RIVERSIDE COUNTY TRANSPORTATION COMMISSION

Riverside-Downtown
STATION IMPROVEMENTS

Appendix G. Air Quality and Greenhouse Gas Emissions Technical Report

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

Riverside-Downtown
STATION IMPROVEMENTS

Riverside-Downtown Station Improvements

Air Quality and Greenhouse Gas Emissions Technical Report

April 2021

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AB	Assembly Bill
ADA	Americans with Disabilities Act
AQMP	Air Quality Management Plan
AREMA	American Railway Engineering and Maintenance-of-Way Association
BNSF	Burlington North Santa Fe
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CY	cubic yards
DPM	diesel particulate matter
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
FRA	Federal Rail Administration
FTA	Federal Transit Administration

Acronym	Definition
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GWP	Global Warming Potential
H_2S	Hydrogen sulfide
HFCs	hydrofluorocarbons
HI	Hazard Index
IEOC	Inland Empire Orange County
IPCC	Intergovernmental Panel on Climate Change
LCFS	Low Carbon Fuel Standard
LOS	level of service
LST	localized significance threshold
MMT	million metric tons
MP	Mile Post
MPH	miles per hour
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NO	nitrogen oxide
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
O_3	ozone
OPR	Governor's Office of Planning and Research
PB	lead
PFCs	perfluorocarbons
$PM_{2.5}$	fine particulate matter
PM_{10}	respirable particulate matter
PPM	parts per million
RCTC	Riverside County Transportation Commission
RDS	Riverside – Downtown Station

Acronym	Definition
ROG	reactive organic gases
ROW	Right of Way
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SF	square foot/feet
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO_2	sulfur dioxide
SR	State Route
SRA	source receptor area
TAC	toxic air contaminant
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compounds
ZEV	zero emissions vehicle

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1.0 Introduction

This report presents an assessment of potential air quality and greenhouse gas (GHG) emissions impacts during construction and operation of the proposed Riverside-Downtown Station (RDS) Improvements Project (project).

The Riverside County Transportation Commission (RCTC) and Metrolink propose construction of the project, which involves improvements to the RDS located at Mile Post (MP) 9.9 to MP 10.2 on the Burlington Northern Santa Fe (BNSF) San Bernardino Subdivision. Proposed improvements include additional passenger loading, enhanced pedestrian and vehicular access, and additional parking. The purpose of the project is to improve capacity, efficiency, and connectivity near the RDS.

The project is subject to state and federal environmental review requirements because it involves the use of federal funds from the Federal Transit Administration (FTA). An Environmental Impact Report (EIR) and an Environmental Assessment (EA) will be prepared for the project in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). RCTC is the CEQA lead agency, and FTA is the NEPA lead agency.

1.1. Project Location and Setting

The proposed project is located at the existing RDS in the City and County of Riverside. Specifically, the project is located at 4066 Vine Street, Riverside, CA 92507, at approximately MP 9.9 to 10.2 on the BNSF Railway San Bernardino Subdivision (Figure 1-1, Regional and Project Location). The project study area is highly developed with residential, commercial, industrial, public facilities, and parks, as well as well as a railroad corridor owned by RCTC and used by passenger and freight rail. Residential uses are concentrated to the east while commercial and industrial uses are interspersed amongst one another on the west side of the study area. State Route (SR) 91 is located approximately 0.1 mile to the west, and SR 60 is located approximately 1.3 miles to the north. Other notable uses in the vicinity include the University of California Riverside campus located approximately two miles to the east and Riverside Community College located approximately 0.75 mile to the southwest.

1.2. Purpose and Need

The purpose of the proposed project is to expand capacity, improve operations and efficiency, connectivity, and the passenger experience at the RDS. In June 2016, the new Perris Valley Line opened, and most of the Metrolink 91 Service was extended to South Perris and rebranded as the 91/Perris Valley (91/PV) Line. Currently, four of the 91/PV Line morning trains originate from the Perris-South Station and four of the afternoon or evening trains terminate there. Additionally, new “local” service currently operates between the RDS and Perris-South Station. This new local service terminates in downtown Riverside, increasing the need for improved connectivity from these trains to other trains in the Metrolink system. This would create more

transfers and passenger traffic at the RDS, adding to the approximately 1,000 trips that currently originate there each weekday. The proposed project would increase rail capacity and service reliability at the RDS and would improve connectivity between local trains.

The basic project objectives supporting the purpose of the project are listed below:

- Expand platform capacity to meet passenger train storage needs;
- Allow for train meets off the BNSF mainline and minimize impacts to BNSF operations;
- Improve train connectivity and passenger accessibility while minimizing impacts on improvement projects near the station that are already designed or in construction;
- Facilitate more efficient passenger flow and reduce dwell times;
- Enhance safety and access for station users; and
- Accommodate projected future demand.

Figure 1-1. Regional and Project Location Map

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2.0 Project Description

2.1. Proposed Project

The RCTC and Metrolink propose to improve the RDS located at MP 9.9 to MP 10.2 on the BNSF San Bernardino Subdivision located just east of SR 91 and a short distance from the SR 60 in the City and County of Riverside, California.

Proposed improvements include construction of an additional passenger loading platform, the extension of the existing pedestrian overcrossing and additional elevator and associated tracks which would allow for two trains to service the station off the BNSF mainline. The proposed track would be required to connect and integrate into the existing station layover tracks on the east side to improve train meet times without impacting BNSF operations. The project would also provide additional parking and improved vehicular traffic circulation on the east side of the station.

2.2. Project Alternatives

Descriptions of a No Project Alternative and one Build Alternative (also referred to as proposed project) are provided below. The No Project Alternative is included to provide a baseline for comparison with the Build Alternative. The Build Alternative, or proposed project, is analyzed in this report.

2.2.1. No Project Alternative

Under the No Project Alternative, implementation of improvements at the RDS would not be constructed, and the current configuration of the RDS would remain the same. The No Project Alternative would not meet the project objectives or improve operations to accommodate the 91/PV Line and the Inland Empire Orange County (IEOC) Lines. Train capacity and storage would be limited to the existing platforms. This alternative does not meet the purpose and need for station improvements and additional passenger service. The No Project Alternative provides insight on future conditions with no improvements and serves as a baseline for comparison with the Build Alternative.

2.2.2. Build Alternative

RCTC and Metrolink propose improvements to the following elements of the RDS: (1) Station Platform and Tracks; (2) Pedestrian Access; and (3) Parking, Circulation and Streetscape. A summary of the proposed Build Alternative improvements is presented in Table 2-1. The Build Alternative includes several design options related to the pedestrian overcrossing and parking and circulation improvements.

Table 2-1. Summary of Proposed Build Alternative Improvements

Element	Description
1. Station Platform and Track Improvements	• Add new center platform (Platform 3) • Add new tracks (Station Tracks 5 and 6) • Modification of railroad signal system
2. Pedestrian Access Improvements	• Extend pedestrian access to new Platform 3 • Emergency egress would be provided at three locations
3. Parking, Circulation and Streetscape Improvements	• Traffic Circulation Options and Howard Avenue Extension • Relocate ADA parking • Add sidewalks and trees • Add up to 560 additional parking spaces

The proposed improvements would enhance Metrolink train connections without affecting BNSF services. The improvements would be designed in accordance with the most recent applicable codes, Southern California Regional Rail Authority (SCRRA), BNSF, Americans with Disabilities Act (ADA), American Railway Engineering and Maintenance-of-Way Association (AREMA), Federal Rail Administration (FRA), and California Public Utilities Commission (CPUC), standards and guidelines.

1. Station Platform and Tracks

The Build Alternative, includes the following station platform and track improvements as part of the proposed project (see Figure 2-1, Build Alternative):

- Add new center platform (Platform 3) that is approximately 680 feet in length and 30 feet in width with direct access from the new parking area to the east and access from the west using the at-grade crossings from Platform 2;
- Add new tracks (Station Tracks 5 and 6) and other track improvements; and
- Modification of the railroad signal system.

Platform 3 would be located between Station Tracks 5 and 6. Platform 3 would be able to service seven 85-foot passenger cars. The centerline to centerline spacing of the parallel tracks at the platform would be approximately 40 feet. Demolition of existing structures and other ancillary improvements would be required to facilitate construction of the station platform and track improvements.

2. Pedestrian Overpass Access

The Build Alternative includes the following pedestrian access improvements as part of the proposed project:

- Extend the existing pedestrian overpass access (see Figure 2-1, Build Alternative).
- Add pedestrian at-grade access from the proposed surface parking lot on the east side of proposed station improvements to Platforms 2 and 3 through an extension of the existing pedestrian at-grade crossing on the north end of the platforms and a new

pedestrian at-grade rail crossing on the south end of the platforms. The pedestrian at-grade crossings would include safety enhancements such as proper channelization, automated gates and flashers.

- Emergency egress would be provided at three locations from Platform 3:
  - North end pedestrian at-grade crossing (existing at-grade crossing to be extended);
  - Pedestrian Access; and
  - South end pedestrian at-grade crossing (new).

3. Parking, Circulation and Streetscape

The Build Alternative includes the following parking, circulation and streetscape improvements as part of the proposed project:

- Relocate ADA parking;
- Modify the bus drop-off area;
- Add sidewalks and trees; and
- Add up to 560 additional parking spaces (proposed surface parking lot) with access to the east side of the station via at-grade pedestrian crossings. Parking and Streetscape Improvements

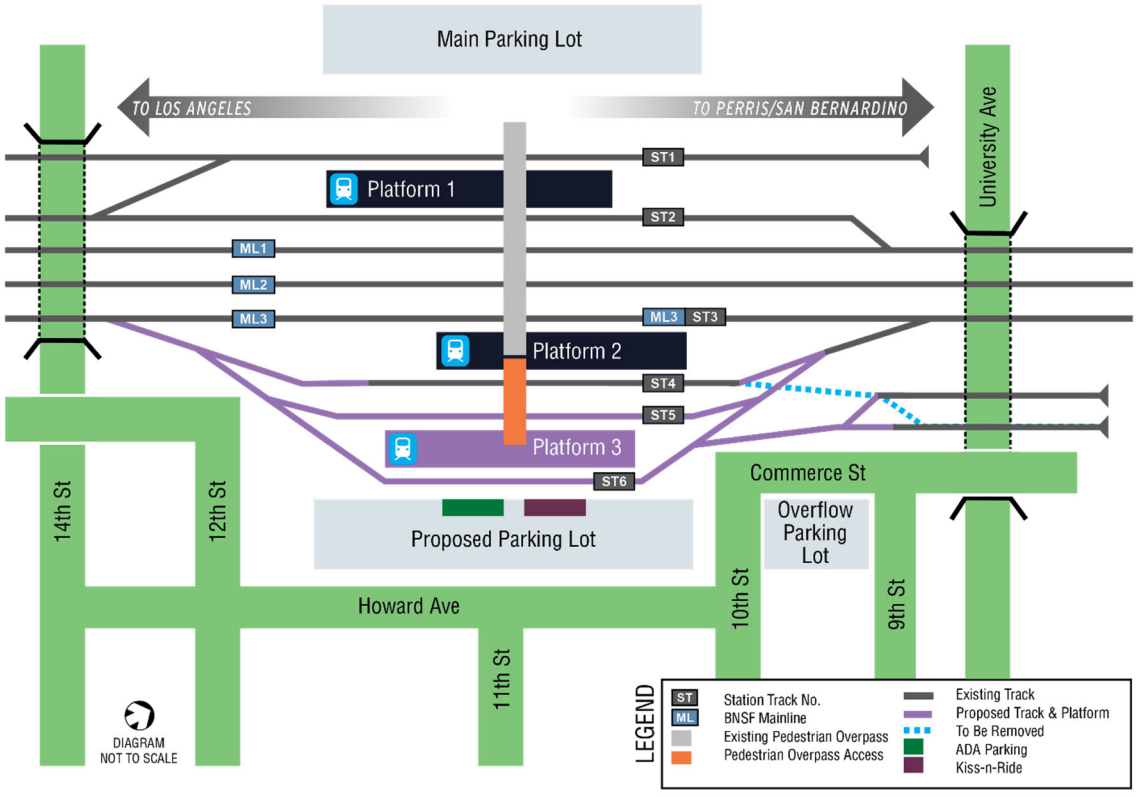

Figure 2-1. Build Alternative Elements

Design Options

As part of the Build Alternative, there is a design option related to a longer extension of the pedestrian overpass access from the new proposed platform to the new surface parking lot. Another design option is associated with the new surface parking lot and combining this new parking lot with the existing overflow parking lot on the east side of the station. This parking option includes traffic circulation improvements along Howard Avenue, 9th Street, 10th Street, and Commerce Street. A summary of the proposed design options is presented in Table 2-2.

Table 2-2. Summary of Proposed Build Alternative with Design Options

Build + Design Option	Description
Pedestrian Overpass Access Improvements	
Pedestrian Overpass Access Design Option 1	Extend pedestrian overpass access to the new platform 3 and to the new surface parking lot
Parking, Circulation and Streetscape Improvements	
Parking Design Option 1A	New surface parking lot east of station. *Requires acquisition and demolition of existing structures and other ancillary structures and residential parcels on the corner of 12th Street and Howard Avenue to facilitate construction of the proposed improvements*
Parking Design Option 1B	Same as Parking Design Option 1A but avoids relocation impacts to residential parcels on the corner of 12th Street and Howard Avenue
Parking Design Option 2A	New surface parking lot east of station combined with existing overflow parking lot with the extension of Howard Avenue through to 9th Street. *Requires acquisition and demolition of existing structures and other ancillary structures and residential parcels on the corner of 12th Street and Howard and requires acquisition of additional parcels directly east of the existing overflow parking lot*
Parking Design Option 2B	Same as Parking Design Option 2A but avoids relocation impacts to residential parcels on the corner of 12th Street and Howard Avenue
Parking Design Option 3A	Same as Parking Design Option 1A/2A but avoids impacts to additional parcels east of the existing overflow parking lot by routing Howard Avenue around the parcels.
Parking Design Option 3B	Same as Parking Design Option 1B/2B but avoids relocation impacts to additional parcels east of the existing overflow parking lot.

Pedestrian Overpass Access Improvements

Access from the existing station area would be provided by the proposed extension of the pedestrian overpass (see Figure 3-2, Build Alternative with Pedestrian Overpass Access Design Option 1). The Build Alternative with Pedestrian Overpass Access Design Option 1 includes a

longer extension of the pedestrian overpass to Platform 3 and new surface parking lot (two spans, two towers/elevators).

The new pedestrian overpass elevator tower would be located 14 feet clear of both Track 5 and Track 6 on Platform 3. Access from the proposed surface parking lot would be provided by two 10-foot wide at-grade pedestrian crossings at the north and south end of Platform 3.

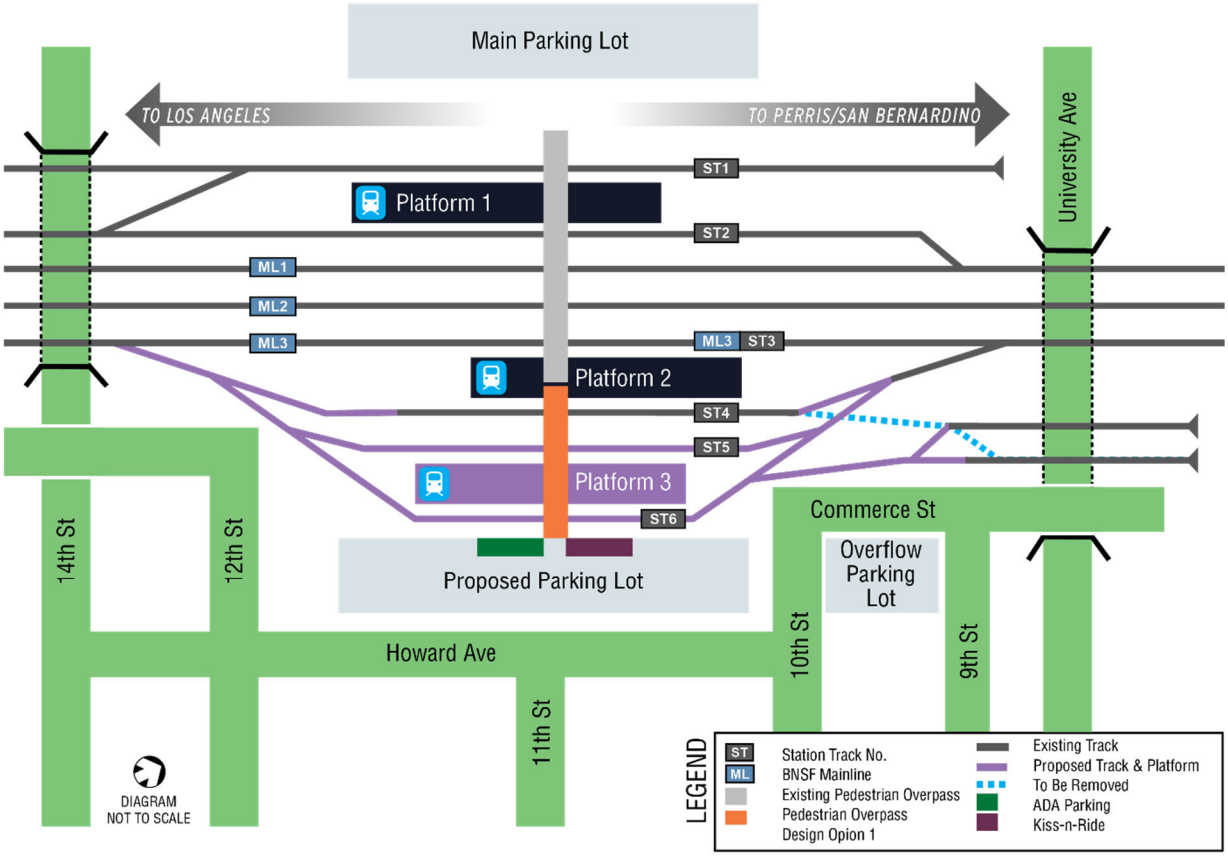

Figure 2-2. Build Alternative with Pedestrian Overpass Access Design Option 1

Parking, Circulation and Streetscape Improvements

All parking design options would require the acquisition of parcels directly east of the station and demolition of existing structures and other ancillary structures to facilitate construction of the proposed Build Alternative improvements:

- Parking Design Option 1A would require the acquisition of residential parcels on the corner of 12th Street and Howard Avenue. Parking Option 1B would avoid the residential properties.

- Parking Design Option 2A and 2B would have similar ROW impacts as Options 1A and 1B but would require acquisition of additional parcels directly east of the existing overflow parking lot.

- Parking Design Option 3A and 3B would have similar ROW impacts as Options 2A and 2B but would avoid parcel acquisitions directly east of the overflow parking lot.

- Parking Design Option 1A/1B adds a new surface parking lot and maintains separation from the existing overflow parking lot on the eastside of the station (Figure 2-3[1], Build Alternative with Parking Design Option 1A and Figure 2-4, Build Alternative with Parking Design Option 1B).

    — Parking Design Option 1A – Add new surface parking lot and maintain separation from existing overflow parking lot on the east side of the station. Acquisition and demolition of residential parcels on the corner of 12th Street and Howard Avenue would be required (see Figure 2-3, Build Alternative with Parking Design Option 1A).

    — Parking Design Option 1B – Add proposed surface parking lot and maintain separation from existing overflow parking lot on the east side of the station and avoid impacts to residential parcels at the corner of 12th Street and Howard Avenue (see Figure 2-4, Build Alternative with Parking Design Option 1B).

- Parking Design Options 2A/2B proposes a new surface parking lot directly east of the station combined with the existing overflow parking lot.

    — Parking Design Option 2A – Combine proposed surface parking lot with existing overflow parking lot on the east side of the station which would require acquisition and demolition of residential parcels on the corner of 12th Street and Howard Avenue. This option would also include extending Howard Avenue through to 9th Street and would require additional acquisition of parcels directly east of the existing overflow parking lot as well as partial street vacations for 10th Street and Commerce Street (see Figure 2-5, Build Alternative with Parking Design Option 2A).

    — Parking Design Option 2B – Combine proposed surface parking lot with existing overflow parking lot on the east side of the station and avoid impacts to residential parcels at the corner of 12th Street and Howard Avenue. This option

[1] Figures 2-3 through 2-8 are located at the end of this chapter.

would also include extending Howard Avenue through to 9th Street and would require additional acquisition of parcels directly east of the existing overflow parking lot as well as partial street vacations for 10th Street and Commerce Street (see Figure 2-6, Build Alternative with Parking Design Option 2B).

- Parking Design Options 3A and 3B propose a new surface parking lot directly east of the station combined with the existing overflow parking lot and extension of Howard Street through to 9th Street.

    — Parking Design Option 3A – Combine proposed surface parking lot with existing overflow parking lot on the east side of the station which would require and demolition of residential parcels on the corner of 12th Street and Howard Avenue. This option would also include extending Howard Avenue through to 9th Street as well as partial street vacations for 10th Street and Commerce Street while avoiding additional acquisition of parcels directly east of the existing overflow parking lot (see Figure 2-7, Build Alternative with Parking Design Option 3A).

    — Parking Design Option 3B - Combine proposed surface parking lot with existing overflow parking lot on the east side of the station and avoid impacts to residential parcels at the corner of 12th Street and Howard Avenue. This option would also include extending Howard Avenue through to 9th Street as well as partial street vacations for 10th Street and Commerce Street while avoiding additional acquisition of parcels directly east of the existing overflow parking lot (see Figure 2-8, Build Alternative with Parking Design Option 3B).

2.3. Construction Activities and Phasing

Project construction is anticipated to begin in 2023 and be completed in 2025. Construction activities would include demolition, site preparation, grading, paving, track construction, bridge/platform construction, and architectural coatings.

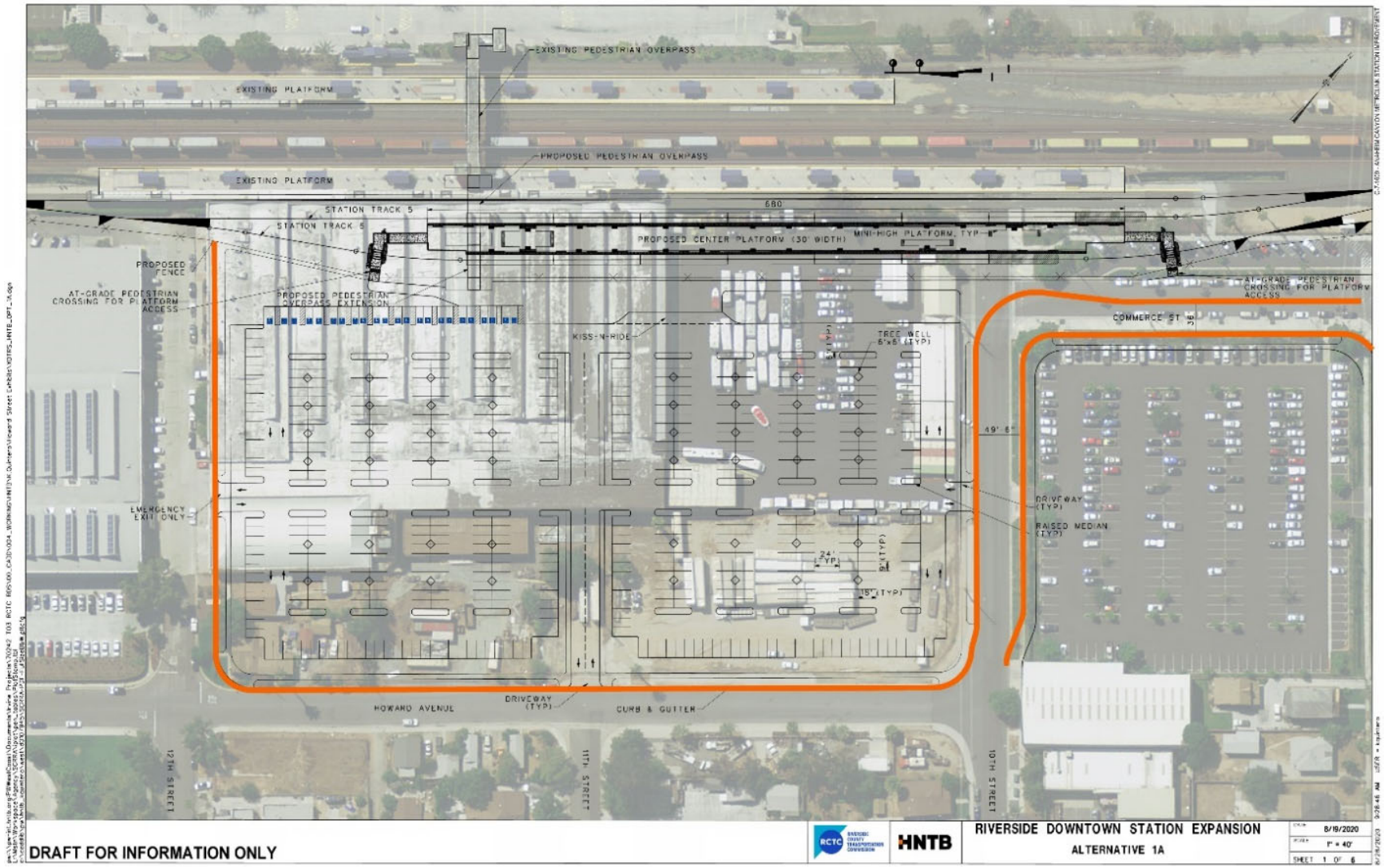

Figure 2-3. Build Alternative with Traffic Circulation and Parking Option 1A

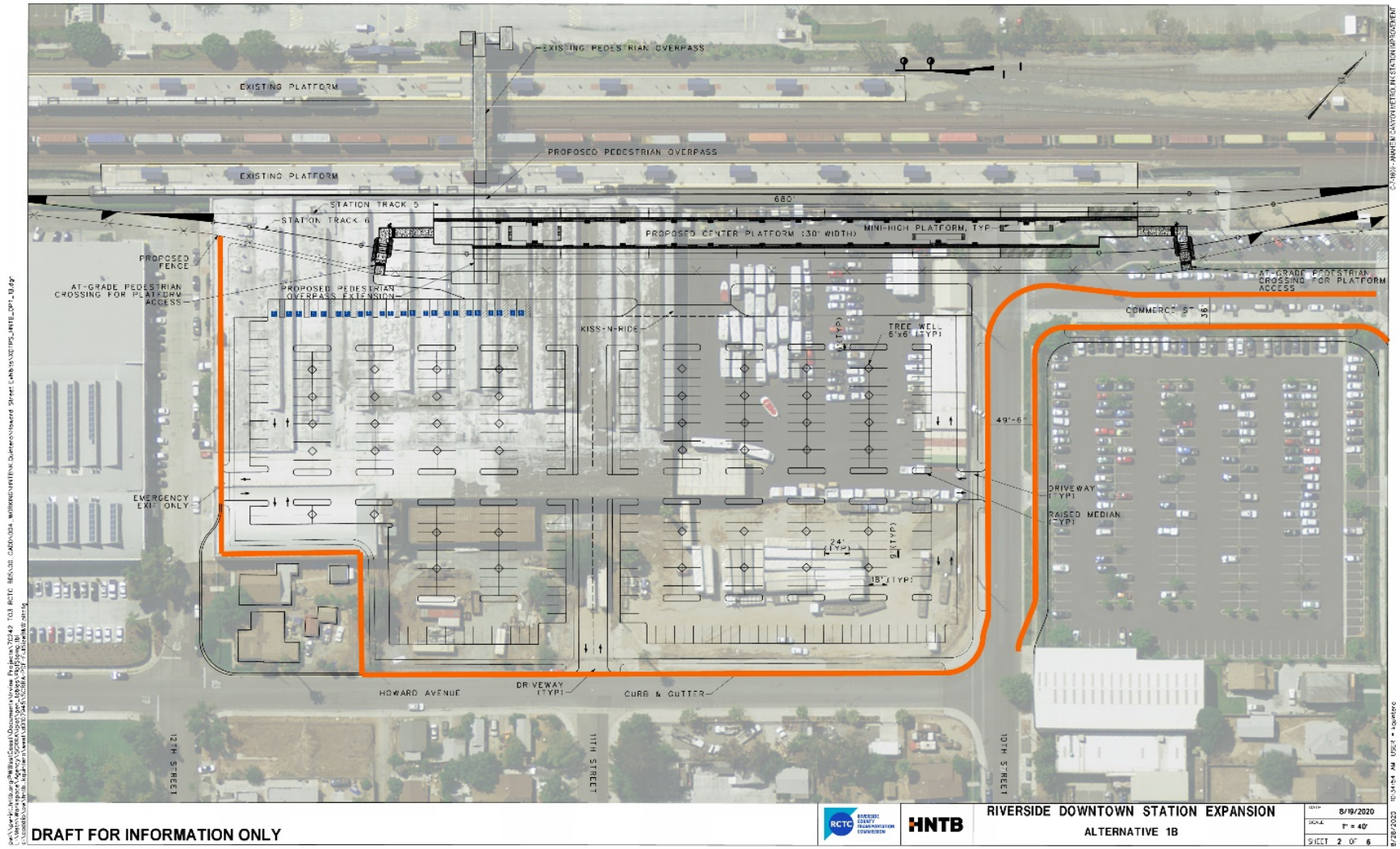

Figure 2-4. Build Alternative with Traffic Circulation and Parking Option 1B

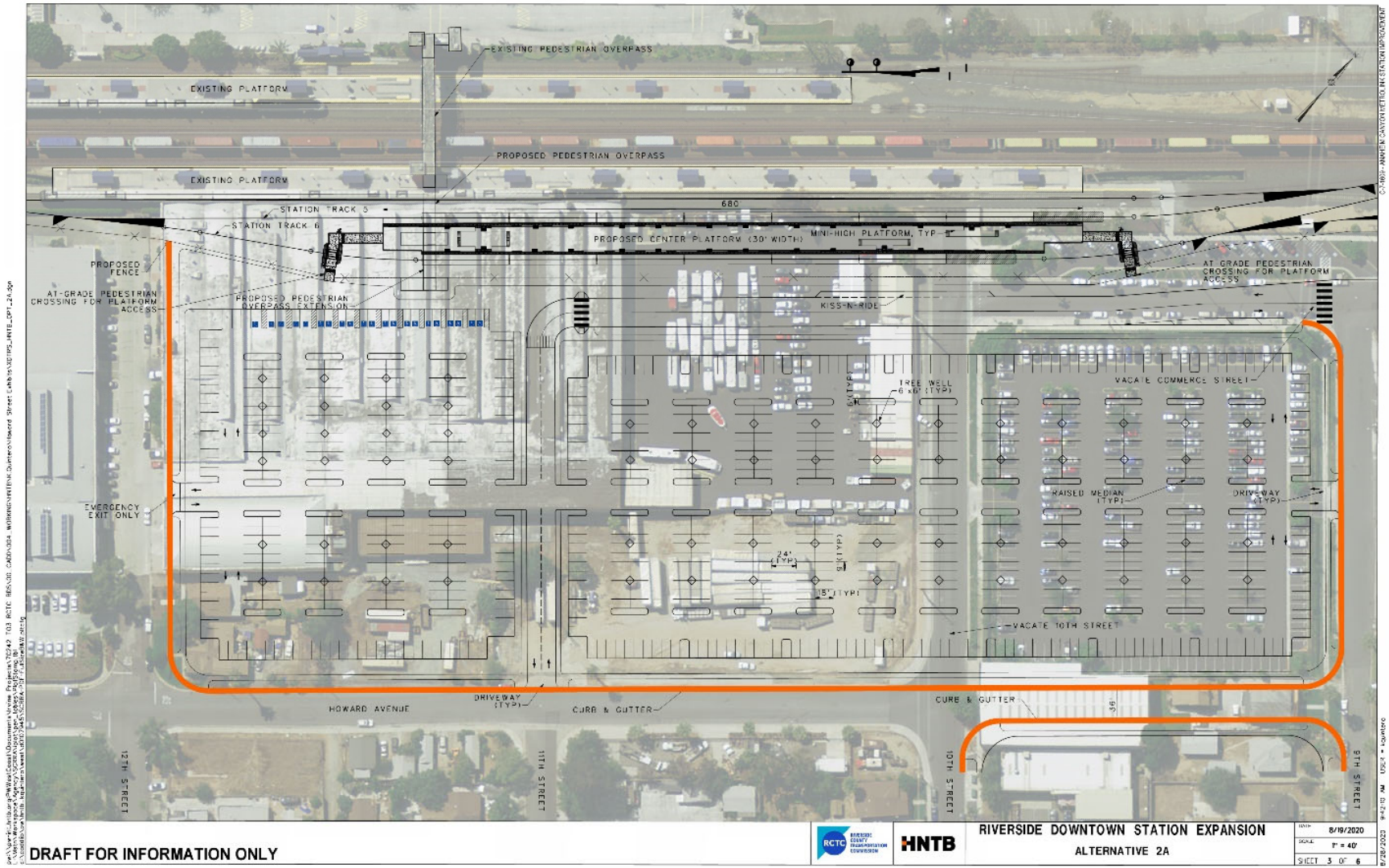

Figure 2-5. Build Alternative with Traffic Circulation and Parking Option 2A

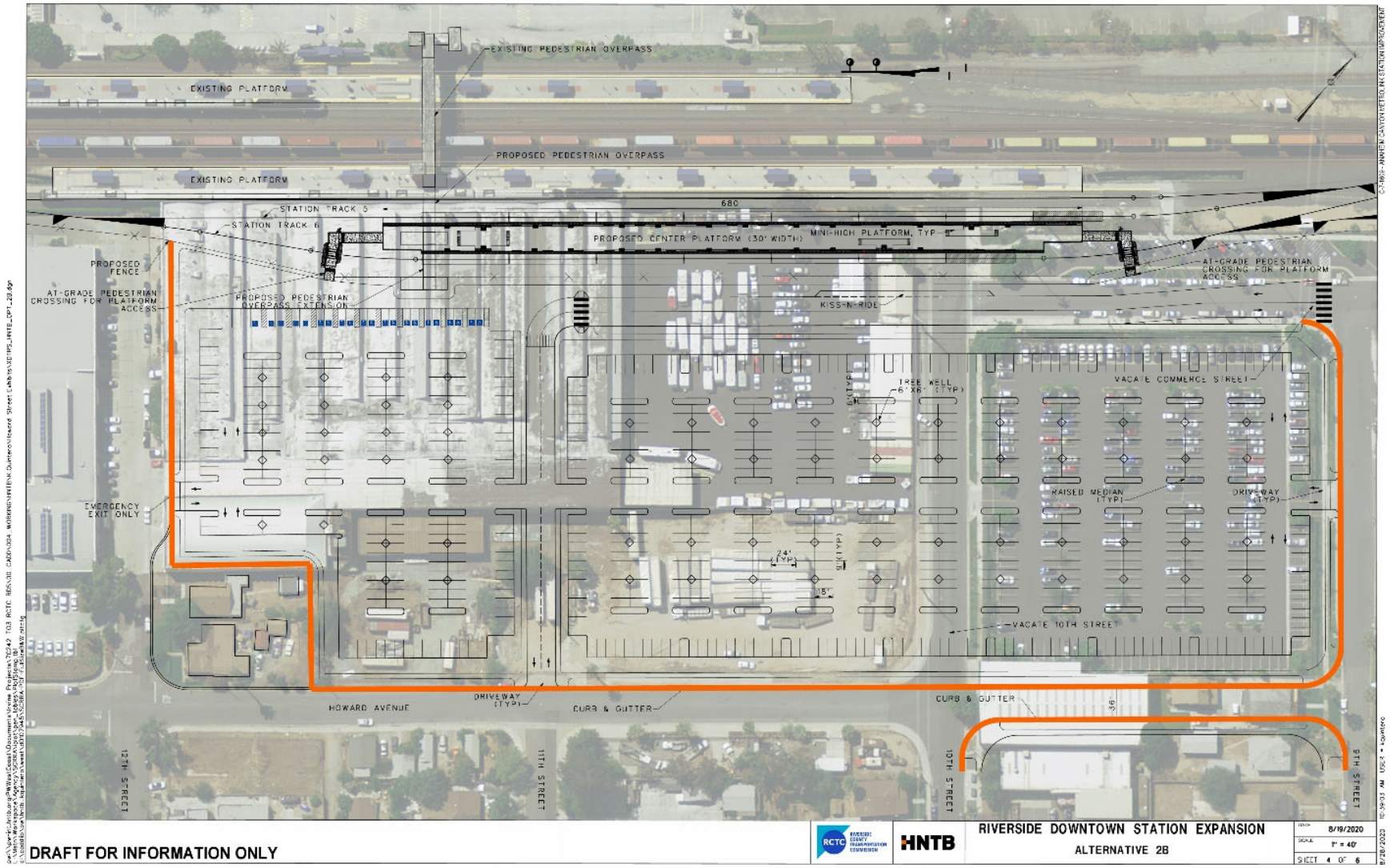

Figure 2-6. Build Alternative with Traffic Circulation and Parking Option 2B

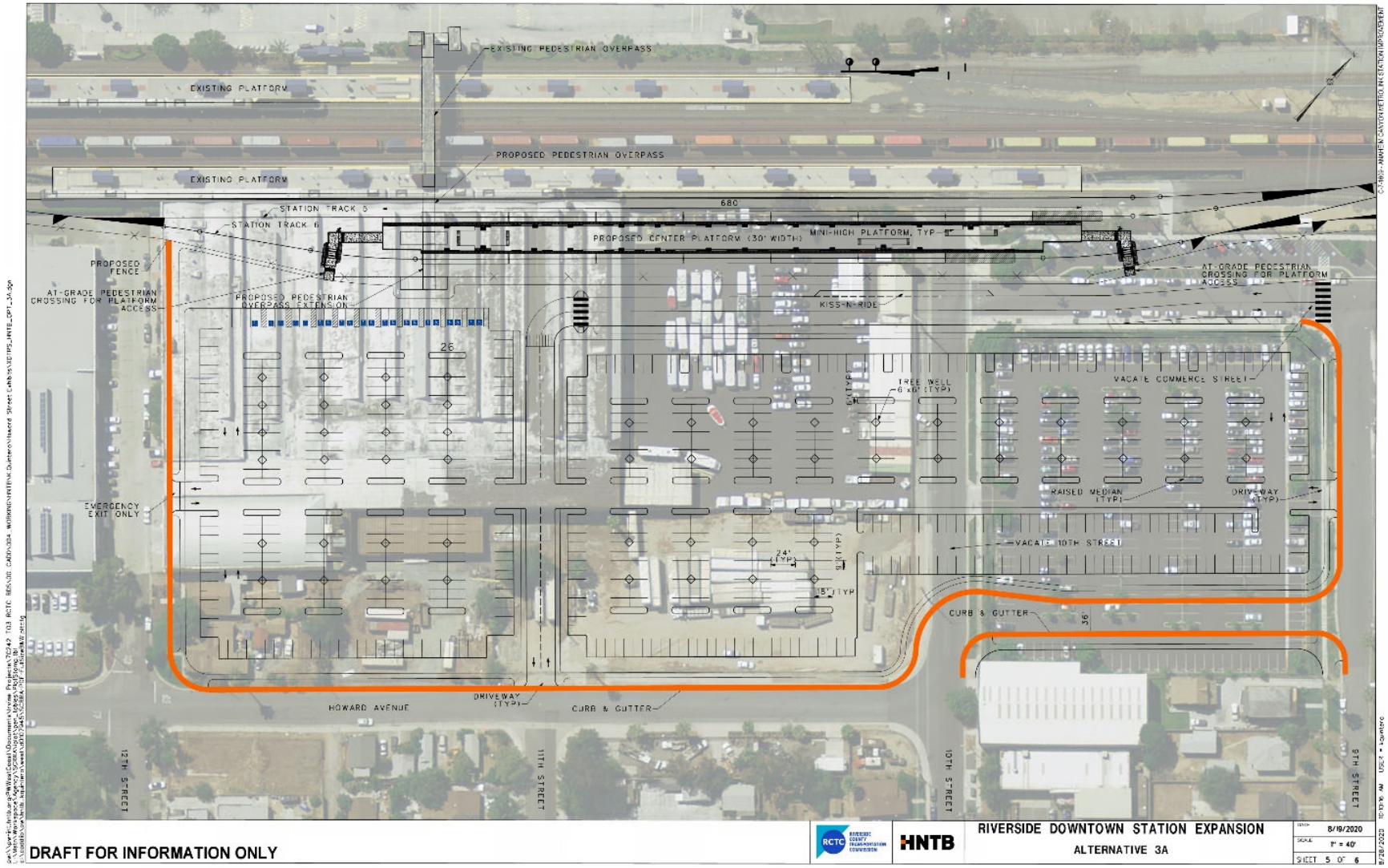

Figure 2-7. Build Alternative with Traffic Circulation and Parking Option 3A

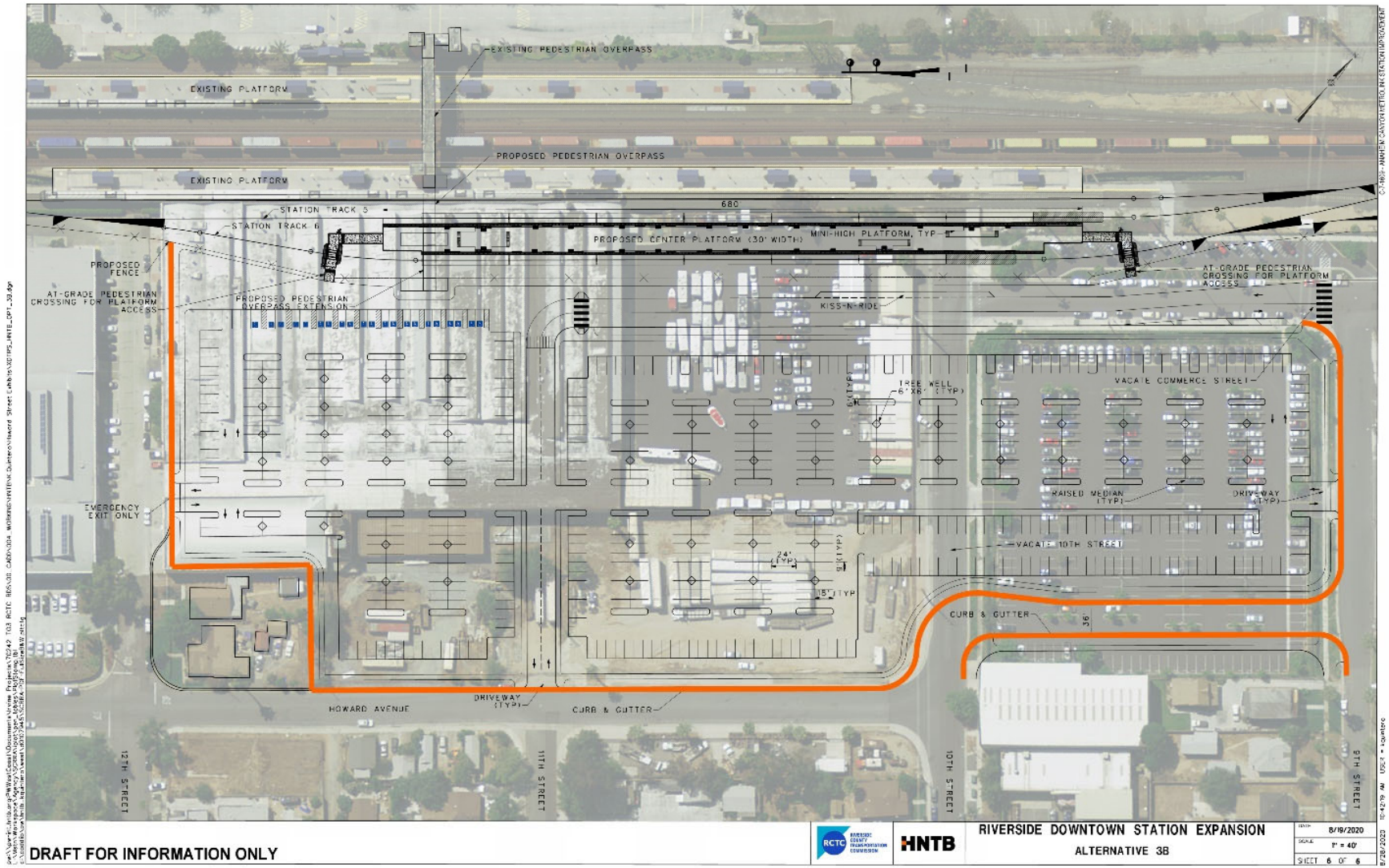

Figure 2-8. Build Alternative with Traffic Circulation and Parking Option 3B

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3.0 Regulatory Setting

3.1. Criteria Pollutants

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. In general, air pollutants include the following compounds:

- Ozone (O_3)
- Reactive organic gases (ROGs) or volatile organic compounds (VOCs)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Respirable particulate matter and fine particulate matter (PM_{10} and $PM_{2.5}$)
- Sulfur dioxide (SO_2)
- Lead (Pb)

The following specific descriptions of health effects for each of the air pollutants potentially associated with project construction and operation are based on information provided by the California Air Resources Board (CARB; 2021a) and the U.S. Environmental Protection Agency (USEPA; 2020a).

Ozone. Ozone is considered a photochemical oxidant, which is a chemical that is formed when VOCs and nitrogen oxides (NO_X), both by-products of fuel combustion, react in the presence of ultraviolet light. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to ozone.

Reactive Organic Gases. ROGs (also known as VOCs) are compounds composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of ROGs. Other sources of ROGs include evaporative emissions from paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. While ROGs can be a health concern outdoors, CARB regulates ROGs outdoors mainly because of their ability to create photochemical smog under certain conditions.

Carbon Monoxide. CO is a by-product of fuel combustion. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease and can also affect mental alertness and vision.

Nitrogen Dioxide. NO_2, a species of the aforementioned NO_X, is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO_2 is a respiratory irritant and may affect those with existing respiratory illness, including asthma. NO_2 can also increase the risk of respiratory illness.

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges have been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM_{10} and $PM_{2.5}$ arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust. PM_{10} and $PM_{2.5}$ can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. $PM_{2.5}$ is considered to have the potential to lodge deeper in the lungs. Particulate matter originating from diesel exhaust, diesel particulate matter, discussed in further detail below, is classified a carcinogen by CARB.

Sulfur dioxide. SO_2 is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil and by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate existing cardiovascular disease.

Lead. Lead in the atmosphere occurs as particulate matter. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead is also present in some aircraft and racing fuels. Lead has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen. Because emissions of lead are found only in specialty fuels and projects that are permitted by the local air district, lead is not an air quality of concern for the proposed project.

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are introduced above. Table 3-1 shows the federal and state ambient air quality standards for these pollutants.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988, and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant.

Table 3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[1]	Secondary[2]
O_3	1 Hour	0.09 ppm (180 µg/m^3)	–	–
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	Same as Primary
PM_{10}	24 Hour	50 µg/m^3	150 µg/m^3	Same as Primary
	AAM	20 µg/m^3	–	Same as Primary
$PM_{2.5}$	24 Hour	–	35 µg/m^3	Same as Primary
	AAM	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	1 Hour	0.18 ppm (339 µg/m^3)	0.100 ppm (188 µg/m^3)	–
	AAM	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as Primary
SO_2	1 Hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m^3)
	24 Hour	0.04 ppm (105 µg/m^3)	–	–
Lead	30-day Avg.	1.5 µg/m^3	–	–
	Calendar Quarter	–	1.5 µg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m^3	

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[1]	Secondary[2]
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)		

Source: CARB 2016

[1] National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[2] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

O_3: ozone; ppm: parts per million; µg/m^3: micrograms per cubic meter; PM_{10}: particulate matter with an aerodynamic diameter of 10 microns or less;

AAM: Annual Arithmetic Mean; $PM_{2.5}$: fine particulate matter; CO: carbon monoxide; mg/m^3: milligrams per cubic meter; NO_2 nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer; –: No Standard.

The project is located in Riverside County. Air quality in the non-desert portion of Riverside County is regulated by the South Coast Air Quality Management District (SCAQMD). As a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), County transportation commissions, and local governments and cooperates actively with all federal and state government agencies. The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMP).

On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (SCAQMD, CARB, SCAG, and USEPA). The 2016 AQMP represents a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The plan seeks to achieve multiple goals in partnership with other entities promoting reductions in criteria pollutant, greenhouse gases, and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The AQMP, in combination with those from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to CARB, which develops the California State

Implementation Plan (SIP). The SIP relies on the same information from SCAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The current federal and state attainment status for the South Coast Air Basin (SCAB) is presented in Table 3-2.

Table 3-2. South Coast Air Basin Attainment Status

Criteria Pollutant	Federal Designation	State Designation
O_3 (1-hour)	(No federal standard)	Nonattainment
O_3 (8-hour)	Extreme Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
PM_{10}	Attainment (Maintenance)	Nonattainment
$PM_{2.5}$	Serious Nonattainment	Nonattainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Attainment
Visibility	(No federal standard)	Attainment

Source: SCAQMD 2016

3.2. Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the criteria pollutants previously discussed because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM2.5 air quality problems. In addition, diesel soot causes visibility reduction (CARB 2021b).

Carcinogenic risks (i.e., cancer risks) are estimated as the incremental probability that an individual will develop cancer over his/her lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a probability (e.g., 10 in 1 million). A risk level of 1 in 1 million implies a likelihood that up to 1 person out of 1 million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the specific concentration over 30 years (the assumed residential exposure duration). This would be in addition to those cancer cases that would normally occur in an unexposed population of 1 million people (USEPA 2016). The Hazard Index (HI) expresses the potential for chemicals to result in non-cancer-related health impacts. HIs are expressed using decimal notation (e.g., 0.001). A calculated HI exposure of less than 1.0 will likely not result in adverse non-cancer-related health effects over a lifetime of exposure.

3.3. Greenhouse Gases

3.3.1. Climate Change Overview

Global climate change refers to changes in average climatic conditions on Earth including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by atmospheric gases. These gases are commonly referred to as GHGs because they function like a greenhouse by letting sunlight in but preventing heat from escaping, thus warming the Earth's atmosphere.

GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with: (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition.

The temperature record shows a decades-long trend of warming, with 2016 global surface temperatures ranking as the warmest year on record since 1880 and 2017 as the second warmest. The 2017 global average surface temperatures were 0.9 degrees Celsius warmer than the 1951 to 1980 mean temperature (National Aeronautics and Space Administration [NASA] 2018). GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century (Intergovernmental Panel on Climate Change [IPCC] 2013). The IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The statistical models show a "high confidence" that temperature increase caused by anthropogenic GHG emissions could be kept to less than two degrees Celsius relative to pre-industrial levels if atmospheric concentrations are stabilized at about 450 parts per million (ppm) carbon dioxide equivalent (CO_2e) by the year 2100 (IPCC 2014).

3.3.2. Types of Greenhouse Gases

The GHGs defined under California's Assembly Bill (AB) 32 include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Carbon dioxide. CO_2 is the most important and common anthropogenic GHG. CO_2 is an odorless, colorless GHG. Natural sources include the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic

outgassing. Anthropogenic sources of CO_2 include burning fuels, such as coal, oil, natural gas, and wood. Data from ice cores indicate that CO_2 concentrations remained steady prior to the current period for approximately 10,000 years. The atmospheric CO_2 concentration in 2010 was 390 ppm, 39 percent above the concentration at the start of the Industrial Revolution (about 280 ppm in 1750). In December 2020, the CO_2 concentration was 414 ppm, a 48 percent increase since 1750 (National Oceanic and Atmospheric Administration [NOAA] 2020).

Methane. CH_4 is the main component of natural gas used in homes. A natural source of methane is from the decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

Nitrous oxide. N_2O is produced by both natural and human-related sources. N_2O is emitted during agricultural and industrial activities, as well as during the combustion of fossil fuels and solid waste. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic (fatty) acid production, and nitric acid production.

Hydrofluorocarbons. Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface). Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the 1989 Montreal Protocol.

Sulfur Hexafluoride. SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semi-conductor manufacturing, and as a tracer gas for leak detection.

GHGs have long atmospheric lifetimes that range from one year to several thousand years. Long atmospheric lifetimes allow for GHG emissions to disperse around the globe. Because GHG emissions vary widely in the power of their climatic effects, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2. For example, because methane and N_2O are approximately 25 and 298 times more powerful than CO_2, respectively, in their ability to trap heat in the atmosphere, they have GWPs of 25 and 298, respectively (CO_2 has a GWP of 1). CO_2e is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e. The atmospheric lifetime and GWP of selected GHGs are summarized in Table 3-3.

Table 3-3. Global Warming Potentials and Atmospheric Lifetimes

Greenhouse Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-134a	14	1,430
PFC: Tetraflouromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

Source: IPCC 2007
HF: hydrofluorocarbon; PFC: perfluorocarbon

3.3.3. Federal Greenhouse Gas Regulations

Federal Clean Air Act

The U.S. Supreme Court ruled on April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency* that CO_2 is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate emissions of GHGs. The USEPA announced that GHGs (including CO_2, CH_4, N_2O, HFC, PFC, and SF_6) threaten the public health and welfare of the American people.

Federal Transit Administration Climate Considerations

The FTA has established a Climate Considerations program that includes resources on transit and climate change mitigation and adaptation. The FTA recognizes that public transportation can facilitate compact development, conserving land and decreasing travel demand, as well as reducing fuel use and GHG emissions that contribute to climate change. Included as part of the program is the FTA's *Greenhouse Gas Emissions for Transit Projects: Programmatic Assessment* (FTA 2017) that serves to (1) report on whether certain types of proposed transit projects merit detailed analysis of their GHG emissions at the project level and (2) be a source of data and analysis for FTA and its grantees to reference in future environmental documents for projects in which detailed, project-level GHG analysis is not vital. Additional resources include FTA's Transit Greenhouse Gas Emission Estimator spreadsheet (FTA 2016) and two reports (FTA 2014 and FTA 2011) related to potential future impacts of climate change on transit systems and adaptation strategies.

Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards

The USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) worked together on developing a national program of regulations to reduce GHG emissions and to improve fuel economy of light-duty vehicles. On April 1, 2010, the

USEPA and NHTSA announced a joint Final Rulemaking establishing standards for 2012 through 2016 model year vehicles. This was followed up on October 15, 2012, when the agencies issued a Final Rulemaking with standards for model years 2017 through 2025. On August 2, 2018, the agencies released a notice of proposed rulemaking—the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks. The purpose of the SAFE Vehicles Rule is "to correct the national automobile fuel economy and GHG emissions standards to give the American people greater access to safer, more affordable vehicles that are cleaner for the environment." The direct effect of the rule is to eliminate the standards that were put in place to gradually raise average fuel economy for passenger cars and light trucks under test conditions from 37 miles per gallon in 2020 to 50 miles per gallon in 2025. By contrast, the new SAFE Vehicles Rule freezes the average fuel economy level standards indefinitely at the 2020 levels. The new SAFE Vehicles Rule also results in the withdraw of the waiver previously provided to California for that State's GHG and zero emissions vehicle (ZEV) programs under section 209 of the CAA.

3.3.4. California Greenhouse Gas Regulations

California Code of Regulations, Title 24, Part 6

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest update to the Title 24 standards occurred in 2019 and went into effect on January 1, 2020. The Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include improvements for attics, walls, water heating, and lighting. The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach.

California Green Building Standards Code

The California Green Building Standards Code (CALGreen; CCR Title 24, Part 11) is a code with mandatory requirements for new residential and nonresidential buildings (including industrial buildings) throughout California. The code is Part 11 of the California Building Standards Code in Title 24 of the CCR (California Building Standards Commission 2019). The current 2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings went into effect on January 1, 2020.

The development of CALGreen is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the

Governor. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

CALGreen contains requirements for storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for the verification that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency.

Executive Order S-3-05

On June 1, 2005, Executive Order (EO) S-3-05 proclaimed that California is vulnerable to climate change impacts. It declared that increased temperatures could reduce snowpack in the Sierra Nevada, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To avoid or reduce climate change impacts, EO S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. EOs are not laws and can only provide the governor's direction to state agencies to act within their authority. Legislation is required to enact the goals of EO S-3-05 and establish a framework for statewide implementation. AB 32, described below, mandates the 2020 GHG reduction goals of EO S-3-05. The 2050 GHG reduction goal of EO S-3-05 has not been enacted by any legislation and remains only a goal of the EO.

Executive Order B-30-15

On April 29, 2015, EO B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28-nation European Union. California is on track to meet or exceed the target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the goal established by EO S-3-05 of reducing emissions 80 percent under 1990 levels by 2050. Senate Bill (SB) 32, described below, mandates the 2030 GHG reduction goals of EO B-30-15.

Assembly Bill 32 – Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006 (Assembly Bill 32 and Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599), widely known as AB 32, requires that the CARB develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. AB 32 enacts the goals of EO S-3-05.

Senate Bill 32

SB 32 (Amendments to the California Global Warming Solutions Action of 2006) extends California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety

Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EO B-30-15 of 80 percent below 1990 emissions levels by 2050.

Assembly Bill 197

A condition of approval for SB 32 was the passage of AB 197. AB 197 requires that CARB consider the social costs of GHG emissions and prioritize direct reductions in GHG emissions at mobile sources and large stationary sources. AB 197 also gives the California legislature more oversight over CARB through the addition of two legislatively appointed members to the CARB Board and the establishment a legislative committee to make recommendations about CARB programs to the legislature.

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

AB 1493 (Pavley) requires that CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." On September 24, 2009, CARB adopted amendments to the Pavley regulations that intend to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments bind California's enforcement of AB 1493 (starting in 2009), while providing vehicle manufacturers with new compliance flexibility. The amendments also prepare California to merge its rules with the federal Corporate Average Fuel Economy (CAFÉ) rules for passenger vehicles (CARB 2013). In January 2012, CARB approved a new emissions-control program for model years 2017 through 2025. However, as described previously, the adoption of the new SAFE Vehicles Rule results in the withdrawal of the waiver previously provided to California for that State's GHG and ZEV programs, freezing the average fuel economy level standards indefinitely at the 2020 levels.

Assembly Bill 75

AB 75 was passed in 1999 and mandates state agencies to develop and implement an integrated waste management plan to reduce GHG emissions related to solid waste disposal. In addition, the bill mandates that community service districts providing solid waste services report the disposal and diversion information to the appropriate city, county, or regional jurisdiction. The bill requires diversion of at least 50 percent of the solid waste from landfills and transformation facilities, and submission to the California Department of Resources Recycling and Recovery (CalRecycle; formerly known as California Integrated Waste Management Board) of an annual report describing the diversion rates.

Assembly Bill 341

The state legislature enacted AB 341 (California Public Resource Code Section 42649.2), increasing the diversion target to 75 percent statewide. AB 341 requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The final regulation was approved by the Office of Administrative Law on May 7, 2012 and went into effect on July 1, 2012.

Executive Order S-01-07

EO S-01-07, signed by Governor Schwarzenegger on January 18, 2007, directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by the year 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California and directs CARB to determine whether a LCFS can be adopted as a discrete early action measure pursuant to AB 32. CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in April 2010. Although challenged in 2011, the Ninth Circuit reversed the District Court's opinion and rejected arguments that implementing LCFS violates the interstate commerce clause in September 2013. CARB is therefore continuing to implement the LCFS statewide.

Senate Bill 350

Approved by Governor Brown on October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, and geothermal. In addition, large utilities are required to develop and submit Integrated Resource Plans to detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions, and increase the use of clean energy.

Senate Bill 100

Approved by Governor Brown on September 10, 2018, SB 100 increases the portion of California's electricity that must come from renewable sources from 50 percent (as mandated by SB 350) to 60 percent by 2030. The bill also establishes a goal of 100 percent of California's electricity sourced from renewable energy and other zero net GHG emissions resources (such as nuclear power) by 2045.

Senate Bill 97 – CEQA: Greenhouse Gas Emissions

SB 97 required the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including but not limited to, effects associated with transportation or energy consumption. The Resources Agency certified and adopted the guidelines on December 31, 2009. The OPR guidance states that the lead agency can rely on qualitative or other performance-based standards for estimating the significance of GHG emissions, although the new CEQA Guidelines did not establish a threshold of significance.

Senate Bill 375

SB 375 aligns regional transportation planning efforts, regional GHG reduction targets, and affordable housing allocations. Metropolitan Planning Organizations (MPOs) are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the MPOs' Regional Transportation Plan (RTP). Qualified projects consistent with an approved SCS or Alternative Planning Strategy categorized as "transit priority projects" would receive incentives to streamline CEQA processing.

California Air Resources Board: Climate Change Scoping Plan

In December 2008, CARB adopted its first version of its Climate Change Scoping Plan (Scoping Plan), which contained the main strategies California will implement to achieve the mandate of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

On December 14, 2017, CARB adopted the 2017 Climate Change Scoping Plan (2017 Scoping Plan), which lays out the framework for achieving the mandate of SB 32 (2016) to reduce statewide GHG emissions to at least 40 percent below 1990 levels by the end of 2030 (CARB 2017).

The 2017 Scoping Plan includes guidance to local governments in Chapter 5, including plan-level GHG emissions reduction goals and methods to reduce communitywide GHG emissions. In its guidance, CARB recommends that "local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals." CARB further states that "it is appropriate for local jurisdictions to derive evidence-based local per capita goals [or some other metric] that the local jurisdiction deems appropriate, such as mass emissions or per service population, based on local emissions sectors and population projections that are consistent with the framework used to develop the statewide per capita targets" (CARB 2017).

3.3.5. Local Greenhouse Gas Regulations

Southern California Association of Governments

SCAG, of which the City is a member agency, adopted the 2020-2045 RTP/SCS, also called Connect SoCal, in September 2020. The RTP/SCS is a State- and federally required long-range plan for regional transportation and land use that aims to achieve a more sustainable growth pattern. The RTP/SCS plans for more than $639 billion in transportation system investments through 2045. It is anticipated that implementation of the RTP/SCS would result in a 19 percent reduction in GHG emissions per capita by 2035, compared with 2005 levels (SCAG 2020).

County of Riverside Climate Action Plan

As part of the General Plan Air Quality Element, the County of Riverside adopted a Climate Action Plan (CAP) in 2015. The CAP "establishes goals and policies that incorporate environmental responsibility into its daily management of residential, commercial and industrial growth, education, energy and water use, air quality, transportation, waste, education, economic development and open space and natural habitats to further their commitment." The CAP identified an emissions reduction target for 2020.

The 2019 CAP Update was approved on December 17, 2019. The 2019 CAP Update refines the County's efforts to meet GHG reduction strategies, specifically for the years 2035 and 2050. The 2019 CAP Update builds upon the GHG reduction strategies in the 2015 CAP. The CAP

Update addresses cumulative GHG emissions, presents reduction measures that achieve reduction targets, and provides an implementation plan to implement the reduction measures (County of Riverside 2019).

4.0 Existing Conditions

4.1. Climate and Meteorology

The project site is in the SCAB, which consists of all or part of four counties: Los Angeles, San Bernardino, Riverside, and Orange. The distinctive climate of the SCAB is determined by its terrain and geographic location. The SCAB is a coastal plain with connecting broad valleys and low hills. It is bound by the Pacific Ocean to the southwest and high mountains around the rest of its perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light, average wind speeds.

The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore sea breezes. At night, the wind generally slows and reverses direction traveling toward the sea. Local canyons can also alter wind direction, with wind tending to flow parallel to the canyons. The vertical dispersion of air pollutants in the SCAB is hampered by the presence of persistent temperature inversions. High pressure systems, such as the semi-permanent high-pressure zone in which the SCAB is located, are characterized by an upper layer of dry air that warms as it descends, restricting the mobility of cooler marine-influenced air near the ground surface, and resulting in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog. The basin-wide occurrence of inversions at 3,500 feet above mean sea level or less averages 191 days per year (SCAQMD 1993).

The annual average maximum temperature as measured at the Riverside Fire Station 3 climatic station, approximately two miles southwest of the project site, is 79.5°F. The highest monthly average maximum temperature (94.4°F) occurs in August, and the lowest monthly average minimum temperature (39.1°F) occurs in January. The average annual precipitation is approximately 10 inches (Western Regional Climate Center 2016).

4.2. Existing Air Quality

4.2.1. Criteria Pollutants

Attainment Designations

Attainment designations are discussed in Section 3.1 and Table 3-2. The SCAB is a federal and state nonattainment area for ozone and $PM_{2.5}$. The SCAB is also a state nonattainment area for PM_{10}.

Monitored Air Quality

The SCAQMD maintains monitoring stations to measure ambient concentrations of pollutants in the SCAB. The nearest monitoring station to the project site is the Riverside-Rubidoux monitoring station, which is located approximately three miles northwest of the project site. The Riverside-Rubidoux station monitors ozone PM_{10}, $PM_{2.5}$, and NO_2. Table 4-1 presents a summary of the ambient pollutant concentrations monitored at the Riverside-Rubidoux air quality monitoring station during the last three years (2017 through 2019) for which the SCAQMD has reported data. The 1- and 8-hour ozone standards were exceeded numerous times in each of the sample years. The state PM_{10} standard and the federal $PM_{2.5}$ standard were also exceeded several times in each of the sample years.

Table 4-1. Air Quality Monitoring Data

Pollutant Standards	2017	2018	2019
Ozone (O_3)			
Maximum concentration 1-hour period (ppm)	0.145	0.123	0.123
Maximum concentration 8-hour period (ppm)	0.118	0.101	0.096
Days above 1-hour state standard (>0.09 ppm)	47	22	24
Days above 8-hour state/federal standard (>0.070 ppm)	81	53	59
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration (ppm)	0.0630	0.0554	0.0560
Days above state 1-hour standard (0.18 ppm)	0	0	0
Days above federal 1-hour standard (0.100 ppm)	0	0	0
Suspended Particulates (PM_{10})			
Maximum 24-hour concentration (µg/m^3)	137.6	126.0	182.4
Days above state standard (>50 µg/m^3)	98	127	110
Days above federal standard (>150 µg/m^3)	0	0	0
Suspended Particulates (PM2.5)			
Maximum 24-hour concentration (µg/m^3)	50.3	68.3	57.6
Days above federal standard (>35 µg/m^3)	7	3	5

Source: CARB 2020a
ppm: parts per million

* insufficient data available to determine the value.

4.2.2. Greenhouse Gases

For 2018, total GHG emissions worldwide were estimated at 47,525 million metric tons (MMT) CO_2e (World Resources Institute 2020). The U.S. contributed the second largest portion of GHG emissions (behind China) at 13 percent of global emissions, with 6,018 MMT CO_2e in 2018. On

a national level in 2018, approximately 28 percent of GHG emissions were associated with transportation and about 27 percent were associated with electricity generation (USEPA 2020b).

CARB performs statewide GHG inventories. The inventory is divided into six broad sectors: agriculture and forestry, commercial, electricity generation, industrial, residential, and transportation. Emissions are quantified in MMT CO_2e. Table 4-2 shows the estimated statewide GHG emissions for the years 1990, 2000, 2010, and 2018.

Table 4-2. California Greenhouse Gas Emissions by Sector (MMT CO_2e)

Sector	1990	2000	2010	2018
Agriculture and Forestry	23.4 (5%)	31.0 (7%)	34.7 (8%)	32.6 (8%)
Commercial	14.4 (3%)	14.1 (3%)	20.1 (4%)	23.9 (6%)
Electricity Generation	110.6 (26%)	105.3 (22%)	90.6 (20%)	63.2 (15%)
Industrial	103.0 (24%)	105.8 (22%)	101.8 (23%)	101.3 (24%)
Residential	29.7 (7%)	31.7 (7%)	32.1 (7%)	30.5 (6%)
Transportation	150.7 (35%)	183.2 (39%)	170.2 (38%)	174.3 (41%)
TOTAL	**433.3**	**471.7**	**448.1**	**425.3**

Source: CARB 2007 and CARB 2020b

As shown in Table 4-2, statewide GHG emissions totaled 433 MMT CO_2e in 1990, 472 MMT CO_2e in 2000, 448 MMT CO_2e in 2010, and 425 MMT CO_2e in 2018. Transportation-related emissions consistently contribute the most GHG emissions, followed by industrial emissions and electricity generation.

A Riverside County regional emissions inventory was prepared as part of the CAP Update. The 2017 emissions inventory for the unincorporated areas of Riverside County is duplicated below in Table 4-3. The unincorporated areas of Riverside County together emitted 4,905,518 MT CO_2e in 2017. The largest portion of Riverside County's 2017 emissions were from transportation (36 percent), followed by agriculture (34 percent), and electricity and natural gas use in buildings (24 percent).

Table 4-3. 2017 County-wide GHG Emissions by Source (MT CO_2e)

Emissions Category	2017
On-road Transportation	1,766,784
Agriculture	1,670,954
Energy (Electricity and Natural Gas)	1,188,138
Solid Waste	204,365
Water and Wastewater	44,606
Aviation	26,786
Off-road Sources	3,883
TOTAL	**4,905,518**

Source: County 2019

Similar to the statewide emissions, transportation-related GHG emissions contributed the most countywide.

5.0 Methodology and Significance Criteria

5.1. Methodology

5.1.1. Emissions Modeling Methodology and Assumptions

Construction period criteria pollutants were modeled for the Build Alternative with Circulation and Parking Design Option 1A (herein referred to as Design Option 1A) and for the Build Alternative with Circulation and Parking Design Option 2A (herein referred to as Design Option 2A). Based on impact footprint and amount of demolition required, these two Build Alternative parking design options are anticipated to require the most construction activity and thus generate the highest level of pollutants of the proposed parking design options. Therefore, if emissions associated with Design Option 1A and Design Option 2A are below significance thresholds, it is assumed that emissions associated with the other Circulation and Parking Design Options (Design Options 3A, 1B, 2B, and 3B) would be below significance thresholds as well.

Construction period criteria pollutant and GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod is a computer model used to estimate criteria air pollutant and GHG emissions resulting from construction and operation of land development projects throughout the state of California. CalEEMod was developed by the SCAQMD with the input of several air quality management and pollution control districts. The input data and subsequent emission estimates for the proposed project are discussed below. CalEEMod output files are included in Appendix A.

CalEEMod contains OFFROAD2011 emission factors and EMFAC2014 emission factors from CARB's models for off-road equipment and on-road vehicles, respectively. The construction analysis included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved. The model calculates emissions of criteria pollutants CO, PM_{10}, $PM_{2.5}$, SO_2; ozone precursors ROG and NO_X; and GHGs CO_2, CH_4, and N_2O.

Construction input data for CalEEMod include but are not limited to (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the project area. The analysis assessed maximum daily emissions from individual construction activities for Design Option 1A and Design Option 2A, including demolition, site preparation, grading, paving, track construction, bridge/platform construction, and architectural coating. The use of heavy equipment would be required during these various construction activities. The types of construction equipment and number of pieces of each type are expected to be the same for Design Option 1A and Design Option 2A. Equipment estimates are based on information provided by the project applicant and model defaults. Table 5-1 presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 5-1. Construction Equipment and Assumptions

Construction Phase	Equipment	Number
Demolition	Skid Steer Loader	2
	Bulldozer	1
	Excavator	2
	Wheel Loader	1
	Backhoe Loader	2
	Water Truck	1
Site Preparation	Skid Steer Loader	2
	Bulldozer	1
	Excavator	2
	Wheel Loader	1
	Backhoe Loader	2
	Water Truck	1
Grading	Skid Steer Loader	2
	Bulldozer	1
	Grader	1
	Excavator	2
	Wheel Loader	1
	Backhoe Loader	2
	Water Truck	1
	Dump Truck	4
Paving	Paver	2
	Paving Equipment	2
	Roller	2
Track Construction	Crane	2
	Excavator	1
	Grader	1
	Roller	1
	Tractor/Loader/Backhoe	2

Construction Phase	Equipment	Number
Bridge/Platform Construction	Crane	1
	Forklift	3
	Generator Set	3
	Tractor/Loader/Backhoe	3
	Welder	1

The construction durations for Design Option 1A and Design Option 2A were based on information provided by RCTC and are shown in Table 5-2. Project construction is anticipated to begin in 2023 and be complete in 2025. However, to provide a conservative analysis as related to air pollutant emissions, modeling assumed construction to begin in spring 2022 and be complete summer 2024. Assuming an earlier construction schedule in the model is conservative because if construction is delayed or occurs over a longer time period, emissions would be reduced due to (1) a more modern and cleaner-burning construction equipment fleet mix than incorporated in the model, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

Table 5-2. Anticipated Construction Durations

Construction Phase	Number of Working Days
Design Option 1A	
Demolition	23
Site Preparation	21
Grading	22
Paving	22
Track Construction	66
Bridge/Platform Construction	445
Architectural Coating	10
Design Option 2A	
Demolition	27
Site Preparation	25
Grading	26
Paving	26
Track Construction	66
Bridge/Platform Construction	445
Architectural Coating	14

Construction of Design Option 1A is anticipated to require the export of 1,000 cubic yards (CY) of vegetation/debris during site preparation and 6,000 CY of material during demolition. Design Option 2A is anticipated to require the export of 1,200 CY of vegetation/debris during site preparation and 6,940 CY during demolition. Both design options are expected to involve the import of 5,100 SF of aggregate/sleepers/rails during track construction.

The quantity, duration, and the intensity of construction activity influence the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. A complete listing of the assumptions used in the analysis and model output is provided in Appendix A of this report.

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Emissions calculations assume application of water during grading and a 15-miles per hour (mph) speed limit on unpaved surfaces in compliance with SCAQMD Rule 403, Fugitive Dust. Based on CalEEMod, Version 2016.3.2, the control efficiency for watering two times per day is 55 percent. In addition, emissions calculations assume the use of low VOC interior and exterior coatings per SCAQMD Rule 1113.

CalEEMod estimates construction emissions for each year of construction activity based on the annual construction equipment profile and other factors determined as needed to complete all phases of construction by the target completion year. As such, each year of construction activity has varying quantities of GHG emissions. Per County Guidance, total construction GHG emissions resulting from the project are amortized over 30 years and added to operational GHG emissions.

5.1.2. Localized Significance Threshold Methodology

As part of the SCAQMD's environmental justice program, more attention has been focused on localized air quality effects. In addition to the CEQA significance thresholds for mass daily emissions and regional conditions, the SCAQMD has established thresholds for ambient air quality (see Table 5-3) to address localized impacts. Also, while regional impact analysis is based on attaining or maintaining regional emissions standards, localized impact analysis compares the concentration of a pollutant at a receptor site to a health-based standard.

SCAQMD staff then developed localized significance threshold (LST) methodology and mass rate look-up tables by source receptor area (SRA) that can be used by public agencies to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard; they are developed based on the ambient concentrations of that pollutant for each SRA (SCAQMD 2009). The LST methodology translates the concentration standards into emissions thresholds that are a function of project site area, source to receptor distance, and the location within the SCAB. The LST methodology is recommended to be limited to projects of five acres or less and to avoid the need for complex dispersion modeling. For projects that exceed five acres, such as the proposed project, the five-acre LST look-up values can be used as a screening tool to

determine which pollutants require detailed analysis (Sun 2017). This approach is conservative as it assumes that all on-site emissions would occur within a five-acre area and over-predicts potential localized impacts (i.e., more pollutant emissions occurring within a smaller area and within closer proximity to potential sensitive receptors). If a project exceeds the LST look up values, then the SCAQMD recommends that project-specific localized air quality modeling be performed.

For construction emissions, the LST look-up values are determined using the maximum area disturbed per day (1, 2, or 5 acres) rather than the size of the project site. The maximum area disturbed per day was determined for the project's construction phase(s) resulting in the maximum pollutant emissions in accordance with the methodology in the SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* (SCAQMD 2020), which provides the maximum number of acres disturbed per day for the use of crawler tractors, graders, rubber tired dozers, and scrapers. Maximum daily on-site emissions of NO_X and CO occur during the grading phase and maximum daily on-site emissions of PM_{10} and $PM_{2.5}$ occur during the site preparation phase. The maximum area disturbed per day during the grading phase was calculated using the total daily use of 4 hours for one rubber tired dozer and 8 hours for one grader, resulting in a maximum area disturbed per day during the grading phase of 0.75 acre. The maximum area disturbed per day during the site preparation phase was calculated using the total use of 8 hours for one rubber tired dozer, resulting in a maximum area disturbed per day during the site preparation phase of 0.5 acre. Therefore, the LST values for allowable emissions for a 1-acre site during construction were used.

The project site is located within SRA 23, Metropolitan Riverside County. The closest off-site sensitive receptors to the project are the single-family residences located between 9th Street and 10th Street that would be directly adjacent to the project's construction activities under Design Options 2A, 2B, 3A, and 3B. The closest receptor distance on the mass rate LST look-up tables is 25 meters (82 feet). According to the SCAQMD's *Final Localized Significance Threshold Methodology,* projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (SCAQMD 2008). Therefore, the LSTs used herein are based on SRA 23, Metropolitan Riverside County, receptors located within 25 meters, and a disturbance area of 1 acre.

5.2. Significance Criteria

5.2.1. Air Quality

The following significance thresholds are based on Appendix G of the state CEQA Guidelines. A significant impact is identified if the project would result in any of the following:

1. Conflict with or obstruct implementation of the applicable air quality plan;

2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;

3. Expose sensitive receptors to substantial pollutant concentrations;

4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the State CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. The SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions. The significance thresholds are updated, as needed, to appropriately represent the most current technical information and attainment status in the SCAB. Table 5-3 presents the most current significance thresholds, including regional daily thresholds for short-term construction and long-term operational emissions; maximum incremental cancer risk and hazard indices for TACs; and maximum ambient concentrations for exposure of sensitive receptors to localized pollutants. If the project's criteria pollutant and precursor emissions are below the SCAQMD daily regional thresholds, the project would not result in a cumulatively considerable net increase of any criteria pollutant, contribute substantially to a project air quality violation, or have an adverse effect on human health. If the project's emissions of criteria pollutants, precursors, and TACs result in localized concentrations and/or risk values below the SCAQMD thresholds, the project's impacts to sensitive receptors would be less than significant.

Table 5-3. SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds (pounds per day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NO_X	100	55
CO	550	550
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
Lead	3	3
Toxic Air Contaminants		
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Ambient Air Quality for Criteria Pollutants		
NO_2	1-hour average ≥ 0.18 ppm Annual average ≥ 0.03 ppm	
CO	1-hour average ≥ 20.0 ppm (state) 8-hour average ≥ 9.0 ppm (state/federal)	
PM_{10}	24-hour average ≥ 10.4 µg/m^3 (construction) 24-hour average ≥ 2.5 µg/m^3 (operation) Annual average ≥ 1.0 µg/m^3	
$PM_{2.5}$	24-hour average ≥ 10.4 µg/m^3 (construction) 24-hour average ≥ 2.5 µg/m^3 (operation)	

Mass Daily Thresholds (pounds per day)	
SO_2	1-hour average ≥ 0.075 ppm 24-hour average ≥ 0.04 ppm

Source: SCAQMD 2015
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM_{10}: respirable particulate matter with a diameter of 10 microns or less; $PM_{2.5}$: fine particulate matter with a diameter of 2.5 microns or less; SO_X: sulfur oxides; TACs: toxic air contaminants; GHG: greenhouse gas emissions; MT/yr: metric tons per year; CO_2e: carbon dioxide equivalent; NO_2: nitrogen dioxide; ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter.

5.2.2. Greenhouse Gases

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Thus, the potential for a significant GHG impact is limited to cumulative impacts.

According to Appendix G of the CEQA Guidelines, a project would have a significant environmental impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The County of Riverside's CAP Update establishes a screening level threshold of 3,000 MT CO_2e per year for development projects. County guidance also recommends including construction emissions (amortized over a typical duration of 30 years) in the comparison to the screening threshold. For projects that exceed this screening level, compliance with the CAP Screening Tables or a reduction of 25 percent over the business-as-usual scenario must be demonstrated.

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6.0 Air Quality Impact Analysis

This section evaluates potential direct impacts of the proposed project related to air pollutant emissions. Project-level emissions modeling was completed for project construction as part of this analysis. Complete modeling results are included as Appendix A to this report.

6.1. Consistency with Air Quality Plans

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, economy, community development, and environment. With regard to air quality planning, SCAG has prepared the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a long-range transportation plan that uses growth forecasts to project trends out over a 20-year period to identify regional transportation strategies to address mobility needs. These growth forecasts form the basis for the land use and transportation control portions of the AQMP. These documents are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. Both the RTP/SCS and AQMP are based, in part, on projections originating with County and City General Plans.[2]

The two principal criteria for determining conformance to the AQMP are:

1. Whether the project would result in an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards; and

2. Whether the project would result in population or employment growth that exceeds the assumptions in the AQMP.

With respect to the first criterion, the analyses presented in Sections 6.2 and 6.3, below, demonstrate that the project would not generate short-term or long-term emissions that could potentially cause an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards. With respect to the second criterion, the purpose of the project is to build an additional passenger loading platform and tracks to improve Metrolink service, extend the existing pedestrian bridge to have additional elevator and stair access, and provide additional parking. The improvements would serve to maintain and increase ridership of the existing and future populations but would not cause or result in population growth. In addition, jobs associated with construction and operation of the project would likely be filled by the local labor pool and the project would not create conditions for employment growth that exceeds growth estimates for the area. Based on these considerations, the project would not exceed the projections of the RTP/SCS and AQMP. Therefore, the project would not obstruct implementation of the AQMP, and the impact would be less than significant.

[2] SCAG serves as the federally designated metropolitan planning organization for the Southern California region.

6.2. Cumulatively Considerable Net Increase for Nonattainment Criteria Pollutants

6.2.1. Construction Emissions

Project construction would result in temporary increases in air pollutant emissions. These emissions would be generated in the form of fugitive dust emissions (PM_{10} and $PM_{2.5}$) and ozone precursor emissions (NO_X and VOCs). Operation of heavy equipment and vehicles during the construction phases would generate exhaust emissions from fuel combustion. Fugitive dust emissions would be generated from earth disturbance during site grading, as well as from construction vehicles operating on dirt roadways within or adjacent to construction sites.

In analyzing cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SCAB is listed as nonattainment for the CAAQS and the NAAQS. The SCAB has been designated as a federal nonattainment area for ozone and $PM_{2.5}$, and a State nonattainment area for ozone, PM_{10}, and $PM_{2.5}$. Since few sources emit ozone directly, and ozone is caused by complex chemical reactions, control of ozone is accomplished by the control of emissions of NO_X and ROGs. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development within the air basin. Thus, this regional impact is a cumulative impact, and projects would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of the regional air quality standards. Consequently, if a project's emissions do not exceed identified significance thresholds, its emissions would not result in a cumulatively considerable contribution to the significant cumulative impact.

To determine whether the project's emissions would result a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, contribute substantially to a projected air quality violation, or have an adverse effect on human health, the project's emissions were evaluated based on the quantitative emission thresholds established by the SCAQMD (as shown in Table 5-3). The project's emissions associated with construction of Design Option 1A and Design Option 2A were estimated using CalEEMod as described in Section 5.1.1. As discussed therein, these two design options are anticipated to require the most construction activity and thus generate the highest level of pollutant emissions of the proposed design options; therefore, if emissions associated with Design Option 1A and Design Option 2A are below significance thresholds, it is assumed that emissions associated with the other proposed design options would be below significance thresholds as well. Project-specific inputs were based on information included in Sections 2.0 and 5.0, information provided by the project applicant, and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix A.

Table 6-1 and Table 6-2 present the results of the emissions calculations for construction of the project's Design Option 1A and Design Option 2A, respectively. The data are presented as the maximum anticipated daily emissions for comparison with the thresholds previously identified in Table 5-3.

Table 6-1. Design Option 1A Maximum Daily Construction Emissions

Construction Phase	Pollutant Emissions (pounds/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	2	25	20	<0.5	4	1
Site Preparation	2	24	22	<0.5	4	3
Grading	5	42	37	<0.5	4	2
Paving	2	15	16	<0.5	1	1
Track Construction	2	22	16	<0.5	2	1
Bridge/Platform Construction	3	29	32	<0.5	4	2
Architectural Coating	12	1	3	<0.5	<0.5	<0.5
Maximum Daily Emissions	**12**	**42**	**37**	**<0.5**	**4**	**3**
Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix A)
ROG = reactive organic gas; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Table 6-2. Design Option 2A Maximum Daily Construction Emissions

Construction Phase	Pollutant Emissions (pounds/day)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition	3	28	22	<0.5	4	2
Site Preparation	2	24	22	<0.5	4	3
Grading	5	42	37	<0.5	4	2
Paving	2	15	16	<0.5	1	1
Track Construction	2	22	16	<0.5	2	1
Bridge/Platform Construction	3	29	32	<0.5	4	2
Architectural Coating	13	1	3	<0.5	<0.5	<0.5
Maximum Daily Emissions	**13**	**42**	**37**	**<0.5**	**4**	**3**
Significance Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix A)
ROG = reactive organic gas; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 6-1 and Table 6-2, emissions from project construction would not exceed the SCAQMD daily thresholds; therefore, construction of the project would not result in a cumulatively considerable increase of $PM_{2.5}$, PM_{10}, or exceed quantitative thresholds for ozone precursors (i.e., NO_X and VOCs), contribute substantially to a projected air quality violation, or have an adverse effect on human health. Impacts associated with a cumulatively considerable increase in criteria pollutants during project construction would be less than significant.

6.2.2. Operational Emissions

Operation of the proposed project would result in criteria pollutant emissions from mobile (vehicular) sources and area sources. Mobile sources would be associated with the increased number of vehicle trips to and from the station due to planned increased transit ridership and would primarily result in emissions of NO_X and CO. Area sources would be associated with reapplications of architectural coatings on building and parking surfaces and would result in emissions of ROGs. Overall, however, the project would result in a net decrease in emissions compared to existing conditions. The purpose of the project is to provide station improvements to enhance Metrolink service and increase transit ridership. Increased ridership would result in a reduction in regional vehicle miles traveled (VMT) and associated criteria pollutant emissions. The project would not result in an increase in the number of train trips or associated emissions. Between the Build Alternative and No Project Alternative, the same number of train trips would occur for existing and future conditions. While the project would result in increased vehicle trips to and from the station, these trips would generally be of short distances and the VMT for these trips would be offset by the use of transit. The occasional reapplication of architectural coating would result in minimal emissions. As such, operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. Impacts would be less than significant.

6.3. Impacts to Sensitive Receptors

6.3.1. Construction

Criteria Pollutants

The localized effects from the on-site portion of daily construction emissions were evaluated at sensitive receptor locations potentially impacted by the project according to the SCAQMD's LST method, described above in Section 5.1.2. Consistent with the LST guidelines, when quantifying mass emissions for localized analysis, only emissions that occur on-site are considered. Emissions related to off-site delivery/haul truck activity and construction worker trips are not considered in the evaluation of construction-related localized impacts, as these do not contribute to emissions generated on a project site. As detailed in Section 5.1.2, the LSTs being applied to the project are based on SRA 23, Metropolitan Riverside County, receptors located within 25 meters, and a disturbed area of 1 acre.

Table 6-3 and Table 6-4 present the results of the localized emissions calculations for Design Option 1A and Design Option 2A, respectively.

Table 6-3. Design Option 1A Maximum Daily Localized Construction Emissions

Construction Phase	Pollutant Emissions (pounds/day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition	20	19	3	1
Site Preparation	23	21	4	2
Grading	42	36	3	2
Paving	11	15	1	1
Track Construction	21	15	1	1
Bridge/Platform Construction	23	25	1	1
Architectural Coating	1	2	<0.5	<0.5
Maximum Daily Emissions	**42**	**36**	**4***	**2**
Localized Significance Thresholds	*118*	*602*	*4*	*3*
Significant Impact?	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix A)
* The total presented is the rounded value. The unrounded value of 3.7 pounds/day is below the localized significance threshold of 4 pounds/day.
ROG = reactive organic gas; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Table 6-4. Design Option 2A Maximum Daily Localized Construction Emissions

Construction Phase	Pollutant Emissions (pounds/day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition	23	21	4	1
Site Preparation	23	21	4	2
Grading	42	36	3	2
Paving	11	15	1	1
Track Construction	21	15	1	1
Bridge/Platform Construction	21	25	1	1
Architectural Coating	1	2	<0.5	<0.5

Construction Phase	Pollutant Emissions (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**42**	**36**	**4***	**2**
Localized Significance Thresholds	*118*	*602*	*4*	*3*
Significant Impact?	***No***	***No***	***No***	***No***

Source: CalEEMod (output data is provided in Appendix A)
The total presented is the rounded value. The unrounded value of 3.7 pounds/day is below the localized significance threshold of 4 pounds/day.
ROG = reactive organic gas; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter 10 microns or less in diameter; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

As shown in Table 6-3 and Table 6-4, emissions from project construction would not exceed the applicable LSTs; therefore, the project's construction criteria pollutant emissions would result in a less than significant impact to sensitive receptors.

Toxic Air Contaminants

The greatest potential for TAC emissions during construction would be related to DPM associated with heavy equipment operations during earth-moving activities. The SCAQMD does not consider diesel-related cancer risks from construction equipment to be an issue due to the short-term nature of construction activities. Construction activities associated with the proposed project would be sporadic, transitory, and short term in nature (less than two and a half years). The assessment of cancer risk is typically based on a 30-year exposure duration. Because exposure to diesel exhaust would be well below 30-years, construction of the proposed project is not anticipated to result in an elevated cancer risk to exposed persons due to the short-term nature of construction. As such, project-related TAC emission impacts during construction would be less than significant.

6.3.2. Operations

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. If a project increases average delay at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the project to operate at LOS E or F with the project, a quantitative screening is required.

According to the Traffic Impact Analysis prepared for the project (HNTB 2020), two intersections under the Build-out (2045) with project scenario, Vine Street at Mission Inn Avenue and Commerce Street and Mission Inn Avenue, would operate at LOS F during the PM peak hour and experience an increase in delay from the project. Therefore, consistent with the CO Protocol, these findings indicate that further screening is required. Although the SCAQMD has not, various air quality agencies in California have developed conservative screening methods. The screening methods of the Sacramento Metropolitan Air Quality Management District

(SMAQMD) are used for this project because ambient CO concentrations within the SMAQMD jurisdiction are higher than for the project area, as measured by CARB, resulting in a more conservative analysis. The SMAQMD states that a project would not result in a significant impact to local CO concentrations if it meets all of the below criteria:

- The affected intersection carries less than 31,600 vehicles per hour;
- The project does not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other location where horizontal or vertical mixing of air would be substantially limited; and
- The affected intersection, which includes a mix of vehicle types, is not anticipated to be substantially different from the county average, as identified by EMFAC or CalEEMod models.

The traffic volumes at the affected intersections under the highest traffic scenario from the Traffic Impact Analysis (Build-out [2045] with Project) are estimated to be 1,846 vehicles at Vine Street and Mission Inn Avenue during the PM peak hour and 1,277 vehicles at Commerce Street and Mission Inn Avenue during the PM peak hour.

These intersections are not located in a tunnel, urban canyon, or similar area that would limit the mixing of air, nor is the vehicle mix anticipated to be substantially different than Riverside average. There would be no potential for a CO hot spot or exceedance of State or Federal CO ambient air quality standard because the maximum traffic volumes would be substantially less than the 31,600 vehicles per hour screening level; because the congested intersections are located where mixing of air would not be limited; and because the vehicle mix would not be uncommon. Therefore, air quality impacts related to the exposure of sensitive receptors to substantial pollutant concentrations related to CO hotspots would be less than significant.

Toxic Air Contaminants

Operation of the project would result in an increase in on-road vehicle trips to the station which would result in some emissions of DPM; however, the project would not result in increased regular use of heavy or medium diesel-powered trucks. While some passenger vehicles traveling to and from the project site may be diesel-powered and emit DPM, most vehicles would be light-duty autos and trucks that are gasoline-powered and not emit DPM. The project would therefore not result in significant localized concentrations of DPM from on-road vehicles. Further, the project would not directly result in an increase in rail traffic and would therefore not generate an increase in DPM associated with diesel-powered trains. As a transit station improvements project, the project is not anticipated to generate other long-term operational TACs. As such, operation of the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

6.4. Other Emissions (Odors)

6.4.1. Construction

The Air Quality Section of the Riverside County General Plan Update Environmental Impact Report (EIR; County 2015) provides guidance for defining objectionable odors and “substantial numbers of people”. For construction activities, the EIR determined that a substantial number of

people would not be impacted, as construction odors are limited to the number of people living and working near the source. Odor detection would depend on several variables, including the prevailing wind direction and speed, the level of construction activity occurring at a given time, the location/proximity of the activity with respect to potential receptor properties, and the presence of receptors at the properties when the activities are occurring. There are residential properties located adjacent to the project site along 9th Street and across Howard Avenue at which odors associated with asphalt and diesel emissions could be detectable; however, the number of residential properties anticipated to be affected is limited to between approximately 12 and 20, depending on which Design Option is constructed. In addition, odors would likely only be detectable at these properties when construction activities are occurring within the portion of the project site immediately adjacent to the residential properties, as odorous emissions disperse rapidly with distance from their source. As such, project construction would not emit odors in a manner that would affect a substantial number of people. Odor impacts from construction would be less than significant.

6.4.2. Operations

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The proposed project, which involves improvements to an existing transit station, does not include these sources or other sources capable of generating substantial odors. Solid waste associated with operation of the project would be collected by a contracted waste hauler, ensuring that any odors resulting from on-site waste would be managed and collected in a manner to prevent the proliferation of odors. Operational odor impacts would be less than significant.

7.0 Greenhouse Gas Emissions Impact Analysis

This section evaluates potential direct impacts of the proposed project related to GHG emissions. Project-level emissions modeling was completed for project construction as part of this analysis. Complete modeling results are included as Appendix A to this report.

7.1. Greenhouse Gas Emissions

7.1.1. Construction

Project construction GHG emissions were estimated using CalEEMod as described in Section 4.1.1. Project-specific inputs were based on information included in Sections 2.0 and 5.0, information provided by the project applicant, and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix A.

Emissions of GHGs during project construction would be temporary. As shown in Table 7-1 and Table 7-2, total GHG emissions associated with construction of Design Option 1A are estimated at 1,832 MT CO_2e and emissions associated with construction of Design Option 2A are estimated at 1,872 MT CO_2e. For construction emissions, SCAQMD and County guidance recommend that the emissions be amortized (i.e., averaged) over 30 years and added to operational emissions. Averaged over 30 years, the proposed construction activities would contribute approximately 61 MT CO_2e emissions per year for Design Option 1A and 62 MT CO_2e per year for Design Option 2A.

Table 7-1. Design Option 1A Estimated Construction GHG Emissions

Construction Phase	Emissions (MT CO_2e)
Demolition	66
Site Preparation	46
Grading	105
Paving	38
Track Construction	122
Bridge/Platform Construction	1,453
Architectural Coating	3
TOTAL[1]	1,832
Amortized Construction Emissions[2]	61

Source: CalEEMod (output data is provided in Appendix A)

[1] Total presented is the sum of the unrounded values.

[2] Construction emissions are amortized over 30 years in accordance with SCAQMD and County guidance.

Table 7-2. Design Option 2A Estimated Construction GHG Emissions

Construction Phase	Emissions (MT CO_2e)
Demolition	70
Site Preparation	54
Grading	124
Paving	48
Track Construction	122
Bridge/Platform Construction	1,452
Architectural Coating	4
TOTAL[1]	1,872
Amortized Construction Emissions[2]	61

Source: CalEEMod (output data is provided in Appendix A)

[1] Total presented is the sum of the unrounded values.

[2] Construction emissions are amortized over 30 years in accordance with SCAQMD and County guidance.

7.1.2. Operations

Operation of the proposed project would result in GHG emissions primarily from mobile (vehicular) sources and on-site energy use. Mobile sources would be associated with the increased number of vehicle trips to and from the station due to increased transit ridership. Energy usage would be associated with lighting provided at the station and the parking lot. Overall, however, the project would result in a net decrease in emissions compared to existing conditions. The purpose of the project is to provide station improvements to enhance Metrolink service and increase transit ridership. Increased ridership would result in a reduction in regional VMT and associated GHG emissions. The project would not result in an increase in the number of train trips or associated emissions. Between the Build Alternative and No Project Alternative, the same number of train trips would occur for existing and future conditions. While the project would result in increased vehicle trips to and from the station, these trips would generally be of short distances and the VMT for these trips would be offset by the use of transit. As such, operation of the project, with the consideration of amortized construction emissions, would not result in an increase in GHG emissions that would exceed the 3,000-MT threshold or have a significant effect on the environment. Impacts would be less than significant.

7.2. Consistency with Local Plans Adopted for the Purpose of Reducing GHG Emissions

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32 and SB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 was to reduce GHG emissions to 1990 levels by 2020. SB 32 requires further reductions of 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. Statewide plans and regulations are being implemented at the statewide level, and compliance on a project-specific level is not addressed; however, as previously discussed, the County CAP Update applies a screening threshold of 3,000 MT CO_2e per year to comply with the reduction goals of AB 32 and SB 32. The proposed project's increase in GHG emissions would be less than the County's screening threshold; therefore, the project would be consistent with the County CAP Update as well as AB 32 and SB 32.

Further, the proposed project would provide transit station improvements to enhance Metrolink service and increase transit ridership. Increased ridership would result in a reduction in regional VMT and associated GHG emissions. This would directly contribute to the goals of the FTA's Climate Considerations program and SCAG's RTP/SCS, which are focused on increasing transit use and thereby decreasing transportation-related GHG emissions. The FTA's *Greenhouse Gas Emissions for Transit Projects: Programmatic Assessment* (FTA 2017) indicates that commuter rail projects with a high ratio of displaced VMT to transit VMT are expected to result in low or net reductions in GHG emissions. While the project would result in increased vehicle trips to and from the station, these trips would generally be of short distances and would not generate substantial VMT. The VMT from these trips would be offset by the anticipated increase in transit ridership (and subsequent overall displacement in regional VMT) that would result from the project expanding platform capacity, improving transit connectivity and accessibility, facilitating more efficient passenger flow and reducing dwell times, enhancing safety and access for station users, and accommodating projected future demand. Therefore, implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This would represent a less than significant impact.

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8.0 Transportation Conformity

Transportation conformity is required by the Clean Air Act section 176(c) (42 U.S.C. 7506(c)) to ensure that federal funding and approval are given to highway and transit projects that are consistent with ("conform to") the air quality goals established by the SIP. Conformity, to the purpose of the SIP, means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards. As described previously, the FTA will be providing federal financial assistance, therefore, a determination must be made as to whether the project conforms to the SIP.

The project was included in SCAG's conforming 2019 Federal Transportation Improvement Program (FTIP) as Project ID RIV141203 (SCAG 2018; Appendix B). The project's design concept and scope have not changed significantly from what was included in SCAG's regional emission analysis. This analysis found that the plan, which takes into account regionally significant projects and financial constraint, will conform to the SIP for attaining and maintaining the NAAQS as provided in Section 176(c) of the Clean Air Act. FHWA determined that the FTIP conforms to the SIP on December 17, 2018.

Furthermore, as detailed in the 2019 FTIP project list, RIV141203 was found to be exempt from all project-level conformity requirements per Title 40, Code of Federal Regulations Section 93.126. Therefore, all air quality conformity requirements have been met.

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9.0 Avoidance and Minimization Measures

The following avoidance and minimization measures would be implemented during project construction:

- Implement standard dust control measures in accordance with SCAQMD Rule 403, including:
  - Application of water two times per day during grading
  - Limiting vehicle speeds to 15 mph on unpaved surfaces
- Use of low VOC interior and exterior coatings in accordance with SCAQMD Rule 1113.

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Appendix A. CalEEMod Outputs

HNT-10.01 Riverside-Downtown Station Improvements Option 1A

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	351.80	1000sqft	8.08	351,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 1A, Run R3.
Construction modeling only.
R-2: Adjusted land uses per revised info from project engineers.
R-3: Corrected grading phase off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
204 loads of asphalt/concrete during paving
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,000 CY esitmated construction debris = 6,000 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,000 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	23474	7110
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	230.00	445.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	408.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3025	2.8691	2.5739	6.6000e-003	0.2906	0.1144	0.4050	0.0939	0.1066	0.2005	0.0000	588.4409	588.4409	0.1263	0.0000	591.5993
2023	0.3929	3.3186	3.9042	9.5000e-003	0.2906	0.1325	0.4231	0.0784	0.1265	0.2049	0.0000	846.6738	846.6738	0.1001	0.0000	849.1773
2024	0.2335	1.4533	1.7905	4.3800e-003	0.1359	0.0539	0.1898	0.0367	0.0514	0.0881	0.0000	390.1139	390.1139	0.0456	0.0000	391.2545
Maximum	**0.3929**	**3.3186**	**3.9042**	**9.5000e-003**	**0.2906**	**0.1325**	**0.4231**	**0.0939**	**0.1265**	**0.2049**	**0.0000**	**846.6738**	**846.6738**	**0.1263**	**0.0000**	**849.1773**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3025	2.8691	2.5739	6.6000e-003	0.1891	0.1144	0.3035	0.0580	0.1066	0.1646	0.0000	588.4404	588.4404	0.1263	0.0000	591.5988
2023	0.3929	3.3186	3.9042	9.5000e-003	0.2906	0.1325	0.4231	0.0784	0.1265	0.2049	0.0000	846.6732	846.6732	0.1001	0.0000	849.1767
2024	0.2335	1.4532	1.7905	4.3800e-003	0.1359	0.0539	0.1898	0.0367	0.0514	0.0881	0.0000	390.1136	390.1136	0.0456	0.0000	391.2543
Maximum	**0.3929**	**3.3186**	**3.9042**	**9.5000e-003**	**0.2906**	**0.1325**	**0.4231**	**0.0784**	**0.1265**	**0.2049**	**0.0000**	**846.6732**	**846.6732**	**0.1263**	**0.0000**	**849.1767**

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**14.16**	**0.00**	**9.98**	**17.20**	**0.00**	**7.28**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2022**	**5-31-2022**	1.1296	1.1296
2	**6-1-2022**	**8-31-2022**	0.7234	0.7234
3	**9-1-2022**	**11-30-2022**	0.9590	0.9590
4	**12-1-2022**	**2-28-2023**	0.9557	0.9557
5	**3-1-2023**	**5-31-2023**	0.9387	0.9387
6	**6-1-2023**	**8-31-2023**	0.9392	0.9392
7	**9-1-2023**	**11-30-2023**	0.9279	0.9279
8	**12-1-2023**	**2-29-2024**	0.8931	0.8931
9	**3-1-2024**	**5-31-2024**	0.8860	0.8860
10	**6-1-2024**	**8-31-2024**	0.2146	0.2146
		Highest	1.1296	1.1296

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.6000e-004**	**5.0000e-005**	**5.0200e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.6000e-004**	**5.0000e-005**	**5.0200e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/31/2022	5	23	
2	Site Preparation	Site Preparation	4/1/2022	4/30/2022	5	21	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Paving	Paving	6/1/2022	6/30/2022	5	22	
5	Track Construction	Grading	7/1/2022	9/30/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/1/2022	6/14/2024	5	445	
7	Architectural Coating	Architectural Coating	6/15/2024	6/30/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 8.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 23,474 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Graders	0	8.00	187	0.41

Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40
Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45

Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	593.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0646	0.0000	0.0646	9.7800e-003	0.0000	9.7800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.2598	0.2364	4.8000e-004		0.0117	0.0117		0.0107	0.0107	0.0000	42.5180	42.5180	0.0138	0.0000	42.8618
Total	**0.0261**	**0.2598**	**0.2364**	**4.8000e-004**	**0.0646**	**0.0117**	**0.0762**	**9.7800e-003**	**0.0107**	**0.0205**	**0.0000**	**42.5180**	**42.5180**	**0.0138**	**0.0000**	**42.8618**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0599	8.8000e-003	2.2000e-004	5.1100e-003	1.6000e-004	5.2700e-003	1.4000e-003	1.6000e-004	1.5600e-003	0.0000	21.0294	21.0294	1.2500e-003	0.0000	21.0606
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	6.9000e-004	7.6700e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9200e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.2652	2.2652	5.0000e-005	0.0000	2.2664
Total	**2.4500e-003**	**0.0606**	**0.0165**	**2.5000e-004**	**8.0200e-003**	**1.8000e-004**	**8.1900e-003**	**2.1700e-003**	**1.8000e-004**	**2.3500e-003**	**0.0000**	**23.2946**	**23.2946**	**1.3000e-003**	**0.0000**	**23.3270**

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0291	0.0000	0.0291	4.4000e-003	0.0000	4.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0261	0.2598	0.2364	4.8000e-004		0.0117	0.0117		0.0107	0.0107	0.0000	42.5179	42.5179	0.0138	0.0000	42.8617
Total	**0.0261**	**0.2598**	**0.2364**	**4.8000e-004**	**0.0291**	**0.0117**	**0.0407**	**4.4000e-003**	**0.0107**	**0.0151**	**0.0000**	**42.5179**	**42.5179**	**0.0138**	**0.0000**	**42.8617**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3900e-003	0.0599	8.8000e-003	2.2000e-004	5.1100e-003	1.6000e-004	5.2700e-003	1.4000e-003	1.6000e-004	1.5600e-003	0.0000	21.0294	21.0294	1.2500e-003	0.0000	21.0606
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0600e-003	6.9000e-004	7.6700e-003	3.0000e-005	2.9100e-003	2.0000e-005	2.9200e-003	7.7000e-004	2.0000e-005	7.9000e-004	0.0000	2.2652	2.2652	5.0000e-005	0.0000	2.2664
Total	**2.4500e-003**	**0.0606**	**0.0165**	**2.5000e-004**	**8.0200e-003**	**1.8000e-004**	**8.1900e-003**	**2.1700e-003**	**1.8000e-004**	**2.3500e-003**	**0.0000**	**23.2946**	**23.2946**	**1.3000e-003**	**0.0000**	**23.3270**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0633	0.0000	0.0633	0.0348	0.0000	0.0348	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2372	0.2158	4.4000e-004		0.0106	0.0106		9.7800e-003	9.7800e-003	0.0000	38.8208	38.8208	0.0126	0.0000	39.1347
Total	**0.0238**	**0.2372**	**0.2158**	**4.4000e-004**	**0.0633**	**0.0106**	**0.0739**	**0.0348**	**9.7800e-003**	**0.0446**	**0.0000**	**38.8208**	**38.8208**	**0.0126**	**0.0000**	**39.1347**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0126	1.8600e-003	5.0000e-005	1.0800e-003	3.0000e-005	1.1100e-003	3.0000e-004	3.0000e-005	3.3000e-004	0.0000	4.4329	4.4329	2.6000e-004	0.0000	4.4394
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	6.3000e-004	7.0000e-003	2.0000e-005	2.6500e-003	2.0000e-005	2.6700e-003	7.0000e-004	1.0000e-005	7.2000e-004	0.0000	2.0682	2.0682	4.0000e-005	0.0000	2.0694
Total	**1.2600e-003**	**0.0133**	**8.8600e-003**	**7.0000e-005**	**3.7300e-003**	**5.0000e-005**	**3.7800e-003**	**1.0000e-003**	**4.0000e-005**	**1.0500e-003**	**0.0000**	**6.5011**	**6.5011**	**3.0000e-004**	**0.0000**	**6.5088**

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0285	0.0000	0.0285	0.0157	0.0000	0.0157	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2372	0.2158	4.4000e-004		0.0106	0.0106		9.7800e-003	9.7800e-003	0.0000	38.8207	38.8207	0.0126	0.0000	39.1346
Total	**0.0238**	**0.2372**	**0.2158**	**4.4000e-004**	**0.0285**	**0.0106**	**0.0391**	**0.0157**	**9.7800e-003**	**0.0254**	**0.0000**	**38.8207**	**38.8207**	**0.0126**	**0.0000**	**39.1346**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0126	1.8600e-003	5.0000e-005	1.0800e-003	3.0000e-005	1.1100e-003	3.0000e-004	3.0000e-005	3.3000e-004	0.0000	4.4329	4.4329	2.6000e-004	0.0000	4.4394
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	6.3000e-004	7.0000e-003	2.0000e-005	2.6500e-003	2.0000e-005	2.6700e-003	7.0000e-004	1.0000e-005	7.2000e-004	0.0000	2.0682	2.0682	4.0000e-005	0.0000	2.0694
Total	**1.2600e-003**	**0.0133**	**8.8600e-003**	**7.0000e-005**	**3.7300e-003**	**5.0000e-005**	**3.7800e-003**	**1.0000e-003**	**4.0000e-005**	**1.0500e-003**	**0.0000**	**6.5011**	**6.5011**	**3.0000e-004**	**0.0000**	**6.5088**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0390	0.0000	0.0390	0.0188	0.0000	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0511	0.4566	0.3916	1.1400e-003		0.0179	0.0179		0.0165	0.0165	0.0000	100.3759	100.3759	0.0325	0.0000	101.1875
Total	**0.0511**	**0.4566**	**0.3916**	**1.1400e-003**	**0.0390**	**0.0179**	**0.0569**	**0.0188**	**0.0165**	**0.0353**	**0.0000**	**100.3759**	**100.3759**	**0.0325**	**0.0000**	**101.1875**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.0000e-003	0.0112	4.0000e-005	4.2300e-003	2.0000e-005	4.2600e-003	1.1200e-003	2.0000e-005	1.1500e-003	0.0000	3.2972	3.2972	7.0000e-005	0.0000	3.2990
Total	**1.5500e-003**	**1.0000e-003**	**0.0112**	**4.0000e-005**	**4.2300e-003**	**2.0000e-005**	**4.2600e-003**	**1.1200e-003**	**2.0000e-005**	**1.1500e-003**	**0.0000**	**3.2972**	**3.2972**	**7.0000e-005**	**0.0000**	**3.2990**

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0175	0.0000	0.0175	8.4800e-003	0.0000	8.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0511	0.4566	0.3916	1.1400e-003		0.0179	0.0179		0.0165	0.0165	0.0000	100.3758	100.3758	0.0325	0.0000	101.1873
Total	**0.0511**	**0.4566**	**0.3916**	**1.1400e-003**	**0.0175**	**0.0179**	**0.0354**	**8.4800e-003**	**0.0165**	**0.0250**	**0.0000**	**100.3758**	**100.3758**	**0.0325**	**0.0000**	**101.1873**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5500e-003	1.0000e-003	0.0112	4.0000e-005	4.2300e-003	2.0000e-005	4.2600e-003	1.1200e-003	2.0000e-005	1.1500e-003	0.0000	3.2972	3.2972	7.0000e-005	0.0000	3.2990
Total	**1.5500e-003**	**1.0000e-003**	**0.0112**	**4.0000e-005**	**4.2300e-003**	**2.0000e-005**	**4.2600e-003**	**1.1200e-003**	**2.0000e-005**	**1.1500e-003**	**0.0000**	**3.2972**	**3.2972**	**7.0000e-005**	**0.0000**	**3.2990**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1224	0.1604	2.5000e-004		6.2500e-003	6.2500e-003		5.7500e-003	5.7500e-003	0.0000	22.0303	22.0303	7.1300e-003	0.0000	22.2084
Paving	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1224**	**0.1604**	**2.5000e-004**		**6.2500e-003**	**6.2500e-003**		**5.7500e-003**	**5.7500e-003**	**0.0000**	**22.0303**	**22.0303**	**7.1300e-003**	**0.0000**	**22.2084**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.5000e-004	0.0412	6.0600e-003	1.5000e-004	3.5200e-003	1.1000e-004	3.6300e-003	9.7000e-004	1.1000e-004	1.0700e-003	0.0000	14.4688	14.4688	8.6000e-004	0.0000	14.4903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.3000e-004	4.7800e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4131	1.4131	3.0000e-005	0.0000	1.4139
Total	**1.6100e-003**	**0.0416**	**0.0108**	**1.7000e-004**	**5.3300e-003**	**1.2000e-004**	**5.4500e-003**	**1.4500e-003**	**1.2000e-004**	**1.5600e-003**	**0.0000**	**15.8819**	**15.8819**	**8.9000e-004**	**0.0000**	**15.9041**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1224	0.1604	2.5000e-004		6.2500e-003	6.2500e-003		5.7500e-003	5.7500e-003	0.0000	22.0303	22.0303	7.1300e-003	0.0000	22.2084
Paving	0.0106					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0227**	**0.1224**	**0.1604**	**2.5000e-004**		**6.2500e-003**	**6.2500e-003**		**5.7500e-003**	**5.7500e-003**	**0.0000**	**22.0303**	**22.0303**	**7.1300e-003**	**0.0000**	**22.2084**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.5000e-004	0.0412	6.0600e-003	1.5000e-004	3.5200e-003	1.1000e-004	3.6300e-003	9.7000e-004	1.1000e-004	1.0700e-003	0.0000	14.4688	14.4688	8.6000e-004	0.0000	14.4903
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.3000e-004	4.7800e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4131	1.4131	3.0000e-005	0.0000	1.4139
Total	**1.6100e-003**	**0.0416**	**0.0108**	**1.7000e-004**	**5.3300e-003**	**1.2000e-004**	**5.4500e-003**	**1.4500e-003**	**1.2000e-004**	**1.5600e-003**	**0.0000**	**15.8819**	**15.8819**	**8.9000e-004**	**0.0000**	**15.9041**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0178	0.0000	0.0178	1.9400e-003	0.0000	1.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0614	0.6759	0.4982	1.0600e-003		0.0291	0.0291		0.0267	0.0267	0.0000	93.2701	93.2701	0.0302	0.0000	94.0243
Total	**0.0614**	**0.6759**	**0.4982**	**1.0600e-003**	**0.0178**	**0.0291**	**0.0469**	**1.9400e-003**	**0.0267**	**0.0287**	**0.0000**	**93.2701**	**93.2701**	**0.0302**	**0.0000**	**94.0243**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0645	9.4700e-003	2.3000e-004	5.5000e-003	1.8000e-004	5.6700e-003	1.5100e-003	1.7000e-004	1.6800e-003	0.0000	22.6253	22.6253	1.3400e-003	0.0000	22.6588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.5400e-003	0.0172	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.0871	5.0871	1.1000e-004	0.0000	5.0899
Total	**3.8800e-003**	**0.0660**	**0.0267**	**2.9000e-004**	**0.0120**	**2.2000e-004**	**0.0122**	**3.2400e-003**	**2.1000e-004**	**3.4500e-003**	**0.0000**	**27.7123**	**27.7123**	**1.4500e-003**	**0.0000**	**27.7486**

3.6 Track Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0200e-003	0.0000	8.0200e-003	8.7000e-004	0.0000	8.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0614	0.6759	0.4982	1.0600e-003		0.0291	0.0291		0.0267	0.0267	0.0000	93.2700	93.2700	0.0302	0.0000	94.0241
Total	**0.0614**	**0.6759**	**0.4982**	**1.0600e-003**	**8.0200e-003**	**0.0291**	**0.0371**	**8.7000e-004**	**0.0267**	**0.0276**	**0.0000**	**93.2700**	**93.2700**	**0.0302**	**0.0000**	**94.0241**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0645	9.4700e-003	2.3000e-004	5.5000e-003	1.8000e-004	5.6700e-003	1.5100e-003	1.7000e-004	1.6800e-003	0.0000	22.6253	22.6253	1.3400e-003	0.0000	22.6588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.5400e-003	0.0172	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.0871	5.0871	1.1000e-004	0.0000	5.0899
Total	**3.8800e-003**	**0.0660**	**0.0267**	**2.9000e-004**	**0.0120**	**2.2000e-004**	**0.0122**	**3.2400e-003**	**2.1000e-004**	**3.4500e-003**	**0.0000**	**27.7123**	**27.7123**	**1.4500e-003**	**0.0000**	**27.7486**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0804	0.7353	0.8057	1.3600e-003		0.0377	0.0377		0.0360	0.0360	0.0000	117.4393	117.4393	0.0215	0.0000	117.9776
Total	**0.0804**	**0.7353**	**0.8057**	**1.3600e-003**		**0.0377**	**0.0377**		**0.0360**	**0.0360**	**0.0000**	**117.4393**	**117.4393**	**0.0215**	**0.0000**	**117.9776**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-003	0.1856	0.0353	5.3000e-004	0.0133	3.2000e-004	0.0137	3.8500e-003	3.0000e-004	4.1500e-003	0.0000	51.0960	51.0960	3.7200e-003	0.0000	51.1891
Worker	0.0217	0.0140	0.1565	5.1000e-004	0.0593	3.5000e-004	0.0596	0.0158	3.2000e-004	0.0161	0.0000	46.2034	46.2034	1.0000e-003	0.0000	46.2285
Total	**0.0264**	**0.1996**	**0.1918**	**1.0400e-003**	**0.0726**	**6.7000e-004**	**0.0733**	**0.0196**	**6.2000e-004**	**0.0202**	**0.0000**	**97.2994**	**97.2994**	**4.7200e-003**	**0.0000**	**97.4176**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0804	0.7353	0.8057	1.3600e-003		0.0377	0.0377		0.0360	0.0360	0.0000	117.4392	117.4392	0.0215	0.0000	117.9775
Total	**0.0804**	**0.7353**	**0.8057**	**1.3600e-003**		**0.0377**	**0.0377**		**0.0360**	**0.0360**	**0.0000**	**117.4392**	**117.4392**	**0.0215**	**0.0000**	**117.9775**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.7000e-003	0.1856	0.0353	5.3000e-004	0.0133	3.2000e-004	0.0137	3.8500e-003	3.0000e-004	4.1500e-003	0.0000	51.0960	51.0960	3.7200e-003	0.0000	51.1891
Worker	0.0217	0.0140	0.1565	5.1000e-004	0.0593	3.5000e-004	0.0596	0.0158	3.2000e-004	0.0161	0.0000	46.2034	46.2034	1.0000e-003	0.0000	46.2285
Total	**0.0264**	**0.1996**	**0.1918**	**1.0400e-003**	**0.0726**	**6.7000e-004**	**0.0733**	**0.0196**	**6.2000e-004**	**0.0202**	**0.0000**	**97.2994**	**97.2994**	**4.7200e-003**	**0.0000**	**97.4176**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2971	2.7130	3.2043	5.4600e-003		0.1306	0.1306		0.1247	0.1247	0.0000	469.8754	469.8754	0.0851	0.0000	472.0036
Total	**0.2971**	**2.7130**	**3.2043**	**5.4600e-003**		**0.1306**	**0.1306**		**0.1247**	**0.1247**	**0.0000**	**469.8754**	**469.8754**	**0.0851**	**0.0000**	**472.0036**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.5551	0.1230	2.0800e-003	0.0534	5.7000e-004	0.0539	0.0154	5.4000e-004	0.0159	0.0000	198.9992	198.9992	0.0114	0.0000	199.2843
Worker	0.0814	0.0506	0.5769	1.9700e-003	0.2372	1.3500e-003	0.2385	0.0630	1.2400e-003	0.0642	0.0000	177.7992	177.7992	3.6100e-003	0.0000	177.8894
Total	**0.0958**	**0.6057**	**0.6998**	**4.0500e-003**	**0.2906**	**1.9200e-003**	**0.2925**	**0.0784**	**1.7800e-003**	**0.0802**	**0.0000**	**376.7984**	**376.7984**	**0.0150**	**0.0000**	**377.1737**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2971	2.7130	3.2043	5.4600e-003		0.1306	0.1306		0.1247	0.1247	0.0000	469.8748	469.8748	0.0851	0.0000	472.0030
Total	**0.2971**	**2.7130**	**3.2043**	**5.4600e-003**		**0.1306**	**0.1306**		**0.1247**	**0.1247**	**0.0000**	**469.8748**	**469.8748**	**0.0851**	**0.0000**	**472.0030**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.5551	0.1230	2.0800e-003	0.0534	5.7000e-004	0.0539	0.0154	5.4000e-004	0.0159	0.0000	198.9992	198.9992	0.0114	0.0000	199.2843
Worker	0.0814	0.0506	0.5769	1.9700e-003	0.2372	1.3500e-003	0.2385	0.0630	1.2400e-003	0.0642	0.0000	177.7992	177.7992	3.6100e-003	0.0000	177.8894
Total	**0.0958**	**0.6057**	**0.6998**	**4.0500e-003**	**0.2906**	**1.9200e-003**	**0.2925**	**0.0784**	**1.7800e-003**	**0.0802**	**0.0000**	**376.7984**	**376.7984**	**0.0150**	**0.0000**	**377.1737**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1282	1.1708	1.4733	2.5200e-003		0.0527	0.0527		0.0503	0.0503	0.0000	216.8960	216.8960	0.0389	0.0000	217.8675
Total	**0.1282**	**1.1708**	**1.4733**	**2.5200e-003**		**0.0527**	**0.0527**		**0.0503**	**0.0503**	**0.0000**	**216.8960**	**216.8960**	**0.0389**	**0.0000**	**217.8675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5200e-003	0.2548	0.0549	9.6000e-004	0.0246	2.6000e-004	0.0249	7.1100e-003	2.5000e-004	7.3500e-003	0.0000	91.5001	91.5001	5.1500e-003	0.0000	91.6288
Worker	0.0355	0.0212	0.2492	8.7000e-004	0.1095	6.2000e-004	0.1101	0.0291	5.7000e-004	0.0296	0.0000	79.1303	79.1303	1.5200e-003	0.0000	79.1682
Total	**0.0420**	**0.2760**	**0.3041**	**1.8300e-003**	**0.1341**	**8.8000e-004**	**0.1350**	**0.0362**	**8.2000e-004**	**0.0370**	**0.0000**	**170.6304**	**170.6304**	**6.6700e-003**	**0.0000**	**170.7971**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1282	1.1708	1.4733	2.5200e-003		0.0527	0.0527		0.0503	0.0503	0.0000	216.8957	216.8957	0.0389	0.0000	217.8673
Total	**0.1282**	**1.1708**	**1.4733**	**2.5200e-003**		**0.0527**	**0.0527**		**0.0503**	**0.0503**	**0.0000**	**216.8957**	**216.8957**	**0.0389**	**0.0000**	**217.8673**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5200e-003	0.2548	0.0549	9.6000e-004	0.0246	2.6000e-004	0.0249	7.1100e-003	2.5000e-004	7.3500e-003	0.0000	91.5001	91.5001	5.1500e-003	0.0000	91.6288
Worker	0.0355	0.0212	0.2492	8.7000e-004	0.1095	6.2000e-004	0.1101	0.0291	5.7000e-004	0.0296	0.0000	79.1303	79.1303	1.5200e-003	0.0000	79.1682
Total	**0.0420**	**0.2760**	**0.3041**	**1.8300e-003**	**0.1341**	**8.8000e-004**	**0.1350**	**0.0362**	**8.2000e-004**	**0.0370**	**0.0000**	**170.6304**	**170.6304**	**6.6700e-003**	**0.0000**	**170.7971**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.0627**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.5000e-004	4.1300e-003	1.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3109	1.3109	3.0000e-005	0.0000	1.3115
Total	**5.9000e-004**	**3.5000e-004**	**4.1300e-003**	**1.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.3109**	**1.3109**	**3.0000e-005**	**0.0000**	**1.3115**

3.8 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	6.0900e-003	9.0500e-003	1.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	1.2766	1.2766	7.0000e-005	0.0000	1.2784
Total	**0.0627**	**6.0900e-003**	**9.0500e-003**	**1.0000e-005**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**1.2766**	**1.2766**	**7.0000e-005**	**0.0000**	**1.2784**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	3.5000e-004	4.1300e-003	1.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3109	1.3109	3.0000e-005	0.0000	1.3115
Total	**5.9000e-004**	**3.5000e-004**	**4.1300e-003**	**1.0000e-005**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**4.8000e-004**	**1.0000e-005**	**4.9000e-004**	**0.0000**	**1.3109**	**1.3109**	**3.0000e-005**	**0.0000**	**1.3115**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Unmitigated	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Total	**4.6000e-004**	**5.0000e-005**	**5.0200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.6000e-004	5.0000e-005	5.0200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7900e-003	9.7900e-003	3.0000e-005	0.0000	0.0104
Total	**4.6000e-004**	**5.0000e-005**	**5.0200e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**9.7900e-003**	**9.7900e-003**	**3.0000e-005**	**0.0000**	**0.0104**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

HNT-10.01 Riverside-Downtown Station Improvements Option 1A

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	351.80	1000sqft	8.08	351,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 1A, Run R3.
Construction modeling only.
R-2: Adjusted land uses per revised info from project engineers.
R-3: Corrected grading phase off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
204 loads of asphalt/concrete during paving
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,000 CY esitmated construction debris = 6,000 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,000 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	23474	7110
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	230.00	445.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	408.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7957	41.5955	36.7917	0.1075	6.3893	1.6305	7.4070	3.4079	1.5000	4.3442	0.0000	10,417.7245	10,417.7245	3.2612	0.0000	10,499.2535
2023	3.0839	25.5001	30.7528	0.0747	2.2717	1.0193	3.2910	0.6119	0.9731	1.5850	0.0000	7,336.5893	7,336.5893	0.8482	0.0000	7,357.7930
2024	12.6642	24.0882	30.3031	0.0740	2.2717	0.8925	3.1641	0.6119	0.8516	1.4635	0.0000	7,271.9607	7,271.9607	0.8353	0.0000	7,292.8429
Maximum	**12.6642**	**41.5955**	**36.7917**	**0.1075**	**6.3893**	**1.6305**	**7.4070**	**3.4079**	**1.5000**	**4.3442**	**0.0000**	**10,417.7245**	**10,417.7245**	**3.2612**	**0.0000**	**10,499.2535**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7957	41.5955	36.7917	0.1075	3.2356	1.6305	4.2641	1.5867	1.5000	2.5231	0.0000	10,417.7244	10,417.7244	3.2612	0.0000	10,499.2535
2023	3.0839	25.5001	30.7528	0.0747	2.2717	1.0193	3.2910	0.6119	0.9731	1.5850	0.0000	7,336.5893	7,336.5893	0.8482	0.0000	7,357.7930
2024	12.6642	24.0882	30.3031	0.0740	2.2717	0.8925	3.1641	0.6119	0.8516	1.4635	0.0000	7,271.9607	7,271.9607	0.8353	0.0000	7,292.8429
Maximum	**12.6642**	**41.5955**	**36.7917**	**0.1075**	**3.2356**	**1.6305**	**4.2641**	**1.5867**	**1.5000**	**2.5231**	**0.0000**	**10,417.7244**	**10,417.7244**	**3.2612**	**0.0000**	**10,499.2535**

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.85	0.00	22.67	39.32	0.00	24.63	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**	**0.0000**	**0.0919**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**	**0.0000**	**0.0919**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/31/2022	5	23	
2	Site Preparation	Site Preparation	4/1/2022	4/30/2022	5	21	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Paving	Paving	6/1/2022	6/30/2022	5	22	
5	Track Construction	Grading	7/1/2022	9/30/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/1/2022	6/14/2024	5	445	
7	Architectural Coating	Architectural Coating	6/15/2024	6/30/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 8.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 23,474 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38

Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40

Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	593.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6168	0.0000	5.6168	0.8504	0.0000	0.8504			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**5.6168**	**1.0129**	**6.6297**	**0.8504**	**0.9319**	**1.7823**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1179	5.1061	0.7151	0.0192	0.4510	0.0141	0.4651	0.1236	0.0135	0.1371		2,037.4178	2,037.4178	0.1149		2,040.2893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.2199**	**5.1620**	**1.4994**	**0.0216**	**0.7081**	**0.0156**	**0.7237**	**0.1918**	**0.0149**	**0.2067**		**2,273.3624**	**2,273.3624**	**0.1201**		**2,276.3650**

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5276	0.0000	2.5276	0.3827	0.0000	0.3827			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.5276**	**1.0129**	**3.5405**	**0.3827**	**0.9319**	**1.3146**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1179	5.1061	0.7151	0.0192	0.4510	0.0141	0.4651	0.1236	0.0135	0.1371		2,037.4178	2,037.4178	0.1149		2,040.2893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.2199**	**5.1620**	**1.4994**	**0.0216**	**0.7081**	**0.0156**	**0.7237**	**0.1918**	**0.0149**	**0.2067**		**2,273.3624**	**2,273.3624**	**0.1201**		**2,276.3650**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0281	0.0000	6.0281	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**6.0281**	**1.0129**	**7.0410**	**3.3111**	**0.9319**	**4.2430**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0272	1.1788	0.1651	4.4300e-003	0.1041	3.2600e-003	0.1074	0.0285	3.1200e-003	0.0317		470.3747	470.3747	0.0265		471.0376
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.1292**	**1.2347**	**0.9494**	**6.8000e-003**	**0.3612**	**4.7300e-003**	**0.3659**	**0.0967**	**4.4800e-003**	**0.1012**		**706.3193**	**706.3193**	**0.0318**		**707.1134**

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7127	0.0000	2.7127	1.4900	0.0000	1.4900			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.7127**	**1.0129**	**3.7256**	**1.4900**	**0.9319**	**2.4219**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0272	1.1788	0.1651	4.4300e-003	0.1041	3.2600e-003	0.1074	0.0285	3.1200e-003	0.0317		470.3747	470.3747	0.0265		471.0376
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.1292**	**1.2347**	**0.9494**	**6.8000e-003**	**0.3612**	**4.7300e-003**	**0.3659**	**0.0967**	**4.4800e-003**	**0.1012**		**706.3193**	**706.3193**	**0.0318**		**707.1134**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5413	0.0000	3.5413	1.7124	0.0000	1.7124			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980		10,058.6783	10,058.6783	3.2532		10,140.0079
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**3.5413**	**1.6282**	**5.1695**	**1.7124**	**1.4980**	**3.2103**		**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0079**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.7706	0.0000	0.7706			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980	0.0000	10,058.6783	10,058.6783	3.2532		10,140.0078
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**1.5936**	**1.6282**	**3.2218**	**0.7706**	**1.4980**	**2.2685**	**0.0000**	**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.9623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0651**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0848	3.6728	0.5144	0.0138	0.3244	0.0102	0.3346	0.0889	9.7300e-003	0.0987		1,465.5165	1,465.5165	0.0826		1,467.5820
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	**0.1513**	**3.7093**	**1.0259**	**0.0153**	**0.4920**	**0.0111**	**0.5032**	**0.1334**	**0.0106**	**0.1440**		**1,619.3934**	**1,619.3934**	**0.0860**		**1,621.5444**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.9623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0651**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0848	3.6728	0.5144	0.0138	0.3244	0.0102	0.3346	0.0889	9.7300e-003	0.0987		1,465.5165	1,465.5165	0.0826		1,467.5820
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	**0.1513**	**3.7093**	**1.0259**	**0.0153**	**0.4920**	**0.0111**	**0.5032**	**0.1334**	**0.0106**	**0.1440**		**1,619.3934**	**1,619.3934**	**0.0860**		**1,621.5444**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5400	0.0000	0.5400	0.0587	0.0000	0.0587			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099		3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.5400**	**0.8803**	**1.4203**	**0.0587**	**0.8099**	**0.8686**		**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0442	1.9144	0.2681	7.1900e-003	0.1691	5.3000e-003	0.1744	0.0464	5.0700e-003	0.0514		763.8885	763.8885	0.0431		764.9651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.1240**	**1.9582**	**0.8819**	**9.0400e-003**	**0.3703**	**6.4500e-003**	**0.3767**	**0.0997**	**6.1300e-003**	**0.1058**		**948.5408**	**948.5408**	**0.0472**		**949.7200**

3.6 Track Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2430	0.0000	0.2430	0.0264	0.0000	0.0264			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099	0.0000	3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.2430**	**0.8803**	**1.1233**	**0.0264**	**0.8099**	**0.8363**	**0.0000**	**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0442	1.9144	0.2681	7.1900e-003	0.1691	5.3000e-003	0.1744	0.0464	5.0700e-003	0.0514		763.8885	763.8885	0.0431		764.9651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.1240**	**1.9582**	**0.8819**	**9.0400e-003**	**0.3703**	**6.4500e-003**	**0.3767**	**0.0997**	**6.1300e-003**	**0.1058**		**948.5408**	**948.5408**	**0.0472**		**949.7200**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060		3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**		**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1415	5.6750	0.9982	0.0167	0.4162	9.6200e-003	0.4258	0.1198	9.2000e-003	0.1290		1,761.0137	1,761.0137	0.1203		1,764.0222
Worker	0.7361	0.4035	5.6608	0.0171	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,702.9044	1,702.9044	0.0379		1,703.8508
Total	**0.8776**	**6.0785**	**6.6590**	**0.0338**	**2.2717**	**0.0203**	**2.2920**	**0.6119**	**0.0190**	**0.6309**		**3,463.9181**	**3,463.9181**	**0.1582**		**3,467.8730**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060	0.0000	3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**	**0.0000**	**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1415	5.6750	0.9982	0.0167	0.4162	9.6200e-003	0.4258	0.1198	9.2000e-003	0.1290		1,761.0137	1,761.0137	0.1203		1,764.0222
Worker	0.7361	0.4035	5.6608	0.0171	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,702.9044	1,702.9044	0.0379		1,703.8508
Total	**0.8776**	**6.0785**	**6.6590**	**0.0338**	**2.2717**	**0.0203**	**2.2920**	**0.6119**	**0.0190**	**0.6309**		**3,463.9181**	**3,463.9181**	**0.1582**		**3,467.8730**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594		3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**		**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1085	4.2674	0.8798	0.0162	0.4162	4.2900e-003	0.4205	0.1198	4.1000e-003	0.1239		1,714.1771	1,714.1771	0.0923		1,716.4856
Worker	0.6902	0.3639	5.2242	0.0164	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,638.1896	1,638.1896	0.0340		1,639.0391
Total	**0.7987**	**4.6312**	**6.1040**	**0.0327**	**2.2717**	**0.0147**	**2.2864**	**0.6119**	**0.0137**	**0.6256**		**3,352.3667**	**3,352.3667**	**0.1263**		**3,355.5247**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594	0.0000	3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**	**0.0000**	**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1085	4.2674	0.8798	0.0162	0.4162	4.2900e-003	0.4205	0.1198	4.1000e-003	0.1239		1,714.1771	1,714.1771	0.0923		1,716.4856
Worker	0.6902	0.3639	5.2242	0.0164	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,638.1896	1,638.1896	0.0340		1,639.0391
Total	**0.7987**	**4.6312**	**6.1040**	**0.0327**	**2.2717**	**0.0147**	**2.2864**	**0.6119**	**0.0137**	**0.6256**		**3,352.3667**	**3,352.3667**	**0.1263**		**3,355.5247**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381		3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**		**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1064	4.2442	0.8499	0.0162	0.4162	4.2700e-003	0.4204	0.1198	4.0800e-003	0.1239		1,707.4710	1,707.4710	0.0903		1,709.7293
Worker	0.6505	0.3300	4.8985	0.0159	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,579.7082	1,579.7082	0.0310		1,580.4828
Total	**0.7569**	**4.5742**	**5.7484**	**0.0320**	**2.2717**	**0.0146**	**2.2862**	**0.6119**	**0.0136**	**0.6255**		**3,287.1792**	**3,287.1792**	**0.1213**		**3,290.2122**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381	0.0000	3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**	**0.0000**	**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1064	4.2442	0.8499	0.0162	0.4162	4.2700e-003	0.4204	0.1198	4.0800e-003	0.1239		1,707.4710	1,707.4710	0.0903		1,709.7293
Worker	0.6505	0.3300	4.8985	0.0159	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,579.7082	1,579.7082	0.0310		1,580.4828
Total	**0.7569**	**4.5742**	**5.7484**	**0.0320**	**2.2717**	**0.0146**	**2.2862**	**0.6119**	**0.0136**	**0.6255**		**3,287.1792**	**3,287.1792**	**0.1213**		**3,290.2122**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**12.5349**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
Total	**0.1293**	**0.0656**	**0.9738**	**3.1500e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**314.0384**	**314.0384**	**6.1600e-003**		**314.1924**

3.8 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**12.5349**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
Total	**0.1293**	**0.0656**	**0.9738**	**3.1500e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**314.0384**	**314.0384**	**6.1600e-003**		**314.1924**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Unmitigated	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**		**0.0919**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**		**0.0919**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

HNT-10.01 Riverside-Downtown Station Improvements Option 1A

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	351.80	1000sqft	8.08	351,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 1A, Run R3.
Construction modeling only.
R-2: Adjusted land uses per revised info from project engineers.
R-3: Corrected grading phase off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
204 loads of asphalt/concrete during paving
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,000 CY esitmated construction debris = 6,000 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,000 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	23474	7110
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	230.00	445.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	20.00	66.00
tblConstructionPhase	NumDays	20.00	22.00
tblConstructionPhase	NumDays	10.00	21.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	408.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7932	41.5983	36.5601	0.1071	6.3893	1.6305	7.4070	3.4079	1.5000	4.3443	0.0000	10,380.7970	10,380.7970	3.2601	0.0000	10,462.3001
2023	3.0817	25.4542	29.8693	0.0724	2.2717	1.0195	3.2911	0.6119	0.9733	1.5852	0.0000	7,104.3738	7,104.3738	0.8538	0.0000	7,125.7188
2024	12.6630	24.0417	29.4716	0.0718	2.2717	0.8926	3.1643	0.6119	0.8517	1.4636	0.0000	7,046.3877	7,046.3877	0.8411	0.0000	7,067.4153
Maximum	**12.6630**	**41.5983**	**36.5601**	**0.1071**	**6.3893**	**1.6305**	**7.4070**	**3.4079**	**1.5000**	**4.3443**	**0.0000**	**10,380.7970**	**10,380.7970**	**3.2601**	**0.0000**	**10,462.3001**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7932	41.5983	36.5601	0.1071	3.2356	1.6305	4.2643	1.5867	1.5000	2.5231	0.0000	10,380.7969	10,380.7969	3.2601	0.0000	10,462.3001
2023	3.0817	25.4542	29.8693	0.0724	2.2717	1.0195	3.2911	0.6119	0.9733	1.5852	0.0000	7,104.3738	7,104.3738	0.8538	0.0000	7,125.7188
2024	12.6630	24.0417	29.4716	0.0718	2.2717	0.8926	3.1643	0.6119	0.8517	1.4636	0.0000	7,046.3877	7,046.3877	0.8411	0.0000	7,067.4153
Maximum	**12.6630**	**41.5983**	**36.5601**	**0.1071**	**3.2356**	**1.6305**	**4.2643**	**1.5867**	**1.5000**	**2.5231**	**0.0000**	**10,380.7969**	**10,380.7969**	**3.2601**	**0.0000**	**10,462.3001**

HNT-10.01 Riverside-Downtown Station Improvements Option 1A - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.85	0.00	22.67	39.32	0.00	24.63	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**	**0.0000**	**0.0919**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**	**0.0000**	**1.4000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**	**0.0000**	**0.0919**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	3/31/2022	5	23	
2	Site Preparation	Site Preparation	4/1/2022	4/30/2022	5	21	
3	Grading	Grading	5/1/2022	5/31/2022	5	22	
4	Paving	Paving	6/1/2022	6/30/2022	5	22	
5	Track Construction	Grading	7/1/2022	9/30/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/1/2022	6/14/2024	5	445	
7	Architectural Coating	Architectural Coating	6/15/2024	6/30/2024	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 8.99

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 23,474 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38

Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Scrapers	0	8.00	367	0.48
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40

Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	9	23.00	0.00	593.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.6168	0.0000	5.6168	0.8504	0.0000	0.8504			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**5.6168**	**1.0129**	**6.6297**	**0.8504**	**0.9319**	**1.7823**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1242	5.1281	0.8321	0.0187	0.4510	0.0144	0.4653	0.1236	0.0137	0.1374		1,985.7965	1,985.7965	0.1256		1,988.9370
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.2246**	**5.1858**	**1.4642**	**0.0208**	**0.7081**	**0.0158**	**0.7239**	**0.1918**	**0.0151**	**0.2069**		**2,197.4744**	**2,197.4744**	**0.1302**		**2,200.7291**

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5276	0.0000	2.5276	0.3827	0.0000	0.3827			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.5276**	**1.0129**	**3.5405**	**0.3827**	**0.9319**	**1.3146**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1242	5.1281	0.8321	0.0187	0.4510	0.0144	0.4653	0.1236	0.0137	0.1374		1,985.7965	1,985.7965	0.1256		1,988.9370
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.2246**	**5.1858**	**1.4642**	**0.0208**	**0.7081**	**0.0158**	**0.7239**	**0.1918**	**0.0151**	**0.2069**		**2,197.4744**	**2,197.4744**	**0.1302**		**2,200.7291**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0281	0.0000	6.0281	3.3111	0.0000	3.3111			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**6.0281**	**1.0129**	**7.0410**	**3.3111**	**0.9319**	**4.2430**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	1.1839	0.1921	4.3200e-003	0.1041	3.3200e-003	0.1074	0.0285	3.1700e-003	0.0317		458.4570	458.4570	0.0290		459.1820
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.1291**	**1.2417**	**0.8242**	**6.4400e-003**	**0.3612**	**4.7900e-003**	**0.3660**	**0.0967**	**4.5300e-003**	**0.1013**		**670.1349**	**670.1349**	**0.0336**		**670.9741**

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7127	0.0000	2.7127	1.4900	0.0000	1.4900			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.7127**	**1.0129**	**3.7256**	**1.4900**	**0.9319**	**2.4219**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	1.1839	0.1921	4.3200e-003	0.1041	3.3200e-003	0.1074	0.0285	3.1700e-003	0.0317		458.4570	458.4570	0.0290		459.1820
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.1291**	**1.2417**	**0.8242**	**6.4400e-003**	**0.3612**	**4.7900e-003**	**0.3660**	**0.0967**	**4.5300e-003**	**0.1013**		**670.1349**	**670.1349**	**0.0336**		**670.9741**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5413	0.0000	3.5413	1.7124	0.0000	1.7124			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980		10,058.6783	10,058.6783	3.2532		10,140.0079
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**3.5413**	**1.6282**	**5.1695**	**1.7124**	**1.4980**	**3.2103**		**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0079**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.7706	0.0000	0.7706			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980	0.0000	10,058.6783	10,058.6783	3.2532		10,140.0078
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**1.5936**	**1.6282**	**3.2218**	**0.7706**	**1.4980**	**2.2685**	**0.0000**	**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.9623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0651**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0893	3.6886	0.5985	0.0135	0.3244	0.0103	0.3347	0.0889	9.8800e-003	0.0988		1,428.3853	1,428.3853	0.0904		1,430.6443
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	**0.1548**	**3.7263**	**1.0108**	**0.0148**	**0.4920**	**0.0113**	**0.5033**	**0.1334**	**0.0108**	**0.1442**		**1,566.4361**	**1,566.4361**	**0.0933**		**1,568.7695**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.9623					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0651**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0893	3.6886	0.5985	0.0135	0.3244	0.0103	0.3347	0.0889	9.8800e-003	0.0988		1,428.3853	1,428.3853	0.0904		1,430.6443
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	**0.1548**	**3.7263**	**1.0108**	**0.0148**	**0.4920**	**0.0113**	**0.5033**	**0.1334**	**0.0108**	**0.1442**		**1,566.4361**	**1,566.4361**	**0.0933**		**1,568.7695**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5400	0.0000	0.5400	0.0587	0.0000	0.0587			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099		3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.5400**	**0.8803**	**1.4203**	**0.0587**	**0.8099**	**0.8686**		**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0466	1.9227	0.3120	7.0100e-003	0.1691	5.3900e-003	0.1745	0.0464	5.1500e-003	0.0515		744.5341	744.5341	0.0471		745.7116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.1251**	**1.9679**	**0.8067**	**8.6700e-003**	**0.3703**	**6.5400e-003**	**0.3768**	**0.0997**	**6.2100e-003**	**0.1059**		**910.1951**	**910.1951**	**0.0507**		**911.4620**

3.6 Track Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2430	0.0000	0.2430	0.0264	0.0000	0.0264			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099	0.0000	3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.2430**	**0.8803**	**1.1233**	**0.0264**	**0.8099**	**0.8363**	**0.0000**	**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0466	1.9227	0.3120	7.0100e-003	0.1691	5.3900e-003	0.1745	0.0464	5.1500e-003	0.0515		744.5341	744.5341	0.0471		745.7116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.1251**	**1.9679**	**0.8067**	**8.6700e-003**	**0.3703**	**6.5400e-003**	**0.3768**	**0.0997**	**6.2100e-003**	**0.1059**		**910.1951**	**910.1951**	**0.0507**		**911.4620**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060		3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**		**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1505	5.6182	1.1851	0.0161	0.4162	9.9300e-003	0.4261	0.1198	9.5000e-003	0.1293		1,694.4014	1,694.4014	0.1342		1,697.7570
Worker	0.7245	0.4171	4.5624	0.0153	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,527.7626	1,527.7626	0.0330		1,528.5863
Total	**0.8750**	**6.0353**	**5.7475**	**0.0314**	**2.2717**	**0.0206**	**2.2923**	**0.6119**	**0.0193**	**0.6312**		**3,222.1639**	**3,222.1639**	**0.1672**		**3,226.3433**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060	0.0000	3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**	**0.0000**	**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1505	5.6182	1.1851	0.0161	0.4162	9.9300e-003	0.4261	0.1198	9.5000e-003	0.1293		1,694.4014	1,694.4014	0.1342		1,697.7570
Worker	0.7245	0.4171	4.5624	0.0153	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,527.7626	1,527.7626	0.0330		1,528.5863
Total	**0.8750**	**6.0353**	**5.7475**	**0.0314**	**2.2717**	**0.0206**	**2.2923**	**0.6119**	**0.0193**	**0.6312**		**3,222.1639**	**3,222.1639**	**0.1672**		**3,226.3433**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594		3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**		**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1150	4.2094	1.0161	0.0156	0.4162	4.4400e-003	0.4206	0.1198	4.2400e-003	0.1241		1,650.3671	1,650.3671	0.1024		1,652.9261
Worker	0.6815	0.3760	4.2044	0.0147	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,469.7840	1,469.7840	0.0296		1,470.5244
Total	**0.7965**	**4.5854**	**5.2206**	**0.0304**	**2.2717**	**0.0148**	**2.2865**	**0.6119**	**0.0138**	**0.6257**		**3,120.1511**	**3,120.1511**	**0.1320**		**3,123.4505**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594	0.0000	3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**	**0.0000**	**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1150	4.2094	1.0161	0.0156	0.4162	4.4400e-003	0.4206	0.1198	4.2400e-003	0.1241		1,650.3671	1,650.3671	0.1024		1,652.9261
Worker	0.6815	0.3760	4.2044	0.0147	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,469.7840	1,469.7840	0.0296		1,470.5244
Total	**0.7965**	**4.5854**	**5.2206**	**0.0304**	**2.2717**	**0.0148**	**2.2865**	**0.6119**	**0.0138**	**0.6257**		**3,120.1511**	**3,120.1511**	**0.1320**		**3,123.4505**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381		3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**		**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1128	4.1870	0.9834	0.0156	0.4162	4.4000e-003	0.4206	0.1198	4.2100e-003	0.1240		1,644.5085	1,644.5085	0.1001		1,647.0114
Worker	0.6442	0.3408	3.9334	0.0142	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,417.0978	1,417.0978	0.0270		1,417.7732
Total	**0.7570**	**4.5277**	**4.9168**	**0.0298**	**2.2717**	**0.0147**	**2.2863**	**0.6119**	**0.0137**	**0.6256**		**3,061.6062**	**3,061.6062**	**0.1271**		**3,064.7846**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381	0.0000	3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**	**0.0000**	**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1128	4.1870	0.9834	0.0156	0.4162	4.4000e-003	0.4206	0.1198	4.2100e-003	0.1240		1,644.5085	1,644.5085	0.1001		1,647.0114
Worker	0.6442	0.3408	3.9334	0.0142	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,417.0978	1,417.0978	0.0270		1,417.7732
Total	**0.7570**	**4.5277**	**4.9168**	**0.0298**	**2.2717**	**0.0147**	**2.2863**	**0.6119**	**0.0137**	**0.6256**		**3,061.6062**	**3,061.6062**	**0.1271**		**3,064.7846**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**12.5349**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
Total	**0.1281**	**0.0677**	**0.7819**	**2.8200e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**281.7122**	**281.7122**	**5.3700e-003**		**281.8465**

3.8 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	12.3541					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**12.5349**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
Total	**0.1281**	**0.0677**	**0.7819**	**2.8200e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**281.7122**	**281.7122**	**5.3700e-003**		**281.8465**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Unmitigated	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**		**0.0919**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0402	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		0.0863	0.0863	2.2000e-004		0.0919
Total	**3.7000e-003**	**3.6000e-004**	**0.0402**	**0.0000**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**		**0.0863**	**0.0863**	**2.2000e-004**		**0.0919**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	474.80	1000sqft	10.90	474,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 2A, Run R3.
Construction modeling only.
R2: Adjusted land uses per revised info from project engineers.
R3: Corrected grading off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
225 loads of asphalt/concrete druing paving.
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,940 CY esitmated construction debris = 6,940 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,200 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	30854	7830
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	300.00	445.00
tblConstructionPhase	NumDays	20.00	27.00
tblConstructionPhase	NumDays	30.00	26.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	25.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	13.00	11.00
tblGrading	MaterialExported	0.00	1,200.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	550.00
tblTripsAndVMT	VendorTripNumber	85.00	65.00
tblTripsAndVMT	WorkerTripNumber	217.00	166.00
tblTripsAndVMT	WorkerTripNumber	43.00	33.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2978	2.8204	2.4985	6.4500e-003	0.3049	0.1121	0.4170	0.1016	0.1042	0.2058	0.0000	575.7269	575.7269	0.1300	0.0000	578.9776
2023	0.3929	3.3186	3.9042	9.5000e-003	0.2906	0.1325	0.4231	0.0784	0.1265	0.2049	0.0000	846.6738	846.6738	0.1001	0.0000	849.1773
2024	0.2739	1.6487	2.0328	4.9700e-003	0.1545	0.0611	0.2157	0.0417	0.0584	0.1000	0.0000	442.8191	442.8191	0.0517	0.0000	444.1125
Maximum	**0.3929**	**3.3186**	**3.9042**	**9.5000e-003**	**0.3049**	**0.1325**	**0.4231**	**0.1016**	**0.1265**	**0.2058**	**0.0000**	**846.6738**	**846.6738**	**0.1300**	**0.0000**	**849.1773**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2978	2.8204	2.4985	6.4500e-003	0.1878	0.1121	0.2999	0.0594	0.1042	0.1635	0.0000	575.7264	575.7264	0.1300	0.0000	578.9771
2023	0.3929	3.3186	3.9042	9.5000e-003	0.2906	0.1325	0.4231	0.0784	0.1265	0.2049	0.0000	846.6732	846.6732	0.1001	0.0000	849.1767
2024	0.2739	1.6487	2.0328	4.9700e-003	0.1545	0.0611	0.2157	0.0417	0.0584	0.1000	0.0000	442.8188	442.8188	0.0517	0.0000	444.1122
Maximum	**0.3929**	**3.3186**	**3.9042**	**9.5000e-003**	**0.2906**	**0.1325**	**0.4231**	**0.0784**	**0.1265**	**0.2049**	**0.0000**	**846.6732**	**846.6732**	**0.1300**	**0.0000**	**849.1767**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**15.61**	**0.00**	**11.09**	**19.05**	**0.00**	**8.27**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2022**	**5-31-2022**	1.0140	1.0140
2	**6-1-2022**	**8-31-2022**	0.8417	0.8417
3	**9-1-2022**	**11-30-2022**	0.8940	0.8940
4	**12-1-2022**	**2-28-2023**	0.9557	0.9557
5	**3-1-2023**	**5-31-2023**	0.9387	0.9387
6	**6-1-2023**	**8-31-2023**	0.9392	0.9392
7	**9-1-2023**	**11-30-2023**	0.9279	0.9279
8	**12-1-2023**	**2-29-2024**	0.8931	0.8931
9	**3-1-2024**	**5-31-2024**	0.8860	0.8860
10	**6-1-2024**	**8-31-2024**	0.4489	0.4489
		Highest	1.0140	1.0140

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1000e-004**	**6.0000e-005**	**6.5900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0137**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.1000e-004**	**6.0000e-005**	**6.5900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0137**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	4/6/2022	5	27	
2	Site Preparation	Site Preparation	4/7/2022	5/11/2022	5	25	
3	Grading	Grading	5/12/2022	6/16/2022	5	26	
4	Paving	Paving	6/17/2022	7/22/2022	5	26	
5	Track Construction	Grading	7/23/2022	10/24/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/25/2022	7/8/2024	5	445	
7	Architectural Coating	Architectural Coating	7/9/2024	7/26/2024	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 11.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 30,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40

Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	0	8.00	367	0.48
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40
Track Construction	Scrapers	0	8.00	367	0.48
Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	686.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	550.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0747	0.0000	0.0747	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.2641	0.2568	4.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	42.4949	42.4949	0.0137	0.0000	42.8384
Total	**0.0267**	**0.2641**	**0.2568**	**4.8000e-004**	**0.0747**	**0.0123**	**0.0870**	**0.0113**	**0.0113**	**0.0226**	**0.0000**	**42.4949**	**42.4949**	**0.0137**	**0.0000**	**42.8384**

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-003	0.0693	0.0102	2.5000e-004	5.9100e-003	1.9000e-004	6.1000e-003	1.6200e-003	1.8000e-004	1.8000e-003	0.0000	24.3275	24.3275	1.4400e-003	0.0000	24.3635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	7.0000e-004	7.8300e-003	3.0000e-005	2.9700e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.3123	2.3123	5.0000e-005	0.0000	2.3136
Total	**2.6800e-003**	**0.0700**	**0.0180**	**2.8000e-004**	**8.8800e-003**	**2.1000e-004**	**9.0800e-003**	**2.4100e-003**	**2.0000e-004**	**2.6000e-003**	**0.0000**	**26.6398**	**26.6398**	**1.4900e-003**	**0.0000**	**26.6771**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0336	0.0000	0.0336	5.0900e-003	0.0000	5.0900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0267	0.2641	0.2568	4.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	42.4948	42.4948	0.0137	0.0000	42.8384
Total	**0.0267**	**0.2641**	**0.2568**	**4.8000e-004**	**0.0336**	**0.0123**	**0.0459**	**5.0900e-003**	**0.0113**	**0.0164**	**0.0000**	**42.4948**	**42.4948**	**0.0137**	**0.0000**	**42.8384**

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-003	0.0693	0.0102	2.5000e-004	5.9100e-003	1.9000e-004	6.1000e-003	1.6200e-003	1.8000e-004	1.8000e-003	0.0000	24.3275	24.3275	1.4400e-003	0.0000	24.3635
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	7.0000e-004	7.8300e-003	3.0000e-005	2.9700e-003	2.0000e-005	2.9800e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.3123	2.3123	5.0000e-005	0.0000	2.3136
Total	**2.6800e-003**	**0.0700**	**0.0180**	**2.8000e-004**	**8.8800e-003**	**2.1000e-004**	**9.0800e-003**	**2.4100e-003**	**2.0000e-004**	**2.6000e-003**	**0.0000**	**26.6398**	**26.6398**	**1.4900e-003**	**0.0000**	**26.6771**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0754	0.0000	0.0754	0.0414	0.0000	0.0414	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0283	0.2824	0.2569	5.3000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	46.2152	46.2152	0.0150	0.0000	46.5889
Total	**0.0283**	**0.2824**	**0.2569**	**5.3000e-004**	**0.0754**	**0.0127**	**0.0880**	**0.0414**	**0.0117**	**0.0530**	**0.0000**	**46.2152**	**46.2152**	**0.0150**	**0.0000**	**46.5889**

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5000e-004	0.0152	2.2300e-003	6.0000e-005	1.2900e-003	4.0000e-005	1.3300e-003	3.5000e-004	4.0000e-005	3.9000e-004	0.0000	5.3194	5.3194	3.2000e-004	0.0000	5.3273
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	7.5000e-004	8.3400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.4622	2.4622	5.0000e-005	0.0000	2.4635
Total	**1.5000e-003**	**0.0159**	**0.0106**	**9.0000e-005**	**4.4500e-003**	**6.0000e-005**	**4.5100e-003**	**1.1900e-003**	**6.0000e-005**	**1.2500e-003**	**0.0000**	**7.7816**	**7.7816**	**3.7000e-004**	**0.0000**	**7.7908**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0339	0.0000	0.0339	0.0186	0.0000	0.0186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0283	0.2824	0.2569	5.3000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	46.2152	46.2152	0.0150	0.0000	46.5888
Total	**0.0283**	**0.2824**	**0.2569**	**5.3000e-004**	**0.0339**	**0.0127**	**0.0466**	**0.0186**	**0.0117**	**0.0303**	**0.0000**	**46.2152**	**46.2152**	**0.0150**	**0.0000**	**46.5888**

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5000e-004	0.0152	2.2300e-003	6.0000e-005	1.2900e-003	4.0000e-005	1.3300e-003	3.5000e-004	4.0000e-005	3.9000e-004	0.0000	5.3194	5.3194	3.2000e-004	0.0000	5.3273
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1500e-003	7.5000e-004	8.3400e-003	3.0000e-005	3.1600e-003	2.0000e-005	3.1800e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.4622	2.4622	5.0000e-005	0.0000	2.4635
Total	**1.5000e-003**	**0.0159**	**0.0106**	**9.0000e-005**	**4.4500e-003**	**6.0000e-005**	**4.5100e-003**	**1.1900e-003**	**6.0000e-005**	**1.2500e-003**	**0.0000**	**7.7816**	**7.7816**	**3.7000e-004**	**0.0000**	**7.7908**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0450	0.0000	0.0450	0.0222	0.0000	0.0222	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0603	0.5396	0.4628	1.3500e-003		0.0212	0.0212		0.0195	0.0195	0.0000	118.6260	118.6260	0.0384	0.0000	119.5852
Total	**0.0603**	**0.5396**	**0.4628**	**1.3500e-003**	**0.0450**	**0.0212**	**0.0662**	**0.0222**	**0.0195**	**0.0416**	**0.0000**	**118.6260**	**118.6260**	**0.0384**	**0.0000**	**119.5852**

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8300e-003	1.1800e-003	0.0132	4.0000e-005	5.0000e-003	3.0000e-005	5.0300e-003	1.3300e-003	3.0000e-005	1.3500e-003	0.0000	3.8967	3.8967	8.0000e-005	0.0000	3.8988
Total	**1.8300e-003**	**1.1800e-003**	**0.0132**	**4.0000e-005**	**5.0000e-003**	**3.0000e-005**	**5.0300e-003**	**1.3300e-003**	**3.0000e-005**	**1.3500e-003**	**0.0000**	**3.8967**	**3.8967**	**8.0000e-005**	**0.0000**	**3.8988**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0202	0.0000	0.0202	9.9700e-003	0.0000	9.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0603	0.5396	0.4628	1.3500e-003		0.0212	0.0212		0.0195	0.0195	0.0000	118.6259	118.6259	0.0384	0.0000	119.5850
Total	**0.0603**	**0.5396**	**0.4628**	**1.3500e-003**	**0.0202**	**0.0212**	**0.0414**	**9.9700e-003**	**0.0195**	**0.0294**	**0.0000**	**118.6259**	**118.6259**	**0.0384**	**0.0000**	**119.5850**

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8300e-003	1.1800e-003	0.0132	4.0000e-005	5.0000e-003	3.0000e-005	5.0300e-003	1.3300e-003	3.0000e-005	1.3500e-003	0.0000	3.8967	3.8967	8.0000e-005	0.0000	3.8988
Total	**1.8300e-003**	**1.1800e-003**	**0.0132**	**4.0000e-005**	**5.0000e-003**	**3.0000e-005**	**5.0300e-003**	**1.3300e-003**	**3.0000e-005**	**1.3500e-003**	**0.0000**	**3.8967**	**3.8967**	**8.0000e-005**	**0.0000**	**3.8988**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0143	0.1446	0.1896	3.0000e-004		7.3800e-003	7.3800e-003		6.7900e-003	6.7900e-003	0.0000	26.0358	26.0358	8.4200e-003	0.0000	26.2463
Paving	0.0143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0286**	**0.1446**	**0.1896**	**3.0000e-004**		**7.3800e-003**	**7.3800e-003**		**6.7900e-003**	**6.7900e-003**	**0.0000**	**26.0358**	**26.0358**	**8.4200e-003**	**0.0000**	**26.2463**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2900e-003	0.0556	8.1700e-003	2.0000e-004	4.7400e-003	1.5000e-004	4.8900e-003	1.3000e-003	1.5000e-004	1.4500e-003	0.0000	19.5045	19.5045	1.1600e-003	0.0000	19.5334
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.1000e-004	5.6500e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.6700	1.6700	4.0000e-005	0.0000	1.6709
Total	**2.0700e-003**	**0.0561**	**0.0138**	**2.2000e-004**	**6.8800e-003**	**1.6000e-004**	**7.0500e-003**	**1.8700e-003**	**1.6000e-004**	**2.0300e-003**	**0.0000**	**21.1745**	**21.1745**	**1.2000e-003**	**0.0000**	**21.2043**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0143	0.1446	0.1896	3.0000e-004		7.3800e-003	7.3800e-003		6.7900e-003	6.7900e-003	0.0000	26.0358	26.0358	8.4200e-003	0.0000	26.2463
Paving	0.0143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0286**	**0.1446**	**0.1896**	**3.0000e-004**		**7.3800e-003**	**7.3800e-003**		**6.7900e-003**	**6.7900e-003**	**0.0000**	**26.0358**	**26.0358**	**8.4200e-003**	**0.0000**	**26.2463**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2900e-003	0.0556	8.1700e-003	2.0000e-004	4.7400e-003	1.5000e-004	4.8900e-003	1.3000e-003	1.5000e-004	1.4500e-003	0.0000	19.5045	19.5045	1.1600e-003	0.0000	19.5334
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.1000e-004	5.6500e-003	2.0000e-005	2.1400e-003	1.0000e-005	2.1600e-003	5.7000e-004	1.0000e-005	5.8000e-004	0.0000	1.6700	1.6700	4.0000e-005	0.0000	1.6709
Total	**2.0700e-003**	**0.0561**	**0.0138**	**2.2000e-004**	**6.8800e-003**	**1.6000e-004**	**7.0500e-003**	**1.8700e-003**	**1.6000e-004**	**2.0300e-003**	**0.0000**	**21.1745**	**21.1745**	**1.2000e-003**	**0.0000**	**21.2043**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0178	0.0000	0.0178	1.9400e-003	0.0000	1.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0614	0.6759	0.4982	1.0600e-003		0.0291	0.0291		0.0267	0.0267	0.0000	93.2701	93.2701	0.0302	0.0000	94.0243
Total	**0.0614**	**0.6759**	**0.4982**	**1.0600e-003**	**0.0178**	**0.0291**	**0.0469**	**1.9400e-003**	**0.0267**	**0.0287**	**0.0000**	**93.2701**	**93.2701**	**0.0302**	**0.0000**	**94.0243**

3.6 Track Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0645	9.4700e-003	2.3000e-004	5.5000e-003	1.8000e-004	5.6700e-003	1.5100e-003	1.7000e-004	1.6800e-003	0.0000	22.6253	22.6253	1.3400e-003	0.0000	22.6588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.5400e-003	0.0172	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.0871	5.0871	1.1000e-004	0.0000	5.0899
Total	**3.8800e-003**	**0.0660**	**0.0267**	**2.9000e-004**	**0.0120**	**2.2000e-004**	**0.0122**	**3.2400e-003**	**2.1000e-004**	**3.4500e-003**	**0.0000**	**27.7123**	**27.7123**	**1.4500e-003**	**0.0000**	**27.7486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.0200e-003	0.0000	8.0200e-003	8.7000e-004	0.0000	8.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0614	0.6759	0.4982	1.0600e-003		0.0291	0.0291		0.0267	0.0267	0.0000	93.2700	93.2700	0.0302	0.0000	94.0241
Total	**0.0614**	**0.6759**	**0.4982**	**1.0600e-003**	**8.0200e-003**	**0.0291**	**0.0371**	**8.7000e-004**	**0.0267**	**0.0276**	**0.0000**	**93.2700**	**93.2700**	**0.0302**	**0.0000**	**94.0241**

3.6 Track Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4900e-003	0.0645	9.4700e-003	2.3000e-004	5.5000e-003	1.8000e-004	5.6700e-003	1.5100e-003	1.7000e-004	1.6800e-003	0.0000	22.6253	22.6253	1.3400e-003	0.0000	22.6588
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3900e-003	1.5400e-003	0.0172	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.0871	5.0871	1.1000e-004	0.0000	5.0899
Total	**3.8800e-003**	**0.0660**	**0.0267**	**2.9000e-004**	**0.0120**	**2.2000e-004**	**0.0122**	**3.2400e-003**	**2.1000e-004**	**3.4500e-003**	**0.0000**	**27.7123**	**27.7123**	**1.4500e-003**	**0.0000**	**27.7486**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0606	0.5543	0.6074	1.0300e-003		0.0284	0.0284		0.0271	0.0271	0.0000	88.5312	88.5312	0.0162	0.0000	88.9370
Total	**0.0606**	**0.5543**	**0.6074**	**1.0300e-003**		**0.0284**	**0.0284**		**0.0271**	**0.0271**	**0.0000**	**88.5312**	**88.5312**	**0.0162**	**0.0000**	**88.9370**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5500e-003	0.1399	0.0266	4.0000e-004	0.0101	2.4000e-004	0.0103	2.9000e-003	2.3000e-004	3.1300e-003	0.0000	38.5185	38.5185	2.8100e-003	0.0000	38.5887
Worker	0.0163	0.0106	0.1179	3.9000e-004	0.0447	2.6000e-004	0.0450	0.0119	2.4000e-004	0.0121	0.0000	34.8302	34.8302	7.6000e-004	0.0000	34.8492
Total	**0.0199**	**0.1505**	**0.1446**	**7.9000e-004**	**0.0548**	**5.0000e-004**	**0.0553**	**0.0148**	**4.7000e-004**	**0.0152**	**0.0000**	**73.3488**	**73.3488**	**3.5700e-003**	**0.0000**	**73.4379**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0606	0.5543	0.6074	1.0300e-003		0.0284	0.0284		0.0271	0.0271	0.0000	88.5311	88.5311	0.0162	0.0000	88.9369
Total	**0.0606**	**0.5543**	**0.6074**	**1.0300e-003**		**0.0284**	**0.0284**		**0.0271**	**0.0271**	**0.0000**	**88.5311**	**88.5311**	**0.0162**	**0.0000**	**88.9369**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5500e-003	0.1399	0.0266	4.0000e-004	0.0101	2.4000e-004	0.0103	2.9000e-003	2.3000e-004	3.1300e-003	0.0000	38.5185	38.5185	2.8100e-003	0.0000	38.5887
Worker	0.0163	0.0106	0.1179	3.9000e-004	0.0447	2.6000e-004	0.0450	0.0119	2.4000e-004	0.0121	0.0000	34.8302	34.8302	7.6000e-004	0.0000	34.8492
Total	**0.0199**	**0.1505**	**0.1446**	**7.9000e-004**	**0.0548**	**5.0000e-004**	**0.0553**	**0.0148**	**4.7000e-004**	**0.0152**	**0.0000**	**73.3488**	**73.3488**	**3.5700e-003**	**0.0000**	**73.4379**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2971	2.7130	3.2043	5.4600e-003		0.1306	0.1306		0.1247	0.1247	0.0000	469.8754	469.8754	0.0851	0.0000	472.0036
Total	**0.2971**	**2.7130**	**3.2043**	**5.4600e-003**		**0.1306**	**0.1306**		**0.1247**	**0.1247**	**0.0000**	**469.8754**	**469.8754**	**0.0851**	**0.0000**	**472.0036**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.5551	0.1230	2.0800e-003	0.0534	5.7000e-004	0.0539	0.0154	5.4000e-004	0.0159	0.0000	198.9992	198.9992	0.0114	0.0000	199.2843
Worker	0.0814	0.0506	0.5769	1.9700e-003	0.2372	1.3500e-003	0.2385	0.0630	1.2400e-003	0.0642	0.0000	177.7992	177.7992	3.6100e-003	0.0000	177.8894
Total	**0.0958**	**0.6057**	**0.6998**	**4.0500e-003**	**0.2906**	**1.9200e-003**	**0.2925**	**0.0784**	**1.7800e-003**	**0.0802**	**0.0000**	**376.7984**	**376.7984**	**0.0150**	**0.0000**	**377.1737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2971	2.7130	3.2043	5.4600e-003		0.1306	0.1306		0.1247	0.1247	0.0000	469.8748	469.8748	0.0851	0.0000	472.0030
Total	**0.2971**	**2.7130**	**3.2043**	**5.4600e-003**		**0.1306**	**0.1306**		**0.1247**	**0.1247**	**0.0000**	**469.8748**	**469.8748**	**0.0851**	**0.0000**	**472.0030**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0144	0.5551	0.1230	2.0800e-003	0.0534	5.7000e-004	0.0539	0.0154	5.4000e-004	0.0159	0.0000	198.9992	198.9992	0.0114	0.0000	199.2843
Worker	0.0814	0.0506	0.5769	1.9700e-003	0.2372	1.3500e-003	0.2385	0.0630	1.2400e-003	0.0642	0.0000	177.7992	177.7992	3.6100e-003	0.0000	177.8894
Total	**0.0958**	**0.6057**	**0.6998**	**4.0500e-003**	**0.2906**	**1.9200e-003**	**0.2925**	**0.0784**	**1.7800e-003**	**0.0802**	**0.0000**	**376.7984**	**376.7984**	**0.0150**	**0.0000**	**377.1737**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1453	1.3270	1.6697	2.8600e-003		0.0597	0.0597		0.0570	0.0570	0.0000	245.8154	245.8154	0.0440	0.0000	246.9165
Total	**0.1453**	**1.3270**	**1.6697**	**2.8600e-003**		**0.0597**	**0.0597**		**0.0570**	**0.0570**	**0.0000**	**245.8154**	**245.8154**	**0.0440**	**0.0000**	**246.9165**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2888	0.0622	1.0800e-003	0.0279	2.9000e-004	0.0282	8.0500e-003	2.8000e-004	8.3300e-003	0.0000	103.7002	103.7002	5.8300e-003	0.0000	103.8460
Worker	0.0402	0.0240	0.2825	9.9000e-004	0.1241	7.0000e-004	0.1248	0.0330	6.4000e-004	0.0336	0.0000	89.6810	89.6810	1.7200e-003	0.0000	89.7240
Total	**0.0476**	**0.3128**	**0.3446**	**2.0700e-003**	**0.1520**	**9.9000e-004**	**0.1530**	**0.0410**	**9.2000e-004**	**0.0419**	**0.0000**	**193.3811**	**193.3811**	**7.5500e-003**	**0.0000**	**193.5700**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1453	1.3270	1.6697	2.8600e-003		0.0597	0.0597		0.0570	0.0570	0.0000	245.8152	245.8152	0.0440	0.0000	246.9162
Total	**0.1453**	**1.3270**	**1.6697**	**2.8600e-003**		**0.0597**	**0.0597**		**0.0570**	**0.0570**	**0.0000**	**245.8152**	**245.8152**	**0.0440**	**0.0000**	**246.9162**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2888	0.0622	1.0800e-003	0.0279	2.9000e-004	0.0282	8.0500e-003	2.8000e-004	8.3300e-003	0.0000	103.7002	103.7002	5.8300e-003	0.0000	103.8460
Worker	0.0402	0.0240	0.2825	9.9000e-004	0.1241	7.0000e-004	0.1248	0.0330	6.4000e-004	0.0336	0.0000	89.6810	89.6810	1.7200e-003	0.0000	89.7240
Total	**0.0476**	**0.3128**	**0.3446**	**2.0700e-003**	**0.1520**	**9.9000e-004**	**0.1530**	**0.0410**	**9.2000e-004**	**0.0419**	**0.0000**	**193.3811**	**193.3811**	**7.5500e-003**	**0.0000**	**193.5700**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0789					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	8.5300e-003	0.0127	2.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	1.7873	1.7873	1.0000e-004	0.0000	1.7898
Total	**0.0801**	**8.5300e-003**	**0.0127**	**2.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**1.7873**	**1.7873**	**1.0000e-004**	**0.0000**	**1.7898**

3.8 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.9000e-004	5.7800e-003	2.0000e-005	2.5400e-003	1.0000e-005	2.5500e-003	6.7000e-004	1.0000e-005	6.9000e-004	0.0000	1.8353	1.8353	4.0000e-005	0.0000	1.8361
Total	**8.2000e-004**	**4.9000e-004**	**5.7800e-003**	**2.0000e-005**	**2.5400e-003**	**1.0000e-005**	**2.5500e-003**	**6.7000e-004**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**1.8353**	**1.8353**	**4.0000e-005**	**0.0000**	**1.8361**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0789					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2700e-003	8.5300e-003	0.0127	2.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	1.7873	1.7873	1.0000e-004	0.0000	1.7898
Total	**0.0801**	**8.5300e-003**	**0.0127**	**2.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**1.7873**	**1.7873**	**1.0000e-004**	**0.0000**	**1.7898**

3.8 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	4.9000e-004	5.7800e-003	2.0000e-005	2.5400e-003	1.0000e-005	2.5500e-003	6.7000e-004	1.0000e-005	6.9000e-004	0.0000	1.8353	1.8353	4.0000e-005	0.0000	1.8361
Total	**8.2000e-004**	**4.9000e-004**	**5.7800e-003**	**2.0000e-005**	**2.5400e-003**	**1.0000e-005**	**2.5500e-003**	**6.7000e-004**	**1.0000e-005**	**6.9000e-004**	**0.0000**	**1.8353**	**1.8353**	**4.0000e-005**	**0.0000**	**1.8361**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137
Unmitigated	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137
Total	**6.1000e-004**	**6.0000e-005**	**6.5900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0137**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e-004	6.0000e-005	6.5900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0128	0.0128	3.0000e-005	0.0000	0.0137
Total	**6.1000e-004**	**6.0000e-005**	**6.5900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0128**	**0.0128**	**3.0000e-005**	**0.0000**	**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

HNT-10.01 Riverside-Downtown Station Improvements Option 2A

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	474.80	1000sqft	10.90	474,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 2A, Run R3.
Construction modeling only.
R2: Adjusted land uses per revised info from project engineers.
R3: Corrected grading off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
225 loads of asphalt/concrete druing paving.
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,940 CY esitmated construction debris = 6,940 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,200 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

HNT-10.01 Riverside-Downtown Station Improvements Option 2A - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	30854	7830
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	300.00	445.00
tblConstructionPhase	NumDays	20.00	27.00
tblConstructionPhase	NumDays	30.00	26.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	25.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	13.00	11.00
tblGrading	MaterialExported	0.00	1,200.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	550.00
tblTripsAndVMT	VendorTripNumber	85.00	65.00
tblTripsAndVMT	WorkerTripNumber	217.00	166.00
tblTripsAndVMT	WorkerTripNumber	43.00	33.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7957	41.5955	36.7917	0.1075	6.3902	1.6305	7.4079	3.4081	1.5000	4.3445	0.0000	10,417.7245	10,417.7245	3.2612	0.0000	10,499.2535
2023	3.0839	25.5001	30.7528	0.0747	2.2717	1.0193	3.2910	0.6119	0.9731	1.5850	0.0000	7,336.5893	7,336.5893	0.8482	0.0000	7,357.7930
2024	11.5778	24.0882	30.3031	0.0740	2.2717	0.8925	3.1641	0.6119	0.8516	1.4635	0.0000	7,271.9607	7,271.9607	0.8353	0.0000	7,292.8429
Maximum	**11.5778**	**41.5955**	**36.7917**	**0.1075**	**6.3902**	**1.6305**	**7.4079**	**3.4081**	**1.5000**	**4.3445**	**0.0000**	**10,417.7245**	**10,417.7245**	**3.2612**	**0.0000**	**10,499.2535**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7957	41.5955	36.7917	0.1075	3.1584	1.6305	4.0924	1.5870	1.5000	2.5233	0.0000	10,417.7244	10,417.7244	3.2612	0.0000	10,499.2535
2023	3.0839	25.5001	30.7528	0.0747	2.2717	1.0193	3.2910	0.6119	0.9731	1.5850	0.0000	7,336.5893	7,336.5893	0.8482	0.0000	7,357.7930
2024	11.5778	24.0882	30.3031	0.0740	2.2717	0.8925	3.1641	0.6119	0.8516	1.4635	0.0000	7,271.9607	7,271.9607	0.8353	0.0000	7,292.8429
Maximum	**11.5778**	**41.5955**	**36.7917**	**0.1075**	**3.1584**	**1.6305**	**4.0924**	**1.5870**	**1.5000**	**2.5233**	**0.0000**	**10,417.7244**	**10,417.7244**	**3.2612**	**0.0000**	**10,499.2535**

HNT-10.01 Riverside-Downtown Station Improvements Option 2A - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	29.56	0.00	23.92	39.32	0.00	24.63	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**	**0.0000**	**0.1206**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**	**0.0000**	**0.1206**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	4/6/2022	5	27	
2	Site Preparation	Site Preparation	4/7/2022	5/11/2022	5	25	
3	Grading	Grading	5/12/2022	6/16/2022	5	26	
4	Paving	Paving	6/17/2022	7/22/2022	5	26	
5	Track Construction	Grading	7/23/2022	10/24/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/25/2022	7/8/2024	5	445	
7	Architectural Coating	Architectural Coating	7/9/2024	7/26/2024	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 11.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 30,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38

Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	0	8.00	367	0.48
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40
Track Construction	Scrapers	0	8.00	367	0.48
Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	686.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	550.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5343	0.0000	5.5343	0.8379	0.0000	0.8379			0.0000			0.0000
Off-Road	1.9748	19.5629	19.0219	0.0358		0.9114	0.9114		0.8385	0.8385		3,469.8190	3,469.8190	1.1222		3,497.8742
Total	**1.9748**	**19.5629**	**19.0219**	**0.0358**	**5.5343**	**0.9114**	**6.4457**	**0.8379**	**0.8385**	**1.6765**		**3,469.8190**	**3,469.8190**	**1.1222**		**3,497.8742**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1162	5.0318	0.7047	0.0189	0.4444	0.0139	0.4583	0.1218	0.0133	0.1351		2,007.7683	2,007.7683	0.1132		2,010.5980
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0486	0.6820	2.0600e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.2049**	**5.0804**	**1.3867**	**0.0210**	**0.6680**	**0.0152**	**0.6832**	**0.1811**	**0.0145**	**0.1956**		**2,212.9375**	**2,212.9375**	**0.1178**		**2,215.8812**

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4904	0.0000	2.4904	0.3771	0.0000	0.3771			0.0000			0.0000
Off-Road	1.9748	19.5629	19.0219	0.0358		0.9114	0.9114		0.8385	0.8385	0.0000	3,469.8190	3,469.8190	1.1222		3,497.8742
Total	**1.9748**	**19.5629**	**19.0219**	**0.0358**	**2.4904**	**0.9114**	**3.4019**	**0.3771**	**0.8385**	**1.2156**	**0.0000**	**3,469.8190**	**3,469.8190**	**1.1222**		**3,497.8742**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1162	5.0318	0.7047	0.0189	0.4444	0.0139	0.4583	0.1218	0.0133	0.1351		2,007.7683	2,007.7683	0.1132		2,010.5980
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0486	0.6820	2.0600e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.2049**	**5.0804**	**1.3867**	**0.0210**	**0.6680**	**0.0152**	**0.6832**	**0.1811**	**0.0145**	**0.1956**		**2,212.9375**	**2,212.9375**	**0.1178**		**2,215.8812**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0282	0.0000	6.0282	3.3112	0.0000	3.3112			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**6.0282**	**1.0129**	**7.0411**	**3.3112**	**0.9319**	**4.2430**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.1883	0.1664	4.4600e-003	0.1050	3.2900e-003	0.1082	0.0288	3.1500e-003	0.0319		474.1377	474.1377	0.0267		474.8059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.1294**	**1.2442**	**0.9507**	**6.8300e-003**	**0.3620**	**4.7600e-003**	**0.3668**	**0.0970**	**4.5100e-003**	**0.1015**		**710.0823**	**710.0823**	**0.0320**		**710.8817**

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7127	0.0000	2.7127	1.4900	0.0000	1.4900			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.7127**	**1.0129**	**3.7256**	**1.4900**	**0.9319**	**2.4219**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0274	1.1883	0.1664	4.4600e-003	0.1050	3.2900e-003	0.1082	0.0288	3.1500e-003	0.0319		474.1377	474.1377	0.0267		474.8059
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0559	0.7843	2.3700e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		235.9446	235.9446	5.2500e-003		236.0757
Total	**0.1294**	**1.2442**	**0.9507**	**6.8300e-003**	**0.3620**	**4.7600e-003**	**0.3668**	**0.0970**	**4.5100e-003**	**0.1015**		**710.0823**	**710.0823**	**0.0320**		**710.8817**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4597	0.0000	3.4597	1.7036	0.0000	1.7036			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980		10,058.6783	10,058.6783	3.2532		10,140.0079
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**3.4597**	**1.6282**	**5.0879**	**1.7036**	**1.4980**	**3.2015**		**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0079**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5569	0.0000	1.5569	0.7666	0.0000	0.7666			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980	0.0000	10,058.6783	10,058.6783	3.2532		10,140.0078
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**1.5569**	**1.6282**	**3.1851**	**0.7666**	**1.4980**	**2.2646**	**0.0000**	**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2012**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0967	4.1894	0.5867	0.0157	0.3700	0.0116	0.3816	0.1014	0.0111	0.1125		1,671.6393	1,671.6393	0.0942		1,673.9953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	**0.1632**	**4.2259**	**1.0982**	**0.0173**	**0.5377**	**0.0126**	**0.5502**	**0.1459**	**0.0120**	**0.1579**		**1,825.5162**	**1,825.5162**	**0.0977**		**1,827.9577**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2012**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0967	4.1894	0.5867	0.0157	0.3700	0.0116	0.3816	0.1014	0.0111	0.1125		1,671.6393	1,671.6393	0.0942		1,673.9953
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0365	0.5115	1.5400e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		153.8769	153.8769	3.4200e-003		153.9624
Total	**0.1632**	**4.2259**	**1.0982**	**0.0173**	**0.5377**	**0.0126**	**0.5502**	**0.1459**	**0.0120**	**0.1579**		**1,825.5162**	**1,825.5162**	**0.0977**		**1,827.9577**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5400	0.0000	0.5400	0.0587	0.0000	0.0587			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099		3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.5400**	**0.8803**	**1.4203**	**0.0587**	**0.8099**	**0.8686**		**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0442	1.9144	0.2681	7.1900e-003	0.1691	5.3000e-003	0.1744	0.0464	5.0700e-003	0.0514		763.8885	763.8885	0.0431		764.9651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.1240**	**1.9582**	**0.8819**	**9.0400e-003**	**0.3703**	**6.4500e-003**	**0.3767**	**0.0997**	**6.1300e-003**	**0.1058**		**948.5408**	**948.5408**	**0.0472**		**949.7200**

3.6 Track Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2430	0.0000	0.2430	0.0264	0.0000	0.0264			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099	0.0000	3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.2430**	**0.8803**	**1.1233**	**0.0264**	**0.8099**	**0.8363**	**0.0000**	**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0442	1.9144	0.2681	7.1900e-003	0.1691	5.3000e-003	0.1744	0.0464	5.0700e-003	0.0514		763.8885	763.8885	0.0431		764.9651
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.1240**	**1.9582**	**0.8819**	**9.0400e-003**	**0.3703**	**6.4500e-003**	**0.3767**	**0.0997**	**6.1300e-003**	**0.1058**		**948.5408**	**948.5408**	**0.0472**		**949.7200**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060		3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**		**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1415	5.6750	0.9982	0.0167	0.4162	9.6200e-003	0.4258	0.1198	9.2000e-003	0.1290		1,761.0137	1,761.0137	0.1203		1,764.0222
Worker	0.7361	0.4035	5.6608	0.0171	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,702.9044	1,702.9044	0.0379		1,703.8508
Total	**0.8776**	**6.0785**	**6.6590**	**0.0338**	**2.2717**	**0.0203**	**2.2920**	**0.6119**	**0.0190**	**0.6309**		**3,463.9181**	**3,463.9181**	**0.1582**		**3,467.8730**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060	0.0000	3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**	**0.0000**	**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1415	5.6750	0.9982	0.0167	0.4162	9.6200e-003	0.4258	0.1198	9.2000e-003	0.1290		1,761.0137	1,761.0137	0.1203		1,764.0222
Worker	0.7361	0.4035	5.6608	0.0171	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,702.9044	1,702.9044	0.0379		1,703.8508
Total	**0.8776**	**6.0785**	**6.6590**	**0.0338**	**2.2717**	**0.0203**	**2.2920**	**0.6119**	**0.0190**	**0.6309**		**3,463.9181**	**3,463.9181**	**0.1582**		**3,467.8730**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594		3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**		**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1085	4.2674	0.8798	0.0162	0.4162	4.2900e-003	0.4205	0.1198	4.1000e-003	0.1239		1,714.1771	1,714.1771	0.0923		1,716.4856
Worker	0.6902	0.3639	5.2242	0.0164	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,638.1896	1,638.1896	0.0340		1,639.0391
Total	**0.7987**	**4.6312**	**6.1040**	**0.0327**	**2.2717**	**0.0147**	**2.2864**	**0.6119**	**0.0137**	**0.6256**		**3,352.3667**	**3,352.3667**	**0.1263**		**3,355.5247**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594	0.0000	3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**	**0.0000**	**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1085	4.2674	0.8798	0.0162	0.4162	4.2900e-003	0.4205	0.1198	4.1000e-003	0.1239		1,714.1771	1,714.1771	0.0923		1,716.4856
Worker	0.6902	0.3639	5.2242	0.0164	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,638.1896	1,638.1896	0.0340		1,639.0391
Total	**0.7987**	**4.6312**	**6.1040**	**0.0327**	**2.2717**	**0.0147**	**2.2864**	**0.6119**	**0.0137**	**0.6256**		**3,352.3667**	**3,352.3667**	**0.1263**		**3,355.5247**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381		3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**		**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1064	4.2442	0.8499	0.0162	0.4162	4.2700e-003	0.4204	0.1198	4.0800e-003	0.1239		1,707.4710	1,707.4710	0.0903		1,709.7293
Worker	0.6505	0.3300	4.8985	0.0159	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,579.7082	1,579.7082	0.0310		1,580.4828
Total	**0.7569**	**4.5742**	**5.7484**	**0.0320**	**2.2717**	**0.0146**	**2.2862**	**0.6119**	**0.0136**	**0.6255**		**3,287.1792**	**3,287.1792**	**0.1213**		**3,290.2122**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381	0.0000	3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**	**0.0000**	**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1064	4.2442	0.8499	0.0162	0.4162	4.2700e-003	0.4204	0.1198	4.0800e-003	0.1239		1,707.4710	1,707.4710	0.0903		1,709.7293
Worker	0.6505	0.3300	4.8985	0.0159	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,579.7082	1,579.7082	0.0310		1,580.4828
Total	**0.7569**	**4.5742**	**5.7484**	**0.0320**	**2.2717**	**0.0146**	**2.2862**	**0.6119**	**0.0136**	**0.6255**		**3,287.1792**	**3,287.1792**	**0.1213**		**3,290.2122**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.2677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**11.4485**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
Total	**0.1293**	**0.0656**	**0.9738**	**3.1500e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**314.0384**	**314.0384**	**6.1600e-003**		**314.1924**

3.8 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.2677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**11.4485**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1293	0.0656	0.9738	3.1500e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		314.0384	314.0384	6.1600e-003		314.1924
Total	**0.1293**	**0.0656**	**0.9738**	**3.1500e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**314.0384**	**314.0384**	**6.1600e-003**		**314.1924**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Unmitigated	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**		**0.1206**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**		**0.1206**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

HNT-10.01 Riverside-Downtown Station Improvements Option 2A

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	3.18	1000sqft	0.07	3,180.00	0
Other Non-Asphalt Surfaces	39.44	1000sqft	0.91	39,440.00	0
Parking Lot	474.80	1000sqft	10.90	474,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2025
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Option 2A, Run R3.
Construction modeling only.
R2: Adjusted land uses per revised info from project engineers.
R3: Corrected grading off-road equipment.

Land Use - General Light Indistry = Pedestrian bridge, elevator and platform canopies.
Other non-Asphalt Surfaces = New railroad track.

Construction Phase - Overal schedule per project engineers, phases adjusted to fit overall schedule.

Off-road Equipment -

Off-road Equipment - Estimated equipment for platform, pedestrian bridge, and elevator/stair tower construction.

Off-road Equipment - Demolition equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Grading equipment per project engineers.
Off-Highway Trucks = dump trucks and 1 water truck.

Off-road Equipment -

Off-road Equipment - Site preparation equipment per project engineers.
Off-Highway Truck = water truck.

Off-road Equipment - Estimated equipment for railroad bed, ballast and track installation.
Grader = grader or ballast tamping machine.

Trips and VMT - One way trips.
225 loads of asphalt/concrete druing paving.
319 loads of aggreagte, sleeprs and track during track construction.

Demolition - 6,940 CY esitmated construction debris = 6,940 tons assuming concrete/asphalt and compacted building debris.

Grading - 1,200 CY of vegetation/debris exported during site preparation.
5,100 CY equivalent of aggregate, sleepers, and rails imported during track construction.

Architectural Coating - Interior and exterior VOC limit 50 g/L per SCAQMD Rule 1113.

Vehicle Trips - Construction only.

Consumer Products - Construction only.

Area Coating - Construction only.

Energy Use - Construction only.

Water And Wastewater - Construction only.

Solid Waste - Construction only.

Construction Off-road Equipment Mitigation - Fugitive dust control to meet SCAQMD Rule 403.

HNT-10.01 Riverside-Downtown Station Improvements Option 2A - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	Area_Nonresidential_Exterior	1590	1250
tblAreaCoating	Area_Nonresidential_Interior	4770	3750
tblAreaCoating	Area_Parking	30854	7830
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	300.00	445.00
tblConstructionPhase	NumDays	20.00	27.00
tblConstructionPhase	NumDays	30.00	26.00
tblConstructionPhase	NumDays	30.00	66.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	25.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	13.00	11.00
tblGrading	MaterialExported	0.00	1,200.00
tblGrading	MaterialImported	0.00	5,100.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	3.94	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	550.00
tblTripsAndVMT	VendorTripNumber	85.00	65.00
tblTripsAndVMT	WorkerTripNumber	217.00	166.00
tblTripsAndVMT	WorkerTripNumber	43.00	33.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00
tblWater	IndoorWaterUseRate	735,375.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7932	41.5983	36.5601	0.1071	6.3902	1.6305	7.4079	3.4081	1.5000	4.3445	0.0000	10,380.7970	10,380.7970	3.2601	0.0000	10,462.3001
2023	3.0817	25.4542	29.8693	0.0724	2.2717	1.0195	3.2911	0.6119	0.9733	1.5852	0.0000	7,104.3738	7,104.3738	0.8538	0.0000	7,125.7188
2024	11.5765	24.0417	29.4716	0.0718	2.2717	0.8926	3.1643	0.6119	0.8517	1.4636	0.0000	7,046.3877	7,046.3877	0.8411	0.0000	7,067.4153
Maximum	**11.5765**	**41.5983**	**36.5601**	**0.1071**	**6.3902**	**1.6305**	**7.4079**	**3.4081**	**1.5000**	**4.3445**	**0.0000**	**10,380.7970**	**10,380.7970**	**3.2601**	**0.0000**	**10,462.3001**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.7932	41.5983	36.5601	0.1071	3.1584	1.6305	4.0924	1.5870	1.5000	2.5234	0.0000	10,380.7969	10,380.7969	3.2601	0.0000	10,462.3001
2023	3.0817	25.4542	29.8693	0.0724	2.2717	1.0195	3.2911	0.6119	0.9733	1.5852	0.0000	7,104.3738	7,104.3738	0.8538	0.0000	7,125.7188
2024	11.5765	24.0417	29.4716	0.0718	2.2717	0.8926	3.1643	0.6119	0.8517	1.4636	0.0000	7,046.3877	7,046.3877	0.8411	0.0000	7,067.4153
Maximum	**11.5765**	**41.5983**	**36.5601**	**0.1071**	**3.1584**	**1.6305**	**4.0924**	**1.5870**	**1.5000**	**2.5234**	**0.0000**	**10,380.7969**	**10,380.7969**	**3.2601**	**0.0000**	**10,462.3001**

HNT-10.01 Riverside-Downtown Station Improvements Option 2A - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	29.56	0.00	23.92	39.32	0.00	24.63	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**	**0.0000**	**0.1206**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**	**0.0000**	**1.9000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**	**0.0000**	**0.1206**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2022	4/6/2022	5	27	
2	Site Preparation	Site Preparation	4/7/2022	5/11/2022	5	25	
3	Grading	Grading	5/12/2022	6/16/2022	5	26	
4	Paving	Paving	6/17/2022	7/22/2022	5	26	
5	Track Construction	Grading	7/23/2022	10/24/2022	5	66	
6	Bridge/Platform Construction	Building Construction	10/25/2022	7/8/2024	5	445	
7	Architectural Coating	Architectural Coating	7/9/2024	7/26/2024	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 11

Acres of Paving: 11.81

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,770; Non-Residential Outdoor: 1,590; Striped Parking Area: 30,854 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38

Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Skid Steer Loaders	2	8.00	65	0.37
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Excavators	2	8.00	158	0.38
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Skid Steer Loaders	2	8.00	65	0.37
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	5	8.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Scrapers	0	8.00	367	0.48
Grading	Skid Steer Loaders	2	8.00	65	0.37
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Track Construction	Cranes	2	8.00	231	0.29
Track Construction	Excavators	1	8.00	158	0.38
Track Construction	Graders	1	8.00	187	0.41
Track Construction	Rollers	1	8.00	80	0.38
Track Construction	Rubber Tired Dozers	0	8.00	247	0.40
Track Construction	Scrapers	0	8.00	367	0.48
Track Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Bridge/Platform Construction	Cranes	1	8.00	231	0.29
Bridge/Platform Construction	Forklifts	3	8.00	89	0.20
Bridge/Platform Construction	Generator Sets	3	8.00	84	0.74
Bridge/Platform Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Bridge/Platform Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	8	20.00	0.00	686.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	9	23.00	0.00	150.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	550.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Track Construction	7	18.00	0.00	638.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Bridge/Platform Construction	11	166.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5343	0.0000	5.5343	0.8379	0.0000	0.8379			0.0000			0.0000
Off-Road	1.9748	19.5629	19.0219	0.0358		0.9114	0.9114		0.8385	0.8385		3,469.8190	3,469.8190	1.1222		3,497.8742
Total	**1.9748**	**19.5629**	**19.0219**	**0.0358**	**5.5343**	**0.9114**	**6.4457**	**0.8379**	**0.8385**	**1.6765**		**3,469.8190**	**3,469.8190**	**1.1222**		**3,497.8742**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1224	5.0534	0.8200	0.0184	0.4444	0.0142	0.4586	0.1218	0.0135	0.1354		1,956.8982	1,956.8982	0.1238		1,959.9930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0873	0.0503	0.5497	1.8500e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.2096**	**5.1037**	**1.3697**	**0.0203**	**0.6680**	**0.0154**	**0.6834**	**0.1811**	**0.0147**	**0.1958**		**2,140.9660**	**2,140.9660**	**0.1278**		**2,144.1600**

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4904	0.0000	2.4904	0.3771	0.0000	0.3771			0.0000			0.0000
Off-Road	1.9748	19.5629	19.0219	0.0358		0.9114	0.9114		0.8385	0.8385	0.0000	3,469.8190	3,469.8190	1.1222		3,497.8742
Total	**1.9748**	**19.5629**	**19.0219**	**0.0358**	**2.4904**	**0.9114**	**3.4019**	**0.3771**	**0.8385**	**1.2156**	**0.0000**	**3,469.8190**	**3,469.8190**	**1.1222**		**3,497.8742**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1224	5.0534	0.8200	0.0184	0.4444	0.0142	0.4586	0.1218	0.0135	0.1354		1,956.8982	1,956.8982	0.1238		1,959.9930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0873	0.0503	0.5497	1.8500e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.2096**	**5.1037**	**1.3697**	**0.0203**	**0.6680**	**0.0154**	**0.6834**	**0.1811**	**0.0147**	**0.1958**		**2,140.9660**	**2,140.9660**	**0.1278**		**2,144.1600**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0282	0.0000	6.0282	3.3112	0.0000	3.3112			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319		4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**6.0282**	**1.0129**	**7.0411**	**3.3112**	**0.9319**	**4.2430**		**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0289	1.1934	0.1936	4.3500e-003	0.1050	3.3400e-003	0.1083	0.0288	3.2000e-003	0.0320		462.1246	462.1246	0.0292		462.8555
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.1293**	**1.2512**	**0.8258**	**6.4700e-003**	**0.3620**	**4.8100e-003**	**0.3669**	**0.0970**	**4.5600e-003**	**0.1015**		**673.8026**	**673.8026**	**0.0338**		**674.6476**

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7127	0.0000	2.7127	1.4900	0.0000	1.4900			0.0000			0.0000
Off-Road	2.2662	22.5879	20.5531	0.0421		1.0129	1.0129		0.9319	0.9319	0.0000	4,075.4833	4,075.4833	1.3181		4,108.4356
Total	**2.2662**	**22.5879**	**20.5531**	**0.0421**	**2.7127**	**1.0129**	**3.7256**	**1.4900**	**0.9319**	**2.4219**	**0.0000**	**4,075.4833**	**4,075.4833**	**1.3181**		**4,108.4356**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0289	1.1934	0.1936	4.3500e-003	0.1050	3.3400e-003	0.1083	0.0288	3.2000e-003	0.0320		462.1246	462.1246	0.0292		462.8555
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1004	0.0578	0.6321	2.1200e-003	0.2571	1.4700e-003	0.2586	0.0682	1.3600e-003	0.0695		211.6779	211.6779	4.5700e-003		211.7921
Total	**0.1293**	**1.2512**	**0.8258**	**6.4700e-003**	**0.3620**	**4.8100e-003**	**0.3669**	**0.0970**	**4.5600e-003**	**0.1015**		**673.8026**	**673.8026**	**0.0338**		**674.6476**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.4597	0.0000	3.4597	1.7036	0.0000	1.7036			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980		10,058.6783	10,058.6783	3.2532		10,140.0079
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**3.4597**	**1.6282**	**5.0879**	**1.7036**	**1.4980**	**3.2015**		**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0079**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5569	0.0000	1.5569	0.7666	0.0000	0.7666			0.0000			0.0000
Off-Road	4.6405	41.5104	35.5982	0.1039		1.6282	1.6282		1.4980	1.4980	0.0000	10,058.6783	10,058.6783	3.2532		10,140.0078
Total	**4.6405**	**41.5104**	**35.5982**	**0.1039**	**1.5569**	**1.6282**	**3.1851**	**0.7666**	**1.4980**	**2.2646**	**0.0000**	**10,058.6783**	**10,058.6783**	**3.2532**		**10,140.0078**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2012**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1019	4.2074	0.6827	0.0153	0.3700	0.0118	0.3818	0.1014	0.0113	0.1127		1,629.2856	1,629.2856	0.1031		1,631.8623
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	**0.1673**	**4.2451**	**1.0950**	**0.0167**	**0.5377**	**0.0127**	**0.5504**	**0.1459**	**0.0122**	**0.1581**		**1,767.3364**	**1,767.3364**	**0.1061**		**1,769.9876**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.0984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.2012**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1019	4.2074	0.6827	0.0153	0.3700	0.0118	0.3818	0.1014	0.0113	0.1127		1,629.2856	1,629.2856	0.1031		1,631.8623
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0655	0.0377	0.4123	1.3800e-003	0.1677	9.6000e-004	0.1686	0.0445	8.9000e-004	0.0454		138.0508	138.0508	2.9800e-003		138.1253
Total	**0.1673**	**4.2451**	**1.0950**	**0.0167**	**0.5377**	**0.0127**	**0.5504**	**0.1459**	**0.0122**	**0.1581**		**1,767.3364**	**1,767.3364**	**0.1061**		**1,769.9876**

3.6 Track Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5400	0.0000	0.5400	0.0587	0.0000	0.0587			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099		3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.5400**	**0.8803**	**1.4203**	**0.0587**	**0.8099**	**0.8686**		**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0466	1.9227	0.3120	7.0100e-003	0.1691	5.3900e-003	0.1745	0.0464	5.1500e-003	0.0515		744.5341	744.5341	0.0471		745.7116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.1251**	**1.9679**	**0.8067**	**8.6700e-003**	**0.3703**	**6.5400e-003**	**0.3768**	**0.0997**	**6.2100e-003**	**0.1059**		**910.1951**	**910.1951**	**0.0507**		**911.4620**

3.6 Track Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2430	0.0000	0.2430	0.0264	0.0000	0.0264			0.0000			0.0000
Off-Road	1.8591	20.4803	15.0978	0.0322		0.8803	0.8803		0.8099	0.8099	0.0000	3,115.5366	3,115.5366	1.0076		3,140.7273
Total	**1.8591**	**20.4803**	**15.0978**	**0.0322**	**0.2430**	**0.8803**	**1.1233**	**0.0264**	**0.8099**	**0.8363**	**0.0000**	**3,115.5366**	**3,115.5366**	**1.0076**		**3,140.7273**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0466	1.9227	0.3120	7.0100e-003	0.1691	5.3900e-003	0.1745	0.0464	5.1500e-003	0.0515		744.5341	744.5341	0.0471		745.7116
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.1251**	**1.9679**	**0.8067**	**8.6700e-003**	**0.3703**	**6.5400e-003**	**0.3768**	**0.0997**	**6.2100e-003**	**0.1059**		**910.1951**	**910.1951**	**0.0507**		**911.4620**

3.7 Bridge/Platform Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060		3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**		**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1505	5.6182	1.1851	0.0161	0.4162	9.9300e-003	0.4261	0.1198	9.5000e-003	0.1293		1,694.4014	1,694.4014	0.1342		1,697.7570
Worker	0.7245	0.4171	4.5624	0.0153	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,527.7626	1,527.7626	0.0330		1,528.5863
Total	**0.8750**	**6.0353**	**5.7475**	**0.0314**	**2.2717**	**0.0206**	**2.2923**	**0.6119**	**0.0193**	**0.6312**		**3,222.1639**	**3,222.1639**	**0.1672**		**3,226.3433**

3.7 Bridge/Platform Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.4746	22.6236	24.7911	0.0420		1.1583	1.1583		1.1060	1.1060	0.0000	3,983.2211	3,983.2211	0.7303		4,001.4780
Total	**2.4746**	**22.6236**	**24.7911**	**0.0420**		**1.1583**	**1.1583**		**1.1060**	**1.1060**	**0.0000**	**3,983.2211**	**3,983.2211**	**0.7303**		**4,001.4780**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1505	5.6182	1.1851	0.0161	0.4162	9.9300e-003	0.4261	0.1198	9.5000e-003	0.1293		1,694.4014	1,694.4014	0.1342		1,697.7570
Worker	0.7245	0.4171	4.5624	0.0153	1.8555	0.0107	1.8661	0.4921	9.8000e-003	0.5019		1,527.7626	1,527.7626	0.0330		1,528.5863
Total	**0.8750**	**6.0353**	**5.7475**	**0.0314**	**2.2717**	**0.0206**	**2.2923**	**0.6119**	**0.0193**	**0.6312**		**3,222.1639**	**3,222.1639**	**0.1672**		**3,226.3433**

3.7 Bridge/Platform Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594		3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**		**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1150	4.2094	1.0161	0.0156	0.4162	4.4400e-003	0.4206	0.1198	4.2400e-003	0.1241		1,650.3671	1,650.3671	0.1024		1,652.9261
Worker	0.6815	0.3760	4.2044	0.0147	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,469.7840	1,469.7840	0.0296		1,470.5244
Total	**0.7965**	**4.5854**	**5.2206**	**0.0304**	**2.2717**	**0.0148**	**2.2865**	**0.6119**	**0.0138**	**0.6257**		**3,120.1511**	**3,120.1511**	**0.1320**		**3,123.4505**

3.7 Bridge/Platform Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2852	20.8689	24.6488	0.0420		1.0046	1.0046		0.9594	0.9594	0.0000	3,984.2227	3,984.2227	0.7218		4,002.2684
Total	**2.2852**	**20.8689**	**24.6488**	**0.0420**		**1.0046**	**1.0046**		**0.9594**	**0.9594**	**0.0000**	**3,984.2227**	**3,984.2227**	**0.7218**		**4,002.2684**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1150	4.2094	1.0161	0.0156	0.4162	4.4400e-003	0.4206	0.1198	4.2400e-003	0.1241		1,650.3671	1,650.3671	0.1024		1,652.9261
Worker	0.6815	0.3760	4.2044	0.0147	1.8555	0.0104	1.8659	0.4921	9.5700e-003	0.5017		1,469.7840	1,469.7840	0.0296		1,470.5244
Total	**0.7965**	**4.5854**	**5.2206**	**0.0304**	**2.2717**	**0.0148**	**2.2865**	**0.6119**	**0.0138**	**0.6257**		**3,120.1511**	**3,120.1511**	**0.1320**		**3,123.4505**

3.7 Bridge/Platform Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381		3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**		**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1128	4.1870	0.9834	0.0156	0.4162	4.4000e-003	0.4206	0.1198	4.2100e-003	0.1240		1,644.5085	1,644.5085	0.1001		1,647.0114
Worker	0.6442	0.3408	3.9334	0.0142	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,417.0978	1,417.0978	0.0270		1,417.7732
Total	**0.7570**	**4.5277**	**4.9168**	**0.0298**	**2.2717**	**0.0147**	**2.2863**	**0.6119**	**0.0137**	**0.6256**		**3,061.6062**	**3,061.6062**	**0.1271**		**3,064.7846**

3.7 Bridge/Platform Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1371	19.5140	24.5548	0.0420		0.8779	0.8779		0.8381	0.8381	0.0000	3,984.7815	3,984.7815	0.7140		4,002.6308
Total	**2.1371**	**19.5140**	**24.5548**	**0.0420**		**0.8779**	**0.8779**		**0.8381**	**0.8381**	**0.0000**	**3,984.7815**	**3,984.7815**	**0.7140**		**4,002.6308**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1128	4.1870	0.9834	0.0156	0.4162	4.4000e-003	0.4206	0.1198	4.2100e-003	0.1240		1,644.5085	1,644.5085	0.1001		1,647.0114
Worker	0.6442	0.3408	3.9334	0.0142	1.8555	0.0103	1.8658	0.4921	9.4700e-003	0.5016		1,417.0978	1,417.0978	0.0270		1,417.7732
Total	**0.7570**	**4.5277**	**4.9168**	**0.0298**	**2.2717**	**0.0147**	**2.2863**	**0.6119**	**0.0137**	**0.6256**		**3,061.6062**	**3,061.6062**	**0.1271**		**3,064.7846**

3.8 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.2677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**11.4485**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
Total	**0.1281**	**0.0677**	**0.7819**	**2.8200e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**281.7122**	**281.7122**	**5.3700e-003**		**281.8465**

3.8 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	11.2677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**11.4485**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1281	0.0677	0.7819	2.8200e-003	0.3689	2.0400e-003	0.3709	0.0978	1.8800e-003	0.0997		281.7122	281.7122	5.3700e-003		281.8465
Total	**0.1281**	**0.0677**	**0.7819**	**2.8200e-003**	**0.3689**	**2.0400e-003**	**0.3709**	**0.0978**	**1.8800e-003**	**0.0997**		**281.7122**	**281.7122**	**5.3700e-003**		**281.8465**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Other Non-Asphalt Surfaces	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789
Parking Lot	0.554334	0.035376	0.188722	0.108173	0.012711	0.004530	0.017449	0.070039	0.001415	0.001123	0.004446	0.000892	0.000789

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Light Industry	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Unmitigated	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**		**0.1206**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.8500e-003	4.8000e-004	0.0527	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		0.1132	0.1132	2.9000e-004		0.1206
Total	**4.8500e-003**	**4.8000e-004**	**0.0527**	**0.0000**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**		**0.1132**	**0.1132**	**2.9000e-004**		**0.1206**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B. Final 2019 Federal Transportation Improvement Program Project Listing

100% Prior Years
Riverside County Project Listing
Local Highway, State Highway, Transit
(in $000`s)

ProjectID	County	Air Basin	Model	RTP ID	Program				System	Conformity Category	Amendment
RIV120101	Riverside	SCAB		3CR104	CON07				T	EXEMPT - 93.126	0

Description: PTC 24,281 Agency RIVERSIDE COUNTY TRANS COMMISSION (RCTC)

RCTC COMMUTER RAIL SYSTEMATIC IMP. OF FACILITIES AND EQUIPMT: REHAB OF RCTC'S COMM. RAIL IN COORDINATION W/METROLINK, INCLUDING REHAB OF TRACK, SIGNALS, COMMUNICATION, MECHANICAL & LAYOVER FACILITIES, ROLLING STOCK (LOCOMOTIVES/PASSENGER RAIL CARS), TVMs, DEV. OF PTC IN SO. CA., & IMPS AND REHAB OF METROLINK STATION PARKING AND FACILITIES.

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
FTA 5309(a) GUIDEWY			12,649	12,649	12,649							12,649
RIVERSIDE-SAN BERNARDINO URBANIZED AREA - BFG			11,632	11,632	11,632							11,632
RIV120101 Total			24,281	24,281	24,281							24,281

ProjectID	County	Air Basin	Model	RTP ID	Program				System	Conformity Category	Amendment
RIV141203	Riverside	SCAB		3CR104	CON07				T	EXEMPT - 93.126	0

Description: PTC 17,895 Agency RIVERSIDE COUNTY TRANS COMMISSION (RCTC)

RCTC COMMUTER RAIL UPGRADES: IN COORDINATION W/ METROLINK TO IMPROVE PASSENGER ACCESS (STATION PLATFORMS, PED BRIDGES, WALKWAYS, BIKE PATHS & STORAGE); TRACK AND LAYOVER FACILITIES; TECHNOLOGY UPGRADES (TIX VENDING MACHINES, INFO KIOSKS, SIGNAGE); & SAFETY/SECURITY IMPROVEMENTS (FENCING & ACCESS CONTROL TO THE PLATFORMS, LIGHTING). ($3,579K TC FOR FY15)

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
RIVERSIDE/SAN BERNARDINO URBANIZED AREA			17,895	17,895	17,895							17,895
RIV141203 Total			17,895	17,895	17,895							17,895

ProjectID	County	Air Basin	Model	RTP ID	Program				System	Conformity Category	Amendment
RIV150301	Riverside	SCAB		REG0702	PAN07				T	EXEMPT - 93.126	0

Description: PTC 1 Agency RIVERSIDE COUNTY TRANS COMMISSION (RCTC)

GROUPED PROJECTS FOR PURCHASE OF OFFICE, SHOP, AND OPERATING EQUIPMENT FOR EXISTING FACILITIES: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - PURCHASE OF OFFICE, SHOP, AND OPERATING EQUIPMENT FOR EXISTING FACILITIES.

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
RIVERSIDE-SAN BERNARDINO URBANIZED AREA - EM			1	1	1							1
RIV150301 Total			1	1	1							1

ProjectID	County	Air Basin	Model	RTP ID	Program				System	Conformity Category	Amendment
RIV150302	Riverside	SCAB		REG0702	PAR16				T	EXEMPT - 93.126	0

Description: PTC 779 Agency RIVERSIDE COUNTY TRANS COMMISSION (RCTC)

GROUPED PROJECTS FOR PURCHASE OF NEW BUSES AND RAIL CARS TO REPLACE EXISTING VEHICLES OR FOR MINOR EXPANSIONS OF THE FLEET: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 AND TABLE 3 CATEGORIES - PURCHASE OF NEW BUSES AND RAIL CARS TO REPLACE EXISTING VEHICLES OR FOR MINOR EXPANSIONS OF THE FLEET.

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
FTA 5310 ELD AND DISABI			248	248	248							248

NOTE: These projects may still require state or federal action other than funding & they are included in the 100% Prior Years listing of the 2019 FTIP for this purpose