

Table 4 shows global greenhouse gas emission in metric ton (MT) of CO₂e generated worldwide, within the United State, within California, and within Visalia, Visalia data coming from the City's Draft Preliminary CAP.

Locations	Emissions (MMTCO ₂ e)	Population (Millions)	Average Per Capita Emission (MTCO ₂ e)
World	33,712.9	6,055	5.6
United States	7033	281	25.0
California	458.45	33.9	13.5
Visalia Community (Preliminary CAP Inventory)	1.14	0.09	12.5
Visalia Municipal (Preliminary CAP Inventory)	0.0174	N/A	0.19

Source: World emissions from World Resource Institute; U.S. emissions Inventory of U.S. Greenhouse Gas Emissions and Sinks; 1990-2006, USEPA; California Air Resources Board; City of Visalia Draft Preliminary Climate Action Plan; U.S. Census

2.2 REGULATORY BACKGROUND

Climate changes is a global, national, state and local issue involving greenhouse gas emissions from all around the world; therefore countries around the world, including the United States, have established regulations to assist in the emissions of GHGs. Tables 5, 6, 7 and 8 gives a brief explanation of both international, national, state and local regulations.

REGULATION	ADOPTED	PROTOCOL
International Regulations		
Intergovernmental Panel on Climate Change	1998	The United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economical information relevant to understanding the scientific basis of risk of human-induced climate change and its potential impacts.
United Nations Framework Convention on Climate Change	March 21, 1994 - A number of countries from around the world joined in signing the Convention	Governments gather and share information on GHG emissions, national policies and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts.
Kyoto Protocol	Adopted: December 1, 1997 Entered into Force: February 16, 2005	Sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of 5% against 1990 levels over the five year period of 2008-2012

**TABLE 6:
NATIONAL GREENHOUSE GAS REGULATIONS**

REGULATION	ADOPTED	PROTOCOL
National Regulations		
Greenhouse Gas Endangerment	December 7, 2009	The EPA Administrator signed two distinct findings regarding GHG emissions under section 2029(a) of the Clean Air Act. 1. Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases — carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF ₆) 2. Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.
Corporate Average Fuel Economy (CAFE)	Adopted: 1975 Revised: July 29, 2011	An agreement with thirteen large automakers to increase fuel economy to 54.5 miles per gallon for cars and light-duty trucks by model year 2025. He was joined by Ford, GM, Chrysler, BMW, Honda, Hyundai, Jaguar/Land Rover, Kia, Mazda, Mitsubishi, Nissan, Toyota, and Volvo, which together account for over 90% of all vehicles sold in the United States, as well as the United Auto Workers (UAW), and the State of California, who were all participants in the deal. The agreement will result in new CAFE regulations for model year 2017-2025 vehicles which were finalized on August 28, 2012. The major increases in stringency and the changes in the structure of CAFE create a need for research that incorporates the demand and supply sides of the new vehicle market in a more detailed manner than was needed with static fuel economy standards
Mandatory Reporting for Greenhouse Gases	September 22, 2009	Requires reporting of GHG emissions from large sources and suppliers in the United States. Any facility that emits 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.
New Source Review	May 13, 2013	Tailors the requirements of the Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits.
Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electrical Utility Generating Units	March 27, 2012	The EPA proposed new performance standards for emissions of carbon dioxide for new affected fossil fuel-fired electrical utility generated units. New sources greater than 25 megawatt would be required to meet an output-based standard of 1,000 pound of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology
Proposed Energy Tax Prevention of 2011	Passed the house of Representatives in 2011 Has yet to pass the Senate	If passed, this bill would amend several core components of the Clean Air Act (CAA). Title III of the CAA would be amended to have the term "greenhouse gas" include: water vapor, carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, perfluorocarbons and any other substance subject to, or proposed to be subject to, regulation, action, or consideration under this Act to address climate change.
Cap and Trade	<i>Yet to be formally adopted.</i>	An environmental policy tool that delivers results with a mandatory cap on emissions while providing sources flexibility in how they comply. Successful cap and trade programs reward innovation, efficiency, and early action and provide strict environmental accountability without inhibiting economic growth.
Western Climate Initiative Partner	<i>Yes to be formally adopted</i>	Jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario and Quebec. Its cap and trade program is estimated to be fully implemented by 2012

**TABLE 7:
CALIFORNIA GREENHOUSE GAS REGULATIONS**

REGULATION	ADOPTED	PROTOCOL
California Regulations		
Title 24	Adopted: 1978 2008 Standards Effective: January 1, 2010	California's Energy Efficiency Standards for Residential and Non-Residential Buildings. Their standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods
California Green Building Standards	January 12, 2010	A comprehensive and uniform regulatory code for all residential, commercial and K-14 school buildings.
Pavley Regulations	July 22, 2002	Reduce GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016. ARB's September amendments will cement California's enforcement of the Pavley rule starting in 2009 while providing vehicle manufacturers with new compliance flexibility.
Low Carbon Fuel Standard- Executive Order S-01-07	January 18, 2007	Calls for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. It instructed the California Environmental Protection Agency to develop and propose a draft compliance schedule to meet the 2020 target.
SB 1368	2006	The law limits long-term investments in base load generation by the state's utilities to power plants that meet an emissions performance standard (EPS)..
SB 97	February 16, 2010	The Natural Resources Agency adopted Amendments to the CEQA Guidelines for greenhouse gas emissions..
AB 32	2006	Set the 2020 greenhouse gas emissions reduction goal into law. It directed the California Air Resources Board to begin developing discrete early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit. The reduction measures to meet the 2020 target are to be adopted by the start of 2011.
SB 375	August 30, 2008	Enhances California's ability to reach its AB 32 goals by promoting good planning with the goal of more sustainable communities. Sustainable Communities requires ARB to develop regional greenhouse gas emission reduction targets for passenger vehicles. ARB is to establish targets for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations
Executive Order S-13-08	2009	A comprehensive "Climate Adaptation Strategy" that would identify the state's vulnerabilities and plan accordingly. State agencies will take this report into account, due in December 2010, when planning new infrastructure such as roads, bridges, and water treatment facilities. The executive order noted that the country's longest continuously operating sea level gauge, San Francisco Bay's Fort Point, recorded a seven-inch rise in sea level over the 20th century.
SB 1078, SB 107 and Executive Order S-14-08	September 12, 2002	Requires California to generate 20% of its electricity from renewable energy by 2017. SB 107 then changes the 2017 deadline to 2010. Executive Order S-14-08 required that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.
CEQA Guidelines Update	Adopted: April 13, 2009 Updated: May 2011	These Thresholds are designed to establish the level at which the District believed air pollution emissions would cause significant environmental impacts under CEQA and were posted on the Air District's website and included in the Air District's updated CEQA Guidelines

TABLE 8: REGIONAL GREENHOUSE GAS REGULATIONS		
REGULATION	ADOPTED	PROTOCOL
Regional Regulations		
San Joaquin Valley Air Pollution Control District		The San Joaquin Valley Air Pollution Control District is made up of eight counties in California's Central Valley: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. The Valley Air District is governed by an fifteen member Governing Board consisting of representatives from the Board of Supervisors of all eight counties, one Health and Science member, one Physician, and five Valley city representatives.
Climate Change Action Plan		A climate change action plan lays out a strategy, including specific policy recommendations that a state will use to address climate change and reduce its greenhouse gas emissions. The following states have completed a climate change action plan.
SJVAPCD CEQA Greenhouse Gas Guidance		The SJVAPCD approach is intended to streamline the process of determining if project specific GHG emissions would have a significant effect. Best Performance Standards would be established according to performance-based determinations.
San Joaquin Valley Carbon Exchange	November 2008	Intended to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley
Rule 2301	January 19, 2012	Emission Reduction Credit Banking. Provided an administrative mechanism for sources to bank GHG emissions, mechanism for sources to transfer GHG reductions to other users and defines eligibility standards, quantitative and procedures.
San Joaquin Valley Blueprint Planning Process (2010)		A plan for the future of the San Joaquin valley and is used to guide growth over the next 50 years.
Tulare County Regional Blueprint		A plan for the future of the San Joaquin valley and is used to guide growth over the next 50 years with the incorporation of the Tulare County Association of Governments (TCAG) through extensive public outreach to develop Tulare Counties vision statement, guiding principles, goals and objectives.

TABLE 9: LOCAL GREENHOUSE GAS REGULATIONS		
REGULATION	ADOPTED	PROTOCOL
Local Regulations		
City of Visalia General Plan		The City has several goals established within its General Plan which are applicable to GHG reduction. Goals include to the improvement of air quality through proper land use planning in Visalia. Conserve, restore and enhance significant natural, cultural and historical resources to sustain the Visalia planning area's environmental quality.
Preliminary Draft Climate Action Plan	<i>Drafted May 2010</i>	The GHG emissions inventory for Visalia calculated GHG emissions from both municipal operations and community activities for Visalia for the year 2000. SEI conducted this inventory using ICLEI's Clean Air and Climate Protection software and the new standardized Local Government Operations Protocol recently developed by the California Air Resources Board, ICLEI, California Climate Action Registry, and The Climate Registry.
Visalia Climate Change Initiatives	January 2007	The City of Visalia signed the "Cool Cities" pledge, part of the U.S. Mayors Climate Protection Agreement. The City adopted the goal of reducing citywide emissions to 7% below 1990 by 2012. The City is also a member of the Cities for Climate Protection (CCP). The CCP campaign is a global coalition of local governments working to reduce GHG at the community level.

SECTION 3: MODELING METHOD AND ANALYSIS

3.1 MODEL SELECTION

Air pollution emissions can be estimated by using emission factors and examining the level of activity occurring. Emission factors are the emission rate of a pollutant given the activity over time; for example, grams of NO_x per horsepower hour. The ARB has published emission factors for on-road equipment and vehicles in the OFFROAD emission model. An air emissions model (or calculator) combines the emission factors and the various levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator (CalEEMod) version 2011.1.1.1 is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations, including vehicle use, as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

The model incorporates Pavley standards and Low Carbon Fuel standards into the mobile source emission factors. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. The GHG mitigation measures were recently developed and adopted by the California Air Pollution Control Officers Association (CAPCOA).

3.2 CONSTRUCTION

The project would emit GHGs from upstream emission sources and direct sources. An upstream emission source, also known as life cycle emissions, refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include, but are not limited to the following: emissions from the manufacture of cement; emissions from the manufacture of steel; and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they were not within the control of the project and to do so would be speculative. Additionally, the California Air Pollution Control Officer Association White Paper on CEQA and Climate change supports the conclusion by stating, "The full life-cycle of GHG emissions from construction activities is not accounted for...and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level" (CAPCOA 2008). Therefore, pursuant to CEQA Guidelines Section 15144 and 15145, upstream/life cycle emissions are speculative; no further discussion is necessary.

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from onsite and offsite activities. Onsite emissions principally consist of exhaust emissions (NO_x , SO_x , CO , CO_2 , CH_4 , N_2O , VOC , PM_{10} and $\text{PM}_{2.5}$) from delivery vehicles, worker traffic and road dust (PM_{10} and $\text{PM}_{2.5}$). The project will be developed in phases and is estimated to start construction in August 2015 and be completed by June 2029. The estimated construction schedule is provided in Table 10. The model was run with "worst case" scenario assumptions and grading to be completed for the entire site during phase 1.

**TABLE 10:
CONSTRUCTION SCHEDULE**

Construction Phase	Start Date	End Date	Total Days Taken
Phase 1 Site Prep	August 3, 2015	August 14, 2015	10
Phase 1 Grading	August 17, 2015	September 25, 2015	30
Phase 1 Building & Construction	September 28, 2015	November 18, 2016	300
Phase 1 Paving	November 21, 2016	December 16, 2016	20
Phase 2 Site Prep	March 1, 2019	March 15, 2019	10
Phase 2 Grading	March 20, 2019	April 28, 2019	30
Phase 2 Building & Construction	May 6, 2019	June 26, 2020	300
Phase 2 Paving	July 6, 2020	July 31, 2020	20
Phase 3 Site Prep	June 6, 2022	June 17, 2022	10
Phase 3 Grading	June 20, 2022	July 29, 2022	30
Phase 3 Building & Construction	September 5, 2022	October 24, 2023	300
Phase 3 Paving	November 13, 2023	December 18, 2023	20
Phase 4 Site Prep	June 7, 2027	June 18, 2027	10
Phase 4 Grading	July 15, 2027	August 13, 2027	30
Phase 4 Building & Construction	March 6, 2028	April 27, 2029	300
Phase 4 Paving	May 17, 2029	June 1, 2029	20

Source: CalEEMod

The construction equipment list is shown in Table 11. The equipment list was generated using the CalEEMod defaults for a project of this size. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of the engine, the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum-rated horsepower. The load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity.

**TABLE 11:
CONSTRUCTION EQUIPMENT ASSUMPTION**

Construction Phase	Equipment	Unit Amount	Usage Hours	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	255	0.4
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	162	0.38
	Graders	1	8	174	0.41
	Rubber Tired Dozers	1	8	255	0.40
	Scrapers	2	8	361	0.48
	Tractors/Loaders/Backhoes	2	8	97	0.37

Construction Phases	Cranes	1	7	226	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	125	0.42
	Paving Equipment	2	8	130	0.36
	Rollers	2	8	80	0.38

Source: CalEEMod

The construction trip assumptions are shown in Table 12. The CalEEMod default trip lengths are used in the analysis and are 10.8, 7.3, and 20 miles for worker, vendor and haul trips respectively.

**TABLE 12:
CONSTRUCTION TRIPS**

Construction Phase	Worker		Vendor		Hauling	
	# of Trips	Trip Length (miles)	# of Trips	Trip Length (miles)	# of Trips	Trip Length (miles)
Phase 1 – Site Preparation	18	10.8	0	7.3	0	20
Phase 2 – Site Preparation	18	10.8	0	7.3	0	20
Phase 3 – Site Preparation	18	10.8	0	7.3	0	20
Phase 4 – Site Preparation	18	10.8	0	7.3	0	20
Phase 1 - Grading	20	10.8	0	7.3	0	20
Phase 2 – Grading	20	10.8	0	7.3	0	20
Phase 3 – Grading	20	10.8	0	7.3	0	20
Phase 4 - Grading	20	10.8	0	7.3	0	20
Phase 1 – Construction	139	10.8	45	7.3	0	20
Phase 2 - Construction	139	10.8	45	7.3	0	20
Phase 3 – Construction	139	10.8	45	7.3	0	20
Phase 4 - Construction	139	10.8	45	7.3	0	20
Phase 1 – Paving	15	10.8	0	7.3	0	20
Phase 2 – Paving	15		0	7.3	0	20
Phase 3 - Paving	15	10.8	0	7.3	0	20
Phase 4 – Paving	15	10.8	0	7.3	0	20

Source: CalEEMod

3.3 OPERATION

3.3.1 SCENARIOS

Operational emissions typically represent the majority of a project's air quality impacts. After a project is built, operational emissions are anticipated to occur continuously throughout the project's lifetime. Due to their long-term nature, operational emissions would continually contribute to the criteria air pollutant (CAP) emissions inventory for Tulare County. Operational activities also have the potential to create concentrations of air pollutants that exceed the California and National Ambient Air Quality Standards (AAQS) and/or expose sensitive receptors to substantial pollutant concentrations.

Land use development projects typically include the following sources of operational CAP and precursor emissions:

- Motor vehicle trips generated by the particular land use (i.e., vehicles arriving and leaving the project site), including those by residents, shoppers, workers, and vendors;
- Fuel combustion from landscape maintenance equipment;
- Natural gas combustion emissions used for space and water heating;
- Evaporative emissions of ROG associated with the use of consumer products by inhabitants and employees within various land uses; and
- Evaporative emissions of ROG from application of architectural coatings as part of building maintenance.

3.3.2 GREENHOUSE GASES EVALUATED

This analysis is restricted to greenhouse gases identified by AB 32, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project would generate a variety of greenhouse gases, including several defined by AB 32 such as carbon dioxide, methane and nitrous oxide.

The project may emit greenhouse gases that are not defined in AB 32. For example, the project may generate aerosols through emissions of diesel particulate matter from the vehicles and trucks that will be accessing the project site. Aerosols are short-lived particles, as they remain in the atmosphere for about one week.

Water vapor could be emitted from evaporated water from the landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emission from project-related activities.

The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas; and found in two regions of the Earth's atmosphere – at ground level and in the upper regions of the atmosphere. Both types of ozone have the same chemical composition (O₃). While upper atmospheric ozone protects the earth from the sun's harmful rays, ground level ozone is the main component of smog.

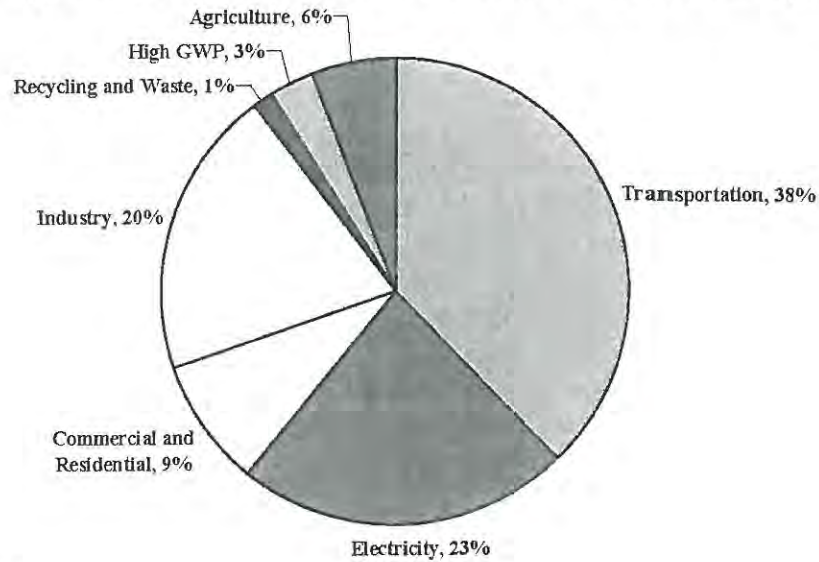
Tropospheric, or ground level ozone, is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (VOC). Ozone is likely

to reach unhealthy levels on hot sunny days in urban environments. Ozone can also be transported long distances by wind. For this reason, even rural areas can experience high ozone levels.

3.3.3 SOURCES

California is the fifteenth largest emitter of greenhouse gases on the planet, representing about two percent of the worldwide emissions. Figure 1 show 2002 to 2004 average emissions and estimates for projected emissions in 2020 without any greenhouse gas reduction measures, business as usual.

Figure 1: California's Greenhouse Gas Emissions (2002-2004 Average)



Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the project site. The Transportation sector, largely the cars and trucks that move goods and people, is the largest contributor with 38 percent of the state's total greenhouse gas emissions. In addition, Carbon Dioxide, a product of fossil fuel combustion, accounts for 95 percent of transportation Greenhouse Gas emission. New motor vehicle trips associated with the project are calculated using the ITE Trip Generation Manual (as discussed below). The emissions for motor vehicles were estimated using CALFEEMod.

Trip Generation Rates

Trips can be classified into three main categories. First being primary trips, those that travel to the project as the primary destination. Second, diverted trips are those that have another primary destination, but detour some small distance (up to a couple blocks) to reach the project on the way to the primary destination. Lastly, pass-by trips are those that have another primary destination and pass directly by the project site, thus requiring no change in travel patterns to patronize the project before continuing on to the primary destination.

Trip Lengths

Trip lengths for the project are likely to mainly be primary trips given the nature and location of the project. Most residents will travel to the project site as their primary trip. Although it is reasonable that

the project would have reduced trip lengths, the CalEEMod default trip lengths were used to provide a "worst-case" estimate. The trip assumptions for the project are shown in Table 14.

**TABLE 13:
OPERATIONAL TRIP ASSUMPTIONS**

Land Use	Primary Trip %	Divert Trip %	Pass-By Trip %
Apartments Mid-Rise	86	11	3
Bank (w/ Drive Through)	27	26	47
Condo/Townhouse	86	11	3
Convenience Market (w/ Gas Pump)	14	21	65
General Office Building	77	19	4
High Turnover Sit Down Restaurant	37	20	43
Hotel	58	38	4
Strip Mall	45	40	15

Source: CalEEMod

Vehicle Fleet

The vehicle fleet information is vital because it classifies vehicle traffic by individual fleets which all have individual emission rates. The CalEEMod default fleet mix, District recommendation for Urban projects are shown in Table 15. The CalEEMod defaults for the vehicle fleet were used for this analysis.

**TABLE 14:
VEHICLE FLEET MIX COMPARISON**

Type of Vehicle	CalEEMod Default Fleet Mix %
Light Duty Automobile (LDA)	40.1282
Light Duty Truck (LTD1)	11.5317
Light Duty Truck (LTD2)	18.8562
Medium Duty Vehicle (MDV)	10.624
Light-Heavy Duty Truck (LHDT1)	2.2979
Light-Heavy Duty Truck (LHDT2)	0.816
Medium-Heavy Truck (MHDT)	1.9871
Heavy-Heavy Truck (HHDT)	12.0851
Other Bus (OBUS)	0.1106
Urban Bus (UBUS)	0.1474
Motorcycle (MCY)	0.93
School Bus (SBUS)	0.183
Motor Home (MH)	0.3024

Source: CalEEMod

Emission Factors

The emission factors are the CalEEMod defaults, which use EMFAC2007 emission factors. For the business as usual case, emission factors for 2005 were used. For the 2020 scenario, emissions for the year 2020 were used. The emission factors for 2020 take into account the Pavley and Low

Carbon Fuel Standard regulations. The Pavely standards will be continued into 2016 and will further reduce the emissions levels.

Land Use and Site Enhancements

The proposed site location will incorporate numerous mitigation measures to their residents, employees and visitors to assist in the reduction of emissions generated at the site. Pertaining to their employees, the parking lot will be designed to include clearly marked and shaded pedestrian pathways between transit facilities and building entrances to promote the use of the cities already existing transportations system. The project will extend sidewalks along the frontage of Plaza Drive and Crowley Avenue to provide for the residents in the nearby neighborhoods another method of travel. In addition there will be a bus stop added to the project area located on the south east corner of Crowley Avenue and Neely Street. The sidewalks will include landscaping buffers between the sidewalk and street to further invite a safe and walkable route for the nearby citizens.

Bike racks will be provided around the site near the entry/exits of the buildings to encourage the use of bicycles for travelling to work, visit, or shop.

Ride Sharing

Employees who drive to work will be provided preferred parking spaces near the entrance of the buildings for those who carpool, vanpool or rideshare. Signage will also be provided to clearly mark these parking space and promote the benefits of ride sharing.

Automobiles and light trucks are considered the largest contributors to air quality problems in the U S. According to 2008 EPA estimates, passenger cars and light trucks accounted for 22 percent of total hydrocarbon emissions, 50 percent of the nation's carbon monoxide (CO) emissions, 32 percent of the total nitrogen oxide (NO_x) emissions and 18 percent of nationwide greenhouse gas emissions.

Ridesharing helps to reduce the number of vehicles on the road, which in turn reduces GHG's. The table below shows the emissions produced by the average properly maintained passenger car and light truck on the road in 2008 based published data from the US DOT Bureau of Transportation Statistics.

	Pollutant	Emission Factor (grams/mile)	Annual Emissions (lbs) *
Passenger Car	Hydrocarbons	0.78	21
	Carbon Monoxide	8.84	234
	Nitrogen Oxides	0.66	17
	Carbon Dioxide	364	9,631
Light Truck**	Hydrocarbons	0.97	26
	Carbon Monoxide	11.22	297
	Nitrogen Oxides	0.93	25
	Carbon Dioxide	519	13,732
* Emissions estimates presume average annual mileage of 12,000.			
** Light trucks include pickups, vans, minivans, and sports-utility vehicles.			

Employees will also be provided with fiscal incentives and reimbursements to carpool, vanpool, take public transportation, telecommute, walk, bike or any additional means that would reduce emissions provided by the use of vehicles.

Electrical Vehicles

Electrical Vehicles (EVs) and Plug in Hybrid Electrical Vehicles (PHEVs) running only on electricity have zero tailpipe emissions, but emissions may be produced by the source of electrical power, such as a power plant. In geographic areas that use relatively low-polluting energy sources for electricity generation, PHEVs and EVs typically have a well-to-wheel emissions advantage over similar conventional vehicles running on gasoline or diesel. In regions that depend heavily on conventional fossil fuels for electricity generation, PEVs may not demonstrate a well-to-wheel emissions benefit.

Compare Electricity Sources and Annual Vehicle Emissions

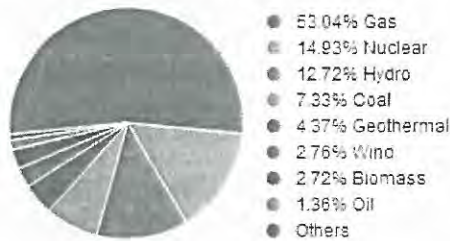
Enter a ZIP code to see a breakdown of the electricity sources used to charge EVs and PHEVs on a local grid and compare the annual emissions generated from vehicles using electricity from the grid, gasoline, or a combination of the two.

ZIP Code 93291

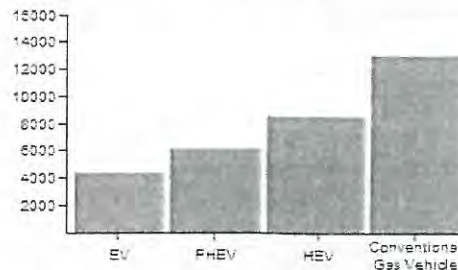
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Electricity Sources

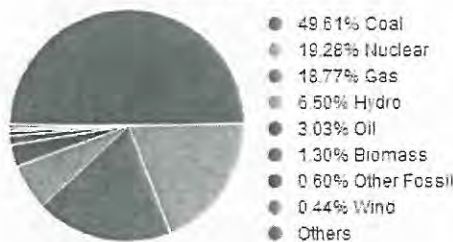


Annual Emissions per Vehicle
(lb of CO₂ equivalent)

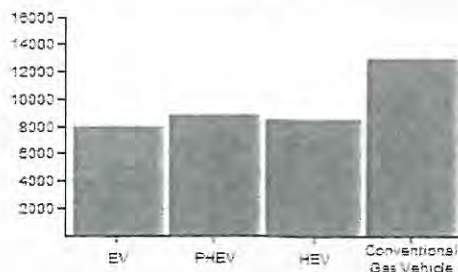


National Averages

Electricity Sources



Annual Emissions per Vehicle
(lb of CO₂ equivalent)



¹ US Department of Energy, Alternative Fuel Data Center

The project will install electric vehicle recharging stations with both conductive and inductive charging capabilities in their commercial parking lot to further promote use of these vehicles over conventional gas vehicles.

Natural Gas

Natural gas emissions refer to the emissions that occur when natural gas is combusted on the project site for heating water, space heating, or other uses. There was no reduction attributed to the 2020 scenario for this category. The CalEEMod defaults were used and are represented in Table 16.

Electricity

Electricity refers to the GHG emissions generated by offsite power plants to supply the electricity required for the project. The Electricity and Commercial/Residential Energy sector is the second largest contributor with over 30 percent of the statewide greenhouse gas emissions. Although electricity imported into California accounts for only about a quarter of our electricity, imports contribute more than half of the greenhouse gas emissions from electricity because much of the imported electricity is generated at coal-fired power plants.

Southern California Edison (SCE) would supply electricity for the project. For the business as usual case, the CalEEMod defaults for electricity emission factors for SCE were used, which represents emission factors in 2002-2004. SCE has 16 percent renewable energy in its portfolio in 2006 (CEC 2007).

In 2020, the utility will achieve 33 percent renewable energy, which would decrease the emissions associated with electricity by an additional 17 percent.

The CalEEMod defaults for energy intensity were used for the business as usual emissions estimates:

	Title- 24 Electrical Energy Intensity (KWhr/size/year)	Nontitle-24 Electrical Energy Intensity (KBTU/size/year)	Light Energy Intensity (KWhr/size/year)	Title- 24 Natural Gas Energy Intensity (KBTU/size/year)	NonTitle- 24 Natural Gas Energy Intensity (KBTU/size/year)
Apartments Mid-Rise	427.66	2,553.86	741.44	9,942.8	1,662
Bank (w/ Drive Through)	2.39	4.16	3.11	17.92	3.84
Condo/Townhouse	539.47	3,125.85	1,001.1	15,116.82	2,951
Convenience Market (w/ Gas Pump)	2.61	2.3	4.22	9.07	2.08
General Office Building	3.2	3.58	3.34	13.44	0.28
High Turnover Sit Down Restaurant	8	16.25	6.94	37.59	174.7
Hotel	5.05	2.3	1.8	18.93	7.16
Strip Mall	2.61	2.3	4.22	9.07	2.08
Total	990.99	5,710.6	1,766.17	25,165.64	4,803.14

Water Transport & Waste

There would be greenhouse gas emissions generated from the electricity required to transport and treat the water to be used on the project site. The project will install low flow toilets, sinks, showers and washing systems. There will be greenhouse gas emissions from the domestic waste generated by the project. The default waste generation rates from CalEEMod were used in this analysis.

SECTION 4: THRESHOLDS OF SIGNIFICANCE

4.1 THRESHOLDS

Generally, the evaluation of an impact under CEQA requires measuring data from a project against a “threshold of significance.” The Office of Planning and Research’s amendments to the CEQA Guidelines states that “[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” According to the CEQA Guidelines’ Appendix G Environmental Checklist, to determine whether GHG emission impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

- A) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- B) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The CEQA Guidelines amendments do not identify a threshold of significance for GHG emissions, nor does it prescribe assessment methodologies or specific mitigation measures. Instead, it calls for a “good faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project.”

The CEQA Guidelines amendments for GHG emissions state that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

Consideration No. 1: The extent to which the project may increase or reduce GHG emissions compared with the existing environmental setting. This discussion could involve a quantification of GHG emissions to the extent feasible.

Consideration No. 2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

Consideration No. 3: The extent to which the project complies with regulations or requirements adopted to implement a statewide regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project’s incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, and EIR must be prepared for the project.

4.2 THRESHOLDS OF SIGNIFICANCE

In accordance with the District's guidance for addressing greenhouse gas emission impact for new projects under CEQA, a project would be considered to have a less than significant individual and cumulative impact on climate change if it were to do at least one of the following:

- Exempt from the requirements of CEQA, or
- Comply with an approved GHG emissions reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located. Such plans or program must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA complaint environmental review document adopted by the lead agency, or
- Implement approved best performance standards, or
- Quantify project GHG emissions and reduce those emissions by at least 29 percent compared to business as usual. "Business as usual" is referred in ARB's AB 32 Scoping Plan as emissions occurring in 2020 levels without additional control. Therefore, 2002-2004 emissions factors, on a unit of activity basis, multiplied by the activity expected to occur in 2020, is an appropriate representation of 2020 business as usual. The reductions can be based on any combination of reduction measures, including GHG reductions achieved as a result of changes in building and appliance standards occurring since 2002-2004 baseline period.

After project analysis it has been determined that it is not exempt from CEQA and there is not an approved GHG emissions reduction plan or GHG mitigation plan for the area where the project is located. The Scoping Plan prepared pursuant to AB 32 demonstrates how California would reduce GHG emissions to 1990 levels by the year 2020. However, most of the measures in the Scoping Plan are not applicable to the project. There are no approved best performance standards that would apply to the project. Therefore, the approach used in this analysis is to quantify GHG emissions and reduce the emissions by at least 29 percent compared to business as usual.

SECTION 5: IMPACT ANALYSIS

Through the examination of the proposed project we have examined several categories of GHG emissions and developed an understanding of the project and its projected impact on GHG emissions. The impact analysis will provide a detailed explanation of the projects GHG Emission, by combining all categories and examine any conflicting encounters, in regards to City Plans, State/Federal Policy and Existing Regulations.

5.1 IMPACT 1: GREENHOUSE GAS EMISSIONS

Impact GHG-1:	Although the project would generate greenhouse gas emissions, the emissions would not have a significant impact on the environment
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While the project will generate greenhouse gas emissions, the emissions would not have a significant impact on the environment. In evaluating the project it has been pre-established that while the District has established a menu of performance standards, some of which depend on the existence of an adopted climate action plan or the establishment of Best Performance Standards, the City of Visalia has yet to implement either of these.

Being that neither a Climate Action Plan nor Best Performance Standards has been established the project will assume the following measurement threshold provided by the District: whether the project will reduce or mitigate greenhouse gas levels by 29 percent from business-as-usual levels. To determine the following statement the report will first establish business as usual activities and then incorporate emissions that would occur when all project related design features are implemented, and when compliance with new regulatory measures is assumed.

Construction

Greenhouse gas emissions, generated during construction, would include activities such as site preparation, grading, the construction of the building, paving, etc. These activities are representing in Table 16 in greater detail along with the estimated onsite and office million metric tons of carbon dioxide equivalent (MTCO_{2e}). The District does not have a recommendation for assessing the significance to construction-related emissions. Construction activities occurring before 2020, the year when the State is required to reduce its GHG emissions to 1990 levels, are therefore considered less than significant.

TABLE 17: CONSTRUCTION GREENHOUSE GAS EMISSIONS (2014-2020)			
	Onsite Total CO2 (MT/year)	Offsite Total CO2(MT/per year)	Total CO2 (MT/per year)
Phase 1 – Site Preparation	18.6505	0.6698	90.4961
Phase 1 - Grading	88.2633	2.2328	153.7656
Phase 1 – Construction (2015)	84.1780	69.5876	506.8326
Phase 1 – Construction (2016)	279.6874	227.1452	22.0886
Phase 1 – Paving	21.0138	1.0748	18.1599
Phase 2 – Site Preparation	17.5845	0.5754	85.079
Phase 2 – Grading	83.1612	1.9178	356.9486
Phase 2 – Construction (2019)	201.3453	155.6033	259.7853
Phase 2 – Construction (2020)	147.6159	112.1694	20.5229
Phase 2 – Paving	19.6021	0.9208	17.734
Phase 3 – Site Preparation	17.1991	0.5349	83.2219
Phase 3 – Grading	81.4391	1.7828	171.3016
Phase 3 – Construction (2022)	98.0752	73.2264	431.9767
Phase 3 – Construction (2023)	248.1580	183.8187	20.4801
Phase 3 – Paving	19.6008	0.8793	17.717
Phase 4 – Site Preparation	17.2086	0.5084	83.1011
Phase 4 - Grading	81.4065	1.6946	428.3695
Phase 4 – Construction (2028)	248.2813	180.0882	169.1635
Phase 4 – Construction (2029)	98.1577	71.0058	20.4299
Phase 4 – Paving	19.5934	0.8365	90.4961
Total	1,890.222	1,086.27	2,976.494

Source: CalEEMbd (Appendix A)

The project is able to benefit from the following mitigation measures during construction of the project:

- Water Exposed Area
- Reduced Vehicle Speed on Unpaved Roads
- Improved Pedestrian Network

Operation

Expected operational or long-term emissions expected over the lifetime of the project include mobile operations, waste generated, water consumed, and energy consumed. Sourced of operation emissions

are represented in Table 17. As represented in Table 11, mitigation and regulation required to reduce business as usual emissions beyond 29 percent by 2020 to remain compliant with the States requirement to reduce GHG emissions to 1990 levels.

TABLE 18: PROJECT OPERATIONAL GREENHOUSE GASES		
Source	Business as Usual (Unmitigated) MTCO _{2e}	Business as Usual (Mitigated) MTCO _{2e} per year
Area	52.6946	38.72
Energy	1,181.26	1,175.54
Mobile	7,575.42	4,661.07
Waste	78.0764	39.0382
Water	74.0304	58.7034
Total	8,964.49	5,971.08
Reduction Percentage		33.37%
Significant Threshold	29%	29%
Are emissions significant after mitigation, project design features and regulations?		Yes

Source: CalEEMod

The business as usual emissions represents emission in terms as if they would have occurred without regulations enacted pursuant to AB 32.

Operational GHG emissions are projected to exceed a 29 percent reduction in emissions by 2020, through implementing the following operational changes:

- Landscaping: The 53% of the project area will contain water efficient landscape.
- Energy: Energy efficient light-bulbs will be incorporated to the project to reduce electrical use. Along with this the project is a user of Southern California Edison which has 16 percent renewable energy in its portfolio in 2006 (CEC 2007). Therefore, to achieve a 33-percent reduction as required by California's Renewable Electricity Standard, 17 percent more renewable energy in the utility's portfolio is needed. In 2020, the utility will achieve 33 percent renewable energy, which would decrease the emissions associated with electricity by 17 percent.
- Waste: The project will participate in the Cities recycle and waste reduction program which has seen an average waste reduction of 50%.
- Water: Low flow faucets, toilets and urinals will be incorporated. Along with a water efficient irrigation system for landscaped areas.
- Energy: The installation of solar panel canopies in the projects parking lot are expected to create 20,000 kWh per year/
- Traffic: The project will increase density, improve walkability, improve destination accessibility through increase transit accessibility and overall improve the pedestrian network. Therefore reducing the number of vehicles used to travel to the project location and reducing GHG emissions.

The project is able to benefit from the following mitigation measures during the lifelong operation of the project:

- Improved Destination Accessibility: The project is located within five miles of downtown Visalia.

- Improved Walkability Design: The project is located in an area that includes multiple restaurants, stores and other desirable locations
- Improved Transit Access: The project is located less than 500 yards from an existing transit stop. There is also plans to add a transit stop along the frontage of the project on Crowley Avenue.
- Installation of Low Flow Bathroom Fixtures: Both low flow bathroom faucets and low flow toilets will be installed within the project site to ensure a reduced quantity of water.
- Turf Reduction: Landscape design will incorporating the use of drought resistant plants in place of excess turf. Turf reductions reduces water consumption, saved energy by requiring less lawn maintenance, creates less yard waste, reduces the amount of herbicides commonly used, and enhances biodiversity through varied planting which offers shelter and feeding opportunities for wildlife.
- Use of Electric Yard Tools: The projects landscape maintenance will incorporate the use of an electric lawnmower, leaf blower, chainsaw.
- Use of Low VOC Paint- Low VOC paint will be used on both the non-residential interior and exterior of the project site.
- Water Efficient Landscaping: To ensure a reduction in water used for project landscaping and maintenance a water efficient irrigation system and water efficient landscaping will be incorporated as part of the project.

These above measures are represented in CalEEMod as mitigation measures. Reductions from these measures are calculated by CalEEMod and are based on the methodology presented in the California Air Pollution control Officer's 2010 report, "Quantifying Greenhouse Gas Mtigation Measure's." Table 18 shows the percentage reduction calculated by CalEEMod for the new regulations and standards.

Measures	Category	Percent reduction
Pavely and Low Carbon Fuel Standards	Mobile Sources	27%
Electricity – Renewable Portfolio Standards	Energy: Electricity	17%
Title 24 Standards	Energy: Electricity and Natural Gas	14.3%
Non-Motorized Improvements	Energy Natural Gas	0.4%
Land Use Changes	Energy Natural Gas	5%
Reduce Carbon-Intensive Travel Activities	Mobile Sources	12%
Locational and Standard Measures	Mobile Sources	13.5%

Source: CalEEMod

Collectively these measures together accounts for a 46.1% reduction in GHG emissions from the projects previous Business as Usual emissions. The percent reduction achieves the recommended threshold established by the SSJVAPCD to find GHG emissions less than cumulatively significant. Therefore the

level of significance before mitigation measures are enacted is less than significant and no mitigation measures are required.

5.2 IMPACT 2: CONFLICT WITH THE CITY PLAN, STATE/FEDERAL POLICY AND EXISTING REGULATION

Impact GHG-2:	The project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.
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Currently, the City of Visalia has yet to implement a Greenhouse Gas Reduction Plan or set any regulations regarding GHG emissions. As discussed in Impact 1, the project will remain consistent with the SJVAQCB GHG reduction of 29 percent by 2020. This minimum reduction from the projects Business As Usual ensures that the project is meeting all Regional Guidance.

Therefore, the project will not conflict with any applicable City Plan, State/ Federal Policy or Existing Regulations.

Being that there is no local or regional plan the project will be held to standards from both the SJVAPCD's recommendations in its guidance for addressing GHGs in CEQA (SJVAPCD 2009) and compliance with the Scoping Plan designated in Assembly Bill (AB) 32.

As previously discussed throughout the report SJVAPCD guidance supports a minimum 29 percent reduction from business as usual, the same reduction the State of California is required to meet by 2020, in order to stay compliant under their standards. Impact one analyzed this reduction and established that the project would meet the 29 percent reduction and emissions created from the project would not have a significant impact on the project.

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. In regards to remaining compliant under the Scoping Plan established under AB 32, which is concurrently the state legislation which requires for GHGs emitted in California to be reduced to 1990 levels by 2020. AB 32 is monitored and regulated by ARB.

In December 2008, ARB adopted the Climate Change Scoping Plan. The AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The scoping plan represents a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation regulation to fund the program. As stated in the Scoping Plan, the key elements of the strategy for achieving a 29 percent reduction by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;

- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures to existing State laws and policies including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standards; and
- Creating target fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan established eighteen types of measures to help pave the path toward California's clean energy future. As shown in Table 19 the project is consistent with measures established through the Scoping Plan.

Scoping Plan Reduction Measure	Recommended Action
1. California Cap- and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.	The projects can generate offsets, verifiable reductions of emissions whose ownership can be transferred to others. Offsets can provide regulated entities a source of low-cost emissions reductions. Reductions from compliance offset projects must be quantified using rigorous measurement and enforcement protocols that provide a basis to determine whether the reductions are also additional.
2. California Light-Duty Vehicle Greenhouse Gas Standards Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Include reducing greenhouse gas emissions from vehicles, reducing the carbon content of the fuel these vehicles burn, and reducing the miles these vehicles travel. While the project is centrally located and could help reduce mileages, however this is not applicable to the project.
3. Energy Efficiency Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).	This measure would set new targets for statewide annual energy demand reductions; however the project design features multiple energy efficient products and features.
4. Renewables Portfolio Standard Achieve 33 percent renewable energy mix statewide.	The project will work with SCE in its efforts to diversify its power supply.
5. Low Carbon Fuel Standard Develop and adopt the Low Carbon Fuel Standard	This measure is applicable to the project because it is a state initiative however, it would be applicable to the fuel used for vehicles to travel to and from their home.
6. Regional Transportation-	This measure is not applicable to the project being that

Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	they will not be developing any Greenhouse Gas reductions.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	Could reduce light-duty greenhouse gas emissions from light-duty vehicles that enter the project site.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	This measure is not applicable to the project being that that is does not propose the use of shore power for ships or to improve good movement activities.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	This measure is not applicable to the project being that it does not plan to implement any solar power into the design of the project building.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	This measure is not applicable to the project being that it is a statewide measure. However, it would be applicable to vehicles that enter the project site.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	This measure is not applicable to the project being that this measure would apply to the direct greenhouse gas emissions at major industrial Facilities, which the proposed project is not.
12. High Speed rail. Support implementation of a high speed rail system.	This measure is not applicable to the project being that it is a statewide measure.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings	The project will be implementing Green Building Strategies into their design along with using water wise landscape design and a bioswale to inhabit wildlife.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	This measure will be applicable when initiated being that the project will produce Global Warming Potential Gases through items such as Motor Vehicles traveling to and from their homes, Air Conditioning system, and Refrigerant Emissions.
15. Recycling and Waste Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.	The project is will be participating in the City of Visalia's Recycling program.
16. Sustainable Forests Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation	This measure is not applicable being that the project is located in an urban area where forest do not pre-exist.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	The project meets this measure by installing low flow toilets and water efficient faucets. Along with this they have also incorporated efficient landscape irrigation practices and design.
18. Agriculture. Encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	This measure is not applicable being that no agriculture activities will be occurring at or near the project site.

Source of ARB Scoping Plan Reduction Measures: California Air Board 2008

Through examination of all eighteen AB 32 Scoping Plan Reduction Measures it can be confirmed that no Reduction measures are being neglected or conflicting

After examination of all eighteen Scoping Reduction Measures it can be confirmed that the construction of this project will not neglect or conflict with any of the SSJVAPCB or AB 32 requirements. Therefore before mitigation measures the project is designated as a less than significant impact and no mitigation measure are required.

SUMMARY

The project is expected to generate GHG emissions in the short-term as a result of the construction of the Mixed-Use Business center within the City of Visalia and long-term emissions as a result of day-to-day operations of the proposed Professional Center in Visalia, CA. The project incorporates local agency requirements, standard measures, with additional mitigation measures that combine to become the Best Performance Standard (BPS) to achieve a 29% reduction in GHG emissions. Estimated GHG emissions calculations are contained within the CalEEMod report, Appendix A.

Taking into account the proposed project's emissions, project design features, standard measures and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the project assists in the states goals of reducing greenhouse gas emission to 1990 levels by 2020 and an 80-percent reduction below 1990 to 2050.

Through the assessment of both short-term and long-term emissions it is our conclusion that the development of the Professional Center in Visalia, CA will assist in the states attainment of their ultimate emissions reduction goal.

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APPENDIX A
CALEEMOD REPORT

The Square at Plaza Drive
San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	17.40	1000sqft	0.40	17,400.00	0
General Office Building	53.80	1000sqft	1.24	53,800.00	0
General Office Building	32.00	1000sqft	0.73	32,000.00	0
High Turnover (Sit Down Restaurant)	11.25	1000sqft	0.26	11,250.00	0
Hotel	140.00	Room	4.67	67,575.00	0
Apartments High Rise	28.00	Dwelling Unit	0.45	28,000.00	89
Condo/Townhouse	55.00	Dwelling Unit	3.44	55,000.00	174
Convenience Market With Gas Pumps	16.00	Pump	0.05	2,258.80	0
Strip Mall	38.00	1000sqft	0.87	38,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	45
Climate Zone	3			Operational Year	2030

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	630.89	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - As referenced on Site Plan
- Construction Phase -
- Off-road Equipment -
- Land Use Change -
- Sequestration -
- Construction Off-road Equipment Mitigation -
- Mobile Land Use Mitigation -
- Mobile Commute Mitigation -
- Area Mitigation -
- Energy Mitigation -
- Water Mitigation -
- Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	203,280.00	67,575.00
tblProjectCharacteristics	OperationalYear	2014	2030
tblSequestration	NumberOfNewTrees	0.00	50.00

2.0 Emissions Summary

**2.1 Overall Construction
Unmitigated Construction**

Year	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2015	0.7691	7.7060	5.7077	7.2100e-003	0.9651	0.4021	1.3672	0.4369	0.3721	0.8090	0.0000	664.3434	664.3434	0.1628	0.0000	667.7614
2016	0.5942	4.3959	4.2142	6.6500e-003	0.1832	0.2682	0.4514	0.0495	0.2517	0.3012	0.0000	572.6550	572.6550	0.0866	0.0000	574.4725
2017	0.5328	4.0265	3.9620	6.6200e-003	0.1825	0.2412	0.4238	0.0493	0.2264	0.2757	0.0000	559.6608	559.6608	0.0840	0.0000	561.4251
2018	0.4631	3.5701	3.7506	6.6400e-003	0.1832	0.2040	0.3872	0.0495	0.1916	0.2411	0.0000	551.5840	551.5840	0.0825	0.0000	553.3163
2019	0.4092	3.2200	3.5715	6.6400e-003	0.1832	0.1760	0.3592	0.0495	0.1653	0.2148	0.0000	541.6491	541.6491	0.0808	0.0000	543.3450
2020	0.1334	1.1762	1.3276	2.3700e-003	0.0441	0.0623	0.1065	0.0119	0.0580	0.0699	0.0000	195.7476	195.7476	0.0426	0.0000	196.6414
Total	2.9018	24.0947	22.5336	0.0361	1.7414	1.3538	3.0953	0.6465	1.2651	1.9116	0.0000	3,085.639	3,085.639	0.5391	0.0000	3,096.961

2.2 Overall Operational
Unmitigated Operational

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	1.5263	0.0189	1.3376	2.3800e-003	0.1234	0.1234	0.1234	0.1234	0.1234	0.1234	15.7262	36.9684	52.6946	0.0752	6.6000e-004	54.4777
Energy	0.0403	0.3625	0.2793	2.2000e-003	0.0279	0.0279	0.0279	0.0279	0.0279	0.0279	0.0000	1,181,266 ⁵	1,181,266 ⁵	0.0436	0.0148	1,186,755 ⁹
Mobile	5.5487	11.3302	61.2612	0.1089	5.7987	6.0057	1.5578	0.1908	1.7486	1.7486	0.0000	7,575.423 ⁵	7,575.423 ⁵	0.1873	0.0000	7,579.356 ²
Waste					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	78.0764	0.0000	78.0764	4.6142	0.0000	174.9743
Water					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	9.9284	64.1020	74.0304	1.0227	0.0247	103.1603
Total	7.1153	11.7116	62.8781	0.1135	5.7987	6.1569	1.5578	0.3420	1.8998	1.8998	103.7310	8,857,760⁴	8,961,491⁵	5.9429	0.0401	9,098.724³

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	33,7000
Total	33,7000

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase 1 Site Prep	Site Preparation	1/1/2015	1/14/2015	5	10	
2	Phase 2 Site Prep	Site Preparation	1/15/2015	1/28/2015	5	10	
3	Phase 3 Site Prep	Site Preparation	1/29/2015	2/11/2015	5	10	
4	Phase 4 Site Prep	Site Preparation	2/12/2015	2/25/2015	5	10	
5	Phase 2 Grading	Grading	2/26/2015	4/8/2015	5	30	
6	Phase 1 Grading	Grading	4/9/2015	5/20/2015	5	30	
7	Phase 3 Grading	Grading	5/21/2015	7/1/2015	5	30	
8	Phase 4 Grading	Grading	7/2/2015	8/12/2015	5	30	
9	Phase 1 Construction	Building Construction	8/13/2015	10/5/2016	5	300	
10	Phase 2 Construction	Building Construction	10/6/2016	11/29/2017	5	300	
11	Phase 3 Construction	Building Construction	11/30/2017	1/23/2019	5	300	
12	Phase 4 Construction	Building Construction	1/24/2019	3/18/2020	5	300	
13	Phase 1 Paving	Paving	3/19/2020	4/15/2020	5	20	
14	Phase 2 Paving	Paving	4/16/2020	5/13/2020	5	20	
15	Phase 3 Paving	Paving	5/14/2020	6/10/2020	5	20	
16	Phase 4 Paving	Paving	6/11/2020	7/8/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase 1 Site Prep	Rubber Tired Dozers	3	8.00	255	0.40
Phase 1 Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Phase 2 Site Prep	Rubber Tired Dozers	3	8.00	255	0.40
Phase 2 Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 3 Site Prep	Rubber Tired Dozers	3	8.00	255	0.40
Phase 3 Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 4 Site Prep	Rubber Tired Dozers	3	8.00	255	0.40
Phase 4 Site Prep	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Phase 2 Grading	Excavators	2	8.00	162	0.38
Phase 2 Grading	Graders	1	8.00	174	0.41
Phase 2 Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase 2 Grading	Scrapers	2	8.00	361	0.48
Phase 2 Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 1 Grading	Excavators	2	8.00	162	0.38
Phase 1 Grading	Graders	1	8.00	174	0.41
Phase 1 Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase 1 Grading	Scrapers	2	8.00	361	0.48
Phase 1 Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 3 Grading	Excavators	2	8.00	162	0.38
Phase 3 Grading	Graders	1	8.00	174	0.41
Phase 3 Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase 3 Grading	Scrapers	2	8.00	361	0.48
Phase 3 Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 4 Grading	Excavators	2	8.00	162	0.38
Phase 4 Grading	Graders	1	8.00	174	0.41
Phase 4 Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase 4 Grading	Scrapers	2	8.00	361	0.48
Phase 4 Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 4 Grading	Excavators	2	8.00	162	0.38
Phase 4 Grading	Graders	1	8.00	174	0.41
Phase 4 Grading	Rubber Tired Dozers	1	8.00	255	0.40
Phase 4 Grading	Scrapers	2	8.00	361	0.48
Phase 4 Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Phase 1 Construction	Cranes	1	7.00	226	0.29
Phase 1 Construction	Forklifts	3	8.00	89	0.20

Phase 1 Construction	Generator Sets	1	8.00	84	0.74
Phase 1 Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase 1 Construction	Welders	1	8.00	46	0.45
Phase 2 Construction	Cranes	1	7.00	226	0.29
Phase 2 Construction	Forklifts	3	8.00	89	0.20
Phase 2 Construction	Generator Sets	1	8.00	84	0.74
Phase 2 Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase 2 Construction	Welders	1	8.00	46	0.45
Phase 3 Construction	Cranes	1	7.00	226	0.29
Phase 3 Construction	Forklifts	3	8.00	89	0.20
Phase 3 Construction	Generator Sets	1	8.00	84	0.74
Phase 3 Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase 3 Construction	Welders	1	8.00	46	0.45
Phase 4 Construction	Cranes	1	7.00	226	0.29
Phase 4 Construction	Forklifts	3	8.00	89	0.20
Phase 4 Construction	Generator Sets	1	8.00	84	0.74
Phase 4 Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Phase 4 Construction	Welders	1	8.00	46	0.45
Phase 1 Paving	Pavers	2	8.00	125	0.42
Phase 1 Paving	Paving Equipment	2	8.00	130	0.36
Phase 1 Paving	Rollers	2	8.00	80	0.38
Phase 2 Paving	Pavers	2	8.00	125	0.42
Phase 2 Paving	Paving Equipment	2	8.00	130	0.36
Phase 2 Paving	Rollers	2	8.00	80	0.38
Phase 3 Paving	Pavers	2	8.00	125	0.42
Phase 3 Paving	Paving Equipment	2	8.00	130	0.36
Phase 3 Paving	Rollers	2	8.00	80	0.38
Phase 4 Paving	Pavers	2	8.00	125	0.42

Phase 4 Paving	Paving Equipment	2	8.00	130	0.36
Phase 4 Paving	Rollers	2	8.00	80	0.38

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
Phase 1 Site Prep	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 Site Prep	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 Site Prep	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 Site Prep	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 Construction	9	139.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 Construction	9	139.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 Construction	9	139.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 Construction	9	139.00	45.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1 Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2 Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 3 Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 4 Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Phase 1 Site Prep - 2015
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	tons/yr				MT/yr								
					Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154	0.0142	0.0142	0.0000	0.0142	18.6506	5.5700e-003	0.0000	0.0000	18.7675	
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	18.6506	18.6506	5.5700e-003	0.0000	0.0000	18.7675	

3.2 Phase 1 Site Prep - 2015

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.0000	0.6707

Mitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					0.0264	0.0000	0.0264	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6505	18.6505	5.7000e-003	0.0000	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0264	0.0154	0.0419	0.0145	0.0142	0.0287	0.0000	18.6505	18.6505	5.7000e-003	0.0000	0.0000	18.7675

3.2 Phase 1 Site Prep - 2015
Mitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

3.3 Phase 2 Site Prep - 2015
Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.3 Phase 2 Site Prep - 2015
Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0264	0.0000	0.0264	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0264	0.0154	0.0419	0.0145	0.0142	0.0287	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.3 Phase 2 Site Prep - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

3.4 Phase 3 Site Prep - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004	0.0154	0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.4 Phase 3 Site Prep - 2015
Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0264	0.0000	0.0264	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0264	0.0154	0.0419	0.0145	0.0142	0.0287	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.4 Phase 3 Site Prep - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

3.5 Phase 4 Site Prep - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004	0.0154	0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0903	0.0154	0.1058	0.0497	0.0142	0.0639	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675

3.5 Phase 4 Site Prep - 2015
Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0264	0.0000	0.0264	0.0145	0.0000	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154	0.0142	0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	0.0263	0.2845	0.2132	2.0000e-004	0.0264	0.0154	0.0419	0.0145	0.0142	0.0287	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675

3.5 Phase 4 Site Prep - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707
Total	3.9000e-004	4.9000e-004	4.8500e-003	1.0000e-005	7.2000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6698	0.6698	4.0000e-005	0.0000	0.6707

3.6 Phase 2 Grading - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004	0.0570	0.0570	0.0570	0.0525	0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1301	0.0570	0.1871	0.0540	0.0525	0.1064	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

**3.6 Phase 2 Grading - 2015
Unmitigated Construction Off-Site**

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0381	0.0000	0.0381	0.0158	0.0000	0.0158	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.0381	0.0570	0.0951	0.0158	0.0525	0.0683	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.6 Phase 2 Grading - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

3.7 Phase 1 Grading - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004	0.0570	0.0570	0.0570	0.0525	0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1301	0.0570	0.1871	0.0540	0.0525	0.1064	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.7 Phase 1 Grading - 2015
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0381	0.0000	0.0381	0.0158	0.0000	0.0158	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.0381	0.0570	0.0951	0.0158	0.0525	0.0683	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.7 Phase 1 Grading - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

3.8 Phase 3 Grading - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004	0.0570	0.0570	0.0570	0.0525	0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1301	0.0570	0.1871	0.0540	0.0525	0.1064	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

3.8 Phase 3 Grading - 2015
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0381	0.0000	0.0381	0.0158	0.0000	0.0158	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004	0.0570	0.0570	0.0570	0.0525	0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.0381	0.0570	0.0951	0.0158	0.0525	0.0683	0.0000	88.2632	88.2632	0.0264	0.0000	88.8166

3.8 Phase 3 Grading - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

3.9 Phase 4 Grading - 2015

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004	0.0570	0.0570	0.0570	0.0525	0.0525	0.0525	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167
Total	0.1016	1.1857	0.7626	9.3000e-004	0.1301	0.0570	0.1871	0.0540	0.0525	0.1064	0.0000	88.2633	88.2633	0.0264	0.0000	88.8167

**3.9 Phase 4 Grading - 2015
Unmitigated Construction Off-Site**

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	0.0000	2.2355

Mitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					0.0381	0.0000	0.0381	0.0158	0.0000	0.0158	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1016	1.1857	0.7626	9.3000e-004		0.0570	0.0570		0.0525	0.0525	0.0000	88.2632	88.2632	0.0264	0.0000	0.0000	88.8166
Total	0.1016	1.1857	0.7626	9.3000e-004	0.0381	0.0570	0.0951	0.0158	0.0525	0.0683	0.0000	88.2632	88.2632	0.0264	0.0000	0.0000	88.8166

3.9 Phase 4 Grading - 2015
Mitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355
Total	1.3000e-003	1.6300e-003	0.0162	3.0000e-005	2.4000e-003	2.0000e-005	2.4200e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.2328	2.2328	1.3000e-004	0.0000	2.2355

3.10 Phase 1 Construction - 2015
Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1848	1.5165	0.9466	1.3500e-003	0.1069	0.1069	0.1069	0.1005	0.1005	0.1005	0.0000	123.2171	123.2171	0.0309	0.0000	123.8664
Total	0.1848	1.5165	0.9466	1.3500e-003	0.1069	0.1069	0.1069	0.1005	0.1005	0.1005	0.0000	123.2171	123.2171	0.0309	0.0000	123.8664

**3.10 Phase 1 Construction - 2015
Unmitigated Construction Off-Site**

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0355	0.2623	0.3960	5.4000e-004	0.0148	4.7400e-003	0.0195	4.2300e-003	4.3500e-003	8.5900e-003	0.0000	49.6162	49.6162	4.7000e-004	0.0000	49.6261
Worker	0.0304	0.0381	0.3781	6.8000e-004	0.0561	4.7000e-004	0.0566	0.0149	4.3000e-004	0.0153	0.0000	52.2439	52.2439	3.0300e-003	0.0000	52.3076
Total	0.0659	0.3004	0.7741	1.2200e-003	0.0709	5.2100e-003	0.0761	0.0192	4.7800e-003	0.0239	0.0000	101.8602	101.8602	3.5000e-003	0.0000	101.9337

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1848	1.5165	0.9466	1.3500e-003		0.1069	0.1069		0.1005	0.1005	0.0000	123.2170	123.2170	0.0309	0.0000	123.8662
Total	0.1848	1.5165	0.9466	1.3500e-003		0.1069	0.1069		0.1005	0.1005	0.0000	123.2170	123.2170	0.0309	0.0000	123.8662

3.10 Phase 1 Construction - 2015

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0355	0.2623	0.3960	5.4000e-004	0.0148	4.7400e-003	0.0195	4.2300e-003	4.3500e-003	8.5900e-003	0.0000	49.6162	49.6162	4.7000e-004	0.0000	49.6261	
Worker	0.0304	0.0381	0.3781	6.8000e-004	0.0561	4.7000e-004	0.0566	0.0149	4.3000e-004	0.0153	0.0000	52.2439	52.2439	3.0300e-003	0.0000	52.3076	
Total	0.0659	0.3004	0.7741	1.2200e-003	0.0709	5.2100e-003	0.0761	0.0192	4.7800e-003	0.0239	0.0000	101.8602	101.8602	3.5000e-003	0.0000	101.9337	

3.10 Phase 1 Construction - 2016

Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.3389	2.8364	1.8414	2.6700e-003		0.1958	0.1958		0.1839	0.1839	0.0000	240.9428	240.9428	0.0598	0.0000	242.1977	
Total	0.3389	2.8364	1.8414	2.6700e-003		0.1958	0.1958		0.1839	0.1839	0.0000	240.9428	240.9428	0.0598	0.0000	242.1977	

3.10 Phase 1 Construction - 2016

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0614	0.4489	0.7163	1.0700e-003	0.0291	7.8400e-003	0.0370	8.3400e-003	7.2100e-003	0.0156	0.0000	96.5788	96.5788	8.4000e-004	0.0000	96.5965
Worker	0.0527	0.0664	0.6554	1.3300e-003	0.1106	8.7000e-004	0.1114	0.0294	7.9000e-004	0.0302	0.0000	99.1004	99.1004	5.3900e-003	0.0000	99.2135
Total	0.1141	0.5153	1.3717	2.4000e-003	0.1397	8.7100e-003	0.1484	0.0377	8.0000e-003	0.0457	0.0000	195.6792	195.6792	6.2300e-003	0.0000	195.8100

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3389	2.8364	1.8414	2.6700e-003		0.1958	0.1958		0.1839	0.1839	0.0000	240.9425	240.9425	0.0598	0.0000	242.1975
Total	0.3389	2.8364	1.8414	2.6700e-003		0.1958	0.1958		0.1839	0.1839	0.0000	240.9425	240.9425	0.0598	0.0000	242.1975

3.10 Phase 1 Construction - 2016

Mitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0614	0.4489	0.7163	1.0700e-003	0.0291	7.8400e-003	0.0370	8.3400e-003	7.2100e-003	0.0156	0.0000	96.5788	8.4000e-004	0.0000	0.0000	96.5965
Worker	0.0527	0.0664	0.6554	1.3300e-003	0.1106	8.7000e-004	0.1114	0.0294	7.9000e-004	0.0302	0.0000	99.1004	5.3900e-003	0.0000	0.0000	99.2135
Total	0.1141	0.5153	1.3717	2.4000e-003	0.1397	8.7100e-003	0.1484	0.0377	8.0000e-003	0.0457	0.0000	195.6792	6.2300e-003	0.0000	0.0000	195.8100

3.11 Phase 2 Construction - 2016

Unmitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1056	0.8837	0.5737	8.3000e-004		0.0610	0.0610		0.0573	0.0573	0.0000	75.0676	0.0186	0.0000	0.0000	75.4586
Total	0.1056	0.8837	0.5737	8.3000e-004		0.0610	0.0610		0.0573	0.0573	0.0000	75.0676	0.0186	0.0000	0.0000	75.4586

**3.11 Phase 2 Construction - 2016
Unmitigated Construction Off-Site**

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.1399	0.2232	3.3000e-004	9.0800e-003	2.4400e-003	0.0115	2.6000e-003	2.2500e-003	4.8500e-003	0.0000	30.0899	30.0899	2.6000e-004	0.0000	30.0954
Worker	0.0164	0.0207	0.2042	4.2000e-004	0.0345	2.7000e-004	0.0347	9.1600e-003	2.5000e-004	9.4000e-003	0.0000	30.8755	30.8755	1.6800e-003	0.0000	30.9107
Total	0.0356	0.1605	0.4274	7.5000e-004	0.0435	2.7100e-003	0.0462	0.0118	2.5000e-003	0.0143	0.0000	60.9654	60.9654	1.9400e-003	0.0000	61.0061

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.1056	0.8837	0.5737	8.3000e-004		0.0610	0.0610	0.0573	0.0573	0.0573	0.0000	75.0675	75.0675	0.0186	0.0000	75.4585
Total	0.1056	0.8837	0.5737	8.3000e-004		0.0610	0.0610	0.0573	0.0573	0.0573	0.0000	75.0675	75.0675	0.0186	0.0000	75.4585

3.11 Phase 2 Construction - 2016

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.1399	0.2232	3.3000e-004	9.0800e-003	2.4400e-003	0.0115	2.6000e-003	2.2500e-003	4.8500e-003	0.0000	30.0899	30.0899	2.6000e-004	0.0000	0.0000	30.0954
Worker	0.0164	0.0207	0.2042	4.2000e-004	0.0345	2.7000e-004	0.0347	9.1600e-003	2.5000e-004	9.4000e-003	0.0000	30.8755	30.8755	1.6800e-003	0.0000	0.0000	30.9107
Total	0.0356	0.1605	0.4274	7.5000e-004	0.0435	2.7100e-003	0.0462	0.0118	2.5000e-003	0.0143	0.0000	60.9654	60.9654	1.9400e-003	0.0000	0.0000	61.0061

3.11 Phase 2 Construction - 2017

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3692	3.1423	2.1574	3.1900e-003		0.2120	0.2120		0.1991	0.1991	0.0000	284.9801	284.9801	0.0701	0.0000	286.4531
Total	0.3692	3.1423	2.1574	3.1900e-003		0.2120	0.2120		0.1991	0.1991	0.0000	284.9801	284.9801	0.0701	0.0000	286.4531

3.11 Phase 2 Construction - 2017
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0636	0.4734	0.7825	1.2700e-003	0.0349	7.8700e-003	0.0427	9.9800e-003	7.2400e-003	0.0172	0.0000	113.5287	113.5287	9.3000e-004	0.0000	113.5483
Worker	0.0550	0.0702	0.6869	1.5900e-003	0.1322	9.9000e-004	0.1332	0.0352	9.1000e-004	0.0361	0.0000	113.7960	113.7960	5.8300e-003	0.0000	113.9185
Total	0.1186	0.5436	1.4694	2.8600e-003	0.1671	8.8600e-003	0.1760	0.0451	8.1500e-003	0.0533	0.0000	227.3247	227.3247	6.7600e-003	0.0000	227.4669

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3692	3.1423	2.1574	3.1900e-003		0.2120	0.2120		0.1991	0.1991	0.0000	284.9798	284.9798	0.0701	0.0000	286.4527
Total	0.3692	3.1423	2.1574	3.1900e-003		0.2120	0.2120		0.1991	0.1991	0.0000	284.9798	284.9798	0.0701	0.0000	286.4527

3.11 Phase 2 Construction - 2017

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0636	0.4734	0.7825	1.2700e-003	0.0349	7.8700e-003	0.0427	9.9800e-003	7.2400e-003	0.0172	0.0000	113.5287	113.5287	9.3000e-004	0.0000	113.5483
Worker	0.0550	0.0702	0.6869	1.5900e-003	0.1322	9.9000e-004	0.1332	0.0352	9.1000e-004	0.0361	0.0000	113.7960	113.7960	5.8300e-003	0.0000	113.9185
Total	0.1186	0.5436	1.4694	2.8600e-003	0.1671	8.8600e-003	0.1760	0.0451	8.1500e-003	0.0533	0.0000	227.3247	227.3247	6.7600e-003	0.0000	227.4669

3.12 Phase 3 Construction - 2017

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0341	0.2905	0.1994	2.9000e-004		0.0196	0.0196		0.0184	0.0184	0.0000	26.3427	26.3427	6.4800e-003	0.0000	26.4789
Total	0.0341	0.2905	0.1994	2.9000e-004		0.0196	0.0196		0.0184	0.0184	0.0000	26.3427	26.3427	6.4800e-003	0.0000	26.4789

3.12 Phase 3 Construction - 2017
Unmitigated Construction Off-Site

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8700e-003	0.0438	0.0723	1.2000e-004	3.2200e-003	7.3000e-004	3.9500e-003	9.2000e-004	6.7000e-004	1.5900e-003	0.0000	10.4943	10.4943	9.0000e-005	0.0000	10.4961	10.4961
Worker	5.0900e-003	6.4900e-003	0.0635	1.5000e-004	0.0122	9.0000e-005	0.0123	3.2500e-003	8.0000e-005	3.3300e-003	0.0000	10.5190	10.5190	5.4000e-004	0.0000	10.5303	10.5303
Total	0.0110	0.0503	0.1358	2.7000e-004	0.0154	8.2000e-004	0.0163	4.1700e-003	7.5000e-004	4.9200e-003	0.0000	21.0132	21.0132	6.3000e-004	0.0000	21.0263	21.0263

Mitigated Construction On-Site

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.0341	0.2905	0.1994	2.9000e-004		0.0196	0.0196		0.0184	0.0184	0.0000	26.3427	26.3427	6.4800e-003	0.0000	26.4788	26.4788
Total	0.0341	0.2905	0.1994	2.9000e-004		0.0196	0.0196		0.0184	0.0184	0.0000	26.3427	26.3427	6.4800e-003	0.0000	26.4788	26.4788

3.12 Phase 3 Construction - 2017

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8700e-003	0.0438	0.0723	1.2000e-004	3.2200e-003	7.3000e-004	3.9500e-003	9.2000e-004	6.7000e-004	1.5900e-003	0.0000	10.4943	10.4943	9.0000e-005	0.0000	10.4961
Worker	5.0900e-003	6.4900e-003	0.0635	1.5000e-004	0.0122	9.0000e-005	0.0123	3.2500e-003	8.0000e-005	3.3300e-003	0.0000	10.5190	10.5190	5.4000e-004	0.0000	10.5303
Total	0.0110	0.0503	0.1358	2.7000e-004	0.0154	8.2000e-004	0.0163	4.1700e-003	7.5000e-004	4.9200e-003	0.0000	21.0132	21.0132	6.3000e-004	0.0000	21.0263

3.12 Phase 3 Construction - 2018

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					CO2e
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723
Total	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9844	308.9844	0.0756	0.0000	310.5723

3.12 Phase 3 Construction - 2018
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0616	0.4660	0.7943	1.3900e-003	0.0382	7.9100e-003	0.0461	0.0109	7.2700e-003	0.0182	0.0000	122.2989	122.2989	9.9000e-004	0.0000	122.3197
Worker	0.0532	0.0686	0.6682	1.7500e-003	0.1450	1.0600e-003	0.1461	0.0386	9.8000e-004	0.0395	0.0000	120.3007	120.3007	5.8900e-003	0.0000	120.4243
Total	0.1148	0.5346	1.4626	3.1400e-003	0.1832	8.9700e-003	0.1922	0.0495	8.2500e-003	0.0578	0.0000	242.5995	242.5995	6.8800e-003	0.0000	242.7440

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720
Total	0.3483	3.0355	2.2880	3.5000e-003		0.1950	0.1950		0.1833	0.1833	0.0000	308.9841	308.9841	0.0756	0.0000	310.5720

3.12 Phase 3 Construction - 2018

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0616	0.4660	0.7943	1.3900e-003	0.0382	7.9100e-003	0.0461	0.0109	7.2700e-003	0.0182	0.0000	122.2989	122.2989	9.9000e-004	0.0000	122.3197
Worker	0.0532	0.0686	0.6682	1.7500e-003	0.1450	1.0600e-003	0.1461	0.0386	9.8000e-004	0.0395	0.0000	120.3007	120.3007	5.8900e-003	0.0000	120.4243
Total	0.1148	0.5346	1.4626	3.1400e-003	0.1832	8.9700e-003	0.1922	0.0495	8.2500e-003	0.0578	0.0000	242.5995	242.5995	6.8800e-003	0.0000	242.7440

3.12 Phase 3 Construction - 2019

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0200	0.1782	0.1455	2.3000e-004		0.0109	0.0109		0.0103	0.0103	0.0000	19.9004	19.9004	4.8400e-003	0.0000	20.0021
Total	0.0200	0.1782	0.1455	2.3000e-004		0.0109	0.0109		0.0103	0.0103	0.0000	19.9004	19.9004	4.8400e-003	0.0000	20.0021

3.12 Phase 3 Construction - 2019
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5400e-003	0.0275	0.0478	9.0000e-005	2.4900e-003	4.7000e-004	2.9600e-003	7.1000e-004	4.3000e-004	1.1500e-003	0.0000	7.8263	7.8263	6.0000e-005	0.0000	7.8276
Worker	3.1300e-003	4.0400e-003	0.0393	1.1000e-004	9.4500e-003	7.0000e-005	9.5100e-003	2.5100e-003	6.0000e-005	2.5700e-003	0.0000	7.5531	7.5531	3.6000e-004	0.0000	7.5606
Total	6.6700e-003	0.0315	0.0871	2.0000e-004	0.0119	5.4000e-004	0.0125	3.2200e-003	4.9000e-004	3.7200e-003	0.0000	15.3794	15.3794	4.2000e-004	0.0000	15.3882

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Off-Road	0.0200	0.1782	0.1455	2.3000e-004		0.0109	0.0109		0.0103	0.0103	0.0000	19.9004	19.9004	4.8400e-003	0.0000	20.0021
Total	0.0200	0.1782	0.1455	2.3000e-004		0.0109	0.0109		0.0103	0.0103	0.0000	19.9004	19.9004	4.8400e-003	0.0000	20.0021

3.12 Phase 3 Construction - 2019

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5400e-003	0.0275	0.0478	9.0000e-005	2.4900e-003	4.7000e-004	2.9600e-003	7.1000e-004	4.3000e-004	1.1500e-003	0.0000	7.8263	7.8263	6.0000e-005	0.0000	0.0000	7.8276
Worker	3.1300e-003	4.0400e-003	0.0393	1.1000e-004	9.4500e-003	7.0000e-005	9.5100e-003	2.5100e-003	6.0000e-005	2.5700e-003	0.0000	7.5531	7.5531	3.6000e-004	0.0000	0.0000	7.5606
Total	6.6700e-003	0.0315	0.0871	2.0000e-004	0.0119	5.4000e-004	0.0125	3.2200e-003	4.9000e-004	3.7200e-003	0.0000	15.3794	15.3794	4.2000e-004	0.0000	0.0000	15.3882

3.13 Phase 4 Construction - 2019

Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.2869	2.5577	2.0887	3.2700e-003	0.1568	0.1568	0.1568	0.1474	0.1474	0.1474	0.0000	285.6298	285.6298	0.0695	0.0000	0.0000	287.0892
Total	0.2869	2.5577	2.0887	3.2700e-003	0.1568	0.1568	0.1568	0.1474	0.1474	0.1474	0.0000	285.6298	285.6298	0.0695	0.0000	0.0000	287.0892

3.13 Phase 4 Construction - 2019

Unmitigated Construction Off-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0508	0.3945	0.6866	1.3000e-003	0.0357	6.7900e-003	0.0425	0.0102	6.2400e-003	0.0165	0.0000	112.3306	112.3306	9.0000e-004	0.0000	112.3494
Worker	0.0449	0.0581	0.5636	1.6400e-003	0.1356	9.8000e-004	0.1366	0.0360	9.0000e-004	0.0369	0.0000	108.4089	108.4089	5.1100e-003	0.0000	108.5162
Total	0.0956	0.4525	1.2502	2.9400e-003	0.1713	7.7700e-003	0.1791	0.0463	7.1400e-003	0.0534	0.0000	220.7395	220.7395	6.0100e-003	0.0000	220.8656

Mitigated Construction On-Site

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.2869	2.5577	2.0887	3.2700e-003		0.1568	0.1568		0.1474	0.1474	0.0000	285.6294	285.6294	0.0695	0.0000	287.0888
Total	0.2869	2.5577	2.0887	3.2700e-003		0.1568	0.1568		0.1474	0.1474	0.0000	285.6294	285.6294	0.0695	0.0000	287.0888

3.13 Phase 4 Construction - 2019

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0508	0.3945	0.6866	1.3000e-003	0.0357	6.7900e-003	0.0425	0.0102	6.2400e-003	0.0165	0.0000	112.3306	112.3306	9.0000e-004	0.0000	112.3494
Worker	0.0449	0.0581	0.5636	1.6400e-003	0.1356	9.8000e-004	0.1366	0.0360	9.0000e-004	0.0369	0.0000	108.4089	108.4089	5.1100e-003	0.0000	108.5162
Total	0.0956	0.4525	1.2502	2.9400e-003	0.1713	7.7700e-003	0.1791	0.0463	7.1400e-003	0.0534	0.0000	220.7395	220.7395	6.0100e-003	0.0000	220.8656

3.13 Phase 4 Construction - 2020

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0591	0.5344	0.4706	7.5000e-004	0.0312	0.0312	0.0312	0.0293	0.0293	0.0293	0.0000	64.5820	64.5820	0.0157	0.0000	64.9124
Total	0.0591	0.5344	0.4706	7.5000e-004	0.0312	0.0312	0.0312	0.0293	0.0293	0.0293	0.0000	64.5820	64.5820	0.0157	0.0000	64.9124

**3.13 Phase 4 Construction - 2020
Unmitigated Construction Off-Site**

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.0764	0.1459	3.0000e-004	8.2000e-003	1.3600e-003	9.5600e-003	2.3500e-003	1.2600e-003	3.6000e-003	0.0000	25.1821	25.1821	2.0000e-004	0.0000	25.1862
Worker	9.4900e-003	0.0122	0.1187	3.8000e-004	0.0311	2.2000e-004	0.0313	8.2700e-003	2.1000e-004	8.4800e-003	0.0000	23.8921	23.8921	1.1000e-003	0.0000	23.9152
Total	0.0196	0.0886	0.2645	6.8000e-004	0.0393	1.5800e-003	0.0409	0.0106	1.4700e-003	0.0121	0.0000	49.0741	49.0741	1.3000e-003	0.0000	49.1014

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0591	0.5344	0.4706	7.5000e-004		0.0312	0.0312		0.0293	0.0293	0.0000	64.5819	64.5819	0.0157	0.0000	64.9123
Total	0.0591	0.5344	0.4706	7.5000e-004		0.0312	0.0312		0.0293	0.0293	0.0000	64.5819	64.5819	0.0157	0.0000	64.9123

3.13 Phase 4 Construction - 2020

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0101	0.0764	0.1459	3.0000e-004	8.2000e-003	1.3600e-003	9.5600e-003	2.3500e-003	1.2600e-003	3.6000e-003	0.0000	25.1821	25.1821	2.0000e-004	0.0000	25.1862
Worker	9.4900e-003	0.0122	0.1187	3.8000e-004	0.0311	2.2000e-004	0.0313	8.2700e-003	2.1000e-004	8.4800e-003	0.0000	23.8921	23.8921	1.1000e-003	0.0000	23.9152
Total	0.0196	0.0886	0.2645	6.8000e-004	0.0393	1.5800e-003	0.0409	0.0106	1.4700e-003	0.0121	0.0000	49.0741	49.0741	1.3000e-003	0.0000	49.1014

3.14 Phase 1 Paving - 2020

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	19.7352
Paving	0.0000				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	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	19.7352

3.14 Phase 1 Paving - 2020
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.9217
Total	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.9217

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352
Paving	0.0000				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	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352

3.14 Phase 1 Paving - 2020

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.0000	0.9217
Total	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.0000	0.9217

3.15 Phase 2 Paving - 2020

Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	0.0000	19.7352
Paving	0.0000				0.0000	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	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	0.0000	19.7352

3.15 Phase 2 Paving - 2020
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.9217
Total	3.7000e-004	4.7000e-004	4.5700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9208	0.9208	4.0000e-005	0.0000	0.9217

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352
Paving	0.0000				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	0.0133	0.1378	0.1435	2.2000e-004	7.3900e-003	7.3900e-003	7.3900e-003	6.8000e-003	6.8000e-003	6.8000e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352