665	0.0159	0.0152	834.1121
NaturalGas Unmitigated	0.0944	0.8504	0.6643	5.1500e-003		0.0652	0.0652		0.0652	0.0652	0.0000	934.2094	934.2094	0.0179	0.0171	939.8948

## 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					
Convenience Market With Gas	70300.8	3.8000e-004	3.4500e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7515	3.7515	7.0000e-005	7.0000e-005	3.7744
Discount Club	237272	1.2800e-003	0.0116	9.7700e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6617	12.6617	2.4000e-004	2.3000e-004	12.7388
Fast Food Restaurant with Drive Thru	4.55362e+006	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9985	242.9985	4.6600e-003	4.4500e-003	244.4774
Free-Standing Discount Supermarket	1.46277e+006	7.8900e-003	0.0717	0.0602	4.3000e-004		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003	0.0000	78.0589	78.0589	1.5000e-003	1.4300e-003	78.5340
Government Office Building	126347	6.8000e-004	6.1900e-003	5.2000e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7424	6.7424	1.3000e-004	1.2000e-004	6.7834
High Turnover (Sit Down Restaurant)	3.71975e+006	0.0201	0.1823	0.1532	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4998	198.4998	3.8000e-003	3.6400e-003	199.7078
High Turnover (Sit Down Restaurant)	919216	4.9600e-003	0.0451	0.0379	2.7000e-004		3.4200e-003	3.4200e-003		3.4200e-003	3.4200e-003	0.0000	49.0529	49.0529	9.4000e-004	9.0000e-004	49.3514
Hotel	1.30189e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	69.4739	69.4739	1.3300e-003	1.2700e-003	69.8967
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	795330	4.2900e-003	0.0390	0.0328	2.3000e-004		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	42.4418	42.4418	8.1000e-004	7.8000e-004	42.7001
Regional Shopping Center	91876	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9029	4.9029	9.0000e-005	9.0000e-005	4.9327
Supermarket	1.60361e+006	8.6500e-003	0.0786	0.0660	4.7000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	85.5747	85.5747	1.6400e-003	1.5700e-003	86.0955
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
<b>Total</b>		<b>0.0944</b>	<b>0.8504</b>	<b>0.6642</b>	<b>5.1400e-003</b>		<b>0.0652</b>	<b>0.0652</b>		<b>0.0652</b>	<b>0.0652</b>	<b>0.0000</b>	<b>934.2094</b>	<b>934.2094</b>	<b>0.0179</b>	<b>0.0171</b>	<b>939.8948</b>

### 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					
Convenience Market With Gas Pump	56004.2	3.0000e-004	2.7500e-003	2.3100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9886	2.9886	6.0000e-005	5.0000e-005	3.0068
Discount Club	189020	1.0200e-003	9.2700e-003	7.7800e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0868	10.0868	1.9000e-004	1.8000e-004	10.1482
Fast Food Restaurant with Drive Thru	4.35204e+006	0.0235	0.2133	0.1792	1.2800e-003		0.0162	0.0162		0.0162	0.0162	0.0000	232.2417	232.2417	4.4500e-003	4.2600e-003	233.6550
Free-Standing Discount Supermarket	1.1653e+006	6.2800e-003	0.0571	0.0480	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1846	62.1846	1.1900e-003	1.1400e-003	62.5630
Government Office Building	95405.2	5.1000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.0912	5.0912	1.0000e-004	9.0000e-005	5.1222
High Turnover (Sit Down Restaurant)	3.55508e+006	0.0192	0.1743	0.1464	1.0500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.7127	189.7127	3.6400e-003	3.4800e-003	190.8673
High Turnover (Sit Down Restaurant)	878525	4.7400e-003	0.0431	0.0362	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8814	46.8814	9.0000e-004	8.6000e-004	47.1667
Hotel	1.06574e+006	5.7500e-003	0.0522	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003	0.0000	56.8719	56.8719	1.0900e-003	1.0400e-003	57.2180
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	633589	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8107	33.8107	6.5000e-004	6.2000e-004	34.0165
Regional Shopping Center	73191.8	3.9000e-004	3.5900e-003	3.0100e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9058	3.9058	7.0000e-005	7.0000e-005	3.9296
Supermarket	1.39273e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3214	74.3214	1.4200e-003	1.3600e-003	74.7737
Apartments Low Rise	2.0795e+006	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
<b>Total</b>		<b>0.0838</b>	<b>0.7555</b>	<b>0.5949</b>	<b>4.5800e-003</b>		<b>0.0579</b>	<b>0.0579</b>		<b>0.0579</b>	<b>0.0579</b>	<b>0.0000</b>	<b>829.0665</b>	<b>829.0665</b>	<b>0.0159</b>	<b>0.0152</b>	<b>834.1121</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	152.5083	6.8200e-003	1.5500e-003	153.1324
Convenience Market With Gas	57564.6	12.8374	5.7000e-004	1.3000e-004	12.8900
Discount Club	194286	43.3276	1.9400e-003	4.4000e-004	43.5049
Fast Food Restaurant with Drive-Thru	669026	149.1985	6.6800e-003	1.5200e-003	149.8091
Free-Standing Discount Supermarket	1.19776e+006	267.1119	0.0120	2.7200e-003	268.2051
Government Office Building	93195.1	20.7833	9.3000e-004	2.1000e-004	20.8684
High Turnover (Sit Down Restaurant)	135053	30.1179	1.3500e-003	3.1000e-004	30.2412
High Turnover (Sit Down Restaurant)	546511	121.8767	5.4500e-003	1.2400e-003	122.3755
Hotel	456585	101.8224	4.5600e-003	1.0400e-003	102.2391
Parking Lot	111165	24.7908	1.1100e-003	2.5000e-004	24.8922
Parking Lot	22999.7	5.1291	2.3000e-004	5.0000e-005	5.1501
Parking Lot	440827	196.6166	8.8000e-003	2.0000e-003	197.4212
Regional Shopping Center	651243	145.2328	6.5000e-003	1.4800e-003	145.8272
Regional Shopping Center	75231.2	16.7772	7.5000e-004	1.7000e-004	16.8459
Supermarket	1.87828e+006	418.8732	0.0187	4.2600e-003	420.5874
<b>Total</b>		<b>1,707.0039</b>	<b>0.0764</b>	<b>0.0174</b>	<b>1,713.9895</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	148.5317	6.6500e-003	1.5100e-003	149.1396
Convenience Market With Gas	53450.6	11.9200	5.3000e-004	1.2000e-004	11.9687
Discount Club	180401	40.2310	1.8000e-003	4.1000e-004	40.3957
Fast Food Restaurant with Drive-Thru	626126	139.6314	6.2500e-003	1.4200e-003	140.2029
Free-Standing Discount Supermarket	1.11216e+006	248.0221	0.0111	2.5200e-003	249.0371
Government Office Building	85827.9	19.1404	8.6000e-004	1.9000e-004	19.2187
High Turnover (Sit Down Restaurant)	126393	28.1867	1.2600e-003	2.9000e-004	28.3020
High Turnover (Sit Down Restaurant)	511467	114.0616	5.1000e-003	1.1600e-003	114.5284
Hotel	393586	87.7732	3.9300e-003	8.9000e-004	88.1324
Parking Lot	111165	24.7908	1.1100e-003	2.5000e-004	24.8922
Parking Lot	22999.7	5.1291	2.3000e-004	5.0000e-005	5.1501
Parking Lot	440827	196.6166	8.8000e-003	2.0000e-003	197.4212
Regional Shopping Center	604700	134.8534	6.0300e-003	1.3700e-003	135.4052
Regional Shopping Center	69854.6	15.5782	7.0000e-004	1.6000e-004	15.6419
Supermarket	1.81368e+006	404.4657	0.0181	4.1100e-003	406.1210
<b>Total</b>		<b>1,618.9318</b>	<b>0.0725</b>	<b>0.0165</b>	<b>1,625.5570</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	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092
Unmitigated	7.3717	0.0319	2.3445	3.3900e-003		0.1788	0.1788		0.1787	0.1787	22.2350	79.2780	101.5130	0.1075	1.4100e-003	104.2092

## 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	0.4657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7459					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0402	0.0153	1.3262	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003	0.0000	2.1671	2.1671	2.1000e-003	0.0000	2.2112
<b>Total</b>	<b>7.3717</b>	<b>0.0319</b>	<b>2.3445</b>	<b>3.3900e-003</b>		<b>0.1788</b>	<b>0.1788</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2780</b>	<b>101.5130</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2092</b>

### 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	0.4657					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.7459					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1199	0.0166	1.0184	3.3200e-003		0.1714	0.1714		0.1714	0.1714	22.2350	77.1109	99.3459	0.1054	1.4100e-003	101.9980
Landscaping	0.0402	0.0153	1.3262	7.0000e-005		7.3300e-003	7.3300e-003		7.3300e-003	7.3300e-003	0.0000	2.1671	2.1671	2.1000e-003	0.0000	2.2112
<b>Total</b>	<b>7.3717</b>	<b>0.0319</b>	<b>2.3445</b>	<b>3.3900e-003</b>		<b>0.1788</b>	<b>0.1788</b>		<b>0.1787</b>	<b>0.1787</b>	<b>22.2350</b>	<b>79.2780</b>	<b>101.5130</b>	<b>0.1075</b>	<b>1.4100e-003</b>	<b>104.2092</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	79.0398	1.3744	0.0330	118.1350
Unmitigated	96.0443	1.7181	0.0413	144.9237

### 7.2 Water by Land Use

**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	23.3807	0.3788	9.1200e- 003	34.1634
Convenience Market With Gas	0.125486 / 0.0769109	0.2513	4.1000e- 003	1.0000e- 004	0.3679
Discount Club	1.57626 / 0.966097	3.1562	0.0515	1.2400e- 003	4.6217
Fast Food Restaurant with Drive Thru	6.5108 / 0.415583	10.2465	0.2125	5.0900e- 003	16.2882
Free-Standing Discount Supermarket	9.71757 / 5.95593	19.4579	0.3174	7.6400e- 003	28.4923
Government Office Building	1.82966 / 1.1214	3.6636	0.0598	1.4400e- 003	5.3646
High Turnover (Sit Down Restaurant)	6.63221 / 0.423333	10.4376	0.2165	5.1900e- 003	16.5919
Hotel	2.05471 / 0.228301	3.3095	0.0671	1.6100e- 003	5.2164
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	5.89395 / 3.61242	11.8017	0.1925	4.6400e- 003	17.2813
Supermarket	6.67867 / 0.206557	10.3392	0.2180	5.2200e- 003	16.5359
<b>Total</b>		<b>96.0443</b>	<b>1.7181</b>	<b>0.0413</b>	<b>144.9237</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	19.4978	0.3030	7.3000e-003	28.1234
Convenience Market With Gas Discount	0.100389 / 0.0722193	0.2094	3.2800e-003	8.0000e-005	0.3027
Discount Club	1.26101 / 0.907165	2.6298	0.0412	9.9000e-004	3.8021
Fast Food Restaurant with Drive Thru	5.20864 / 0.390232	8.2423	0.1700	4.0700e-003	13.0737
Free-Standing Discount Supermarket	7.77406 / 5.59262	16.2125	0.2539	6.1100e-003	23.4395
Government Office Building	1.46372 / 1.053	3.0525	0.0478	1.1500e-003	4.4133
High Turnover (Sit Down Restaurant)	5.30577 / 0.397509	8.3960	0.1732	4.1500e-003	13.3175
Hotel	1.64377 / 0.214375	2.6724	0.0537	1.2800e-003	4.1973
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	4.71516 / 3.39206	9.8333	0.1540	3.7100e-003	14.2166
Supermarket	5.34294 / 0.193957	8.2938	0.1744	4.1700e-003	13.2490
<b>Total</b>		<b>79.0398</b>	<b>1.3744</b>	<b>0.0330</b>	<b>118.1350</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	342.3970	20.2351	0.0000	767.3338
Mitigated	171.1985	10.1175	0.0000	383.6669

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Discount Club	91.52	18.5777	1.0979	0.0000	41.6339
Fast Food Restaurant with Drive-Through	247.08	50.1550	2.9641	0.0000	112.4006
Free-Standing Discount Superstore	564.21	114.5295	6.7685	0.0000	256.6681
Government Office Building	8.57	1.7396	0.1028	0.0000	3.8986
High Turnover (Sit Down Restaurant)	260.02	52.7817	3.1193	0.0000	118.2872
Hotel	44.35	9.0027	0.5320	0.0000	20.1755
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83.55	16.9599	1.0023	0.0000	38.0082
Supermarket	305.58	62.0300	3.6659	0.0000	139.0132
<b>Total</b>		<b>342.3970</b>	<b>20.2351</b>	<b>0.0000</b>	<b>767.3338</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Discount Club	45.76	9.2889	0.5490	0.0000	20.8170
Fast Food Restaurant with Drive Thru	123.54	25.0775	1.4820	0.0000	56.2003
Free-Standing Discount Supermarket	282.105	57.2648	3.3843	0.0000	128.3340
Government Office Building	4.285	0.8698	0.0514	0.0000	1.9493
High Turnover (Sit Down Restaurant)	130.01	26.3909	1.5597	0.0000	59.1436
Hotel	22.175	4.5013	0.2660	0.0000	10.0878
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	41.775	8.4800	0.5012	0.0000	19.0041
Supermarket	152.79	31.0150	1.8329	0.0000	69.5066
<b>Total</b>		<b>171.1985</b>	<b>10.1175</b>	<b>0.0000</b>	<b>383.6669</b>

**9.0 Operational Offroad**

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

**Merced Gateway Operational All Phases Year 2026  
Merced County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	9.21	1000sqft	1.10	9,209.00	0
Parking Lot	35.70	Acre	35.70	1,555,092.00	0
Fast Food Restaurant with Drive Thru	21.45	1000sqft	0.86	21,450.00	0
High Turnover (Sit Down Restaurant)	17.52	1000sqft	0.89	17,522.00	0
High Turnover (Sit Down Restaurant)	4.33	1000sqft	0.18	4,330.00	0
Hotel	81.00	Room	4.73	49,900.00	0
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509
Convenience Market With Gas Pumps	12.00	Pump	0.07	6,305.00	0
Discount Club	21.28	1000sqft	0.86	21,280.00	0
Free-Standing Discount Superstore	131.19	1000sqft	5.27	131,190.00	0
Regional Shopping Center	71.33	1000sqft	3.65	71,330.00	0
Regional Shopping Center	8.24	1000sqft	0.33	8,240.00	0
Supermarket	54.18	1000sqft	2.76	54,176.00	0
Movie Theater (No Matinee)	38.77	1000sqft	2.01	38,773.00	0
User Defined Commercial	1.00	User Defined Unit	0.45	2,000.00	0
High Turnover (Sit Down Restaurant)	9.09	1000sqft	0.47	9,093.00	0
Regional Shopping Center	165.64	1000sqft	8.57	165,641.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3	<b>Operational Year</b>			2025

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MW hr) 491.65 CH4 Intensity (lb/MW hr) 0.022 N2O Intensity (lb/MW hr) 0.005

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

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Phases 1, 2, 4, and 5

Construction Phase -

Vehicle Trips - Pass-by trips % moved to Primary Trips %

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site. Increase transit accessibility 0.01

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Woodstoves - No woodstoves

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	9,210.00	9,209.00
tblLandUse	LandUseSquareFeet	0.00	2,000.00
tblLandUse	LandUseSquareFeet	17,520.00	17,522.00
tblLandUse	LandUseSquareFeet	117,612.00	49,900.00
tblLandUse	LandUseSquareFeet	1,694.10	6,305.00
tblLandUse	LandUseSquareFeet	54,180.00	54,176.00
tblLandUse	LandUseSquareFeet	38,770.00	38,773.00
tblLandUse	LandUseSquareFeet	9,090.00	9,093.00
tblLandUse	LandUseSquareFeet	165,640.00	165,641.00
tblLandUse	LotAcreage	0.21	1.10
tblLandUse	LotAcreage	0.00	0.45

tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	0.40	0.89
tblLandUse	LotAcreage	0.10	0.18
tblLandUse	LotAcreage	2.70	4.73
tblLandUse	LotAcreage	11.13	5.50
tblLandUse	LotAcreage	0.04	0.07
tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	3.01	5.27
tblLandUse	LotAcreage	1.64	3.65
tblLandUse	LotAcreage	0.19	0.33
tblLandUse	LotAcreage	1.24	2.76
tblLandUse	LotAcreage	0.89	2.01
tblLandUse	LotAcreage	0.21	0.47
tblLandUse	LotAcreage	3.80	8.57
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleEF	HHD	0.14	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.9230e-003	0.00
tblVehicleEF	MCY	6.8250e-003	9.0000e-003
tblVehicleEF	MDV	0.17	0.21
tblVehicleEF	MH	1.8160e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003
tblVehicleEF	OBUS	2.0140e-003	0.00
tblVehicleEF	SBUS	1.1680e-003	0.00

tblVehicleEF	UBUS	1.6690e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	36.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	14.00	79.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	PR_TP	29.00	79.00
tblVehicleTrips	PR_TP	47.50	64.50
tblVehicleTrips	PR_TP	50.00	66.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	54.00	65.00
tblVehicleTrips	PR_TP	34.00	70.00
tblVehicleTrips	PR_TP	66.00	83.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	204.47	72.61
tblVehicleTrips	ST_TR	53.75	11.31
tblVehicleTrips	ST_TR	722.03	248.06
tblVehicleTrips	ST_TR	64.07	14.86
tblVehicleTrips	ST_TR	0.00	1.75

tblVehicleTrips	ST_TR	158.37	78.55
tblVehicleTrips	ST_TR	8.19	7.76
tblVehicleTrips	ST_TR	49.97	33.73
tblVehicleTrips	ST_TR	177.59	60.34
tblVehicleTrips	ST_TR	80.00	59.52
tblVehicleTrips	ST_TR	0.00	19.00
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	SU_TR	166.88	72.61
tblVehicleTrips	SU_TR	33.67	11.31
tblVehicleTrips	SU_TR	542.72	248.06
tblVehicleTrips	SU_TR	56.12	14.86
tblVehicleTrips	SU_TR	0.00	1.75
tblVehicleTrips	SU_TR	131.84	78.55
tblVehicleTrips	SU_TR	5.95	7.76
tblVehicleTrips	SU_TR	25.24	33.73
tblVehicleTrips	SU_TR	166.44	60.34
tblVehicleTrips	SU_TR	80.00	59.52
tblVehicleTrips	SU_TR	0.00	19.00
tblVehicleTrips	WD_TR	6.59	6.31
tblVehicleTrips	WD_TR	542.60	72.61
tblVehicleTrips	WD_TR	41.80	11.31
tblVehicleTrips	WD_TR	496.12	248.06
tblVehicleTrips	WD_TR	53.13	14.86
tblVehicleTrips	WD_TR	68.93	1.75
tblVehicleTrips	WD_TR	127.15	78.55
tblVehicleTrips	WD_TR	8.17	7.76
tblVehicleTrips	WD_TR	42.94	33.73
tblVehicleTrips	WD_TR	102.24	60.34
tblVehicleTrips	WD_TR	80.00	59.52
tblVehicleTrips	WD_TR	0.00	19.00

tblWoodstoves	NumberCatalytic	5.50	0.00
tblWoodstoves	NumberNoncatalytic	5.50	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954
Energy	0.1193	1.0770	0.8545	6.5100e-003		0.0824	0.0824		0.0824	0.0824	0.0000	3,450.4829	3,450.4829	0.1242	0.0447	3,466.9573
Mobile	10.0788	10.9174	96.5102	0.2958	21.4849	0.2187	21.7036	5.7268	0.2026	5.9294	0.0000	18,195.3875	18,195.3875	0.7766	0.0000	18,211.6967
Waste						0.0000	0.0000		0.0000	0.0000	444.5177	0.0000	444.5177	26.2703	0.0000	996.1929
Water						0.0000	0.0000		0.0000	0.0000	26.4004	123.0574	149.4578	2.7171	0.0653	226.7525
<b>Total</b>	<b>20.0227</b>	<b>12.0096</b>	<b>98.6918</b>	<b>0.3024</b>	<b>21.4849</b>	<b>0.3139</b>	<b>21.7987</b>	<b>5.7268</b>	<b>0.2977</b>	<b>6.0245</b>	<b>470.9181</b>	<b>21,848.2098</b>	<b>22,319.1279</b>	<b>29.8917</b>	<b>0.1114</b>	<b>22,981.3948</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	tons/yr										MT/yr					
Area	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954
Energy	0.1053	0.9509	0.7590	5.7400e-003		0.0727	0.0727		0.0727	0.0727	0.0000	3,190.0705	3,190.0705	0.1161	0.0410	3,205.2022
Mobile	9.7736	9.9378	88.5965	0.2647	19.1430	0.2001	19.3431	5.1026	0.1854	5.2880	0.0000	16,282.0863	16,282.0863	0.6997	0.0000	16,296.7793
Waste						0.0000	0.0000		0.0000	0.0000	222.2589	0.0000	222.2589	13.1351	0.0000	498.0964

Water						0.0000	0.0000		0.0000	0.0000	21.1203	101.5931	122.7134	2.1735	0.0522	184.5346
<b>Total</b>	<b>19.7034</b>	<b>10.9039</b>	<b>90.6826</b>	<b>0.2705</b>	<b>19.1430</b>	<b>0.2856</b>	<b>19.4286</b>	<b>5.1026</b>	<b>0.2708</b>	<b>5.3734</b>	<b>243.3792</b>	<b>19,653.03</b>	<b>19,896.411</b>	<b>16.1280</b>	<b>0.0946</b>	<b>20,264.40</b>
												<b>20</b>	<b>2</b>			<b>79</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>1.59</b>	<b>9.21</b>	<b>8.12</b>	<b>10.54</b>	<b>10.90</b>	<b>9.01</b>	<b>10.87</b>	<b>10.90</b>	<b>9.04</b>	<b>10.81</b>	<b>48.32</b>	<b>10.05</b>	<b>10.85</b>	<b>46.05</b>	<b>15.14</b>	<b>11.82</b>

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

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	9.7736	9.9378	88.5965	0.2647	19.1430	0.2001	19.3431	5.1026	0.1854	5.2880	0.0000	16,282.0863	16,282.0863	0.6997	0.0000	16,296.7793
Unmitigated	10.0788	10.9174	96.5102	0.2958	21.4849	0.2187	21.7036	5.7268	0.2026	5.9294	0.0000	18,195.3875	18,195.3875	0.7766	0.0000	18,211.6967

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1123.18	3,380,815	3,012,306
Convenience Market With Gas Pumps	871.32	871.32	871.32	1,955,319	1,742,189
Discount Club	240.68	240.68	240.68	470,199	418,947

Fast Food Restaurant with Drive Thru	5,320.89	5,320.89	5320.89	11,990,799	10,683,802
Free-Standing Discount Superstore	1,949.48	1,949.48	1949.48	3,952,153	3,521,368
Government Office Building	16.12	16.12	16.12	35,080	31,256
High Turnover (Sit Down Restaurant)	1,376.20	1,376.20	1376.20	3,187,927	2,840,443
High Turnover (Sit Down Restaurant)	340.12	340.12	340.12	787,884	702,005
High Turnover (Sit Down Restaurant)	714.02	714.02	714.02	1,654,010	1,473,723
Hotel	628.56	628.56	628.56	1,264,020	1,126,242
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,405.96	2,405.96	2405.96	4,946,538	4,407,365
Regional Shopping Center	277.94	277.94	277.94	571,421	509,136
Regional Shopping Center	5,587.04	5,587.04	5587.04	11,486,676	10,234,628
Supermarket	3,269.22	3,269.22	3269.22	6,864,287	6,116,079
Movie Theater (No Matinee)	2,307.59	2,307.59	2307.59	5,378,955	4,792,649
User Defined Commercial	0.00	0.00	0.00		
<b>Total</b>	<b>26,428.31</b>	<b>26,428.31</b>	<b>26,428.31</b>	<b>57,926,082</b>	<b>51,612,139</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
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	79	21	0
Discount Club	9.50	7.30	7.30	16.70	64.30	19.00	60	40	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	79	21	0
Free-Standing Discount	9.50	7.30	7.30	13.20	67.80	19.00	64.5	35.5	0
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	66	34	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	70	30	0
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	83	17	0
User Defined Commercial	9.50	7.30	7.30	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2,148.2849	2,148.2849	0.0961	0.0219	2,157.0764
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,269.6820	2,269.6820	0.1016	0.0231	2,278.9703
NaturalGas Mitigated	0.1053	0.9509	0.7590	5.7400e-003		0.0727	0.0727		0.0727	0.0727	0.0000	1,041.7856	1,041.7856	0.0200	0.0191	1,048.1258
NaturalGas Unmitigated	0.1193	1.0770	0.8545	6.5100e-003		0.0824	0.0824		0.0824	0.0824	0.0000	1,180.8009	1,180.8009	0.0226	0.0217	1,187.9871

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	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					
Convenience Market With Gas Pump	70300.8	3.8000e-004	3.4500e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7515	3.7515	7.0000e-005	7.0000e-005	3.7744
Discount Club	237272	1.2800e-003	0.0116	9.7700e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6617	12.6617	2.4000e-004	2.3000e-004	12.7388
Fast Food Restaurant with Drive Thru	4.55362e+006	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9985	242.9985	4.6600e-003	4.4500e-003	244.4774
Free-Standing Discount Supermarket	1.46277e+006	7.8900e-003	0.0717	0.0602	4.3000e-004		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003	0.0000	78.0589	78.0589	1.5000e-003	1.4300e-003	78.5340
Government Office Building	126347	6.8000e-004	6.1900e-003	5.2000e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7424	6.7424	1.3000e-004	1.2000e-004	6.7834
High Turnover (Sit Down Restaurant)	1.93035e+006	0.0104	0.0946	0.0795	5.7000e-004		7.1900e-003	7.1900e-003		7.1900e-003	7.1900e-003	0.0000	103.0110	103.0110	1.9700e-003	1.8900e-003	103.6379
High Turnover (Sit Down Restaurant)	3.71975e+006	0.0201	0.1823	0.1532	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4998	198.4998	3.8000e-003	3.6400e-003	199.7078
High Turnover (Sit Down Restaurant)	919216	4.9600e-003	0.0451	0.0379	2.7000e-004		3.4200e-003	3.4200e-003		3.4200e-003	3.4200e-003	0.0000	49.0529	49.0529	9.4000e-004	9.0000e-004	49.3514
Hotel	1.30189e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	69.4739	69.4739	1.3300e-003	1.2700e-003	69.8967
Movie Theater (No Matinee)	843700	4.5500e-003	0.0414	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	45.0231	45.0231	8.6000e-004	8.3000e-004	45.2971
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
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	1.8469e+006	9.9600e-003	0.0905	0.0761	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5575	98.5575	1.8900e-003	1.8100e-003	99.1573
Regional Shopping Center	795330	4.2900e-003	0.0390	0.0328	2.3000e-004		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	42.4418	42.4418	8.1000e-004	7.8000e-004	42.7001
Regional Shopping Center	91876	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9029	4.9029	9.0000e-005	9.0000e-005	4.9327
Supermarket	1.60361e+006	8.6500e-003	0.0786	0.0660	4.7000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	85.5747	85.5747	1.6400e-003	1.5700e-003	86.0955
User Defined Commercial	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>0.1193</b>	<b>1.0770</b>	<b>0.8545</b>	<b>6.5000e-003</b>		<b>0.0824</b>	<b>0.0824</b>		<b>0.0824</b>	<b>0.0824</b>	<b>0.0000</b>	<b>1,180.8009</b>	<b>1,180.8009</b>	<b>0.0226</b>	<b>0.0217</b>	<b>1,187.9871</b>

**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					
Convenience Market With Gas Pump	56004.2	3.0000e-004	2.7500e-003	2.3100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9886	2.9886	6.0000e-005	5.0000e-005	3.0068
Discount Club	189020	1.0200e-003	9.2700e-003	7.7800e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0868	10.0868	1.9000e-004	1.8000e-004	10.1482
Fast Food Restaurant with Drive-Thru	4.35204e+006	0.0235	0.2133	0.1792	1.2800e-003		0.0162	0.0162		0.0162	0.0162	0.0000	232.2417	232.2417	4.4500e-003	4.2600e-003	233.6550
Free-Standing Discount Supermarket	1.1653e+006	6.2800e-003	0.0571	0.0480	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1846	62.1846	1.1900e-003	1.1400e-003	62.5630
Government Office Building	95405.2	5.1000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.0912	5.0912	1.0000e-004	9.0000e-005	5.1222
High Turnover (Sit Down Restaurant)	1.8449e+006	9.9500e-003	0.0904	0.0760	5.4000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	98.4510	98.4510	1.8900e-003	1.8000e-003	99.0501
High Turnover (Sit Down Restaurant)	3.55508e+006	0.0192	0.1743	0.1464	1.0500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.7127	189.7127	3.6400e-003	3.4800e-003	190.8673
High Turnover (Sit Down Restaurant)	878525	4.7400e-003	0.0431	0.0362	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8814	46.8814	9.0000e-004	8.6000e-004	47.1667
Hotel	1.06574e+006	5.7500e-003	0.0522	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003	0.0000	56.8719	56.8719	1.0900e-003	1.0400e-003	57.2180
Movie Theater (No Matinee)	669997	3.6100e-003	0.0328	0.0276	2.0000e-004		2.5000e-003	2.5000e-003		2.5000e-003	2.5000e-003	0.0000	35.7536	35.7536	6.9000e-004	6.6000e-004	35.9712
Apartments Low Rise	2.0795e+006	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
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	1.47131e+006	7.9300e-003	0.0721	0.0606	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003	0.0000	78.5145	78.5145	1.5000e-003	1.4400e-003	78.9923
Regional Shopping Center	633589	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8107	33.8107	6.5000e-004	6.2000e-004	34.0165
Regional Shopping Center	73191.8	3.9000e-004	3.5900e-003	3.0100e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9058	3.9058	7.0000e-005	7.0000e-005	3.9296
Supermarket	1.39273e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3214	74.3214	1.4200e-003	1.3600e-003	74.7737
User Defined Commercial	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>0.1053</b>	<b>0.9509</b>	<b>0.7590</b>	<b>5.7500e-003</b>		<b>0.0727</b>	<b>0.0727</b>		<b>0.0727</b>	<b>0.0727</b>	<b>0.0000</b>	<b>1,041.7856</b>	<b>1,041.7856</b>	<b>0.0200</b>	<b>0.0191</b>	<b>1,048.1258</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	152.5083	6.8200e-003	1.5500e-003	153.1324
Convenience Market With Gas	57564.6	12.8374	5.7000e-004	1.3000e-004	12.8900
Discount Club	194286	43.3276	1.9400e-003	4.4000e-004	43.5049
Fast Food Restaurant with Drive Thru	669026	149.1985	6.6800e-003	1.5200e-003	149.8091
Free-Standing Discount Superstore	1.19776e+006	267.1119	0.0120	2.7200e-003	268.2051
Government Office Building	93195.1	20.7833	9.3000e-004	2.1000e-004	20.8684
High Turnover (Sit Down Restaurant)	135053	30.1179	1.3500e-003	3.1000e-004	30.2412
High Turnover (Sit Down Restaurant)	283611	63.2476	2.8300e-003	6.4000e-004	63.5065
High Turnover (Sit Down Restaurant)	546511	121.8767	5.4500e-003	1.2400e-003	122.3755
Hotel	456585	101.8224	4.5600e-003	1.0400e-003	102.2391
Movie Theater (No Matinee)	374547	83.5273	3.7400e-003	8.5000e-004	83.8691
Parking Lot	1.36848e+006	305.1831	0.0137	3.1000e-003	306.4321
Regional Shopping Center	1.5123e+006	337.2566	0.0151	3.4300e-003	338.6367
Regional Shopping Center	651243	145.2328	6.5000e-003	1.4800e-003	145.8272
Regional Shopping Center	75231.2	16.7772	7.5000e-004	1.7000e-004	16.8459
Supermarket	1.87828e+006	418.8732	0.0187	4.2600e-003	420.5874
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,269.6820</b>	<b>0.1016</b>	<b>0.0231</b>	<b>2,278.9703</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	148.5317	6.6500e-003	1.5100e-003	149.1396
Convenience Market With Gas	53450.6	11.9200	5.3000e-004	1.2000e-004	11.9687
Discount Club	180401	40.2310	1.8000e-003	4.1000e-004	40.3957
Fast Food Restaurant with Drive Thru	626126	139.6314	6.2500e-003	1.4200e-003	140.2029
Free-Standing Discount Supermarket	1.11216e+006	248.0221	0.0111	2.5200e-003	249.0371
Government Office Building	85827.9	19.1404	8.6000e-004	1.9000e-004	19.2187
High Turnover (Sit Down Restaurant)	126393	28.1867	1.2600e-003	2.9000e-004	28.3020
High Turnover (Sit Down Restaurant)	265425	59.1920	2.6500e-003	6.0000e-004	59.4342
High Turnover (Sit Down Restaurant)	511467	114.0616	5.1000e-003	1.1600e-003	114.5284
Hotel	393586	87.7732	3.9300e-003	8.9000e-004	88.1324
Movie Theater (No Matinee)	351380	78.3609	3.5100e-003	8.0000e-004	78.6815
Parking Lot	1.36848e+006	305.1831	0.0137	3.1000e-003	306.4321
Regional Shopping Center	1.40422e+006	313.1536	0.0140	3.1800e-003	314.4351
Regional Shopping Center	604700	134.8534	6.0300e-003	1.3700e-003	135.4052
Regional Shopping Center	69854.6	15.5782	7.0000e-004	1.6000e-004	15.6419
Supermarket	1.81368e+006	404.4657	0.0181	4.1100e-003	406.1210
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,148.2849</b>	<b>0.0961</b>	<b>0.0218</b>	<b>2,157.0764</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	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954
Unmitigated	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954

### 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	0.6239					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7900e-003	0.0000	4.3000e-004	0.0000		5.3800e-003	5.3800e-003		5.3300e-003	5.3300e-003	0.0000	77.1109	77.1109	1.4800e-003	1.4100e-003	77.5802
Landscaping	0.0402	0.0153	1.3267	7.0000e-005		7.3500e-003	7.3500e-003		7.3500e-003	7.3500e-003	0.0000	2.1711	2.1711	2.1000e-003	0.0000	2.2152
<b>Total</b>	<b>9.8246</b>	<b>0.0153</b>	<b>1.3271</b>	<b>7.0000e-005</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>79.2820</b>	<b>79.2820</b>	<b>3.5800e-003</b>	<b>1.4100e-003</b>	<b>79.7954</b>

#### 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	0.6239					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7900e-003	0.0000	4.3000e-004	0.0000		5.3800e-003	5.3800e-003		5.3300e-003	5.3300e-003	0.0000	77.1109	77.1109	1.4800e-003	1.4100e-003	77.5802
Landscaping	0.0402	0.0153	1.3267	7.0000e-005		7.3500e-003	7.3500e-003		7.3500e-003	7.3500e-003	0.0000	2.1711	2.1711	2.1000e-003	0.0000	2.2152
<b>Total</b>	<b>9.8246</b>	<b>0.0153</b>	<b>1.3271</b>	<b>7.0000e-005</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>79.2820</b>	<b>79.2820</b>	<b>3.5800e-003</b>	<b>1.4100e-003</b>	<b>79.7954</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	122.7134	2.1735	0.0522	184.5346
Unmitigated	149.4578	2.7171	0.0653	226.7525

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	23.3807	0.3788	9.1200e-003	34.1634
Convenience Market With Gas Dispenser	0.125486 / 0.0769109	0.2513	4.1000e-003	1.0000e-004	0.3679
Discount Club	1.57626 / 0.966097	3.1562	0.0515	1.2400e-003	4.6217
Fast Food Restaurant with Drive Thru	6.5108 / 0.415583	10.2465	0.2125	5.0900e-003	16.2882
Free-Standing Discount Supermarket	9.71757 / 5.95593	19.4579	0.3174	7.6400e-003	28.4923
Government Office Building	1.82966 / 1.1214	3.6636	0.0598	1.4400e-003	5.3646
High Turnover (Sit Down Restaurant)	9.39133 / 0.599447	14.7798	0.3065	7.3500e-003	23.4945
Hotel	2.05471 / 0.228301	3.3095	0.0671	1.6100e-003	5.2164
Movie Theater (No Matinee)	15.5701 / 0.993835	24.5038	0.5082	0.0122	38.9520
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18.1633 / 11.1324	36.3692	0.5932	0.0143	53.2556
Supermarket	6.67867 / 0.206557	10.3392	0.2180	5.2200e-003	16.5359
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>149.4578</b>	<b>2.7171</b>	<b>0.0653</b>	<b>226.7525</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	19.4978	0.3030	7.3000e-003	28.1234
Convenience Market With Gas	0.100389 / 0.0722193	0.2094	3.2800e-003	8.0000e-005	0.3027
Discount Club	1.26101 / 0.907165	2.6298	0.0412	9.9000e-004	3.8021
Fast Food Restaurant with Drive Thru	5.20864 / 0.390232	8.2423	0.1700	4.0700e-003	13.0737
Free-Standing Discount Supermarket	7.77406 / 5.59262	16.2125	0.2539	6.1100e-003	23.4395
Government Office Building	1.46372 / 1.053	3.0525	0.0478	1.1500e-003	4.4133
High Turnover (Sit Down Restaurant)	7.51307 / 0.562881	11.8889	0.2452	5.8700e-003	18.8578
Hotel	1.64377 / 0.214375	2.6724	0.0537	1.2800e-003	4.1973
Movie Theater (No Matinee)	12.4561 / 0.933211	19.7109	0.4065	9.7300e-003	31.2647
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14.5307 / 10.4533	30.3032	0.4746	0.0114	43.8112
Supermarket	5.34294 / 0.193957	8.2938	0.1744	4.1700e-003	13.2490
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>122.7134</b>	<b>2.1735</b>	<b>0.0522</b>	<b>184.5346</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	444.5177	26.2703	0.0000	996.1929
Mitigated	222.2589	13.1351	0.0000	498.0964

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Discount Club	91.52	18.5777	1.0979	0.0000	41.6339
Fast Food Restaurant with Drive Thru	247.08	50.1550	2.9641	0.0000	112.4006
Free-Standing Discount Supermarket	564.21	114.5295	6.7685	0.0000	256.6681
Government Office Building	8.57	1.7396	0.1028	0.0000	3.8986
High Turnover (Sit Down Restaurant)	368.19	74.7392	4.4170	0.0000	167.4955
Hotel	44.35	9.0027	0.5320	0.0000	20.1755
Movie Theater (No Matinee)	220.99	44.8590	2.6511	0.0000	100.5319
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	257.47	52.2641	3.0887	0.0000	117.1272
Supermarket	305.58	62.0300	3.6659	0.0000	139.0132
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>444.5177</b>	<b>26.2703</b>	<b>0.0000</b>	<b>996.1929</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Discount Club	45.76	9.2889	0.5490	0.0000	20.8170
Fast Food Restaurant with Drive Thru	123.54	25.0775	1.4820	0.0000	56.2003
Free-Standing Discount Supermarket	282.105	57.2648	3.3843	0.0000	128.3340
Government Office Building	4.285	0.8698	0.0514	0.0000	1.9493
High Turnover (Sit Down Restaurant)	184.095	37.3696	2.2085	0.0000	83.7477
Hotel	22.175	4.5013	0.2660	0.0000	10.0878
Movie Theater (No Matinee)	110.495	22.4295	1.3255	0.0000	50.2659
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	128.735	26.1320	1.5444	0.0000	58.5636
Supermarket	152.79	31.0150	1.8329	0.0000	69.5066
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>222.2589</b>	<b>13.1351</b>	<b>0.0000</b>	<b>498.0964</b>

## 9.0 Operational Offroad

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

**Mitigated Merced Gateway Operational All Phases Year 2026**  
**Merced County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	9.21	1000sqft	1.10	9,209.00	0
User Defined Commercial	1.00	User Defined Unit	0.45	2,000.00	0
Parking Lot	35.70	Acre	35.70	1,555,092.00	0
Fast Food Restaurant with Drive Thru	21.45	1000sqft	0.86	21,450.00	0
High Turnover (Sit Down Restaurant)	17.52	1000sqft	0.89	17,522.00	0
High Turnover (Sit Down Restaurant)	4.33	1000sqft	0.18	4,330.00	0
High Turnover (Sit Down Restaurant)	9.09	1000sqft	0.47	9,093.00	0
Hotel	81.00	Room	4.73	49,900.00	0
Movie Theater (No Matinee)	38.77	1000sqft	2.01	38,773.00	0
Apartments Low Rise	178.00	Dwelling Unit	5.50	178,000.00	509
Convenience Market With Gas Pumps	12.00	Pump	0.07	6,305.00	0
Discount Club	21.28	1000sqft	0.86	21,280.00	0
Free-Standing Discount Superstore	131.19	1000sqft	5.27	131,190.00	0
Regional Shopping Center	71.33	1000sqft	3.65	71,330.00	0
Regional Shopping Center	8.24	1000sqft	0.33	8,240.00	0
Regional Shopping Center	165.64	1000sqft	8.57	165,641.00	0
Supermarket	54.18	1000sqft	2.76	54,176.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	49
<b>Climate Zone</b>	3	<b>Operational Year</b>	2025		

Utility Company Pacific Gas & Electric Company

CO2 Intensity (lb/MWhr) 491.65 CH4 Intensity (lb/MWhr) 0.022 N2O Intensity (lb/MWhr) 0.005

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

Project Characteristics - PG&E - 491.65 CO2, 0.022 CH4 and 0.005 N2O Intensity Factors

Land Use - Phases 1, 2, 4, and 5

Construction Phase -

Vehicle Trips - Pass-by trips % moved to Primary Trips %

Vehicle Emission Factors - Fleet Mix adjusted to project

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - No woodstoves

Energy Use -

Mobile Land Use Mitigation - Suburban Center, 21 dwelling units per acre, Improve Pedestrian Network on project site. Increase transit accessibility 0.01 mile. NEV Network 9 charging

Energy Mitigation - Exceed Title 24 by 25%.

Water Mitigation - Install Low-flow faucets, toilets, and showers. Use water-efficient irrigation system.

Waste Mitigation - Institute Recycling and Composting Services 50% reduction

Mobile Commute Mitigation - Implement Voluntary Trip Reduction Program 50% eligible. Provide Ride Sharing Program 50% Eligible.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	9,210.00	9,209.00
tblLandUse	LandUseSquareFeet	0.00	2,000.00
tblLandUse	LandUseSquareFeet	17,520.00	17,522.00
tblLandUse	LandUseSquareFeet	9,090.00	9,093.00
tblLandUse	LandUseSquareFeet	117,612.00	49,900.00
tblLandUse	LandUseSquareFeet	38,770.00	38,773.00
tblLandUse	LandUseSquareFeet	1,694.10	6,305.00
tblLandUse	LandUseSquareFeet	165,640.00	165,641.00
tblLandUse	LandUseSquareFeet	54,180.00	54,176.00

tblLandUse	LotAcreage	0.21	1.10
tblLandUse	LotAcreage	0.00	0.45
tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	0.40	0.89
tblLandUse	LotAcreage	0.10	0.18
tblLandUse	LotAcreage	0.21	0.47
tblLandUse	LotAcreage	2.70	4.73
tblLandUse	LotAcreage	0.89	2.01
tblLandUse	LotAcreage	11.13	5.50
tblLandUse	LotAcreage	0.04	0.07
tblLandUse	LotAcreage	0.49	0.86
tblLandUse	LotAcreage	3.01	5.27
tblLandUse	LotAcreage	3.80	8.57
tblLandUse	LotAcreage	1.64	3.65
tblLandUse	LotAcreage	0.19	0.33
tblLandUse	LotAcreage	1.24	2.76
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.022
tblProjectCharacteristics	CO2IntensityFactor	641.35	491.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblProjectCharacteristics	OperationalYear	2014	2025
tblVehicleEF	HHD	0.14	2.0000e-003
tblVehicleEF	LDA	0.39	0.51
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.15	0.20
tblVehicleEF	LHD1	0.05	0.00
tblVehicleEF	LHD2	6.9230e-003	0.00
tblVehicleEF	MCY	6.8250e-003	9.0000e-003
tblVehicleEF	MDV	0.17	0.21
tblVehicleEF	MH	1.8160e-003	0.00
tblVehicleEF	MHD	0.02	5.0000e-003

tblVehicleEF	OBUS	2.0140e-003	0.00
tblVehicleEF	SBUS	1.1680e-003	0.00
tblVehicleEF	UBUS	1.6690e-003	2.0000e-003
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PB_TP	36.00	0.00
tblVehicleTrips	PR_TP	86.00	89.00
tblVehicleTrips	PR_TP	14.00	79.00
tblVehicleTrips	PR_TP	45.00	60.00
tblVehicleTrips	PR_TP	29.00	79.00
tblVehicleTrips	PR_TP	47.50	64.50
tblVehicleTrips	PR_TP	50.00	66.00
tblVehicleTrips	PR_TP	37.00	80.00
tblVehicleTrips	PR_TP	58.00	62.00
tblVehicleTrips	PR_TP	66.00	83.00
tblVehicleTrips	PR_TP	54.00	65.00
tblVehicleTrips	PR_TP	34.00	70.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	7.16	6.31
tblVehicleTrips	ST_TR	204.47	72.61
tblVehicleTrips	ST_TR	53.75	11.31
tblVehicleTrips	ST_TR	722.03	248.06

tblVehicleTrips	ST_TR	64.07	14.86
tblVehicleTrips	ST_TR	0.00	1.75
tblVehicleTrips	ST_TR	158.37	78.55
tblVehicleTrips	ST_TR	8.19	7.76
tblVehicleTrips	ST_TR	80.00	59.52
tblVehicleTrips	ST_TR	49.97	33.73
tblVehicleTrips	ST_TR	177.59	60.34
tblVehicleTrips	ST_TR	0.00	19.00
tblVehicleTrips	SU_TR	6.07	6.31
tblVehicleTrips	SU_TR	166.88	72.61
tblVehicleTrips	SU_TR	33.67	11.31
tblVehicleTrips	SU_TR	542.72	248.06
tblVehicleTrips	SU_TR	56.12	14.86
tblVehicleTrips	SU_TR	0.00	1.75
tblVehicleTrips	SU_TR	131.84	78.55
tblVehicleTrips	SU_TR	5.95	7.76
tblVehicleTrips	SU_TR	80.00	59.52
tblVehicleTrips	SU_TR	25.24	33.73
tblVehicleTrips	SU_TR	166.44	60.34
tblVehicleTrips	SU_TR	0.00	19.00
tblVehicleTrips	WD_TR	6.59	6.31
tblVehicleTrips	WD_TR	542.60	72.61
tblVehicleTrips	WD_TR	41.80	11.31
tblVehicleTrips	WD_TR	496.12	248.06
tblVehicleTrips	WD_TR	53.13	14.86
tblVehicleTrips	WD_TR	68.93	1.75
tblVehicleTrips	WD_TR	127.15	78.55
tblVehicleTrips	WD_TR	8.17	7.76
tblVehicleTrips	WD_TR	80.00	59.52
tblVehicleTrips	WD_TR	42.94	33.73

tblVehicleTrips	WD_TR	102.24	60.34
tblVehicleTrips	WD_TR	0.00	19.00

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954
Energy	0.1193	1.0770	0.8545	6.5100e-003		0.0824	0.0824		0.0824	0.0824	0.0000	3,450.4829	3,450.4829	0.1242	0.0447	3,466.9573
Mobile	10.0788	10.9174	96.5102	0.2958	21.4849	0.2187	21.7036	5.7268	0.2026	5.9294	0.0000	18,195.3875	18,195.3875	0.7766	0.0000	18,211.6967
Waste						0.0000	0.0000		0.0000	0.0000	444.5177	0.0000	444.5177	26.2703	0.0000	996.1929
Water						0.0000	0.0000		0.0000	0.0000	26.4004	123.0574	149.4578	2.7171	0.0653	226.7525
<b>Total</b>	<b>20.0227</b>	<b>12.0096</b>	<b>98.6918</b>	<b>0.3024</b>	<b>21.4849</b>	<b>0.3139</b>	<b>21.7987</b>	<b>5.7268</b>	<b>0.2977</b>	<b>6.0245</b>	<b>470.9181</b>	<b>21,848.2098</b>	<b>22,319.1279</b>	<b>29.8917</b>	<b>0.1114</b>	<b>22,981.3948</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	tons/yr										MT/yr					
Area	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954

Energy	0.1053	0.9509	0.7590	5.7400e-003		0.0727	0.0727		0.0727	0.0727	0.0000	3,190.0705	3,190.0705	0.1161	0.0410	3,205.2022
Mobile	9.5672	9.2753	83.2445	0.2437	17.5592	0.1876	17.7468	4.6804	0.1738	4.8542	0.0000	14,988.1362	14,988.1362	0.6476	0.0000	15,001.7361
Waste						0.0000	0.0000		0.0000	0.0000	222.2589	0.0000	222.2589	13.1351	0.0000	498.0964
Water						0.0000	0.0000		0.0000	0.0000	21.1203	101.5931	122.7134	2.1735	0.0522	184.5346
<b>Total</b>	<b>19.4970</b>	<b>10.2414</b>	<b>85.3306</b>	<b>0.2495</b>	<b>17.5592</b>	<b>0.2730</b>	<b>17.8323</b>	<b>4.6804</b>	<b>0.2592</b>	<b>4.9396</b>	<b>243.3792</b>	<b>18,359.0818</b>	<b>18,602.4610</b>	<b>16.0759</b>	<b>0.0946</b>	<b>18,969.3647</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	2.63	14.72	13.54	17.49	18.27	13.01	18.20	18.27	12.95	18.01	48.32	15.97	16.65	46.22	15.14	17.46

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Increase Transit Accessibility

Improve Pedestrian Network

Implement NEV Network

Implement Trip Reduction Program

Provide Ride Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.5672	9.2753	83.2445	0.2437	17.5592	0.1876	17.7468	4.6804	0.1738	4.8542	0.0000	14,988.1362	14,988.1362	0.6476	0.0000	15,001.7361
Unmitigated	10.0788	10.9174	96.5102	0.2958	21.4849	0.2187	21.7036	5.7268	0.2026	5.9294	0.0000	18,195.3875	18,195.3875	0.7766	0.0000	18,211.6967

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,123.18	1,123.18	1123.18	3,380,815	2,832,809
Convenience Market With Gas Pumps	871.32	871.32	871.32	1,955,319	1,596,330
Discount Club	240.68	240.68	240.68	470,199	383,521
Fast Food Restaurant with Drive Thru	5,320.89	5,320.89	5320.89	11,990,799	9,788,512
Free-Standing Discount Superstore	1,949.48	1,949.48	1949.48	3,952,153	3,224,223
Government Office Building	16.12	16.12	16.12	35,080	28,202
High Turnover (Sit Down Restaurant)	1,376.20	1,376.20	1376.20	3,187,927	2,601,454
High Turnover (Sit Down Restaurant)	340.12	340.12	340.12	787,884	642,939
High Turnover (Sit Down Restaurant)	714.02	714.02	714.02	1,654,010	1,349,727
Hotel	628.56	628.56	628.56	1,264,020	1,030,853
Movie Theater (No Matinee)	2,307.59	2,307.59	2307.59	5,378,955	4,391,136
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,405.96	2,405.96	2405.96	4,946,538	4,034,761
Regional Shopping Center	277.94	277.94	277.94	571,421	466,093
Regional Shopping Center	5,587.04	5,587.04	5587.04	11,486,676	9,369,378
Supermarket	3,269.22	3,269.22	3269.22	6,864,287	5,602,134
User Defined Commercial	0.00	0.00	0.00		
<b>Total</b>	<b>26,428.31</b>	<b>26,428.31</b>	<b>26,428.31</b>	<b>57,926,082</b>	<b>47,342,071</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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	46.90	17.40	35.70	89	11	0
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	79	21	0
Discount Club	9.50	7.30	7.30	16.70	64.30	19.00	60	40	0
Fast Food Restaurant with Drive	9.50	7.30	7.30	2.20	78.80	19.00	79	21	0
Free-Standing Discount	9.50	7.30	7.30	13.20	67.80	19.00	64.5	35.5	0
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	66	34	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
High Turnover (Sit Down	9.50	7.30	7.30	8.50	72.50	19.00	80	20	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	62	38	0
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	83	17	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0

Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	65	35	0
Supermarket	9.50	7.30	7.30	6.50	74.50	19.00	70	30	0
User Defined Commercial	9.50	7.30	7.30	0.00	0.00	0.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.507000	0.075000	0.196000	0.211000	0.000000	0.000000	0.005000	0.002000	0.000000	0.002000	0.009000	0.000000	0.000000

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2,148.2849	2,148.2849	0.0961	0.0219	2,157.0764
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,269.6820	2,269.6820	0.1016	0.0231	2,278.9703
NaturalGas Mitigated	0.1053	0.9509	0.7590	5.7400e-003		0.0727	0.0727		0.0727	0.0727	0.0000	1,041.7856	1,041.7856	0.0200	0.0191	1,048.1258
NaturalGas Unmitigated	0.1193	1.0770	0.8545	6.5100e-003		0.0824	0.0824		0.0824	0.0824	0.0000	1,180.8009	1,180.8009	0.0226	0.0217	1,187.9871

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	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					
Convenience Market With Gas Pump	70300.8	3.8000e-004	3.4500e-003	2.8900e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7515	3.7515	7.0000e-005	7.0000e-005	3.7744
Discount Club	237272	1.2800e-003	0.0116	9.7700e-003	7.0000e-005		8.8000e-004	8.8000e-004		8.8000e-004	8.8000e-004	0.0000	12.6617	12.6617	2.4000e-004	2.3000e-004	12.7388
Fast Food Restaurant with Drive Thru	4.55362e+006	0.0246	0.2232	0.1875	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	242.9985	242.9985	4.6600e-003	4.4500e-003	244.4774
Free-Standing Discount Supermarket	1.46277e+006	7.8900e-003	0.0717	0.0602	4.3000e-004		5.4500e-003	5.4500e-003		5.4500e-003	5.4500e-003	0.0000	78.0589	78.0589	1.5000e-003	1.4300e-003	78.5340
Government Office Building	126347	6.8000e-004	6.1900e-003	5.2000e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7424	6.7424	1.3000e-004	1.2000e-004	6.7834
High Turnover (Sit Down Restaurant)	1.93035e+006	0.0104	0.0946	0.0795	5.7000e-004		7.1900e-003	7.1900e-003		7.1900e-003	7.1900e-003	0.0000	103.0110	103.0110	1.9700e-003	1.8900e-003	103.6379
High Turnover (Sit Down Restaurant)	3.71975e+006	0.0201	0.1823	0.1532	1.0900e-003		0.0139	0.0139		0.0139	0.0139	0.0000	198.4998	198.4998	3.8000e-003	3.6400e-003	199.7078
High Turnover (Sit Down Restaurant)	919216	4.9600e-003	0.0451	0.0379	2.7000e-004		3.4200e-003	3.4200e-003		3.4200e-003	3.4200e-003	0.0000	49.0529	49.0529	9.4000e-004	9.0000e-004	49.3514
Hotel	1.30189e+006	7.0200e-003	0.0638	0.0536	3.8000e-004		4.8500e-003	4.8500e-003		4.8500e-003	4.8500e-003	0.0000	69.4739	69.4739	1.3300e-003	1.2700e-003	69.8967
Movie Theater (No Matinee)	843700	4.5500e-003	0.0414	0.0347	2.5000e-004		3.1400e-003	3.1400e-003		3.1400e-003	3.1400e-003	0.0000	45.0231	45.0231	8.6000e-004	8.3000e-004	45.2971
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
Apartments Low Rise	2.62445e+006	0.0142	0.1209	0.0515	7.7000e-004		9.7800e-003	9.7800e-003		9.7800e-003	9.7800e-003	0.0000	140.0505	140.0505	2.6800e-003	2.5700e-003	140.9028
Regional Shopping Center	1.8469e+006	9.9600e-003	0.0905	0.0761	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5575	98.5575	1.8900e-003	1.8100e-003	99.1573
Regional Shopping Center	795330	4.2900e-003	0.0390	0.0328	2.3000e-004		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	42.4418	42.4418	8.1000e-004	7.8000e-004	42.7001
Regional Shopping Center	91876	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9029	4.9029	9.0000e-005	9.0000e-005	4.9327
Supermarket	1.60361e+006	8.6500e-003	0.0786	0.0660	4.7000e-004		5.9700e-003	5.9700e-003		5.9700e-003	5.9700e-003	0.0000	85.5747	85.5747	1.6400e-003	1.5700e-003	86.0955
User Defined Commercial	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>0.1193</b>	<b>1.0770</b>	<b>0.8545</b>	<b>6.5000e-003</b>		<b>0.0824</b>	<b>0.0824</b>		<b>0.0824</b>	<b>0.0824</b>	<b>0.0000</b>	<b>1,180.8009</b>	<b>1,180.8009</b>	<b>0.0226</b>	<b>0.0217</b>	<b>1,187.9871</b>

**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					
Convenience Market With Gas Pump	56004.2	3.0000e-004	2.7500e-003	2.3100e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	2.9886	2.9886	6.0000e-005	5.0000e-005	3.0068
Discount Club	189020	1.0200e-003	9.2700e-003	7.7800e-003	6.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	10.0868	10.0868	1.9000e-004	1.8000e-004	10.1482
Fast Food Restaurant with Drive-Thru	4.35204e+006	0.0235	0.2133	0.1792	1.2800e-003		0.0162	0.0162		0.0162	0.0162	0.0000	232.2417	232.2417	4.4500e-003	4.2600e-003	233.6550
Free-Standing Discount Supermarket	1.1653e+006	6.2800e-003	0.0571	0.0480	3.4000e-004		4.3400e-003	4.3400e-003		4.3400e-003	4.3400e-003	0.0000	62.1846	62.1846	1.1900e-003	1.1400e-003	62.5630
Government Office Building	95405.2	5.1000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004	0.0000	5.0912	5.0912	1.0000e-004	9.0000e-005	5.1222
High Turnover (Sit Down Restaurant)	1.8449e+006	9.9500e-003	0.0904	0.0760	5.4000e-004		6.8700e-003	6.8700e-003		6.8700e-003	6.8700e-003	0.0000	98.4510	98.4510	1.8900e-003	1.8000e-003	99.0501
High Turnover (Sit Down Restaurant)	3.55508e+006	0.0192	0.1743	0.1464	1.0500e-003		0.0132	0.0132		0.0132	0.0132	0.0000	189.7127	189.7127	3.6400e-003	3.4800e-003	190.8673
High Turnover (Sit Down Restaurant)	878525	4.7400e-003	0.0431	0.0362	2.6000e-004		3.2700e-003	3.2700e-003		3.2700e-003	3.2700e-003	0.0000	46.8814	46.8814	9.0000e-004	8.6000e-004	47.1667
Hotel	1.06574e+006	5.7500e-003	0.0522	0.0439	3.1000e-004		3.9700e-003	3.9700e-003		3.9700e-003	3.9700e-003	0.0000	56.8719	56.8719	1.0900e-003	1.0400e-003	57.2180
Movie Theater (No Matinee)	669997	3.6100e-003	0.0328	0.0276	2.0000e-004		2.5000e-003	2.5000e-003		2.5000e-003	2.5000e-003	0.0000	35.7536	35.7536	6.9000e-004	6.6000e-004	35.9712
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	1.47131e+006	7.9300e-003	0.0721	0.0606	4.3000e-004		5.4800e-003	5.4800e-003		5.4800e-003	5.4800e-003	0.0000	78.5145	78.5145	1.5000e-003	1.4400e-003	78.9923
Regional Shopping Center	633589	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8107	33.8107	6.5000e-004	6.2000e-004	34.0165
Apartments Low Rise	2.0795e+006	0.0112	0.0958	0.0408	6.1000e-004		7.7500e-003	7.7500e-003		7.7500e-003	7.7500e-003	0.0000	110.9698	110.9698	2.1300e-003	2.0300e-003	111.6452
Regional Shopping Center	73191.8	3.9000e-004	3.5900e-003	3.0100e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.9058	3.9058	7.0000e-005	7.0000e-005	3.9296
Supermarket	1.39273e+006	7.5100e-003	0.0683	0.0574	4.1000e-004		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	74.3214	74.3214	1.4200e-003	1.3600e-003	74.7737
User Defined Commercial	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>0.1053</b>	<b>0.9509</b>	<b>0.7590</b>	<b>5.7500e-003</b>		<b>0.0727</b>	<b>0.0727</b>		<b>0.0727</b>	<b>0.0727</b>	<b>0.0000</b>	<b>1,041.7856</b>	<b>1,041.7856</b>	<b>0.0200</b>	<b>0.0191</b>	<b>1,048.1258</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	683867	152.5083	6.8200e-003	1.5500e-003	153.1324
Convenience Market With Gas Dispenser	57564.6	12.8374	5.7000e-004	1.3000e-004	12.8900
Discount Club	194286	43.3276	1.9400e-003	4.4000e-004	43.5049
Fast Food Restaurant with Drive Thru	669026	149.1985	6.6800e-003	1.5200e-003	149.8091
Free-Standing Discount Supermarket	1.19776e+006	267.1119	0.0120	2.7200e-003	268.2051
Government Office Building	93195.1	20.7833	9.3000e-004	2.1000e-004	20.8684
High Turnover (Sit Down Restaurant)	135053	30.1179	1.3500e-003	3.1000e-004	30.2412
High Turnover (Sit Down Restaurant)	283611	63.2476	2.8300e-003	6.4000e-004	63.5065
High Turnover (Sit Down Restaurant)	546511	121.8767	5.4500e-003	1.2400e-003	122.3755
Hotel	456585	101.8224	4.5600e-003	1.0400e-003	102.2391
Movie Theater (No Matinee)	374547	83.5273	3.7400e-003	8.5000e-004	83.8691
Parking Lot	1.36848e+006	305.1831	0.0137	3.1000e-003	306.4321
Regional Shopping Center	1.5123e+006	337.2566	0.0151	3.4300e-003	338.6367
Regional Shopping Center	651243	145.2328	6.5000e-003	1.4800e-003	145.8272
Regional Shopping Center	75231.2	16.7772	7.5000e-004	1.7000e-004	16.8459
Supermarket	1.87828e+006	418.8732	0.0187	4.2600e-003	420.5874
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,269.6820</b>	<b>0.1016</b>	<b>0.0231</b>	<b>2,278.9703</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	666036	148.5317	6.6500e-003	1.5100e-003	149.1396
Convenience Market With Gas	53450.6	11.9200	5.3000e-004	1.2000e-004	11.9687
Discount Club	180401	40.2310	1.8000e-003	4.1000e-004	40.3957
Fast Food Restaurant with Drive Thru	626126	139.6314	6.2500e-003	1.4200e-003	140.2029
Free-Standing Discount Supermarket	1.11216e+006	248.0221	0.0111	2.5200e-003	249.0371
Government Office Building	85827.9	19.1404	8.6000e-004	1.9000e-004	19.2187
High Turnover (Sit Down Restaurant)	126393	28.1867	1.2600e-003	2.9000e-004	28.3020
High Turnover (Sit Down Restaurant)	265425	59.1920	2.6500e-003	6.0000e-004	59.4342
High Turnover (Sit Down Restaurant)	511467	114.0616	5.1000e-003	1.1600e-003	114.5284
Hotel	393586	87.7732	3.9300e-003	8.9000e-004	88.1324
Movie Theater (No Matinee)	351380	78.3609	3.5100e-003	8.0000e-004	78.6815
Parking Lot	1.36848e+006	305.1831	0.0137	3.1000e-003	306.4321
Regional Shopping Center	1.40422e+006	313.1536	0.0140	3.1800e-003	314.4351
Regional Shopping Center	604700	134.8534	6.0300e-003	1.3700e-003	135.4052
Regional Shopping Center	69854.6	15.5782	7.0000e-004	1.6000e-004	15.6419
Supermarket	1.81368e+006	404.4657	0.0181	4.1100e-003	406.1210
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2,148.2849</b>	<b>0.0961</b>	<b>0.0218</b>	<b>2,157.0764</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	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954
Unmitigated	9.8246	0.0153	1.3271	7.0000e-005		0.0127	0.0127		0.0127	0.0127	0.0000	79.2820	79.2820	3.5800e-003	1.4100e-003	79.7954

### 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	0.6239					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7900e-003	0.0000	4.3000e-004	0.0000		5.3800e-003	5.3800e-003		5.3300e-003	5.3300e-003	0.0000	77.1109	77.1109	1.4800e-003	1.4100e-003	77.5802
Landscaping	0.0402	0.0153	1.3267	7.0000e-005		7.3500e-003	7.3500e-003		7.3500e-003	7.3500e-003	0.0000	2.1711	2.1711	2.1000e-003	0.0000	2.2152
<b>Total</b>	<b>9.8246</b>	<b>0.0153</b>	<b>1.3271</b>	<b>7.0000e-005</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>79.2820</b>	<b>79.2820</b>	<b>3.5800e-003</b>	<b>1.4100e-003</b>	<b>79.7954</b>

#### 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	0.6239					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.1527					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.7900e-003	0.0000	4.3000e-004	0.0000		5.3800e-003	5.3800e-003		5.3300e-003	5.3300e-003	0.0000	77.1109	77.1109	1.4800e-003	1.4100e-003	77.5802
Landscaping	0.0402	0.0153	1.3267	7.0000e-005		7.3500e-003	7.3500e-003		7.3500e-003	7.3500e-003	0.0000	2.1711	2.1711	2.1000e-003	0.0000	2.2152
<b>Total</b>	<b>9.8246</b>	<b>0.0153</b>	<b>1.3271</b>	<b>7.0000e-005</b>		<b>0.0127</b>	<b>0.0127</b>		<b>0.0127</b>	<b>0.0127</b>	<b>0.0000</b>	<b>79.2820</b>	<b>79.2820</b>	<b>3.5800e-003</b>	<b>1.4100e-003</b>	<b>79.7954</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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	122.7134	2.1735	0.0522	184.5346
Unmitigated	149.4578	2.7171	0.0653	226.7525

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.5974 / 7.31141	23.3807	0.3788	9.1200e-003	34.1634
Convenience Market With Gas Dispenser	0.125486 / 0.0769109	0.2513	4.1000e-003	1.0000e-004	0.3679
Discount Club	1.57626 / 0.966097	3.1562	0.0515	1.2400e-003	4.6217
Fast Food Restaurant with Drive Thru	6.5108 / 0.415583	10.2465	0.2125	5.0900e-003	16.2882
Free-Standing Discount Supermarket	9.71757 / 5.95593	19.4579	0.3174	7.6400e-003	28.4923
Government Office Building	1.82966 / 1.1214	3.6636	0.0598	1.4400e-003	5.3646
High Turnover (Sit Down Restaurant)	9.39133 / 0.599447	14.7798	0.3065	7.3500e-003	23.4945
Hotel	2.05471 / 0.228301	3.3095	0.0671	1.6100e-003	5.2164
Movie Theater (No Matinee)	15.5701 / 0.993835	24.5038	0.5082	0.0122	38.9520
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	18.1633 / 11.1324	36.3692	0.5932	0.0143	53.2556
Supermarket	6.67867 / 0.206557	10.3392	0.2180	5.2200e-003	16.5359
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>149.4578</b>	<b>2.7171</b>	<b>0.0653</b>	<b>226.7525</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	9.27793 / 6.86542	19.4978	0.3030	7.3000e-003	28.1234
Convenience Market With Gas	0.100389 / 0.0722193	0.2094	3.2800e-003	8.0000e-005	0.3027
Discount Club	1.26101 / 0.907165	2.6298	0.0412	9.9000e-004	3.8021
Fast Food Restaurant with Drive Thru	5.20864 / 0.390232	8.2423	0.1700	4.0700e-003	13.0737
Free-Standing Discount Supermarket	7.77406 / 5.59262	16.2125	0.2539	6.1100e-003	23.4395
Government Office Building	1.46372 / 1.053	3.0525	0.0478	1.1500e-003	4.4133
High Turnover (Sit Down Restaurant)	7.51307 / 0.562881	11.8889	0.2452	5.8700e-003	18.8578
Hotel	1.64377 / 0.214375	2.6724	0.0537	1.2800e-003	4.1973
Movie Theater (No Matinee)	12.4561 / 0.933211	19.7109	0.4065	9.7300e-003	31.2647
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14.5307 / 10.4533	30.3032	0.4746	0.0114	43.8112
Supermarket	5.34294 / 0.193957	8.2938	0.1744	4.1700e-003	13.2490
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>122.7134</b>	<b>2.1735</b>	<b>0.0522</b>	<b>184.5346</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Unmitigated	444.5177	26.2703	0.0000	996.1929
Mitigated	222.2589	13.1351	0.0000	498.0964

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	81.88	16.6209	0.9823	0.0000	37.2485
Discount Club	91.52	18.5777	1.0979	0.0000	41.6339
Fast Food Restaurant with Drive-Thru	247.08	50.1550	2.9641	0.0000	112.4006
Free-Standing Discount Supermarket	564.21	114.5295	6.7685	0.0000	256.6681
Government Office Building	8.57	1.7396	0.1028	0.0000	3.8986
High Turnover (Sit Down Restaurant)	368.19	74.7392	4.4170	0.0000	167.4955
Hotel	44.35	9.0027	0.5320	0.0000	20.1755
Movie Theater (No Matinee)	220.99	44.8590	2.6511	0.0000	100.5319
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	257.47	52.2641	3.0887	0.0000	117.1272
Supermarket	305.58	62.0300	3.6659	0.0000	139.0132
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>444.5177</b>	<b>26.2703</b>	<b>0.0000</b>	<b>996.1929</b>

## Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.94	8.3105	0.4911	0.0000	18.6243
Discount Club	45.76	9.2889	0.5490	0.0000	20.8170
Fast Food Restaurant with Drive Thru	123.54	25.0775	1.4820	0.0000	56.2003
Free-Standing Discount Supermarket	282.105	57.2648	3.3843	0.0000	128.3340
Government Office Building	4.285	0.8698	0.0514	0.0000	1.9493
High Turnover (Sit Down Restaurant)	184.095	37.3696	2.2085	0.0000	83.7477
Hotel	22.175	4.5013	0.2660	0.0000	10.0878
Movie Theater (No Matinee)	110.495	22.4295	1.3255	0.0000	50.2659
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	128.735	26.1320	1.5444	0.0000	58.5636
Supermarket	152.79	31.0150	1.8329	0.0000	69.5066
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>222.2589</b>	<b>13.1351</b>	<b>0.0000</b>	<b>498.0964</b>

## 9.0 Operational Offroad

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

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