



MEMORANDUM

DATE: June 10, 2016
TO: Eric Edelmayer, Jackson Properties
FROM: Amy Fischer, Principal
SUBJECT: Air Quality Impact Analysis – Residence Inn Project, Davis

INTRODUCTION

This Air Quality Impact Technical Memorandum for the proposed Residence Inn project (project) has been prepared using methods and assumptions recommended in the air quality impact assessment guidelines of the Yolo-Solano Air Quality Management District (YSAQMD) and by the City of Davis. This analysis follows the YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts*¹, including an assessment of criteria pollutant emissions, an assessment of operational health risk impacts, and an assessment of the project's greenhouse gas (GHG) emissions consistent with the Davis Climate Action and Adaptation Plan (D-CAAP).² Mitigation measures to reduce or eliminate significant air quality impacts are identified, where appropriate.

PROJECT DESCRIPTION

The proposed Residence Inn project site is located at 4647 Fermi Place, in the City of Davis. The 2.69 acre site is currently undeveloped and is located approximately 1,000 feet north of Interstate 80 (I-80). Commercial and office buildings are located southwest and west of the project west, apartments are located northwest of the project, and agricultural lands are located southeast, east, and northeast of the project.

The proposed project would develop a 4-story, 120-room extended-stay hotel, including studios and one-bedroom rooms with kitchens, and comprising 78,953 square feet. Guest amenities would include the lobby, host stand, kitchen, pool, fitness center, gathering room, and business center. The project would also provide 121 off-street parking spaces.

The proposed project would implement energy-saving measures to work towards zero net energy by using light emitting diode (LED) lighting and a high-efficiency lighting control system, energy-saving guestroom, kitchen, and laundry appliances, high-efficiency boilers and heating ventilation and air conditioning (HVAC), solar water heating, a high-performance building envelope, window shading devices, and photovoltaic (PV) panels as part of parking lot shading.

¹ Yolo-Solano Air Quality Management District, 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*. July.

² Davis, City of, 2016. *Staff Report - Davis Climate Action and Adaptation Plan (CAAP – Implementation Update)*. November.

Construction would begin by December of 2017 and require approximately 14 months for completion. The proposed project would be fully operational in early 2019.

AIR QUALITY IMPACTS

The proposed project would release emissions over the short-term as a result of construction activities, and over the long-term from additional traffic generation and operation of the hotel. Emissions would include criteria air pollutants, toxic air contaminants, and GHG emissions. The sections below describe the estimated potential emissions and the significance of impacts with respect to YSAQMD thresholds of significance and the D-CAAP.

Construction Emissions

Construction activities can generate a substantial amount of air pollution, and in some cases can represent the largest air quality impact associated with a project. While construction activities are considered temporary, the short term impacts can still contribute to exceedances of air quality standards. Construction activities include site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty diesel and gasoline powered equipment, portable auxiliary equipment, and worker commute trips. The YSAQMD has established thresholds of significance at 10 tons per year for ozone precursors, which include reactive organic gases (ROG), and oxides of nitrogen (NO_x), and 80 pounds per day for coarse particulate matter (PM₁₀).

The California Emissions Estimator Model (CalEEMod) was used to estimate construction emissions for the proposed project. Appendix A contains CalEEMod output worksheets. Results, summarized in Table 1, were compared to the YSAQMD's established thresholds of significance for construction impacts. Under this scenario, unmitigated project emissions would not exceed the significance threshold for criteria pollutants. Therefore, the proposed project would result in less-than-significant impacts. However, as described below, the proposed project would still implement construction best management practices to further reduce fugitive dust emissions.

Table 1: Project Construction Emissions

	Reactive Organic Gases (Tons/Year)	Nitrogen Oxides (Tons/Year)	PM ₁₀ (Pounds/Day)
Project Emissions	0.5	3.2	8.4
Yolo-Solano AQMD Significance Threshold	10	10	80
Exceed?	No	No	No

Source: LSA Associates, Inc., 2016

Construction Best Management Practices. The proposed project would require earthmoving during the construction phase. Without control, dust emissions from grading, trenching, or land clearing can create nuisances or localized health impacts. The AQMD recommends that even projects not exceeding PM thresholds should implement best management practices to reduce dust emissions and avoid localized health impacts. To reduce PM₁₀ emissions from construction activities, the project should implement the following best management practices.

- Unpaved areas subject to vehicle traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered.

- The speed of any vehicles and equipment traveling across unpaved areas must be no more than 15 miles per hour.
- Storage piles and disturbed areas not subject to vehicular traffic must be stabilized by being kept wet, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile.
- Prior to any ground disturbance, including grading, excavating, and land clearing, sufficient water must be applied to the area to be disturbed to minimize dust emissions.
- Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.

Regional Air Quality Impacts

In addition to the short-term construction emissions, the project would also generate long-term air emissions. These long-term emissions are primarily mobile source emissions that would result from vehicle trips associated with the proposed project. Stationary and area source emissions would also result from consumption of natural gas and electricity, landscape equipment, and use of consumer products. These long-term air pollutant emissions affect the entire Sacramento Valley Air Basin.

Long-term operational emissions were calculated using the CalEEMod model and the trip generation rates from the *Trip Generation Analysis* prepared for the proposed project.³ Appendix A contains model output worksheets. The incremental daily emission increases associated with the proposed project are identified in Table 2 for ROG, NO_x, and PM₁₀. The YSAQMD established the same thresholds of significance for long-term operational emissions as for construction emissions: 10 tons per year for ROG and NO_x, and 80 pounds per day for PM₁₀.

As shown in Table 2, the emissions associated with the proposed project would be well below the significance thresholds. Therefore the proposed project would not result in a violation of air quality standards and would result in less-than-significant emissions. Mitigation would not be required.

Table 2: Project Regional Emissions

	Reactive Organic Gases (tons/year)	Nitrogen Oxides (tons/year)	PM ₁₀ (pounds/day)	PM _{2.5} (pounds/day)
Project Emissions	1.0	1.3	3.7	1.1
Yolo-Solano AQMD Significance Threshold	10.0	10.0	80.0	NA
Exceed?	No	No	No	

Source: LSA Associates, Inc., 2016.

Carbon Monoxide Effects of Traffic

In addition to construction and operational emissions, localized air quality impacts (i.e., higher carbon monoxide concentrations or “hot spots”) near intersections or roadway segments in the project vicinity would potentially occur due to vehicle trips generated as a result of the proposed project.

³ KD Anderson & Associates, Inc., 2016. *Trip Generation Analysis – Residence Inn, Davis, CA*. May.

The primary mobile source pollutant of local concern is carbon monoxide (CO). Carbon monoxide concentration is a direct function of vehicle idling time and, thus, traffic flow conditions. Carbon monoxide disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors. Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service (LOS) or with extremely high traffic volumes.

The *Trip Generation Analysis*⁴ prepared for the proposed project estimated that implementation of the project would generate an estimated 872 daily trips with 70 AM peak hour trips and 74 PM peak hour trips. Given that the proposed project is located at the intersection of two major roadways near I-80 and nearby land uses include large commercial and medium-density residential developments, the additional trips generated by the proposed project are expected to be a small percentage of total traffic on the adjacent roadways. The proposed project is therefore not expected to reduce the peak-hour Level of Service (LOS) at intersection in the project vicinity to an unacceptable LOS (LOS E or F) or substantially worsen an already existing peak-hour LOS F on roadways or at intersections in the project vicinity. Based on the CO screening procedures in the YSAQMD's CEQA Handbook⁵, the project would therefore not have the potential to create a violation of the State or federal CO standards.

Additionally, the maximum 8-hour and 1-hour CO concentrations, as measured at the 100 Bercut Drive monitoring station in Sacramento (the closest station to the site) reached 0.9 and 1.3 parts per million (ppm) in 2015. The State and federal standards are both 9 ppm for 8-hour CO concentrations, and 20 ppm and 35 ppm, respectively, for 1-hour CO concentrations. Because CO concentrations in the region are so far below the State and federal standards, the proposed project would not generate nearly enough CO emissions to result in an exceedance. Therefore, the proposed project would result in less-than-significant emissions, and no mitigation would be required.

Objectionable Odors

Heavy-duty equipment in the project area during construction would emit odors. However, the construction activity would be short-term and would cease to occur after project construction is completed. No other sources of objectionable odors have been identified for the proposed project. Therefore, the proposed project would not be expected to generate or expose sensitive receptors to objectionable odors, impacts would be less than significant, and no mitigation would be required.

HEALTH RISK ASSESSMENT

The proposed project is not expected to be a source of Toxic Air Contaminants (TACs) that would result in significant air quality impacts. However, the proposed project would construct extended-stay hotel rooms approximately 1,000 feet from I-80, and would therefore potentially expose sensitive receptors to TAC emissions. The traffic on the freeway and local streets includes both diesel-powered vehicles, which emit diesel particulate, and gasoline-powered vehicles, which emit a number of TACs. These sources have been determined to pose potential cancer risks and potentially cause other health problems when receptors are exposed to the pollutants over the duration of a lifetime.

⁴ KD Anderson & Associates, Inc., 2016. Op. Cit.

⁵ Yolo-Solano AQMD, 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*. July.

There are currently no federal project-level requirements for air toxics analysis, and CEQA only requires a consideration of the risks from toxics. The YSAQMD has a TAC threshold for development projects that have the potential to expose the public to TACs from stationary sources in excess of the thresholds established in the District's Risk Management Policy. While the District's Risk Management Policy provides a basis for a threshold for TACs from stationary sources, this policy does not cover TACs from mobile sources. Therefore, the project is not subject to a significance threshold for mobile source toxic emissions such as those from vehicles travelling on I-80 and local roadways. The YSAQMD has no permitting or other regulatory authority over mobile sources, such as vehicle emissions.⁶ The project is not located within 500 feet of I-80; however, the following evaluation of risks associated with exposure to freeway emissions is provided for informational purposes.

California's Office of Environmental Health Hazard Assessment (OEHHA) has determined that long-term exposure to diesel exhaust particulates poses cancer risk. Health risk analyses determine cancer risk levels over a 70-year exposure duration. LSA previously conducted a health risk assessment for residential units located within 150 feet of I-80 in the project vicinity. That analysis showed that the increased 70-year cancer risk would be 16 in 1 million for future residents of the project site. The proposed project is a hotel and the average resident stay would be approximately 5 days and could be up to 14 days. Based on LSA's previous analysis findings, even if a guest of the hotel stayed for one year, the increased health risk would be well below 1 in 1 million. Therefore, the potential inhalation health risks from diesel exhaust at the project site would not be significant due to the relatively short exposure duration, especially given the nearly sevenfold distance increase compared to the previous analysis.

Based on the hotel visitors' short duration of stay at the project site, the distance from I-80, and the relatively low overall risk of exposure attributable to I-80, TAC emissions would not be considered a significant health risk. Future guests of the hotel would not be exposed to substantial pollutant concentrations. The proposed project would result in less-than-significant impacts, and no mitigation would be required.

GREENHOUSE GAS EMISSIONS

The general scientific consensus is that over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, causing accelerated global warming and in turn driving global climate change.

GHG are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. The gases widely seen as the principal anthropogenic (human-induced) contributors to global climate change are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). While manmade GHG include naturally-occurring GHG such as CO₂, methane, and N₂O, some gases, like HFCs, PFCs, and SF₆ are completely new to the atmosphere.

⁶ Yolo-Solano Air Quality Management District, 2007, op. cit.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others have much longer atmospheric residence times and contribute to global warming in the long term. Water vapor is excluded from the list of GHG above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and the length of time that the gas remains in the atmosphere (“atmospheric lifetime”). The GWP of each gas is measured relative to CO₂, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one of unit mass of the GHG to the ratio of heat trapped by one of unit mass of CO₂ over a specified time period. Thus, GHG emissions are typically measured in terms of pounds or tons of “CO₂ equivalents” (CO₂e).

The proposed project would generate direct and indirect GHG emissions that contribute to global warming and climate change impacts. Although the contribution from an individual project may be minor, the cumulative impact can be substantial. The YSAQMD has not established specific thresholds applicable to GHG emissions; however, CEQA still requires an evaluation of GHG.

The California Global Warming Solution Action of 2006 (Assembly Bill 32) was adopted to establish a State goal of reducing California’s GHG emissions to 1990 levels by the year 2020. A subsequent Executive Order signed by the Governor establishes an additional target for State agencies of 80 percent below 1990 levels by 2050. The City of Davis has adopted local GHG emission reduction targets that are consistent with the State targets outlined in AB 32 and Executive Order S-3-06. The emission reduction targets require that projects make a fair share contribution to meet local and statewide reduction targets. This conclusion was based on the understanding that projects built today are expected to be in existence past the 2050 target date that calls for a minimum reduction of CO₂ to 80 percent below 1990 levels.

The 2010 City of Davis Climate Action and Adaptation Plan (D-CAAP) includes local reduction targets for GHG emissions for new development projects.⁷ By 2050, the City’s CO₂ target is 80 percent below 1990 levels. Table 3 summarizes the targets from the D-CAAP.

The D-CAAP includes a number of actions for implementation, under different sector categories, to begin achieving the emission reduction goals. The plan incorporates energy conservation in its community design of buildings. The proposed project advocates uses, consistent with the land use and community design requirements, by including a high level of energy efficiency in the project design.

⁷ Davis, City of, 2016. *Staff Report - Davis Climate Action and Adaptation Plan (CAAP – Implementation Update*. November.

Table 3: Davis GHG Reduction Targets: Community and City Operations

Year	Target Range ^a		Notes
	State	Davis ^b	
2010	2000 levels	1990 levels	<u>Minimum:</u> State target. <u>Desired:</u> Provides baseline for subsequent average annual reductions.
2012	1998 levels	7 percent below 1990 levels	<u>Minimum:</u> State does not establish target for this year; linear interpolation from 2010 target. <u>Desired:</u> Consistent with Kyoto – Mayors Climate Protection Agreement Pledge – City of Davis Reso. 006.
2015	1995 levels	15 percent below 1990 levels	<u>Minimum:</u> State does not establish target for this year; linear interpolation from 2010 target. <u>Desired:</u> Consistent with initial ICLEI modeling conducted by the City.
2015 to 2020	Average annual reduction	Average of 2.6 percent reduction/year to achieve 80 percent below 1900 levels by 2014	<u>Minimum:</u> State does not establish target for these years. <u>Desired:</u> Average reduction encourages monitoring of progress and some flexibility in implementation.
2020	1990 levels	28 percent below 1990 levels	<u>Minimum:</u> State target. <u>Desired:</u> Average reduction encourages monitoring of progress and some flexibility in implementation.
2020 to 2040	No formal target, but must reduce an average of 2.66 percent per year to achieve 80 percent below 1990 levels by 2050	Average of 2.6 percent reduction per year to achieve 80 percent reduction below 1990 levels	<u>Minimum:</u> State does not establish target for these years. <u>Desired:</u> Reduction level adopted by the state based on climate stabilization levels of 3-5.5 degree increase in temp. Average reduction encourages monitoring of progress and some flexibility in implementation.
2050	80 percent below 1990 levels	Carbon neutral	<u>Minimum:</u> State target. Reduction level adopted by the state based on climate stabilization levels of 3-5.5 degree in temp. Average reduction encourages monitoring of progress and some flexibility in implementation. <u>Desired:</u> Combination of actions at the local, regional, national, and international levels and carbon offsets. Similar target set by the UC system, City of Berkeley, and Norway.

^a It is anticipated that Davis will achieve reductions within the range of the state targets (minimum) and local targets (desired).

^b Due to residency time of GHG in the atmosphere, early GHG reduction is generally more beneficial for mitigation of the most severe impacts of climate change.

Source: City of Davis, 2010.

Implementation of the proposed project would result in GHG emissions during short-term construction and long-term operation activities.

Construction GHG Emissions Construction activities, such as site preparation, grading, on-site heavy-duty construction vehicles, hauling materials to and from the site, and transporting the construction crew, would produce combustion emissions from various sources. During construction of the project, GHG would be emitted from both the operation of construction equipment and worker and builder supply vendor vehicles, all of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHG such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Based on the results of the CalEEMod analysis, the project would generate approximately 366 tons of CO₂e emissions during construction. These potential impacts would be limited to the duration of construction activities and GHG generation would halt upon project completion. Therefore, construction emissions would be less than significant.

Operational GHG Emissions

Long-term operation of the proposed project would generate GHG emissions from mobile sources and indirect emissions from sources related to energy consumption. Mobile-source emissions of GHG would include project-generated vehicle trips associated with future guests of the hotel as well as hotel employee trips. Emissions would also be generated at off-site utility providers as a result of increased electricity demand generated by the proposed project.

The project would include measures to reduce energy consumption, including the following:

- LED lighting and lighting control system;
- High-efficiency guestroom, kitchen, and laundry appliances;
- High efficiency HVAC and boilers;
- Solar hot water heating;
- High-performance envelope including high R value and ceiling assemblies and low albedo roof;
- Window shading devices on high solar gain exposures;
- Photovoltaic electricity generation as part of parking lot shading;
- Alternative transportation options; and
- Material resource efficiency.

The above measures would greatly reduce the energy consumption and subsequent GHG emissions associated with the project.

Table 4 shows the CalEEMod results for estimated GHG emissions for the proposed project. The analysis includes reductions for energy efficiency and also accounts for the installation of a 75 kW PV system. Mobile source emissions are the largest source of GHG emissions at approximately 74 percent of the total. Energy use is the next largest category at approximately 22 percent of the total. Waste and water source emissions are approximately 3 percent and 1 percent of the total, respectively.

Table 4: GHG Emissions (Metric Tons Per Year)

Emissions Source Category	Operational Emissions				Percent of Total
	CO ₂	CH ₄	N ₂ O	CO ₂ e	
Area	0.0	0.0	0.0	0.0	0
Energy	212.8	0.0	0.0	214.3	22
Mobile	709.7	0.0	0.0	710.2	74
Waste	13.3	0.8	0.0	29.9	3
Water	2.7	0.1	0.0	4.9	1
Total Annual Emissions				959.3	100

Source: LSA Associates, Inc., 2016.

The YSAQMD has not adopted thresholds of significance for GHG emissions. The hotel building would comply with the new CalGreen building standards, which go beyond previous energy performance standards in Title 24 to encompass additional areas such as reduced construction waste, water conservation, non-toxic sealants, renewable materials, and other sustainable measures. Additionally, as discussed above, the proposed project would implement energy saving measures to reduce energy consumption.

Stationary emitters of GHG emissions are required to report GHG emissions of 25,000 metric tons per year CO₂e or above, and several air districts in California (e.g., Bay Area Air Quality Management District, South Coast Air Quality Management District) have adopted a CEQA significance threshold of 10,000 metric tons of CO₂e per year for stationary sources. The Bay Area Air Quality Management District (BAAQMD) also adopted a threshold of 1,100 metric tons per year CO₂e for development projects. Although the project is not a stationary source of GHG emissions, but primarily a mobile source, it is still useful to compare the project estimated emissions to these GHG emission thresholds to provide context for the magnitude of emissions. The proposed project's estimated operational GHG emissions of 959.3 metric tons of CO₂e per year are substantially lower than the 10,000 metric tons per year threshold adopted by other air districts in California, and are also lower than the 1,100 metric tons threshold established by the BAAQMD. Therefore, the proposed project's estimated operational GHG emissions would not be considered significant.

Additionally, because the proposed project's net increase in operational GHG would not be significant with respect to mass emission thresholds that have been recommended by other air districts for analyzing stationary sources, and because the proposed project would have increased energy efficiency over standard building methods, the project would be consistent with the goals mandated by AB 32. GHG emissions associated with the proposed project would not be cumulatively considerable. Therefore, the project would result in less-than-significant emissions, and mitigation would not be required.

Consistency with Plans

As discussed above, the project would not generate significant emissions. Additionally, the proposed project would include energy-reducing measures that are consistent with the intent of the D-CAAP. Bus routes are located near the proposed project, including one directly across Mace Boulevard, less than 100 feet east of the proposed project, and two others located approximately 540 feet north and 800 feet southwest, respectively. The project would also provide bicycles, bicycle parking, and bicycle repair for hotel guests to use, as well as electric vehicle charging stations, carpool/low-

emission vehicle dedicated parking, and a hotel shuttle to provide transportation to the airport, downtown Davis, and UC Davis. Water reduction measures include water conserving toilets, sinks, and showers, laundry on demand (reduced towel/sheet replacement) and drought-tolerant landscaping with primarily drip irrigation and seasonal/weather control of irrigation. Therefore, the sustainability measures included in the proposed project plans would be consistent with the D-CAAP and would not conflict with the reduction goals established by AB 32. As a result, the project would not conflict with plans adopted for the purpose of reducing GHG emissions. Impacts would be less-than-significant and mitigation would not be required.

CONCLUSION

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed YSAQMD thresholds. Implementation of the YSAQMD's Best Management Practices would further reduce construction dust impacts to a less-than-significant level. Based on the hotel visitors' short duration of stay at the project site, and due to the relatively low overall risk of exposure attributable to I-80, TAC emissions would not be considered a significant health risk. The project would not have the potential to create a violation of the State or federal CO standards, nor would it result in objectionable odors affecting a substantial number of people. GHG emissions during construction and operation of the project are estimated to be lower than significance thresholds, and not be cumulatively considerable. Sustainability measures included in the proposed project plans would be consistent with the D-CAAP and would not conflict with the reduction goals established by AB 32. Therefore, the proposed project would result in less-than-significant emissions in all required areas and mitigation would not be required.

APPENDIX A
CalEEMod Output Worksheets

Residence Inn Davis
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	121.00	Space	1.09	48,400.00	0
Hotel	120.00	Room	1.60	78,953.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	4			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor per PG&E April 2015.

Land Use - Per Planning Application (10/7/15) and Initial Design Review (9/1/15)

Vehicle Trips - Back-calculated from Trip Generation Analysis: 872 total daily trips/ 120 rooms = 7.27 trips per room

Road Dust - Project access to the site would be provided by paved roads - 100% pave

Energy Use - .

Area Mitigation - Assumed no hearth.

Energy Mitigation - Assumed 25% improvement over Title 24; assumed LED lighting and control system provides 30% reduction; assumed PV solar system provides 20% of Electricity use generated (CalEEMod estimates 582406.4 kWh electricity use without solar, per applicant 75 kW solar system installed, per NREL Solar Calculator system would produce approximately 117,000 kWh -> $117,000/582,406 = 20\%$)

Water Mitigation - Per Sustainability Features provided by applicant, assumed low-flow fixtures and water-efficient irrigation systems with CalEEMod default % reductions.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	174,240.00	78,953.00
tblLandUse	LotAcreage	4.00	1.60
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	8.19	7.27
tblVehicleTrips	SU_TR	5.95	7.27
tblVehicleTrips	WD_TR	8.17	7.27

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003
Energy	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136	0.0000	288.6670	288.6670	0.0131	5.5100e-003	290.6502
Mobile	0.4788	1.1525	4.5935	9.6300e-003	0.6240	0.0163	0.6403	0.1678	0.0150	0.1828	0.0000	709.6730	709.6730	0.0242	0.0000	710.1803
Waste						0.0000	0.0000		0.0000	0.0000	13.3365	0.0000	13.3365	0.7882	0.0000	29.8880
Water						0.0000	0.0000		0.0000	0.0000	0.9657	2.3224	3.2881	0.0994	2.3900e-003	6.1169
Total	1.0520	1.3320	4.7465	0.0107	0.6240	0.0300	0.6540	0.1678	0.0287	0.1965	14.3022	1,000.6666	1,014.9689	0.9248	7.9000e-003	1,036.8398

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003
Energy	0.0153	0.1392	0.1170	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	212.8491	212.8491	9.0300e-003	4.0500e-003	214.2933
Mobile	0.4788	1.1525	4.5935	9.6300e-003	0.6240	0.0163	0.6403	0.1678	0.0150	0.1828	0.0000	709.6730	709.6730	0.0242	0.0000	710.1803
Waste						0.0000	0.0000		0.0000	0.0000	13.3365	0.0000	13.3365	0.7882	0.0000	29.8880
Water						0.0000	0.0000		0.0000	0.0000	0.7726	1.8795	2.6521	0.0795	1.9100e-003	4.9141
Total	1.0476	1.2917	4.7127	0.0105	0.6240	0.0269	0.6509	0.1678	0.0256	0.1934	14.1091	924.4060	938.5151	0.9009	5.9600e-003	959.2802

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.42	3.02	0.71	2.24	0.00	10.22	0.47	0.00	10.68	1.56	1.35	7.62	7.53	2.59	24.56	7.48

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/1/2017	5	3	
3	Grading	Grading	2/2/2017	2/9/2017	5	6	
4	Building Construction	Building Construction	2/10/2017	12/14/2017	5	220	
5	Paving	Paving	12/15/2017	12/28/2017	5	10	
6	Architectural Coating	Architectural Coating	12/29/2017	1/11/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,608; Non-Residential Outdoor: 40,203 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	1	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126
Total	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4126

3.2 Demolition - 2017

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-004	5.2000e-004	5.0500e-003	1.0000e-005	0.1066	1.0000e-005	0.1066	0.0108	1.0000e-005	0.0108	0.0000	0.8833	0.8833	4.0000e-005	0.0000	0.8842
Total	4.0000e-004	5.2000e-004	5.0500e-003	1.0000e-005	0.1066	1.0000e-005	0.1066	0.0108	1.0000e-005	0.0108	0.0000	0.8833	0.8833	4.0000e-005	0.0000	0.8842

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	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125
Total	0.0272	0.2659	0.2087	2.4000e-004		0.0161	0.0161		0.0150	0.0150	0.0000	22.2938	22.2938	5.6600e-003	0.0000	22.4125

3.2 Demolition - 2017

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-004	5.2000e-004	5.0500e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8833	0.8833	4.0000e-005	0.0000	0.8842
Total	4.0000e-004	5.2000e-004	5.0500e-003	1.0000e-005	9.8000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.8833	0.8833	4.0000e-005	0.0000	0.8842

3.3 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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0429	0.0257	4.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409
Total	3.7900e-003	0.0429	0.0257	4.0000e-005	2.3900e-003	2.1000e-003	4.4900e-003	2.6000e-004	1.9300e-003	2.1900e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409

3.3 Site Preparation - 2017

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	5.0000e-005	4.7000e-004	0.0000	9.8400e-003	0.0000	9.8400e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0815	0.0815	0.0000	0.0000	0.0816
Total	4.0000e-005	5.0000e-005	4.7000e-004	0.0000	9.8400e-003	0.0000	9.8400e-003	1.0000e-003	0.0000	1.0000e-003	0.0000	0.0815	0.0815	0.0000	0.0000	0.0816

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					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7900e-003	0.0429	0.0257	4.0000e-005		2.1000e-003	2.1000e-003		1.9300e-003	1.9300e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409
Total	3.7900e-003	0.0429	0.0257	4.0000e-005	2.3900e-003	2.1000e-003	4.4900e-003	2.6000e-004	1.9300e-003	2.1900e-003	0.0000	3.3195	3.3195	1.0200e-003	0.0000	3.3409

3.3 Site Preparation - 2017

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	5.0000e-005	4.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0815	0.0815	0.0000	0.0000	0.0816
Total	4.0000e-005	5.0000e-005	4.7000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0815	0.0815	0.0000	0.0000	0.0816

3.4 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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0197	4.6700e-003	0.0243	0.0101	4.2900e-003	0.0144	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

3.4 Grading - 2017

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	9.0000e-005	1.2000e-004	1.1600e-003	0.0000	0.0246	0.0000	0.0246	2.4900e-003	0.0000	2.4900e-003	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2040
Total	9.0000e-005	1.2000e-004	1.1600e-003	0.0000	0.0246	0.0000	0.0246	2.4900e-003	0.0000	2.4900e-003	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2040

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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0900e-003	0.0845	0.0569	6.0000e-005		4.6700e-003	4.6700e-003		4.2900e-003	4.2900e-003	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646
Total	8.0900e-003	0.0845	0.0569	6.0000e-005	0.0197	4.6700e-003	0.0243	0.0101	4.2900e-003	0.0144	0.0000	5.7277	5.7277	1.7500e-003	0.0000	5.7646

3.4 Grading - 2017

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	9.0000e-005	1.2000e-004	1.1600e-003	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2040
Total	9.0000e-005	1.2000e-004	1.1600e-003	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	0.0000	0.2040

3.5 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	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9955	232.9955	0.0518	0.0000	234.0829

3.5 Building Construction - 2017

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	0.0284	0.1960	0.3490	5.5000e-004	1.2832	3.1100e-003	1.2863	0.1308	2.8600e-003	0.1336	0.0000	49.4190	49.4190	3.8000e-004	0.0000	49.4269
Worker	0.0178	0.0231	0.2264	5.5000e-004	4.7815	3.3000e-004	4.7819	0.4845	3.0000e-004	0.4848	0.0000	39.6115	39.6115	1.9400e-003	0.0000	39.6522
Total	0.0462	0.2191	0.5754	1.1000e-003	6.0648	3.4400e-003	6.0682	0.6152	3.1600e-003	0.6184	0.0000	89.0304	89.0304	2.3200e-003	0.0000	89.0791

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	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827
Total	0.3660	2.5144	1.7874	2.7400e-003		0.1608	0.1608		0.1540	0.1540	0.0000	232.9952	232.9952	0.0518	0.0000	234.0827

3.5 Building Construction - 2017

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	0.0284	0.1960	0.3490	5.5000e-004	0.0144	3.1100e-003	0.0175	4.1700e-003	2.8600e-003	7.0300e-003	0.0000	49.4190	49.4190	3.8000e-004	0.0000	49.4269
Worker	0.0178	0.0231	0.2264	5.5000e-004	0.0440	3.3000e-004	0.0443	0.0117	3.0000e-004	0.0120	0.0000	39.6115	39.6115	1.9400e-003	0.0000	39.6522
Total	0.0462	0.2191	0.5754	1.1000e-003	0.0584	3.4400e-003	0.0618	0.0159	3.1600e-003	0.0191	0.0000	89.0304	89.0304	2.3200e-003	0.0000	89.0791

3.6 Paving - 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	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	1.4300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.6300e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

3.6 Paving - 2017

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	2.3000e-004	3.0000e-004	2.9100e-003	1.0000e-005	0.0615	0.0000	0.0615	6.2300e-003	0.0000	6.2400e-003	0.0000	0.5096	0.5096	2.0000e-005	0.0000	0.5101
Total	2.3000e-004	3.0000e-004	2.9100e-003	1.0000e-005	0.0615	0.0000	0.0615	6.2300e-003	0.0000	6.2400e-003	0.0000	0.5096	0.5096	2.0000e-005	0.0000	0.5101

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	8.2000e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134
Paving	1.4300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.6300e-003	0.0823	0.0603	9.0000e-005		5.1100e-003	5.1100e-003		4.7100e-003	4.7100e-003	0.0000	8.0625	8.0625	2.4200e-003	0.0000	8.1134

3.6 Paving - 2017

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	2.3000e-004	3.0000e-004	2.9100e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5096	0.5096	2.0000e-005	0.0000	0.5101
Total	2.3000e-004	3.0000e-004	2.9100e-003	1.0000e-005	5.7000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5096	0.5096	2.0000e-005	0.0000	0.5101

3.7 Architectural Coating - 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					
Archit. Coating	0.0559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280
Total	0.0561	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280

3.7 Architectural Coating - 2017

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	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	0.0000
Worker	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	4.5100e-003	0.0000	4.5100e-003	4.6000e-004	0.0000	4.6000e-004	0.0000	0.0374	0.0374	0.0000	0.0000	0.0374	0.0374
Total	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	4.5100e-003	0.0000	4.5100e-003	4.6000e-004	0.0000	4.6000e-004	0.0000	0.0374	0.0374	0.0000	0.0000	0.0374	0.0374

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	0.0559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7000e-004	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280
Total	0.0561	1.0900e-003	9.3000e-004	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	0.1277	0.1277	1.0000e-005	0.0000	0.1280

3.7 Architectural Coating - 2017

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	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	0.0000
Worker	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0374	0.0374	0.0000	0.0000	0.0374	0.0000
Total	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	4.0000e-005	0.0000	4.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0374	0.0374	0.0000	0.0000	0.0374	0.0000

3.7 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	0.5031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513
Total	0.5045	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513

3.7 Architectural Coating - 2018

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	1.4000e-004	1.8000e-004	1.7200e-003	0.0000	0.0406	0.0000	0.0406	4.1100e-003	0.0000	4.1200e-003	0.0000	0.3237	0.3237	2.0000e-005	0.0000	0.3241
Total	1.4000e-004	1.8000e-004	1.7200e-003	0.0000	0.0406	0.0000	0.0406	4.1100e-003	0.0000	4.1200e-003	0.0000	0.3237	0.3237	2.0000e-005	0.0000	0.3241

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	0.5031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3400e-003	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513
Total	0.5045	9.0300e-003	8.3400e-003	1.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004	0.0000	1.1490	1.1490	1.1000e-004	0.0000	1.1513

3.7 Architectural Coating - 2018

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	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	0.0000
Worker	1.4000e-004	1.8000e-004	1.7200e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3237	0.3237	2.0000e-005	0.0000	0.3241	
Total	1.4000e-004	1.8000e-004	1.7200e-003	0.0000	3.7000e-004	0.0000	3.8000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3237	0.3237	2.0000e-005	0.0000	0.3241	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.4788	1.1525	4.5935	9.6300e-003	0.6240	0.0163	0.6403	0.1678	0.0150	0.1828	0.0000	709.6730	709.6730	0.0242	0.0000	710.1803
Unmitigated	0.4788	1.1525	4.5935	9.6300e-003	0.6240	0.0163	0.6403	0.1678	0.0150	0.1828	0.0000	709.6730	709.6730	0.0242	0.0000	710.1803

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	872.40	872.40	872.40	1,657,500	1,657,500
Parking Lot	0.00	0.00	0.00		
Total	872.40	872.40	872.40	1,657,500	1,657,500

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
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
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	61.2886	61.2886	6.1300e-003	1.2700e-003	61.8104
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	93.2573	93.2573	9.3300e-003	1.9300e-003	94.0512
NaturalGas Mitigated	0.0153	0.1392	0.1170	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	151.5605	151.5605	2.9000e-003	2.7800e-003	152.4829
NaturalGas Unmitigated	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136	0.0000	195.4097	195.4097	3.7500e-003	3.5800e-003	196.5990

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
Hotel	3.66184e+006	0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136	0.0000	195.4097	195.4097	3.7500e-003	3.5800e-003	196.5990
Total		0.0198	0.1795	0.1508	1.0800e-003		0.0136	0.0136		0.0136	0.0136	0.0000	195.4097	195.4097	3.7500e-003	3.5800e-003	196.5990

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Hotel	2.84014e+006	0.0153	0.1392	0.1170	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	151.5605	151.5605	2.9000e-003	2.7800e-003	152.4829
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0153	0.1392	0.1170	8.4000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	151.5605	151.5605	2.9000e-003	2.7800e-003	152.4829

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	666363	87.6546	8.7700e-003	1.8100e-003	88.4009
Parking Lot	42592	5.6026	5.6000e-004	1.2000e-004	5.6503
Total		93.2573	9.3300e-003	1.9300e-003	94.0512

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Hotel	442074	58.1512	5.8200e-003	1.2000e-003	58.6462
Parking Lot	23851.5	3.1375	3.1000e-004	6.0000e-005	3.1642
Total		61.2886	6.1300e-003	1.2600e-003	61.8104

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003
Unmitigated	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003

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	0.0559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003
Total	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003

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	0.0559					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003
Total	0.5535	2.0000e-005	2.2400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.3100e-003	4.3100e-003	1.0000e-005	0.0000	4.5500e-003

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	2.6521	0.0795	1.9100e-003	4.9141
Unmitigated	3.2881	0.0994	2.3900e-003	6.1169

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	3.04401 / 0.338224	3.2881	0.0994	2.3900e-003	6.1169
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		3.2881	0.0994	2.3900e-003	6.1169

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Hotel	2.43521 / 0.317592	2.6521	0.0795	1.9100e-003	4.9141
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		2.6521	0.0795	1.9100e-003	4.9141

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.3365	0.7882	0.0000	29.8880
Unmitigated	13.3365	0.7882	0.0000	29.8880

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	65.7	13.3365	0.7882	0.0000	29.8880
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		13.3365	0.7882	0.0000	29.8880

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Hotel	65.7	13.3365	0.7882	0.0000	29.8880
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		13.3365	0.7882	0.0000	29.8880

9.0 Operational Offroad

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

Residence Inn Davis
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	121.00	Space	1.09	48,400.00	0
Hotel	120.00	Room	1.60	78,953.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	4			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor per PG&E April 2015.

Land Use - Per Planning Application (10/7/15) and Initial Design Review (9/1/15)

Vehicle Trips - Back-calculated from Trip Generation Analysis: 872 total daily trips/ 120 rooms = 7.27 trips per room

Road Dust - Project access to the site would be provided by paved roads - 100% pave

Energy Use - .

Area Mitigation - Assumed no hearth.

Energy Mitigation - Assumed 25% improvement over Title 24; assumed LED lighting and control system provides 30% reduction; assumed PV solar system provides 20% of Electricity use generated (CalEEMod estimates 582406.4 kWh electricity use without solar, per applicant 75 kW solar system installed, per NREL Solar Calculator system would produce approximately 117,000 kWh -> $117,000/582,406 = 20\%$)

Water Mitigation - Per Sustainability Features provided by applicant, assumed low-flow fixtures and water-efficient irrigation systems with CalEEMod default % reductions.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	174,240.00	78,953.00
tblLandUse	LotAcreage	4.00	1.60
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	8.19	7.27
tblVehicleTrips	SU_TR	5.95	7.27
tblVehicleTrips	WD_TR	8.17	7.27

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Energy	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699
Mobile	2.8929	5.9452	24.1523	0.0566	3.5400	0.0893	3.6293	0.9494	0.0823	1.0317		4,580.0447	4,580.0447	0.1463		4,583.1178
Total	6.0351	6.9290	25.0033	0.0625	3.5400	0.1641	3.7042	0.9494	0.1571	1.1065		5,760.3844	5,760.3844	0.1691	0.0216	5,770.6435

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Energy	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
Mobile	2.8929	5.9452	24.1523	0.0566	3.5400	0.0893	3.6293	0.9494	0.0823	1.0317		4,580.0447	4,580.0447	0.1463		4,583.1178
Total	6.0109	6.7083	24.8179	0.0612	3.5400	0.1474	3.6874	0.9494	0.1403	1.0897		5,495.5323	5,495.5323	0.1640	0.0168	5,504.1797

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.40	3.19	0.74	2.11	0.00	10.22	0.45	0.00	10.67	1.52	0.00	4.60	4.60	3.00	22.46	4.62

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/1/2017	5	3	
3	Grading	Grading	2/2/2017	2/9/2017	5	6	
4	Building Construction	Building Construction	2/10/2017	12/14/2017	5	220	
5	Paving	Paving	12/15/2017	12/28/2017	5	10	
6	Architectural Coating	Architectural Coating	12/29/2017	1/11/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,608; Non-Residential Outdoor: 40,203 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	1	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	lb/day										lb/day					
Off-Road	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022		2,457.4682	2,457.4682	0.6235		2,470.5620
Total	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022		2,457.4682	2,457.4682	0.6235		2,470.5620

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0473	0.0463	0.5770	1.3500e-003	12.4996	7.3000e-004	12.5003	1.2641	6.8000e-004	1.2647		107.2580	107.2580	4.7700e-003		107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	12.4996	7.3000e-004	12.5003	1.2641	6.8000e-004	1.2647		107.2580	107.2580	4.7700e-003		107.3580

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022	0.0000	2,457.4682	2,457.4682	0.6235		2,470.5620
Total	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022	0.0000	2,457.4682	2,457.4682	0.6235		2,470.5620

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0473	0.0463	0.5770	1.3500e-003	0.1012	7.3000e-004	0.1020	0.0270	6.8000e-004	0.0276		107.2580	107.2580	4.7700e-003		107.3580
Total	0.0473	0.0463	0.5770	1.3500e-003	0.1012	7.3000e-004	0.1020	0.0270	6.8000e-004	0.0276		107.2580	107.2580	4.7700e-003		107.3580

3.3 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	2.5289	28.6230	17.1310	0.0238		1.3967	1.3967		1.2850	1.2850		2,439.4360	2,439.4360	0.7474		2,455.1322
Total	2.5289	28.6230	17.1310	0.0238	1.5908	1.3967	2.9875	0.1718	1.2850	1.4567		2,439.4360	2,439.4360	0.7474		2,455.1322

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0291	0.0285	0.3551	8.3000e-004	7.6920	4.5000e-004	7.6925	0.7779	4.2000e-004	0.7783		66.0049	66.0049	2.9300e-003		66.0665
Total	0.0291	0.0285	0.3551	8.3000e-004	7.6920	4.5000e-004	7.6925	0.7779	4.2000e-004	0.7783		66.0049	66.0049	2.9300e-003		66.0665

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	2.5289	28.6230	17.1310	0.0238		1.3967	1.3967		1.2850	1.2850	0.0000	2,439.4360	2,439.4360	0.7474		2,455.1322
Total	2.5289	28.6230	17.1310	0.0238	1.5908	1.3967	2.9875	0.1718	1.2850	1.4567	0.0000	2,439.4360	2,439.4360	0.7474		2,455.1322

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0291	0.0285	0.3551	8.3000e-004	0.0623	4.5000e-004	0.0627	0.0166	4.2000e-004	0.0170		66.0049	66.0049	2.9300e-003		66.0665
Total	0.0291	0.0285	0.3551	8.3000e-004	0.0623	4.5000e-004	0.0627	0.0166	4.2000e-004	0.0170		66.0049	66.0049	2.9300e-003		66.0665

3.4 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306		2,104.5737	2,104.5737	0.6448		2,118.1153
Total	2.6973	28.1608	18.9679	0.0206	6.5523	1.5550	8.1074	3.3675	1.4306	4.7981		2,104.5737	2,104.5737	0.6448		2,118.1153

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0364	0.0356	0.4438	1.0400e-003	9.6151	5.6000e-004	9.6156	0.9724	5.2000e-004	0.9729		82.5061	82.5061	3.6700e-003		82.5831
Total	0.0364	0.0356	0.4438	1.0400e-003	9.6151	5.6000e-004	9.6156	0.9724	5.2000e-004	0.9729		82.5061	82.5061	3.6700e-003		82.5831

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306	0.0000	2,104.5737	2,104.5737	0.6448		2,118.1153
Total	2.6973	28.1608	18.9679	0.0206	6.5523	1.5550	8.1074	3.3675	1.4306	4.7981	0.0000	2,104.5737	2,104.5737	0.6448		2,118.1153

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0364	0.0356	0.4438	1.0400e-003	0.0779	5.6000e-004	0.0784	0.0207	5.2000e-004	0.0213		82.5061	82.5061	3.6700e-003		82.5831
Total	0.0364	0.0356	0.4438	1.0400e-003	0.0779	5.6000e-004	0.0784	0.0207	5.2000e-004	0.0213		82.5061	82.5061	3.6700e-003		82.5831

3.5 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	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479
Total	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2322	1.6956	2.4641	5.0300e-003	13.6720	0.0281	13.7001	1.3895	0.0258	1.4154		496.8115	496.8115	3.7500e-003		496.8902
Worker	0.1928	0.1887	2.3523	5.5000e-003	50.9598	2.9900e-003	50.9628	5.1535	2.7600e-003	5.1563		437.2825	437.2825	0.0194		437.6905
Total	0.4251	1.8843	4.8164	0.0105	64.6318	0.0311	64.6629	6.5430	0.0286	6.5716		934.0940	934.0940	0.0232		934.5807

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189		2,345.7479
Total	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189		2,345.7479

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2322	1.6956	2.4641	5.0300e-003	0.1345	0.0281	0.1626	0.0388	0.0258	0.0646		496.8115	496.8115	3.7500e-003			496.8902
Worker	0.1928	0.1887	2.3523	5.5000e-003	0.4127	2.9900e-003	0.4157	0.1099	2.7600e-003	0.1127		437.2825	437.2825	0.0194			437.6905
Total	0.4251	1.8843	4.8164	0.0105	0.5472	0.0311	0.5783	0.1487	0.0286	0.1773		934.0940	934.0940	0.0232			934.5807

3.6 Paving - 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	lb/day										lb/day						
Off-Road	1.6402	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423		1,777.4745	1,777.4745	0.5344			1,788.6966
Paving	0.2856					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.9257	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423		1,777.4745	1,777.4745	0.5344			1,788.6966

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0546	0.0534	0.6658	1.5600e-003	14.4226	8.5000e-004	14.4234	1.4585	7.8000e-004	1.4593		123.7592	123.7592	5.5000e-003		123.8747
Total	0.0546	0.0534	0.6658	1.5600e-003	14.4226	8.5000e-004	14.4234	1.4585	7.8000e-004	1.4593		123.7592	123.7592	5.5000e-003		123.8747

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6402	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423	0.0000	1,777.4745	1,777.4745	0.5344		1,788.6966
Paving	0.2856					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9257	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423	0.0000	1,777.4745	1,777.4745	0.5344		1,788.6966

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0546	0.0534	0.6658	1.5600e-003	0.1168	8.5000e-004	0.1176	0.0311	7.8000e-004	0.0319		123.7592	123.7592	5.5000e-003		123.8747
Total	0.0546	0.0534	0.6658	1.5600e-003	0.1168	8.5000e-004	0.1176	0.0311	7.8000e-004	0.0319		123.7592	123.7592	5.5000e-003		123.8747

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	112.1362	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0400	0.0392	0.4882	1.1400e-003	10.5766	6.2000e-004	10.5772	1.0696	5.7000e-004	1.0702		90.7567	90.7567	4.0300e-003		90.8414
Total	0.0400	0.0392	0.4882	1.1400e-003	10.5766	6.2000e-004	10.5772	1.0696	5.7000e-004	1.0702		90.7567	90.7567	4.0300e-003		90.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	112.1362	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

3.7 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0400	0.0392	0.4882	1.1400e-003	0.0857	6.2000e-004	0.0863	0.0228	5.7000e-004	0.0234		90.7567	90.7567	4.0300e-003			90.8414
Total	0.0400	0.0392	0.4882	1.1400e-003	0.0857	6.2000e-004	0.0863	0.0228	5.7000e-004	0.0234		90.7567	90.7567	4.0300e-003			90.8414

3.7 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	lb/day										lb/day						
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102
Total	112.1025	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0360	0.0353	0.4376	1.1400e-003	10.5766	6.1000e-004	10.5772	1.0696	5.6000e-004	1.0702		87.3663	87.3663	3.7100e-003			87.4442
Total	0.0360	0.0353	0.4376	1.1400e-003	10.5766	6.1000e-004	10.5772	1.0696	5.6000e-004	1.0702		87.3663	87.3663	3.7100e-003			87.4442

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102
Total	112.1025	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0360	0.0353	0.4376	1.1400e-003	0.0857	6.1000e-004	0.0863	0.0228	5.6000e-004	0.0234		87.3663	87.3663	3.7100e-003		87.4442
Total	0.0360	0.0353	0.4376	1.1400e-003	0.0857	6.1000e-004	0.0863	0.0228	5.6000e-004	0.0234		87.3663	87.3663	3.7100e-003		87.4442

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8929	5.9452	24.1523	0.0566	3.5400	0.0893	3.6293	0.9494	0.0823	1.0317		4,580.0447	4,580.0447	0.1463		4,583.1178
Unmitigated	2.8929	5.9452	24.1523	0.0566	3.5400	0.0893	3.6293	0.9494	0.0823	1.0317		4,580.0447	4,580.0447	0.1463		4,583.1178

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	872.40	872.40	872.40	1,657,500	1,657,500
Parking Lot	0.00	0.00	0.00		
Total	872.40	872.40	872.40	1,657,500	1,657,500

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
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
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

~~4.4 Fleet Mix~~

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
NaturalGas Unmitigated	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	10032.4	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.7812	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Unmitigated	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3500e-003	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Total	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3500e-003	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Total	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Residence Inn Davis
Yolo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	121.00	Space	1.09	48,400.00	0
Hotel	120.00	Room	1.60	78,953.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	6.8	Precipitation Freq (Days)	54
Climate Zone	4			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor per PG&E April 2015.

Land Use - Per Planning Application (10/7/15) and Initial Design Review (9/1/15)

Vehicle Trips - Back-calculated from Trip Generation Analysis: 872 total daily trips/ 120 rooms = 7.27 trips per room

Road Dust - Project access to the site would be provided by paved roads - 100% pave

Energy Use - .

Area Mitigation - Assumed no hearth.

Energy Mitigation - Assumed 25% improvement over Title 24; assumed LED lighting and control system provides 30% reduction; assumed PV solar system provides 20% of Electricity use generated (CalEEMod estimates 582406.4 kWh electricity use without solar, per applicant 75 kW solar system installed, per NREL Solar Calculator system would produce approximately 117,000 kWh -> $117,000/582,406 = 20\%$)

Water Mitigation - Per Sustainability Features provided by applicant, assumed low-flow fixtures and water-efficient irrigation systems with CalEEMod default % reductions.

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	174,240.00	78,953.00
tblLandUse	LotAcreage	4.00	1.60
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblProjectCharacteristics	OperationalYear	2014	2019
tblRoadDust	RoadPercentPave	94	100
tblVehicleTrips	ST_TR	8.19	7.27
tblVehicleTrips	SU_TR	5.95	7.27
tblVehicleTrips	WD_TR	8.17	7.27

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Energy	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699
Mobile	2.8239	6.6177	30.1968	0.0520	3.5400	0.0902	3.6302	0.9494	0.0831	1.0325		4,223.0026	4,223.0026	0.1467		4,226.0826
Total	5.9661	7.6015	31.0478	0.0579	3.5400	0.1650	3.7050	0.9494	0.1579	1.1073		5,403.3423	5,403.3423	0.1694	0.0216	5,413.6083

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Energy	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
Mobile	2.8239	6.6177	30.1968	0.0520	3.5400	0.0902	3.6302	0.9494	0.0831	1.0325		4,223.0026	4,223.0026	0.1467		4,226.0826
Total	5.9418	7.3807	30.8624	0.0566	3.5400	0.1482	3.6883	0.9494	0.1411	1.0905		5,138.4903	5,138.4903	0.1644	0.0168	5,147.1444

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.41	2.90	0.60	2.28	0.00	10.16	0.45	0.00	10.62	1.51	0.00	4.90	4.90	2.99	22.46	4.92

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/1/2017	5	3	
3	Grading	Grading	2/2/2017	2/9/2017	5	6	
4	Building Construction	Building Construction	2/10/2017	12/14/2017	5	220	
5	Paving	Paving	12/15/2017	12/28/2017	5	10	
6	Architectural Coating	Architectural Coating	12/29/2017	1/11/2018	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 120,608; Non-Residential Outdoor: 40,203 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	1	8.00	130	0.36
Site Preparation	Scrapers	1	8.00	361	0.48
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	53.00	21.00	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	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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	lb/day										lb/day					
Off-Road	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022		2,457.4682	2,457.4682	0.6235		2,470.5620
Total	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022		2,457.4682	2,457.4682	0.6235		2,470.5620

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0414	0.0580	0.5259	1.1900e-003	12.4996	7.3000e-004	12.5003	1.2641	6.8000e-004	1.2647		94.6714	94.6714	4.7700e-003		94.7715
Total	0.0414	0.0580	0.5259	1.1900e-003	12.4996	7.3000e-004	12.5003	1.2641	6.8000e-004	1.2647		94.6714	94.6714	4.7700e-003		94.7715

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022	0.0000	2,457.4682	2,457.4682	0.6235		2,470.5620
Total	2.7216	26.5855	20.8712	0.0245		1.6062	1.6062		1.5022	1.5022	0.0000	2,457.4682	2,457.4682	0.6235		2,470.5620

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0414	0.0580	0.5259	1.1900e-003	0.1012	7.3000e-004	0.1020	0.0270	6.8000e-004	0.0276		94.6714	94.6714	4.7700e-003		94.7715
Total	0.0414	0.0580	0.5259	1.1900e-003	0.1012	7.3000e-004	0.1020	0.0270	6.8000e-004	0.0276		94.6714	94.6714	4.7700e-003		94.7715

3.3 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	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	2.5289	28.6230	17.1310	0.0238		1.3967	1.3967		1.2850	1.2850		2,439.4360	2,439.4360	0.7474		2,455.1322
Total	2.5289	28.6230	17.1310	0.0238	1.5908	1.3967	2.9875	0.1718	1.2850	1.4567		2,439.4360	2,439.4360	0.7474		2,455.1322

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0357	0.3236	7.3000e-004	7.6920	4.5000e-004	7.6925	0.7779	4.2000e-004	0.7783		58.2593	58.2593	2.9300e-003		58.3209
Total	0.0255	0.0357	0.3236	7.3000e-004	7.6920	4.5000e-004	7.6925	0.7779	4.2000e-004	0.7783		58.2593	58.2593	2.9300e-003		58.3209

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	2.5289	28.6230	17.1310	0.0238		1.3967	1.3967		1.2850	1.2850	0.0000	2,439.4360	2,439.4360	0.7474		2,455.1322
Total	2.5289	28.6230	17.1310	0.0238	1.5908	1.3967	2.9875	0.1718	1.2850	1.4567	0.0000	2,439.4360	2,439.4360	0.7474		2,455.1322

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0255	0.0357	0.3236	7.3000e-004	0.0623	4.5000e-004	0.0627	0.0166	4.2000e-004	0.0170		58.2593	58.2593	2.9300e-003		58.3209
Total	0.0255	0.0357	0.3236	7.3000e-004	0.0623	4.5000e-004	0.0627	0.0166	4.2000e-004	0.0170		58.2593	58.2593	2.9300e-003		58.3209

3.4 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	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306		2,104.5737	2,104.5737	0.6448		2,118.1153
Total	2.6973	28.1608	18.9679	0.0206	6.5523	1.5550	8.1074	3.3675	1.4306	4.7981		2,104.5737	2,104.5737	0.6448		2,118.1153

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0319	0.0446	0.4046	9.2000e-004	9.6151	5.6000e-004	9.6156	0.9724	5.2000e-004	0.9729		72.8241	72.8241	3.6700e-003			72.9011
Total	0.0319	0.0446	0.4046	9.2000e-004	9.6151	5.6000e-004	9.6156	0.9724	5.2000e-004	0.9729		72.8241	72.8241	3.6700e-003			72.9011

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000	
Off-Road	2.6973	28.1608	18.9679	0.0206		1.5550	1.5550		1.4306	1.4306	0.0000	2,104.5737	2,104.5737	0.6448			2,118.1153
Total	2.6973	28.1608	18.9679	0.0206	6.5523	1.5550	8.1074	3.3675	1.4306	4.7981	0.0000	2,104.5737	2,104.5737	0.6448			2,118.1153

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0319	0.0446	0.4046	9.2000e-004	0.0779	5.6000e-004	0.0784	0.0207	5.2000e-004	0.0213		72.8241	72.8241	3.6700e-003		72.9011
Total	0.0319	0.0446	0.4046	9.2000e-004	0.0779	5.6000e-004	0.0784	0.0207	5.2000e-004	0.0213		72.8241	72.8241	3.6700e-003		72.9011

3.5 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	lb/day										lb/day					
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479
Total	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998		2,334.8503	2,334.8503	0.5189		2,345.7479

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.3089	1.8110	4.3202	5.0200e-003	13.6720	0.0285	13.7005	1.3895	0.0262	1.4157		493.0410	493.0410	3.8500e-003			493.1218
Worker	0.1689	0.2363	2.1442	4.8500e-003	50.9598	2.9900e-003	50.9628	5.1535	2.7600e-003	5.1563		385.9679	385.9679	0.0194			386.3760
Total	0.4777	2.0473	6.4644	9.8700e-003	64.6318	0.0314	64.6632	6.5430	0.0289	6.5719		879.0089	879.0089	0.0233			879.4977

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189			2,345.7479
Total	3.3275	22.8585	16.2492	0.0249		1.4621	1.4621		1.3998	1.3998	0.0000	2,334.8503	2,334.8503	0.5189			2,345.7479

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3089	1.8110	4.3202	5.0200e-003	0.1345	0.0285	0.1629	0.0388	0.0262	0.0649		493.0410	493.0410	3.8500e-003		493.1218
Worker	0.1689	0.2363	2.1442	4.8500e-003	0.4127	2.9900e-003	0.4157	0.1099	2.7600e-003	0.1127		385.9679	385.9679	0.0194		386.3760
Total	0.4777	2.0473	6.4644	9.8700e-003	0.5472	0.0314	0.5786	0.1487	0.0289	0.1776		879.0089	879.0089	0.0233		879.4977

3.6 Paving - 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	lb/day										lb/day					
Off-Road	1.6402	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423		1,777.4745	1,777.4745	0.5344		1,788.6966
Paving	0.2856					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9257	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423		1,777.4745	1,777.4745	0.5344		1,788.6966

3.6 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0478	0.0669	0.6068	1.3700e-003	14.4226	8.5000e-004	14.4234	1.4585	7.8000e-004	1.4593		109.2362	109.2362	5.5000e-003		109.3517
Total	0.0478	0.0669	0.6068	1.3700e-003	14.4226	8.5000e-004	14.4234	1.4585	7.8000e-004	1.4593		109.2362	109.2362	5.5000e-003		109.3517

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6402	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423	0.0000	1,777.4745	1,777.4745	0.5344		1,788.6966
Paving	0.2856					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.9257	16.4619	12.0566	0.0176		1.0230	1.0230		0.9423	0.9423	0.0000	1,777.4745	1,777.4745	0.5344		1,788.6966

3.6 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0478	0.0669	0.6068	1.3700e-003	0.1168	8.5000e-004	0.1176	0.0311	7.8000e-004	0.0319		109.2362	109.2362	5.5000e-003		109.3517
Total	0.0478	0.0669	0.6068	1.3700e-003	0.1168	8.5000e-004	0.1176	0.0311	7.8000e-004	0.0319		109.2362	109.2362	5.5000e-003		109.3517

3.7 Architectural Coating - 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	lb/day										lb/day					
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	112.1362	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

3.7 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0351	0.0490	0.4450	1.0100e-003	10.5766	6.2000e-004	10.5772	1.0696	5.7000e-004	1.0702		80.1066	80.1066	4.0300e-003		80.1912
Total	0.0351	0.0490	0.4450	1.0100e-003	10.5766	6.2000e-004	10.5772	1.0696	5.7000e-004	1.0702		80.1066	80.1066	4.0300e-003		80.1912

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	112.1362	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721

3.7 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0351	0.0490	0.4450	1.0100e-003	0.0857	6.2000e-004	0.0863	0.0228	5.7000e-004	0.0234		80.1066	80.1066	4.0300e-003		80.1912
Total	0.0351	0.0490	0.4450	1.0100e-003	0.0857	6.2000e-004	0.0863	0.0228	5.7000e-004	0.0234		80.1066	80.1066	4.0300e-003		80.1912

3.7 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	lb/day										lb/day					
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102
Total	112.1025	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.0102

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0312	0.0441	0.3951	1.0100e-003	10.5766	6.1000e-004	10.5772	1.0696	5.6000e-004	1.0702		77.1060	77.1060	3.7100e-003			77.1839
Total	0.0312	0.0441	0.3951	1.0100e-003	10.5766	6.1000e-004	10.5772	1.0696	5.6000e-004	1.0702		77.1060	77.1060	3.7100e-003			77.1839

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	111.8039					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102
Total	112.1025	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267			282.0102

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0312	0.0441	0.3951	1.0100e-003	0.0857	6.1000e-004	0.0863	0.0228	5.6000e-004	0.0234		77.1060	77.1060	3.7100e-003		77.1839
Total	0.0312	0.0441	0.3951	1.0100e-003	0.0857	6.1000e-004	0.0863	0.0228	5.6000e-004	0.0234		77.1060	77.1060	3.7100e-003		77.1839

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8239	6.6177	30.1968	0.0520	3.5400	0.0902	3.6302	0.9494	0.0831	1.0325		4,223.0026	4,223.0026	0.1467		4,226.0826
Unmitigated	2.8239	6.6177	30.1968	0.0520	3.5400	0.0902	3.6302	0.9494	0.0831	1.0325		4,223.0026	4,223.0026	0.1467		4,226.0826

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Hotel	872.40	872.40	872.40	1,657,500	1,657,500
Parking Lot	0.00	0.00	0.00		
Total	872.40	872.40	872.40	1,657,500	1,657,500

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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
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
0.480588	0.067655	0.152308	0.148424	0.059174	0.006668	0.036554	0.035496	0.000914	0.001885	0.007619	0.000654	0.002062

5.0 Energy Detail

~~4.4 Fleet Mix~~

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
NaturalGas Unmitigated	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Hotel	10032.4	0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699
Total		0.1082	0.9836	0.8262	5.9000e-003		0.0748	0.0748		0.0748	0.0748		1,180.2869	1,180.2869	0.0226	0.0216	1,187.4699

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Hotel	7.7812	0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0839	0.7629	0.6408	4.5800e-003		0.0580	0.0580		0.0580	0.0580		915.4349	915.4349	0.0176	0.0168	921.0061

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Unmitigated	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3500e-003	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Total	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3063					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3500e-003	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558
Total	3.0340	2.3000e-004	0.0249	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0527	0.0527	1.4000e-004		0.0558

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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