APPENDIX 4.1-7

Land Exchange Alternative
Greenhouse Gas Emissions Technical Report

Greenhouse Gas Emissions Technical Report for Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative San Diego County, California

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Greenhouse Gas Emissions Technical Report for the Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
°C	degrees Celsius
°F	degrees Fahrenheit
AB	Assembly Bill
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CAP	Climate Action Plan
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CNRA	California Natural Resources Agency
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of San Diego
CPUC	California Public Utilities Commission
DU	dwelling unit
EIR	environmental impact report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
EVSE	Electric Vehicle Supply Equipment
GDP/SRP	General Development Plan/Subregional Plan
General Plan	San Diego County General Plan
GHG	greenhouse gas
GWP	global warming potential
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
IPCC	Intergovernmental Panel on Climate Change
kBtu	kilo British thermal unit
kWh	kilowatt hour
Land Exchange Alternative	The Otay Ranch Village 14 Land Exchange Alternative
MT	metric ton
MMBtu	million British thermal unit
MMT	million metric ton
N_2O	nitrous oxide
NHTSA	National Highway Traffic Safety Administration
O_3	ozone
PDF	project design feature

Acronym/Abbreviation	Definition
PDS	Planning & Development Services Department
PFC	perfluorocarbon
PHEV	plug-in hybrid electric vehicle
PV	photovoltaic
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas and Electric
SF_6	sulfur hexafluoride
SF	square feet
SLCP	short-lived climate pollutants
SR	State Route
TDM	Transportation Demand Management
VMT	vehicle miles traveled
ZEV	Zero Emissions Vehicle
ZNE	zero net energy

EXECUTIVE SUMMARY

Project Overview

The Otay Ranch Village 14 Land Exchange Alternative is part of the overall Otay Ranch project, an approximately 23,000-acre master-planned community in southern San Diego County (County), designed as a series of villages and planning areas. The Land Exchange Alternative location is within Otay Ranch Village 14 in the Proctor Valley area of Otay Ranch.

The Land Exchange Alternative would consist of approximately 517 acres designated for 1,530 homes, 1,124 of which would be traditional single-family homes, 283 would be single-family age-restricted homes, and 123 would be multi-family homes, as indicated on Table 1, Land Use Summary, provided in Section 1.2.3. Eighteen neighborhoods are planned, with approximate densities ranging from 1.5 to 15.0 dwelling units per acre. The age-restricted neighborhoods would be gated, as would four of the single-family neighborhoods situated on the largest lots.

Village 14 in the Land Exchange Alternative is planned around a centrally located Village Core. Higher-density residential uses would be adjacent to the Village Core, with single-family residential radiating out in decreasing density. The Village Core would consist of the Neighborhood Center, which would include an approximately 9-acre elementary school, a 4-acre Village Green (public park), a 3-acre mixed-use site with up to 15,000 square feet of commercial/retail uses and 54 multi-family homes, and a 2-acre Village Square Community Facility. The Village Core would also include a 2-acre public safety site for a fire station and satellite sheriff's facility, and 69 multi-family townhomes located adjacent to the public safety site.

The Land Exchange Alternative would include numerous project design features (PDFs) that would reduce greenhouse gas (GHG) emissions. Energy-related PDFs include zero net energy (ZNE) design for the residential land uses, Energy Star or equivalent appliances, and solar water heating for the swimming pools at private recreation centers. Mobile-related strategies include implementation of a Transportation Demand Management (TDM) Program aimed at reducing vehicle miles traveled (VMT).

Impact Analysis Summary

This GHG emissions analysis evaluates the potential for the Land Exchange Alternative to generate GHG emissions during construction and operation that may have a significant impact on the environment, and the potential for the Land Exchange Alternative to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Principal GHGs regulated under state and federal law include carbon dioxide (CO_2), methane

(CH_4), and nitrous oxide (N_2O). GHG emissions are measured in metric tons of CO_2 equivalent (MT CO_2e), which accounts for the weighted global warming potential factors for CH_4 and N_2O. Estimated annual emissions generated by the Land Exchange Alternative at full buildout in 2028 from area, energy, mobile, solid waste, and water/wastewater emissions sources; sequestered carbon; and amortized Land Exchange Alternative construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1,[1],[2] consistent with the San Diego Air Pollution Control District guidance.

Construction of the Land Exchange Alternative is anticipated to be complete in 2026; however, operational year 2028 was assumed instead of 2027 to provide a more meaning comparison to the Otay Ranch Village 14 and Planning Areas 16/19 GHG emissions analysis. Operational emissions were estimated for full buildout in 2027 to disclose the additional emissions from energy and mobile sources. These emissions only represent one year of operation, while 2028 emissions provide a comparison of the Proposed Project and Land Exchange Alternative long term operation.

The significance criteria used to evaluate the Land Exchange Alternative's GHG emissions impacts are based on the recommendations provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. For the purposes of this GHG emissions analysis, the Land Exchange Alternative would have a significant environmental impact if it would (14 CCR 15000 et seq.):

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

This GHG emissions analysis also considers the direction provided in CEQA Guidelines Section 15064.4(b), which provides that "a lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the

---

1 CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects.

2 CalEEMod Version 2016.3.1 was the current version of CalEEMod when the Land Exchange Alternative analysis initiated. In October 2017, CalEEMod Version 2016.3.2 was released, followed by CalEEMod Version 2016.3.2.25 in November 2017, which fixed a Windows security update issue in Version 2016.3.2. CalEEMod Version 2016.3.2 included five upgrades and ten bug fixes. All CalEEMod Version 2016.3.2 updates were reviewed and it was determined that use of CalEEMod Version 2016.3.2 is not anticipated to result in greater GHG emissions compared to estimated Land Exchange Alternative generated using CalEEMod Version 2016.3.1. Accordingly, use of CalEEMod Version 2016.3.1 is appropriate for the Land Exchange Alternative's GHG emissions analysis.

environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

The "project life" is assumed to be 30 years, which is consistent with the 30-year project life time frame used by the South Coast Air Quality Management District's GHG guidance (SCAQMD 2008).

Potential to Generate Significant Greenhouse Gas Emissions

Construction of the Land Exchange Alternative would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. Land Exchange Alternative–generated GHG emissions from construction activities, including rock crushing, were estimated to be 7,988 MT CO_2e. Additionally, the one-time loss of sequestered carbon from land use conversion for the Land Exchange Alternative is 8,740 MT CO_2. Total construction-related Land Exchange Alternative–generated emissions were estimated to be 16,728 MT CO_2e, or 558 MT CO_2e per year when amortized over 30 years.

The Land Exchange Alternative would generate operational GHG emissions from area sources (hearths and landscape maintenance), energy sources (electricity and natural gas consumption), mobile sources (vehicle trips), water supply and wastewater treatment, and solid waste. Estimated annual Land Exchange Alternative–generated operational GHG emissions at buildout in 2028 would be approximately 20,882 MT CO_2e per year[3]. These emissions would be reduced by planting at least 6,000 new trees, which would result in the one-time sequestration of approximately 4,248 MT CO_2e (or 142 MT CO_2e per year when amortized over 30 years). Therefore, Land Exchange Alternative–generated operational GHG emissions (20,882 MT CO_2e per year) minus the sequestered carbon (142 MT CO_2e per year) would result in annual Land Exchange Alternative emissions of 20,740 MT CO_2e per year. Due to the Land Exchange Alternative's increase in GHG emissions above existing levels, the Land Exchange Alternative would have a **potentially significant** impact, and mitigation is required.

[3] Operational year 2027 would result in an estimated 21,402 MT CO_2e per year (a 2.5% increase over 2028 emissions) in the first year of operation.

Mitigation measures M-GHG-1 through M-GHG-4 are provided to reduce this impact, and would require the Land Exchange Alternative to achieve carbon neutrality (i.e., a net zero emissions level). With mitigation, the Land Exchange Alternative's impacts would be reduced to **less than significant**.

Consistency with Applicable Greenhouse Gas Reduction Plans

Regarding consistency with the San Diego Association of Governments' (SANDAG) San Diego Forward: The Regional Plan (Regional Plan), as part of the Land Exchange Alternative's TDM Program, the Land Exchange Alternative would include design elements and design features to support the policy objectives of the Regional Plan and Senate Bill (SB) 375. The Land Exchange Alternative's TDM Program would work to reduce the Land Exchange Alternative's VMT through two primary strategies: land use and design measures that would create an environment that promotes alternative mode choice (e.g., land use diversity and pedestrian/bicycle networks), and commute/travel services for residents that would reduce out-going single-occupant vehicle trips (e.g., ride-share, commute trip reduction marketing). Implementation of the Land Exchange Alternative's TDM Program and associated measures would achieve a 4.6% reduction in VMT.

Regarding consistency with the San Diego County General Plan (General Plan), the Land Exchange Alternative would include PDFs that would reduce indoor and outdoor water consumption, include bike and pedestrian networks, and employ sustainable technology and energy-efficient design through ZNE homes with rooftop solar and electric vehicle chargers in the garages of half of the residential units. The Land Exchange Alternative, with mitigation, would also be consistent with the statewide GHG reduction target codified in SB 32 by achieving net-zero emissions. Therefore, the Land Exchange Alternative would not conflict with an applicable plan adopted for the purpose of reducing GHG emissions, and plan consistency impacts would be **less than significant**.

1 INTRODUCTION

1.1 Report Purpose and Scope

The purpose of this report is to estimate and evaluate the potential greenhouse gas (GHG) emissions impacts associated with construction and operation of the proposed Otay Ranch Village 14 Land Exchange Alternative.

This introductory section provides a description of the Land Exchange Alternative. Section 2, Environmental Setting, describes the local environment. Section 3, Regulatory Setting, identifies relevant federal, state, and local regulations and policies regarding GHG emissions. Section 4, Significance Criteria and Analysis Methodologies, includes the thresholds of significance applied herein, which are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and presents the methodology for estimating emissions and evaluating impacts. Section 5, Impact Analysis, evaluates the Land Exchange Alternative's potential impacts per the thresholds identified in Section 4. Section 6, References, includes a list of the references cited. Section 7, List of Preparers, includes a list of those who prepared this technical report.

1.2 Project Description

1.2.1 Overview and Background

This technical report provides a project level analysis of the Land Exchange Alternative (defined below) for inclusion in the Otay Ranch Village 14 and Planning Areas 16/19 Environmental Impact Report (EIR). The regional location is shown in Figure 1, Regional Map.

The Land Exchange Alternative is located within Otay Ranch Village 14 and Planning Areas 16/19 in the Proctor Valley parcel of Otay Ranch as shown on Figure 2, Vicinity Map. Village 14 and Planning Areas 16/19 are part of the larger Otay Ranch, an approximately 23,000-acre master-planned community in southern San Diego County designed as a series of villages and planning areas.

The Land Exchange Alternative proposes 1,530 homes within a development footprint that is limited to Proctor Valley Village 14. The majority of Planning Areas 16/19 would be converted to MSCP and Otay Ranch RMP Preserve and would not be developed.

The following describes the major components and characteristics of the Land Exchange Alternative.

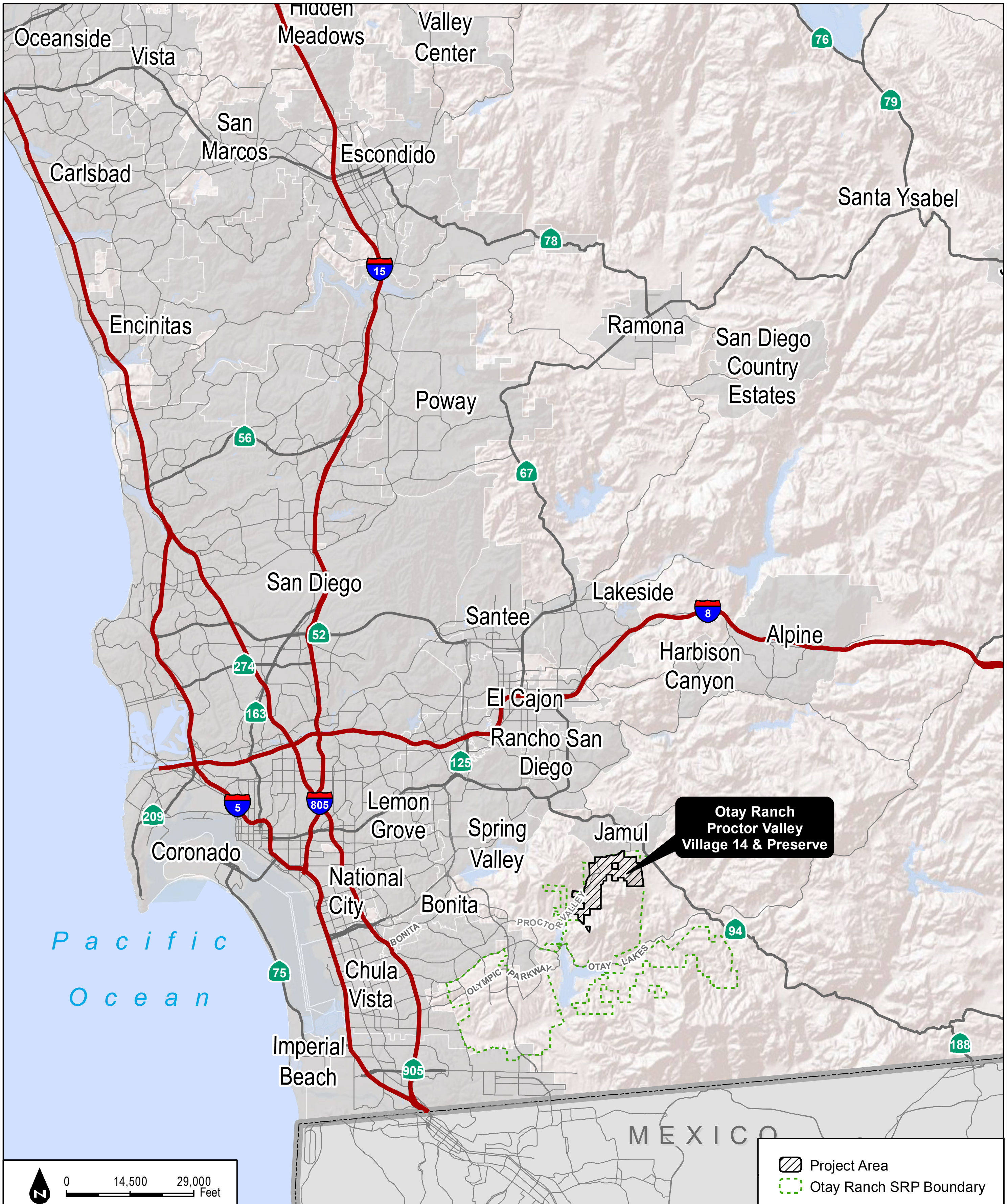
1.2.2 Definitions

County

The County is the County of San Diego and its associated jurisdictional area.

Land Exchange Area

As indicated above, the "Land Exchange Area" is located within Otay Ranch Village 14 and Planning Areas 16/19 as depicted in Figure 3, Site Utilization Plan. The total Land Exchange Area covers approximately 2,387 acres, of which the Applicant owns 1,294 acres, the State owns approximately 1,053 acres and 39.9 acres are Offsites. Within the Land Exchange Area, there are 1,003 acres in Village 14 and 1,345 acres in Planning Areas 16/19. Offsites include Proctor Valley Road and related utilities in the south and central portions of Village 14. The State's ownership is included in order to process a General Plan Amendment to remove existing approved Otay Ranch GDP/SRP County General Plan development land uses and convert these acres to Otay Ranch RMP/MSCP Preserve.



SOURCE: Hunsaker 2017; County of San Diego 1997

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FIGURE 1

Regional Map

Otay Ranch Village 14 and Planning Areas 16/19 - Land Exchange Alternative

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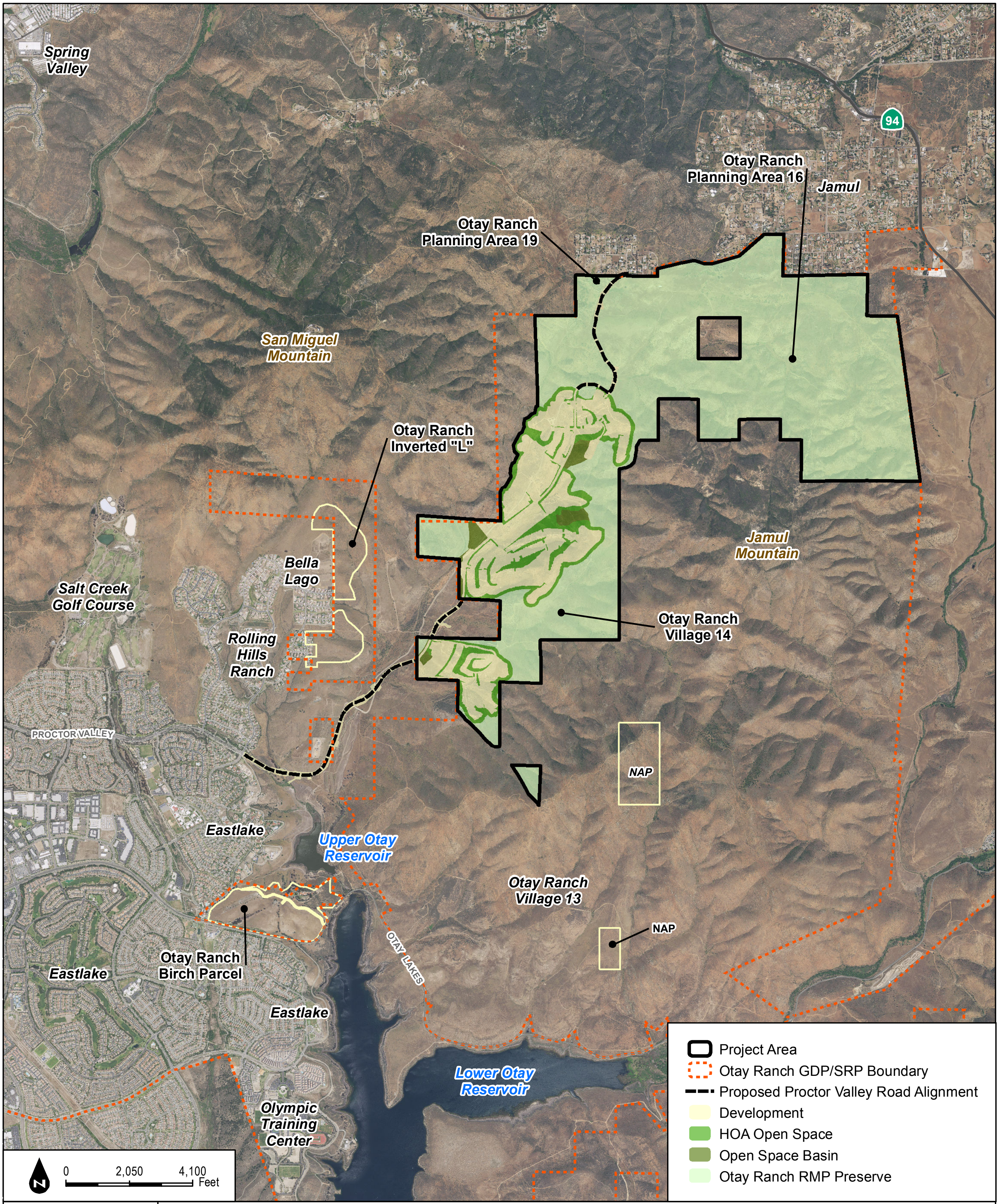

SOURCE: NAIP 2016; Hunsaker 2017; County of San Diego 1997

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FIGURE 2

Vicinity Map

Otay Ranch Village 14 and Planning Areas 16/19 - Land Exchange Alternative

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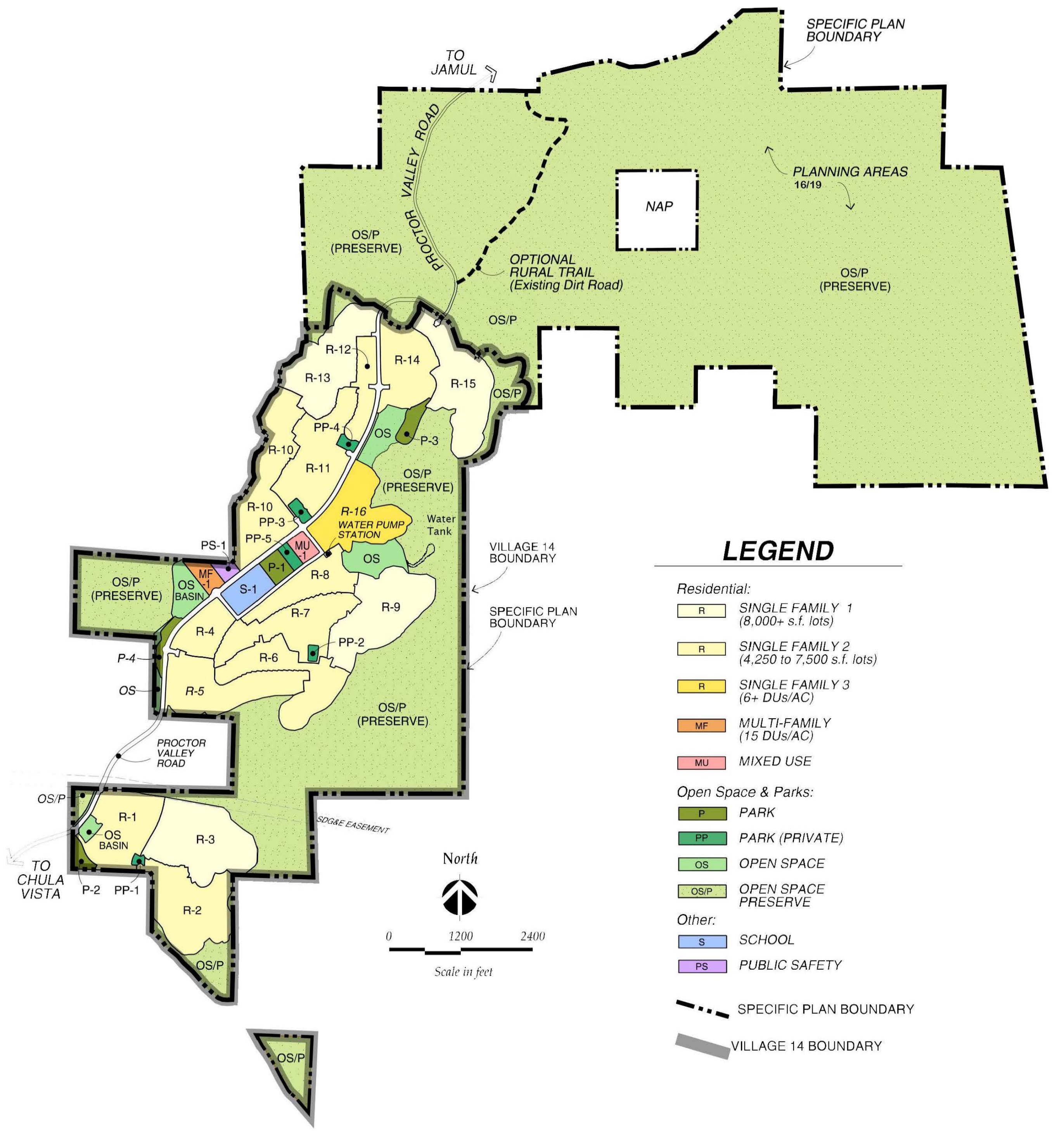

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SOURCE: Hunsaker 2017

FIGURE 3

Proctor Valley Site Utilization Plan

Otay Ranch Village 14 and Planning Areas 16/19 - Land Exchange Alternative

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Land Exchange Alternative

The Land Exchange limits development to Otay Ranch Village 14 and converts the majority of development approved by the Otay Ranch GDP/SRP in Planning Areas 16/19 to MSCP and Otay Ranch RMP Preserve. The Land Exchange Alternative assumes the completion of a land exchange agreement with the State of California and a simultaneous boundary adjustment to the MSCP and Otay Ranch RMP Preserve systems.

Specifically, the "Land Exchange Alternative" proposes to:

- Exchange 278 acres owned by the State in Village 14 for 278 acres owned by the Applicant in Planning Area 16.
- Change MSCP and Otay Ranch RMP Preserve boundaries via a boundary adjustment where approximately 169.8 acres in Planning Areas 16/19 are converted to Otay Ranch RMP Preserve and 142.3 acres in Village 14 are converted to Otay Ranch Preserve and 43.6 acres in Village 14 are converted to development footprint for a net increase in Otay Ranch RMP Preserve of 268.5 acres.

After implementation, the Land Exchange Alternative land plan is depicted in Figure 3, Site Utilization Plan. The Land Exchange Alternative contemplates a Specific Plan, General Plan Amendments, EIR, Rezone, Tentative Map, the Otay Ranch RMP Amendment, and County MSCP Subarea Plan South County Segment Boundary Adjustment.

Village 14

Village 14 as referred to herein is a discrete subset of the Land Exchange and reflects that portion located exclusively within Village 14 as depicted in Figure 3, Site Utilization Plan. The majority of the technical reports focus on Village 14 as this is where the development is planned.

Proposed Specific Plan

<u>Summary</u>

The adopted Otay SRP requires the preparation of a Site Utilization Plan that describes the land uses. Figure 3, Site Utilization Plan depicts the proposed Site Utilization Plan for the Land Exchange Alternative. Additionally, Table 1 quantifies the land uses.

The Land Exchange Alternative includes approximately 511 acres designated for 1,530 homes, 1,124 of which would be traditional single-family homes, 283 would be single family age-restricted and 123 would be multifamily homes as indicated on Table 1 below. 18 neighborhoods are planned with approximate densities ranging from 1.5 to 15.0 dwelling units per acre. The age-restricted neighborhoods would be gated, as would four of the single-family neighborhoods situated on the largest lots.

Village 14 in the Land Exchange Alternative is planned around a Village Core, centrally located in the heart of the village. Higher density residential uses will be adjacent to the Village Core with single family residential radiating out in decreasing density. The Village Core is comprised of the Neighborhood Center which includes an 8-acre elementary school; a 4-acre Village Green (public park); a 3-acre Mixed Use Site with up to 15,000 square feet of commercial/retail uses and 54 multi-family homes; and a 2-acre Village Square Community Facility. The Village Core also includes a 2-acre public safety site for a fire station and sheriff's storefront facility and 69 multi-family townhomes located adjacent to the public safety site.

The Land Exchange Alternative is designed around an active lifestyle and wellness recreation theme and includes an extensive park and recreation system including four public parks totaling13 acres as depicted on Figure 3, Site Utilization Plan. The remaining private recreation facilities include three private swim clubs, a senior activity center, the Village Square community facility and numerous pocket parks totaling approximately 9 acres. Approximately 4.6 miles of community pathway are proposed on the Proctor Valley Road. Approximately three miles of Park-to-Park Loop connect to the regional pathway.

After implementing the proposed land exchange agreement, MSCP and RMP Preserve boundary adjustment, and General Plan Amendment, the Land Exchange Area will include 1,749 acres of land for MSCP and Otay Ranch RMP Preserve, consisting of 404 acres in Proctor Valley Village 14, and 1,345 acres in Planning Areas 16/19.

Circulation and Access

Under the Land Exchange Alternative, regional access to Village 14 would be provided by State Route 125 (SR-125), located approximately three miles to the west. Interstate 805 (I-805), approximately eight miles to the west, provides secondary north/south access. SR-54, located approximately six miles to the northwest, connects to SR-125 and I-805, and provides regional east/west access.

Proctor Valley Road would provide the main access to Village 14. Five roundabouts would identify the entrance into each residential area as well as provide traffic calming at key internal intersections. The internal circulation plan also includes a series of collectors and residential streets to provide access to the residential neighborhoods.

Proctor Valley Road is planned as a two-lane road and is designated as a scenic corridor. The Land Exchange Alternative includes an Otay SRP amendment to the classification of Proctor Valley Road from a 4 Lane Major to a 2 Lane Light Collector. The northern connection of Proctor Valley Village 14 to Jamul will be in the alignment of the existing partially-improved Proctor Valley Road and will be paved provide both public access and secondary emergency access to both communities.

The Lane Exchange Alternative's Circulation Plan incorporates vehicular and non-vehicular modes of transportation to create an integrated system of roads, bike lanes, trails, pathways, and sidewalks.

Options

The Land Exchange Alternative includes three options for internal circulation: (1) the Proctor Valley Road North Option, (2) the Preserve Trails Option and (3) the Perimeter Trail Option. The Draft EIR Land Exchange Alternative assesses each of these options and their respective impacts. Each of the options summarized below. For detailed descriptions with exhibits, see the Specific Plan Section VIII. Internal Circulation Options.

Proctor Valley Road North Option: The Proctor Valley Road North Option applies to Proctor Valley Road street section 10 at the northerly edge of Village 14. Street sections 10 would be replaced with street section 10B to provide for two dedicated bike lanes (one on each side of the road) instead of the "sharrows" [1] proposed in the Land Exchange Alternative. Note that Street section 10A provides a transition section at the northerly property boundary and does not change in the Option scenario. Generally, the Proctor Valley Road North Option would increase the right-of-way width from 40 feet to 48 feet.

Preserve Trails Option: The Preserve Trails Option consists of two segments of existing, disturbed trails. These segments would be located within the Otay Ranch RMP Preserve. The Preserve Trails Option includes segments "A" & "B" as identified in the Otay Ranch GDP/SRP, which are also identified as segments 52& 49 in the County of San Diego's Community Trails Master Plan (CTMP). Segment "A"/"52" is 4,450 lineal feet, generally located at the northern terminus of Village 14 and extending northeast through the onsite Otay Ranch RMP Preserve to the eastern edge of the Echo Valley loop (CTMP Trail 53). Segment "B"/"49" is approximately 3,100 lineal feet and is located between South and Central Village 14, along an existing, historic ranch road. This trail is located within onsite Otay Ranch RMP Preserve and bisects regional wildlife corridor R1. The Preserve Trails Option would retain these portions of trails in their existing conditions, which meet the CTMP primitive trail standard. No improvements to these Preserve Trails are contemplated.

Perimeter Trail Option: The Perimeter Trail Option is an approximately 4.5-mile perimeter trail located within the Development Footprint of Village 14. The Perimeter Trail Option is situated primarily within the Otay Ranch RMP 100-foot Preserve Edge. The Perimeter Trail Option is designed to CTMP primitive trail standards, and the trail tread varies from 2-6 feet. Due to topography, trail grades range from 2% to the maximum grade allowed of 30%. The Perimeter Trail Option requires the construction of approximately 5,200 lineal feet (1.0 mile) of 5 to-7-foot-high retaining walls due to steep topography and drainage constraints. The Perimeter Trail Option would be graded as part of overall project grading and does not encroach into the Otay Ranch RMP Preserve. The perimeter trail would be accessed at public parks and trailheads and would be maintained by the County of San Diego.

Dudek has evaluated these options and they are discussed herein.

Village 14

Village 14, as referred to herein, is a discrete subset of the Land Exchange Alternative, and reflects that portion located exclusively within Village 14. Village 14 is where the development is planned.

Off-Site Improvements

Off-site improvements, as referred to herein, include the following: Proctor Valley Road, including all utilities and trails, and an off-site sewer pump station and off-site sewer facilities to connect to the Salt Creek Interceptor.

1.2.3 Proposed Specific Plan

Summary

The adopted Otay Ranch GDP/SRP requires preparation of a Site Utilization Plan that describes land uses. Figure 3 depicts the proposed Site Utilization Plan for the Land Exchange Alternative. Table 1, Land Use Summary, quantifies the land uses.

The Land Exchange Alternative would include approximately 517 acres designated for 1,530 homes, 1,124 of which would be traditional single-family homes, 283 would be single-family age-restricted homes, and 123 would be multi-family homes, as indicated in Table 1. Eighteen neighborhoods are planned, with approximate densities ranging from 1.5 to 15.0 dwelling units per acre. The age-restricted neighborhoods would be gated, as would four of the single-family neighborhoods situated on the largest lots.

Village 14 in the Land Exchange Alternative is planned around a centrally located Village Core. Higher-density residential uses would be adjacent to the Village Core, with single-family residential radiating out in decreasing density. The Village Core would be composed of the Neighborhood Center, which would include an approximately 9-acre elementary school, a 4-acre Village Green (public park), a 3-acre mixed-use site with up to 15,000 square feet of commercial/retail uses and 54 multi-family homes (noted as mixed-use residential in Table 1), and a 2-acre Village Square Community Facility. The Village Core would also include a 2-acre public safety site for a fire station and satellite sheriff's facility, and 69 multi-family townhomes located adjacent to the public safety site.

The Land Exchange Alternative is designed around an active lifestyle and wellness recreation theme, and would include an extensive park and recreation system, including four public parks totaling 13 acres, as depicted in Figure 3. The remaining private recreation facilities would include three private swim clubs, a senior activity center, the Village Square Community Facility, and numerous pocket parks totaling approximately 9 acres. Approximately 4.6 miles of community pathways are proposed on Proctor Valley Road. Approximately 3 miles of the Park-to-Park Loop connect to a regional pathway.

After implementing the proposed land exchange agreement, MSCP boundary adjustment and Otay Ranch RMP Preserve amendment, and General Plan Amendment, the Land Exchange Area will include 1,749 acres of land for MSCP and Otay Ranch RMP Preserve, consisting of 404 acres in Proctor Valley Village 14, and 1,345 acres in Planning Areas 16/19.

Table 1
Land Use Summary

Land Use	Acres	Units
Otay Ranch Village 14[a]		
Single-Family Residential	502.0	1,407
Multi-Family Residential	4.6	69
Mixed-Use Residential	3.6	54
Residential Subtotal[b]	*510.2*	*1,530*
Public Parks	13.1	N/A
Private Parks	7.0	N/A
Public Safety Site	2.3	N/A
Elementary School	8.8	N/A
Mixed-Use	N/A[c]	N/A

Table 1
Land Use Summary

Land Use	Acres	Units
Internal Open Space[d]	33.4	N/A
Otay Ranch RMP Preserve	403.9	N/A
Circulation[e]	12.8	N/A
Non-Residential Subtotal	*492.6*	*N/A*
Village 14 Subtotal	**1,002.8**	**1,530**
Planning Areas 16/19		
Circulation[f]	13.4	N/A
Otay Ranch RMP Preserve	278.3	N/A
Exchange to State for Preserve	278.0	N/A
Existing State Ownership	775.1	N/A
Planning Areas 16/19 Subtotal	**1,344.8**	*N/A*

Notes:
a Additional off-site areas excluded from the acreage above include:
b Residential acreage includes 167.6 acres of fuel mod and internal open space slopes and 2.6 acres of private pocket parks.
c Mixed-Use acreage includes 15,000 square feet of commercial use
d Open Space included 10.6 acres of basins. Additional 167.6 acres of open space slopes and FMZ are included in the residential acreage.
e Proctor Valley Road Onsite in Village 14 only
f Proctor Valley Road north in Planning Area 16.
Numbers may not total due to rounding.

Circulation and Access

Under the Land Exchange Alternative, regional access to Village 14 would be provided by State Route (SR) 125, located approximately 3 miles to the west. Interstate (I) 805, approximately 8 miles to the west, provides secondary north/south access. SR-54, located approximately 6 miles to the northwest, connects to SR-125 and I-805, and provides regional east/west access.

Proctor Valley Road would provide the main access to Village 14. Five roundabouts would identify the entrance into each residential area, and provide traffic-calming at key internal intersections. The internal circulation plan also includes a series of collectors and residential streets to provide access to the residential neighborhoods.

Proctor Valley Road is planned as a two-lane road and is designated as a scenic corridor. The Land Exchange Alternative includes an Otay Ranch GDP/SRP amendment to the classification of Proctor Valley Road from a four-lane major to a two-lane light collector. The northern connection of Proctor Valley Village 14 to Jamul would be in the alignment of the existing, partially improved Proctor Valley Road, and would be paved in its existing width to provide public access and secondary emergency access to both communities.

The Lane Exchange Alternative's Circulation Plan incorporates vehicular and non-vehicular modes of transportation to create an integrated system of roads, bike lanes, trails, pathways, and sidewalks. The Circulation Plan also includes bus pull-ins to be used as transit stops should bus service be extended to the project site in the future.

Public Services

A summary of the public services that would be provided is described below.

Sewer

Sewer capacity will be provided by the County through annexation into the County Sanitation District. Sewer transportation will be provided as planned for in the Salt Creek Interceptor, located in the City of Chula Vista, pursuant to agreements between the City of Chula Vista and the County. Sewer is allowed in Village 14 per the Otay Ranch GDP/SRP. Sewer trunk extensions and pump stations are planned.

Water

The Land Exchange Alternative is located within the Otay Water District boundary and already accommodated for in the Otay Water District Master Plan. A 980 pressure zone water tank adjacent to Central Village 14 is planned on site. Water transmission lines and pump stations are also planned.

Law Enforcement

The County Sheriff's office will provide service and will be co-located with the fire station on the Land Exchange Alternative's public safety site in the Village Core.

Fire

Fire service will be provided by the County from a fire station built within the Land Exchange Alternative's public safety site in the Village Core.

Stormwater/Drainage

Biofiltration basins are planned.

Schools

Village 14 is planned to be served by the Chula Vista Elementary School District and Sweetwater Union High School District.

1.2.4 Existing and Surrounding Land Uses

Existing Conditions

The entire Land Exchange Area is undeveloped and on-site elevation ranges from 525 to 1,650 feet above mean sea level. The site is diverse in topography and contains a flat valley along Proctor Valley Road and rolling hills within the remainder of the site.

Land Use Designations and Zoning

In the County's General Plan, the Land Exchange Area is designated as Rural and Semi-Rural regional categories, and has Specific Plan Area (SPA) and Open Space (Conservation) land use designations. The Land Exchange Area is zoned S80 (Open Space) and S88 (Specific Plan) by the County of San Diego Zoning Map. The Land Exchange Alternative does not propose any changes to the existing regional categories, land use designations, or zoning. Because the County formally adopted the Otay Ranch GDP/SRP to govern development within the Otay Ranch area, the land use designations specified in the Otay Ranch GDP/SRP take precedence over those in the County General Plan. A wide range of land use designations are specified in the Otay Ranch GDP/SRP for the Land Exchange Area: Very Low Density Residential (VL), Low Density Residential (L), Low Medium Village Density Residential (LMV), Medium Density Residential (MD), Medium High Residential (MH), Mixed Use (MU), Public/Quasi Public (P/QP), Park (P), and Open Space (OS).

Surrounding Land Uses

Existing surrounding development, including the master planned communities of Eastlake Woods, Bella Lago, Salt Creek Ranch, and Rolling Hills Ranch, is located approximately 1 mile to the southwest of the Land Exchange Area. Commercial centers are located in Eastlake and Rolling Hills Ranch, and regional shopping is located in Otay Ranch. The proposed Village 13 Resort development is located south of the Land Exchange Area. The Otay Reservoir is located south of the Land Exchange Area, along with the City of San Diego's MSCP "Cornerstone Lands," which are adjacent to the Land Exchange Area to the south. The Cornerstone Lands Multi-Habitat Planning Area Preserve areas include the lands surrounding the Otay Reservoir under the jurisdiction of the City of San Diego (more specifically, the Water Utilities

Department). The community of Jamul is located approximately 1 mile north of the Land Exchange Area and is rural, as reflected by primarily large-lot estates and horse ranches. Rancho San Diego, which is more heavily developed, is located to the northwest.

1.2.5 Project Design Features

The following Project Design Features (PDFs) will be included in the Land Exchange Alternative, as organized by emissions source.[4,5]

Area Sources

PDF-AQ/GHG-1 **Wood Burning Stoves and Fireplaces**. Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating that no wood burning stoves or fireplaces would be constructed.

Energy Sources[6]

PDF-AQ/GHG-2 **Zero Net Energy Development – Residential Land Uses.** Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating compliance with the zero net energy (ZNE) design standards defined by the California Energy Commission.

PDF-AQ/GHG-3 **Non-Residential Energy Improvement Standards.** Prior to the issuance of non-residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating that the Land Exchange Alternative's non-residential land uses shall achieve a 10% greater building energy efficiency than required by the 2016 state energy efficiency standards in Title 24, Part 6 of the California Code of Regulations.

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[4] GHG emission sources are categorized in this analysis as area sources (landscape maintenance equipment), energy sources (building electricity and natural gas usage), mobile sources (vehicle trips), solid waste, and water and wastewater.

[5] Sections 4.3 and 5.1 discuss what PDFs are quantified in this analysis.

[6] Regarding PDF-AQ/GHG-2, Zero Net Energy Development – Residential Land Uses, key policy timelines for ZNE include that all new residential construction will meet ZNE standards starting in 2020, and all new commercial will meet ZNE standards starting in 2030. The Land Exchange Alternative incorporates ZNE for residential development only as it is foreseeable addition to the California Title 24 Building Code Standards. Furthermore, the majority of the Land Exchange Alternative would be residential development and the Land Exchange Alternative as a whole would produce more electricity than the entire development would demand.

PDF-AQ/GHG-4 **Energy Star Appliances**. All appliances (washer/dryers, refrigerators, and dishwashers) that will be installed by builders in residences and commercial businesses shall be Energy Star rated or equivalent.

PDF-AQ/GHG-5 **Solar Water Heating**. Prior to the issuance of private recreation center building permits, the Land Exchange Alternative applicant or its designee shall submit swimming pool heating design plans to San Diego County for review and approval. The design plans shall demonstrate that swimming pools located at private recreation centers in the Land Exchange Area are designed and shall be constructed to use solar water heating or other technology with an equivalent level of energy efficiency.

Mobile Sources

PDF-AQ/GHG-6 **Electric Vehicle Charging Stations**. **Electric Vehicle Charging Stations**. Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit plans for the installation of one Level 2 electric vehicle (EV) charging station in the garage in half of all residential units to San Diego County for review and approval. Prior to the issuance of non-residential building permits, the applicant or its designee shall submit plans for the installation of ten (10) Level 2 EV charging stations in parking spaces located in the Village Core's commercial development area and P1 through P4 park areas to San Diego County for review and approval.

As part of the Land Exchange Alternative's Transportation Demand Management (TDM) Program, as described in the traffic impact analysis (Chen Ryan 2017) and identified in the Land Exchange Alternative's EIR Section 2.9 (Transportation), the Land Exchange Alternative would employ PDF-TR-1 to reduce the number of vehicle trips generated by the Land Exchange Alternative, including alternative modes of transportation. As detailed below, the TDM Program would facilitate increased opportunities for transit, bicycling, and pedestrian travel, as well as provide the resources, means, and incentives for ridesharing and carpooling opportunities.

PDF-TR-1 **Transportation Demand Management.** The Land Exchange Alternative applicant proposes implementation of a Transportation Demand Management (TDM) Program to facilitate increased opportunities for transit, bicycling, and pedestrian travel, as well as provide the resources, means, and incentives for ridesharing and carpooling. The following components are to be included in the TDM Program:

- Develop a comprehensive pedestrian network designed to provide safe bicycle and pedestrian access between the various Land Exchange Alternative phases, land uses, parks/open spaces, schools, and the Village Core. Where approved by the appropriate jurisdiction, the pedestrian network would also provide connections to the various recreational trails and multi-modal facilities accessing the Land Exchange Area.
- Provide bicycle racks along main travel corridors adjacent to commercial developments and at public parks and open spaces within the Land Exchange Area.
- Provide bicycle racks at the office, multi-family, and live/work buildings within the Land Exchange Alternative site.
- Coordinate with San Diego Association of Governments' (SANDAG) iCommute program for carpool, vanpool, and rideshare programs that are specific to the Land Exchange Alternative.
- Promote available websites providing transportation options for residents and businesses.
- Create and distribute a "new resident" information packet addressing alternative modes of transportation.
- Coordinate with San Diego Metropolitan Transit System and SANDAG about the future siting of transit stops/stations within the Land Exchange Area.
- Provide a communal shuttle system for the age-restricted communities within the Land Exchange Alternative.
- Provide a "School Pool" program to coordinate school-related carpool activities with the local school district and SANDAG. As part of the program, provide dedicated parking spaces for the School Pool program in the Village Core.
- Implement a "Walking School Bus" program, whereby neighborhood students are accompanied by a chaperone (e.g., parental supervision) to safely walk to and from the on-site elementary school. Relatedly, the Land Exchange Alternative applicant would also coordinate with the local school district to encourage the provision of bicycle storage facilities at the on-site elementary school.

Solid Waste

The Land Exchange Alternative would comply with solid waste diversion regulatory requirements; no additional voluntary waste reduction measures are proposed.

Water and Wastewater

The strategies identified in the Land Exchange Alternative's Water Conservation Plan would be implemented as part of the Land Exchange Alternative by way of the following PDFs to reduce potable water consumption, as identified in the Land Exchange Alternative's EIR Section 3.1.8 (Utilities and Service Systems):

PDF-UT-1 **Hot Water Pipe Insulation – Residential and Non-Residential.** All hot water pipes shall be insulated, and hot and cold water piping shall be separated.

PDF-UT-2 **Pressure Reducing Valves – Residential and Non-Residential.** The maximum service pressure shall be set to 60 pounds per square inch to reduce potential leakage and prevent excessive flow of water from all appliances and fixtures.

PDF-UT-3 **Water Efficient Dishwashers.** Water efficient dishwashers that carry the Energy Star label shall be installed in all residential units and commercial uses where appropriate.

PDF-UT-4 **Residential Landscaping.** All Land Exchange Alternative landscaping shall comply with the Model Water Efficient Landscape Ordinance, California Code of Regulations Title 23, Division 2, Chapter 2.7 (Section 490 et seq.).

1.2.6 Proctor Valley Road North and Trails Options

The Land Exchange Alternative includes three options for internal circulation: (1) the Proctor Valley Road North Option, (2) the Preserve Trails Option, and (3) the Perimeter Trail Option. The Draft EIR Land Exchange Alternative assesses each of these options and their respective impacts. Each of the options is summarized in Section 1.2.3, above.

These three options are quantitatively or qualitatively evaluated in this GHG emissions report. Potential GHG emissions associated with implementation of the Proctor Valley Road North Option are quantified herein, as discussed in Section 4.2.6 and 5.1.2, because implementation is anticipated to require additional construction days. Implementation of the Perimeter Trail and Preserve Trail options are not anticipated to require additional construction activities than evaluated herein; therefore, potential construction of these two options is not anticipated to generate additional GHG emissions.

2 ENVIRONMENTAL SETTING

2.1 Climate Change Overview

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short-wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. Recent climate changes, in particular the warming observed over the past century, however, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of that warming since the mid-20th century and are the most significant driver of observed climate change (EPA 2017a; IPCC 2013). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system, which is discussed further in Section 2.6, Potential Effects of Climate Change.

2.2 Greenhouse Gases and other Climate Forcing Substances

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), water vapor, hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).[7] Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, HCFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. A summary of the most common GHGs and their sources is included in the following text.[8] Also included is a discussion of other climate forcing substances.

Carbon Dioxide (CO_2). CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane (CH_4). CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide (N_2O). N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

7 California Health and Safety Code 38505 identifies seven GHGs that the California Air Resources Board (CARB) is responsible to monitor and regulate to reduce emissions: CO_2, CH_4, N_2O, SF_6, HFCs, PFCs, and NF_3.

8 The descriptions of GHGs are summarized from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (1995), IPCC Fourth Assessment Report (2007), CARB's Glossary of Terms Used in GHG Inventories (2015a), and EPA's Glossary of Climate Change Terms (2016).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric ozone-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons (HFCs):** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to ozone-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons (PFCs):** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride (SF_6):** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.
- **Nitrogen Trifluoride (NF_3):** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons (CFCs). CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere) and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons (HCFCs). HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of fine particulate matter, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived species that varies spatially, which makes it difficult to quantify the global warming potential. Diesel particulate matter emissions are a major source of black carbon and are toxic air contaminants that have been regulated and controlled in California for several decades to protect public health. In relation to declining diesel particulate matter from the California Air Resources Board's (CARB) regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone (O_3). Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen (O_2), plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

2.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017b).). The Intergovernmental Panel on Climate Change (IPCC) developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of carbon dioxide equivalent (MT CO_2e).

The current version of the California Emissions Estimator Model (CalEEMod) (version 2016.3.1) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report (IPCC 2007).[9] The GWP values identified in CalEEMod were applied to the Land Exchange Alternative.

2.4 Sources of Greenhouse Gas Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2014 (the most recent year for which data is available) totaled approximately 45,741 million metric tons (MMT) CO_2e, excluding land use change and forestry (WRI 2015). Six countries—China, the United States, the Russian Federation, India, Japan, and Brazil—and the European community accounted for approximately 65% of the total global emissions, approximately 29,920 MMT CO_2e (WRI 2015). Table 2 presents the top GHG-emissions-producing countries.

Table 2
Six Top GHG Producer Countries and the European Union

Emitting Countries	GHG Emissions (MMT CO_2e)
China	11,911.71
United States	6,371.10
European Union	4,053.66
India	3,079.81
Russian Federation	2,137.83
Japan	1,314.59
Brazil	1,051.00
Total*	**29,919.70**

Source: WRI 2015.
Notes:
MMT CO_2e = million metric tons of carbon dioxide equivalent.
GHG emissions do not include land use change and forestry related GHG emissions.

National and State Inventories

Per the U.S. Environmental Protection Agency's (EPA) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2015* (2017), total United States GHG emissions were approximately 6,586.7 MMT CO_2e in 2015 (EPA 2017a). The primary GHG emitted by human activities in the

9 The default GWP values in CalEEMod Version 2016.3.2 are the same as assumed in CalEEMod Version 2016.3.1.

United States was CO_2, which represented approximately 82.2% of total GHG emissions (5,411.4 MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 93.3% of CO_2 emissions in 2015 (5,049.8 MMT CO_2e). Relative to 1990, gross United States GHG emissions in 2015 are higher by 3.5%; down from a high of 15.5% above 1990 levels in 2007. GHG emissions decreased from 2014 to 2015 by 2.3% (153.0 MMT CO_2e), and overall, net emissions in 2015 were 11.5% below 2005 levels (EPA 2017b).

According to California's 2000–2015 GHG emissions inventory (2017 edition), California emitted 440.36 MMT CO_2e in 2015, including emissions resulting from out-of-state electrical generation (CARB 2017a). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The California GHG emissions source categories and their relative contributions in 2015 are presented in Table 3.

Table 3
GHG Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	164.63	37%
Industrial[b]	91.71	21%
Electricity generation[c]	83.67	19%
Residential and commercial uses	37.92	9%
Agriculture	34.65	8%
High global-warming potential substances	19.05	4%
Recycling and waste	8.73	2%
Totals	**440.36**	**100%**

Source: CARB 2017a.
Notes: Emissions reflect the 2015 California GHG inventory.
MMT CO_2e = million metric tons of carbon dioxide equivalent per year
a Percentage of total has been rounded, and total may not sum due to rounding.
b The Aliso Canyon natural gas leak event released 1.96 MMT CO_2e of unanticipated emissions in 2015 and 0.52 MMT CO_2e in 2016. These leak emissions will be fully mitigated according to legal settlement and are tracked separately from routine inventory emissions.
c Includes emissions associated with imported electricity, which account for 33.74 MMT CO_2e annually.

During 2000 to 2015, per-capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MT per person to 11.3 MT per person in 2015, representing a 19% decrease. In addition, total GHG emissions in 2015 were approximately 1.5 MMT CO_2e less than 2014 emissions. The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California is on track to meet the 2020 target of 431 MMT CO_2e (CARB 2017a).

According to the GHG inventory data compiled by the Energy Policy Initiative Center, in 2010, the County emitted 34.5 MMT CO_2e (EPIC 2013). As outlined in Table 4, San Diego County GHG Emissions by Sectors, on-road transportation created 42% of these emissions. Similar to emissions trends statewide, electricity generation is the second biggest emitter.

Table 4
San Diego County GHG Emissions by Sectors

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total
On-road transportation	14.4	42%
Electricity generation	8.3	24%
Natural gas end uses	2.9	8%
Off-road equipment and vehicles	1.4	4%
Civil aviation	1.9	5%
Industrial processes and products	1.8	5%
Waste	0.6	2%
Water-borne navigation	0.1	<1%
Rail	0.32	<1%
Other fuels	1.58	5%
Agriculture (livestock)	0.05	<1%
Wildfires	0.28	<1%
Development (loss of vegetation)	0.18	<1%
Sequestration from land cover	0.66	2%
Total	**34.5**	**100%**

Source: EPIC 2013.
MMT CO_2e = million metric tons of carbon dioxide equivalent per year

2.5 Carbon Sequestration

Carbon sequestration is the process by which CO_2 is removed from the atmosphere and deposited into a carbon reservoir (e.g., vegetation). Trees and vegetation take in CO_2 from the atmosphere during photosynthesis, break down the CO_2, store the carbon within plant parts, and release the oxygen back into the atmosphere (CARB 2015c). A development that changes land use type results in potential release of sequestered carbon to the atmosphere as CO_2, which would not have been released had there been no land-type change. The planting of new trees and vegetation would store new carbon as their wood mass increases via normal growth. This GHG analysis estimates the loss of sequestered carbon associated with the proposed land use change and the gain of sequestered carbon associated with planting new trees.

2.6 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 *Intergovernmental Panel on Climate Change Synthesis Report* indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a 0.2 degrees Celsius (°C) rise in average global tropospheric temperature per decade, determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. A warming of about 0.2°C (0.36 degrees Fahrenheit [°F]) per decade is projected, and there are identifiable signs that global warming could be taking place.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The average temperatures in California have increased, leading to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

An increase in annual average temperature is a reasonably foreseeable effect of climate change. Observed changes over the last several decades across the western United States reveal clear signals of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada (CCCC 2012). By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase by 4.1°F to 8.6°F, depending on emissions levels. Springtime warming—a critical influence on snowmelt—will be particularly pronounced. Summer temperatures will rise more than winter temperatures, and the increases will be greater in inland California, compared to the coast. Heat waves will be more frequent, hotter, and longer. There will be fewer extremely cold nights (CCCC 2012). A decline of Sierra Nevada snowpack, which accounts for approximately half of the surface water storage in California and much of the state's water supply, by 30% to as much as 90% is predicted over the next 100 years (CAT 2006).

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. For the first time, however, several of the improved climate models shift toward drier conditions by the mid-to-late 21st century in central and, most notably, Southern California. By late-century, all projections show drying, and half of them suggest 30-year average precipitation will decline by more than 10% below the historical average (CCCC 2012).

A summary of current and future climate change impacts to resource areas in California, as discussed in the California Natural Resources Agency's (CNRA) *Safeguarding California: Reducing Climate Risk* (CNRA 2014), is provided below.

Agriculture. The impacts of climate change on the agricultural sector are far more severe than the typical variability in weather and precipitation patterns that occur year to year. The agriculture sector and farmers face some specific challenges that include more drastic and unpredictable precipitation and weather patterns; extreme weather events that range from severe flooding to extreme drought, to destructive storm events; significant shifts in water availably and water quality; changes in pollinator lifecycles; temperature fluctuations, including extreme heat stress and decreased chill hours; increased risks from invasive species and weeds, agricultural pests and plant diseases; and disruptions to the transportation and energy infrastructure supporting agricultural production. These challenges and associated short-term and long-term impacts can have both positive and negative effects on agricultural production. Nonetheless, it is predicted that current crop and livestock production will suffer long-term negative effects resulting in a substantial decrease in the agricultural sector if not managed or mitigated.

Biodiversity and Habitat. The state's extensive biodiversity stems from its varied climate and assorted landscapes, which have resulted in numerous habitats where species have evolved and adapted over time. Specific climate change challenges to biodiversity and habitat include species migration in response to climatic changes, range shift, and novel combinations of species; pathogens, parasites, and disease; invasive species; extinction risks; changes in the timing of seasonal life-cycle events; food web disruptions; and threshold effects (i.e., a change in the ecosystem that results in a "tipping point" beyond which irreversible damage or loss occurs). Habitat restoration, conservation, and resource management across California and through collaborative efforts among public, private, and nonprofit agencies has assisted in the effort to fight climate change impacts on biodiversity and habitat. One of the key measures in these efforts is ensuring species' ability to relocate as temperature and water availability fluctuate as a result of climate change, based on geographic region.

Energy. The energy sector provides California residents with a supply of reliable and affordable energy through a complex integrated system. Specific climate change challenges for the energy sector include temperature, fluctuating precipitation patterns, increasing extreme weather events and sea-level rise. Increasing temperatures and reduced snowpack negatively impact the availability of a steady flow of snowmelt to hydroelectric reservoirs. Higher temperatures also reduce the capacity of thermal power plants since power plant cooling is less efficient at higher ambient temperatures. Increased temperatures will also increase electricity demand associated with air conditioning. Natural gas infrastructure in coastal California is threatened by sea-level rise and extreme storm events.

Forestry. Forests occupy approximately 33% of California's 100 million acres and provide key benefits such as wildlife habitat, absorption of carbon dioxide, renewable energy and building materials. The most significant climate change related risk to forests is accelerated risk of wildfire and more frequent and severe droughts. Droughts have resulted in more large scale mortalities and combined with increasing temperatures have led to an overall increase in wildfire risks. Increased wildfire intensity subsequently increases public safety risks, property damage, fire suppression and emergency response costs, watershed and water quality impacts and vegetation conversions. These factors contribute to decreased forest growth, geographic shifts in tree distribution, loss of fish and wildlife habitat, and decreased carbon absorption. Climate change may result in increased establishment of non-native species, particularly in rangelands where invasive species are already a problem. Invasive species may be able to exploit temperature or precipitation changes, or quickly occupy areas denuded by fire, insect mortality or other climate change effects on vegetation.

Ocean and Coastal Ecosystems and Resources. Sea-level rise, changing ocean conditions, and other climate change stressors are likely to exacerbate long-standing challenges related to ocean and coastal ecosystems, in addition to threatening people and infrastructure located along the California coastline and in coastal communities. Sea-level rise in addition to more frequent and severe coastal storms and erosion are threatening vital infrastructure such as roads, bridges, power plants, ports and airports, gasoline pipes, and emergency facilities, as well as negatively impacting the coastal recreational assets such as beaches and tidal wetlands. Water quality and ocean acidification threaten the abundance of seafood and other plant and wildlife habitats throughout California and globally.

Public Health. Climate change can impact public health through various environmental changes and is the largest threat to human health in the 21st century. Changes in precipitation patterns affect public health primarily through potential for altered water supplies, and extreme events such as heat, floods, droughts, and wildfires. Increased frequency, intensity, and duration of extreme heat and heat waves is likely to increase the risk of mortality due to heat-related illness and exacerbation of existing chronic health conditions. Other extreme weather events are likely to negatively impact air quality and increase or intensify respiratory illness such as asthma and allergies. Additional health impacts that may be impacted by climate change include cardiovascular disease, vector-borne diseases, mental health impacts, and malnutrition injuries. Increased frequency of these ailments is likely to subsequently increase the direct risk of injury and/or mortality.

Transportation. Residents of California rely on airports, seaports, public transportation, and an extensive roadway network to gain access to destinations, goods, and services. While the transportation industry is a source of GHG emissions, it is also vulnerable to climate change risks. Particularly, sea-level rise and erosion threaten many coastal California roadways, airports, seaports, transit systems, bridge supports, and energy and fueling infrastructure. Increasing temperatures and extended periods of extreme heat threaten the integrity of the roadways and rail lines. High temperatures cause the road surfaces to expand, which leads to increased pressure and pavement buckling. High temperatures can also cause rail breakages, which could lead to train derailment. Other forms of extreme weather events, such as extreme storm events, can negatively impact infrastructure, which can impair movement of peoples and goods, or potentially block evacuation routes and emergency access roads. Increased wildfires, flooding, erosion risks, landslides, mudslides, and rockslides can all profoundly impact the transportation system and pose a serious risk to public safety.

Water. Water resources in California support residences, plants, wildlife, farmland, landscapes, and ecosystems, and bring trillions of dollars in economic activity. Climate change could seriously impact the timing, form, amount of precipitation, runoff patterns, and frequency and severity of precipitation events. Higher temperatures reduce the amount of snowpack and lead to earlier snowmelt, which can impact water supply availability, natural ecosystems, and winter recreation. Water supply availability during the intense dry summer months is heavily dependent on the snowpack accumulated during the winter time. Increased risk of flooding has a variety of public health concerns including water quality, public safety, property damage, displacement, and post-disaster mental health problems. Prolonged and intensified droughts can also negatively affect groundwater reserves and result in increased overdraft and subsidence. Droughts can also negatively impact agriculture and farmland throughout the state. The higher risk of wildfires can lead to increased erosion, which can negatively impact watersheds and result in poor water quality. Water temperatures are also prone to increase, which can negatively impact wildlife that rely on a specific range of temperatures for suitable habitat.

In March 2016, the CNRA released *Safeguarding California: Implementation Action Plans*, a document that shows how California is acting to convert the recommendations contained in the 2014 *Safeguarding California* plan into action (CNRA 2016). Additionally, in May 2017, CNRA released the draft *Safeguarding California Plan: 2017 Update*, which is a survey of current programmatic responses for climate change and contains recommendations for further actions (CNRA 2017).

The CNRA released *Safeguarding California Plan: 2018 Update* in January 2018, which provides a roadmap for state agencies to protect communities, infrastructure, services, and the natural environment from climate change impacts. The 2018 Safeguarding California Plan includes 69 recommendations across 11 sectors and more than 1,000 ongoing actions and next steps developed by scientific and policy experts across 38 state agencies (CNRA 2018). As with previous state adaptation plans, the 2018 Update addresses the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming.

3 REGULATORY SETTING

3.1 Federal Activities

Massachusetts v. EPA. In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act. The Energy Independence and Security Act of 2007 (December 2007), among other key measures, would do the following, which would aid in the reduction of national GHG emissions (EPA 2007):

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Federal Vehicle Standards. In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the

Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017c).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018 (76 FR 57106–57513). The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6% to 23% over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

Clean Power Plan and New Source Performance Standards for Electric Generating Units. In October 2015, EPA published a final rule (effective December 2015) establishing the Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units (80 FR 64510–64660), also known as the Clean Power Plan. These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO_2 emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: (1) fossil-fuel-fired electric utility steam-generating units and (2) stationary combustion turbines. Concurrently, the EPA published a final rule in October 2015 establishing Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units (80 FR 64661–65120). The rule prescribes CO_2 emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. Implementation of the Clean Power Plan has been stayed by the U.S. Supreme Court pending resolution of several lawsuits; additionally, President Trump has called upon the EPA to review the Clean Power Plan.

3.2 State of California

The statewide GHG emissions regulatory framework is summarized below by category: state climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other state regulations and goals. The following text describes executive orders, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues.

State Climate Change Targets

Executive Order S-3-05. EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill 32 and CARB's Climate Change Scoping Plan. In furtherance of the goals established in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020.

Under AB 32, CARB is responsible for and is recognized as having the expertise to carry out and develop the programs and requirements necessary to achieve the GHG emissions reduction mandate of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions from specified sources. This program is used to monitor and enforce compliance with established standards. CARB also is required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 relatedly authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a limit on the statewide GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 MMT CO_2e). CARB's adoption of this limit is in accordance with Health and Safety Code Section 38550.

Further, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) in accordance with Health and Safety Code Section 38561. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various emission sources/sectors to 1990 levels by 2020. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction features by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.
2. Achieving a statewide renewable energy mix of 33%.
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions.
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets.
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

In the Scoping Plan, CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of approximately 28.5% from the otherwise projected 2020 emissions level; i.e., those emissions that would occur in 2020, absent GHG-reducing laws and regulations (referred to as "business-as-usual"). For purposes of calculating this percent reduction, CARB assumed that all new electricity generation would be supplied by natural gas plants, no further regulatory action would impact vehicle fuel efficiency, and building energy efficiency codes would be held at 2005 standards.

In the 2011 Final Supplement to the Scoping Plan's Functional Equivalent Document, CARB revised its estimates of the projected 2020 emissions level in light of the economic recession and the availability of updated information about GHG reduction regulations. Based on the new economic data, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7% (down from 28.5%) from the business-as-usual conditions. When the 2020 emissions level projection also was updated to account for newly implemented regulatory measures, including Pavley I (model years 2009–2016) and the Renewables Portfolio Standard (12% to 20%), CARB determined that achieving the 1990 emissions level in 2020 would require a reduction in GHG emissions of 16% (down from 28.5%) from the business-as-usual conditions.

In 2014, CARB adopted the *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update). The stated purpose of the First Update is to "highlight California's success to date in reducing its GHG emissions and lay the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80% below 1990 levels by 2050." The First Update found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80% below 1990 levels by 2050 if the state realizes the expected benefits of existing policy goals.

In conjunction with the First Update, CARB identified "six key focus areas comprising major components of the state's economy to evaluate and describe the larger transformative actions that will be needed to meet the state's more expansive emission reduction needs by 2050." Those six areas are energy, transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure), agriculture, water, waste management, and natural and working lands. The First Update identifies key recommended actions for each sector that will facilitate achievement of EO S-3-05's 2050 reduction goal.

Based on CARB's research efforts presented in the First Update, it has a "strong sense of the mix of technologies needed to reduce emissions through 2050." Those technologies include energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

As part of the First Update, CARB recalculated the state's 1990 emissions level using more recent global warming potentials identified by the IPCC. Using the recalculated 1990 emissions level (431 MMT CO_2e) and the revised 2020 emissions level projection identified in the 2011 Final Supplement, CARB determined that achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of approximately 15% (instead of 28.5% or 16%) from the business-as-usual conditions.

On January 20, 2017, CARB released The *2017 Climate Change Scoping Plan Update* (Second Update) for public review and comment (CARB 2017b). This update proposes CARB's strategy for achieving the state's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below), including continuing the Cap-and-Trade Program through 2030, and includes a new approach to reduce GHGs from refineries by 20%. The Second Update incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017), and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon. During development of the Second Update, CARB held a number of public workshops in the Natural and Working Lands, Agriculture, Energy, and Transportation sectors to inform development of the 2030 Scoping Plan Update (CARB 2016). When discussing project-level GHG emissions reduction actions and thresholds, the Second Update states, "achieving no net increase in GHG emissions is the correct overall objective, but it may not be appropriate or feasible for every development project. An inability to mitigate a project's GHG emissions to zero does not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA." The Second Update was approved by CARB's Governing Board on December 14, 2017.

EO B-30-15. EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing statewide GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing statewide GHG emissions to 80% below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achievement of this goal, EO B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of MMT CO_2e. The EO also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. EO B-30-15 does not require local agencies to take any action to meet the new interim GHG reduction target.

SB 32 and AB 197. SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction targets; make changes to CARB's membership, and increase legislative oversight of CARB's climate change-based activities; and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. More specifically, SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also adds two members of the Legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

SB 605 and SB 1383. SB 605 (2014) requires CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the state; SB 1383 (2016) required CARB to approve and implement the SLCP reduction strategy. SB 1383 also establishes specific targets for the reduction of SLCPs (40% below 2013 levels by 2030 for methane and HFCs, and 50% below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, and as mentioned above, CARB adopted its Short-Lived Climate Pollutant Reduction Strategy (SLCP Reduction Strategy) in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, methane, and fluorinated gases.

Building Energy

Title 24, Part 6. Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed every few years by the Building Standards Commission and the California Energy Commission (CEC) (and revised if necessary) (California Public Resources Code, Section 25402(b)(1)). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (California Public Resources Code, Section 25402). These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2016 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2017. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and non-residential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015).

Title 24, Part 11. In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The CALGreen 2016 standards became effective on January 1, 2017 (CALGreen 2016a). The mandatory standards require the following (24 CCR Part 11):

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings.
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance.
- 65% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations.
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants.

CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation, 65% diversion of construction and demolition waste, 10% recycled content in building materials, 20% permeable paving, 20% cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements, stricter water conservation, 75% diversion of construction and demolition waste, 15% recycled content in building materials, 30% permeable paving, 25% cement reduction, and cool/solar-reflective roofs.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving zero net energy (ZNE) for new construction in California. The key policy timelines include all new residential construction in California will be ZNE starting in 2020, and all new commercial construction in California will be ZNE starting in 2030 (CPUC 2013).[10] As most recently defined by the CEC in its 2015 *Integrated Energy Policy Report*, a ZNE code building is "one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building" using the CEC's Time Dependent Valuation metric (CEC 2015b).

Title 20. Title 20 of the California Code of Regulations requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. Performance of appliances must be certified through the CEC to demonstrate compliance with standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing for each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SB 1. SB 1 (2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the Public Resources Code, including Chapter 8.8 (California Solar Initiative),

[10] It is expected that achievement of the ZNE goal will occur via revisions to the Title 24 standards.

that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and businesses within 10 years of adoption, and to place solar energy systems on 50% of new homes within 13 years of adoption. SB 1, also termed "GoSolarCalifornia," was previously titled "Million Solar Roofs."

AB 1470. This bill established the Solar Water Heating and Efficiency Act of 2007. The bill makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. The bill defines several terms for purposes of the act. The bill requires the commission to evaluate the data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

AB 1109. Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general purpose lighting, to reduce electricity consumption 50% for indoor residential lighting and 25% for indoor commercial lighting.

Renewable Energy and Energy Procurement

***SB 1078*.** SB 1078 (2002) established the Renewables Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. This goal was subsequently accelerated, requiring utilities to obtain 20% of their power from renewable sources by 2010.

***SB 1368*.** SB 1368 (2006) requires the CEC to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission. This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

SB X1 2. SB X1 2 (2011) expanded the RPS by establishing that 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years be secured from qualifying renewable energy sources. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and that meets other specified requirements with respect to its location. In addition to the retail sellers previously covered by the RPS, SB X1 2 added local, publicly owned electric utilities to the RPS.

SB 350. SB 350 (2015) further expanded the RPS by establishing that 50% of the total electricity sold to retail customers in California per year by December 31, 2030, be secured from qualifying renewable energy sources. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy-efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal.

Mobile Sources

AB 1493. In a response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards will result in a reduction of about 30%.

EO S-1-07. Issued on January 18, 2007, EO S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste.

SB 375. SB 375 (2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional metropolitan planning organizations are then responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

In 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations. The targets for SANDAG are a 7% reduction in emissions per capita by 2020 and a 13% reduction by 2035.

SANDAG completed and adopted its *2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) in October 2011 (SANDAG 2011). In November 2011, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

After SANDAG's 2050 RTP/SCS was adopted, a lawsuit was filed by the Cleveland National Forest Foundation and others. The case was resolved and decided upon in July 2017 by the California Supreme Court; the court found that SANDAG's EIR did not have to use EO S-3-05's 2050 goal of an 80% reduction in GHG emissions from 1990 levels as a significance threshold because the EIR sufficiently informed the public of the potential impacts.

Although the EIR for SANDAG's 2050 RTP/SCS was pending before the California Supreme Court, in 2015, SANDAG adopted the next iteration of its RTP/SCS in accordance with statutorily mandated timelines, and no subsequent litigation challenge was filed. More specifically, in October 2015, SANDAG adopted *San Diego Forward: The Regional Plan*. Like the 2050 RTP/SCS, this planning document meets CARB's 2020 and 2035 reduction targets for the region (SANDAG 2015). In December 2015, CARB, by resolution, accepted SANDAG's GHG emissions quantification analysis and determination that, if implemented, the SCS would achieve CARB's 2020 and 2035 GHG emissions reduction targets for the region.

Advanced Clean Cars Program. In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2011). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold before 2012. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, has adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The Zero Emissions Vehicle (ZEV) program will act as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

EO B-16-12. EO B-16-12 (2012) directs state entities under the Governor's direction and control to support and facilitate development and distribution ZEVs. This EO also sets a long-term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, EO B-16-12 also establishes a GHG emissions reduction target from the transportation sector equaling 80% less than 1990 levels by 2050. In furtherance of this EO, the governor convened an Interagency Working Group on ZEVs that has published multiple reports regarding the progress made on the penetration of ZEVs in the statewide vehicle fleet.

AB 1236. AB 1236 (2015) as enacted in California's Planning and Zoning Law, requires local land use jurisdictions to approve applications for the installation of EV charging stations, as defined, through the issuance of specified permits unless there is substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provides for appeal of that decision to the planning commission, as specified. The bill requires local land use jurisdictions with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that creates an expedited and streamlined permitting process for EV charging stations, as specified. Prior to this statutory deadline, in August 2016, the County Board of Supervisors adopted Ordinance No. 10437 (N.S.)

adding a section to its County Code related to the expedited processing of EV charging stations permits consistent with AB 1236.

SB 350. In 2015, SB 350 – the Clean Energy and Pollution Reduction Act – was enacted into law. As one of its elements, SB 350 establishes a statewide policy for widespread electrification of the transportation sector, recognizing that such electrification is required for achievement of the state's 2030 and 2050 reduction targets (see Public Utilities Code Section 740.12).

EO B-48-18. EO B-48-18 (2018) launches an eight-year initiative to accelerate the sale of EVs through a mix of rebate programs and infrastructure improvements. The order also sets a new EV target of five million EVs in California by 2030. EO B-48-18 includes funding for multiple state agencies, including the CEC, to increase EV charging infrastructure and CARB to provide rebates for the purchase of new EVs and purchase incentives for low-income customers.

Solid Waste

AB 939 and AB 341**.** In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000.

AB 341 (2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery (CalRecycle) to develop strategies to achieve the state's policy goal. CalRecycle has conducted multiple workshops and published documents that identify priority strategies that CalRecycle believes would assist the state in reaching the 75% goal by 2020 (CalRecycle 2015).

Water

EO B-29-15. In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have since become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the state. In response to EO B-

29-15, the California Department of Water Resources has modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency and broadens its applicability to include new development projects with smaller landscape areas.

Other State Regulations and Goals

SB 97. SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities (OPR 2008). The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4(a)). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The CNRA also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009).

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4(a)). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

EO S-13-08. EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs state agencies to take specified actions to assess and plan for such impacts. The final *2009 California Climate Adaptation Strategy* report was issued in December 2009 (CNRA 2009), and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014 (CNRA 2014). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: Agriculture, Biodiversity and Habitat, Emergency Management, Energy, Forestry, Ocean and Coastal Ecosystems and Resources, Public Health, Transportation, and Water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016 (CNRA 2016). In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update which communicates current and needed actions that state government should take to build climate change resiliency (CNRA 2018).

2015 State of the State Address. In January 2015, Governor Brown in his inaugural address and annual report to the Legislature established supplementary goals which would further reduce GHG emissions over the next 15 years. These goals include an increase in California's renewable energy portfolio from 33% to 50%, a reduction in vehicle petroleum use for cars and trucks by up to 50%, measures to double the efficiency of existing buildings, and decreasing emissions associated with heating fuels.

2016 State of the State Address. In his January 2016 address, Governor Brown established a statewide goal to bring per capita GHG emission down to two tons per person, which reflects the goal of the Global Climate Leadership Memorandum of Understanding (Under 2 MOU) to limit global warming to less than two degrees Celsius by 2050. The Under 2 MOU agreement pursues emission reductions of 80% to 95% below 1990 levels by 2050 and/or reach a per capita annual emissions goal of less than two metric tons by 2050. A total of 135 jurisdictions representing 32 countries and six continents, including California, have signed or endorsed the Under 2 MOU (Under 2 2016).

3.3 Local Regulations

San Diego Air Pollution Control District

The San Diego Air Pollution Control District (SDAPCD) does not have established GHG rules, regulations, or policies.

County of San Diego

Climate Action Plan

The County has developed a Climate Action Plan (CAP) that is a comprehensive strategy to reduce GHG emissions in the unincorporated communities of San Diego County. A draft CAP was released on August 10, 2017 for public review. The plan includes six chapters (1) Introduction; (2) Greenhouse Gas Emissions Inventory, Projections, and Reductions Targets; (3) Greenhouse Gas Reduction Strategies and Measures; (4) Climate Change Vulnerability, Resiliency, and Adaptation; (5) Implementation and Monitoring; and (6) Public Outreach and Engagement. Concurrent with the release of the Draft CAP, the County published implementation tools for the County to use when conducting CEQA analysis. This includes a general plan land use conformity determination and CAP Consistency review checklist. In January 2018, the Planning Commission recommended adoption of the final CAP to the County Board of Supervisors. On February 14, 2018, the County Board of Supervisors adopted the CAP.

General Plan

The County's General Plan (County of San Diego 2011) includes smart growth and land use planning principles designed to reduce vehicle miles traveled (VMT) and result in a reduction in GHG emissions. As discussed in the General Plan, climate change and GHG reduction policies are addressed in plans and programs in multiple elements of the General Plan.

The strategies for reduction of GHG emissions in the General Plan are as follows:

- **Strategy A-1:** Reduce vehicle trips generated, gasoline/energy consumption, and GHG emissions.
- **Strategy A-2:** Reduce non-renewable electrical and natural gas energy consumption and generation (energy efficiency).
- **Strategy A-3:** Increase generation and use of renewable energy sources.
- **Strategy A-4:** Reduce water consumption.

- **Strategy A-5:** Reduce and maximize reuse of solid wastes.
- **Strategy A-6:** Promote carbon dioxide consuming landscapes.
- **Strategy A-7:** Maximize preservation of open spaces, natural areas, and agricultural lands.

The General Plan also includes climate adaptation strategies to deal with potential adverse effects of climate change. The climate adaptation strategies include the following:

- **Strategy B-1:** Reduce risk from wildfire, flooding, and other hazards resulting from climate change.
- **Strategy B-2:** Conserve and improve water supply due to shortages from climate change.
- **Strategy B-3:** Promote agricultural lands for local food production.
- **Strategy B-4:** Provide education and leadership.

The County has also implemented a number of outreach programs such as the Green Building Program, lawn mower trade-in program, and reduction of solid waste by recycling to reduce air quality impacts as well as GHG emissions.

The County General Plan's Conservation and Open Space Element includes goals and policies that are designed to reduce the emissions of criteria air pollutants, emissions of GHGs, and energy use in buildings and infrastructure, while promoting the use of renewable energy sources, conservation, and other methods of efficiency.

- **Goal COS-14, Sustainable Land Development.** Land use development techniques and patterns that reduce emissions of criteria pollutants and GHGs through minimized transportation and energy demands, while protecting public health and contributing to a more sustainable environment.
  - **Policy COS-14.1 Land Use Development Form.** Require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact regional and community-level development patterns while maintaining community character.
  - **Policy COS-14.2 Villages and Rural Villages.** Incorporate a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit to reduce air pollution and GHG emissions.

- **Policy COS-14.3 Sustainable Development.** Require design of residential subdivisions and non-residential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.
- **Policy COS-14.4 Sustainable Technology and Projects.** Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.
- **Policy COS-14.5 Building Siting and Orientation in Subdivisions.** Require that buildings be located and oriented in new subdivisions and multi-structure non-residential projects to maximize passive solar heating during cool seasons, minimize heat gains during hot periods, enhance natural ventilation, and promote the effective use of daylight.
- **Policy COS-14.6 Solar Access for Infill Development.** Require that property setbacks and building massing of new construction located within existing developed areas maintain an envelope that maximizes solar access to the extent feasible.
- **Policy COS-14.7 Alternative Energy Sources for Development Projects.** Encourage development projects that use energy recovery, photovoltaic, and wind energy.
- **Policy COS-14.8 Minimize Air Pollution.** Minimize land use conflicts that expose people to significant amounts of air pollutants.
- **Policy COS-14.9 Significant Producers of Air Pollutants.** Require projects that generate potentially significant levels of air pollutants and/or GHGs such as quarries, landfill operations, or large land development projects to incorporate renewable energy, and the best available control technologies and practices into the project design.
- **Policy COS-14.10 Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.
- **Policy COS-14.11 Native Vegetation.** Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control.
- **Policy COS-14.12 Heat Island Effect.** Require that development be located and designed to minimize the "heat island" effect as appropriate to the location and

density of development, incorporating such elements as cool roofs, cool pavements, and strategically placed shade trees.

- **Policy COS-14.13 Incentives for Sustainable and Low GHG Development.** Provide incentives such as expedited project review and entitlement processing for developers that maximize use of sustainable and low GHG land development practices in exceedance of State and local standards.

- **Goal COS-15, Sustainable Architecture and Buildings.** Building design and construction techniques that reduce emissions of criteria pollutants and GHGs, while protecting public health and contributing to a more sustainable environment.
  - **Policy COS-15.1 Design and Construction of New Buildings.** Require that new buildings be designed and constructed in accordance with "green building" programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.
  - **Policy COS-15.2 Upgrade of Existing Buildings.** Promote and, as appropriate, develop standards for the retrofit of existing buildings to incorporate design elements, heating and cooling, water, energy, and other elements that improve their environmental sustainability and reduce GHG.
  - **Policy COS-15.3 Green Building Programs.** Require all new County facilities and the renovation and expansion of existing County buildings to meet identified "green building" programs that demonstrate energy efficiency, energy conservation, and renewable technologies.
  - **Policy COS-15.4 Title 24 Energy Standards.** Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.
  - **Policy COS-15.5 Energy Efficiency Audits.** Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits.
  - **Policy COS-15.6 Design and Construction Methods.** Require development design and construction methods to minimize impacts to air quality.

- **Goal COS-16, Sustainable Mobility.** Transportation and mobility systems that contribute to environmental and human sustainability and minimize GHG and other air pollutant emissions.
  - **Policy COS-16.1 Alternative Transportation Modes.** Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies.
  - **Policy COS-16.2 Single-Occupancy Vehicles.** Support transportation management programs that reduce the use of single-occupancy vehicles.
  - **Policy COS-16.3 Low-Emissions Vehicles and Equipment.** Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions.
  - **Policy COS-16.4 Alternative Fuel Sources.** Explore the potential of developing alternative fuel stations at maintenance yards and other County facilities for the municipal fleet and general public.
  - **Policy COS-16.5 Transit-Center Development.** Encourage compact development patterns along major transit routes.
- **Goal COS-17, Sustainable Solid Waste Management.** Perform solid waste management in a manner that protects natural resources from pollutants while providing sufficient, long term capacity through vigorous reduction, reuse, recycling, and composting programs.
  - **Policy COS-17.1 Reduction of Solid Waste Materials.** Reduce GHG emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with State law.
  - **Policy COS-17.2 Construction and Demolition Waste.** Require recycling, reduction and reuse of construction and demolition debris.
  - **Policy COS-17.3 Landfill Waste Management.** Require landfills to use waste management and disposal techniques and practices to meet all applicable environmental standards.
  - **Policy COS-17.4 Composting.** Encourage composting throughout the County and minimize the amount of organic materials disposed at landfills.

- **Policy COS-17.5 Methane Recapture.** Promote efficient methods for methane recapture in landfills and the use of composting facilities and anaerobic digesters and other sustainable strategies to reduce the release of GHG emissions from waste disposal or management sites and to generate additional energy such as electricity.
- **Policy COS-17.6 Recycling Containers.** Require that all new land development projects include space for recycling containers.
- **Policy COS-17.7 Material Recovery Program.** Improve the County's rate of recycling by expanding solid waste recycling programs for residential and non-residential uses.
- **Policy COS-17.8 Education.** Continue programs to educate industry and the public regarding the need and methods for waste reduction, recycling, and reuse.

- **Goal COS-18, Sustainable Energy.** Energy systems that reduce consumption of non-renewable resources and reduce GHG and other air pollutant emissions while minimizing impacts to natural resources and communities.
  - **Policy COS-18.1 Alternate Energy Systems Design.** Work with San Diego Gas and Electric (SDG&E) and non-utility developers to facilitate the development of alternative energy systems that are located and designed to maintain the character of their setting.
  - **Policy COS-18.2 Energy Generation from Waste.** Encourage use of methane sequestration and other sustainable strategies to produce energy and/or reduce GHG emissions from waste disposal or management sites.
  - **Policy COS-18.3 Alternate Energy Systems Impacts.** Require alternative energy system operators to properly design and maintain these systems to minimize adverse impacts to the environment.
- **Goal COS-19, Sustainable Water Supply.** Conservation of limited water supply supporting all uses including urban, rural, commercial, industrial, and agricultural uses.
  - **Policy COS-19.1 Sustainable Development Practices.** Require land development, building design, landscaping, and operational practices that minimize water consumption.
  - **Policy COS-19.2 Recycled Water in New Development.** Require the use of recycled water in development wherever feasible. Restrict the use of recycled water when it increases salt loading in reservoirs.

- **Goal COS-20, Governance and Administration.** Reduction of local GHG emissions contributing to climate change that meet or exceed requirements of the *Global Warming Solutions Act of 2006*.
  - **Policy COS-20.1 Climate Change Action Plan.** Prepare, maintain, and implement a climate change action plan with a baseline inventory of GHG emissions from all sources; GHG emissions reduction targets and deadlines, and enforceable GHG emissions reduction measures.
  - **Policy COS-20.2 GHG Monitoring and Implementation.** Establish and maintain a program to monitor GHG emissions attributable to development, transportation, infrastructure, and municipal operations and periodically review the effectiveness of and revise existing programs as necessary to achieve GHG emission reduction objectives.
  - **Policy COS-20.3 Regional Collaboration.** Coordinate air quality planning efforts with federal and State agencies, SANDAG, and other jurisdictions.
  - **Policy COS-20.4 Public Education.** Continue to provide materials and programs that educate and provide technical assistance to the public, development professionals, schools, and other parties regarding the importance and approaches for sustainable development and reduction of GHG emissions.

Strategic Plan to Reduce Waste

The County of San Diego Strategic Plan to Reduce Waste outlines near, mid-, and long-term programs and policies to increase the County's solid waste diversion rate to meet state targets and support other County initiatives, such as the CAP. In April 2017, the County adopted a diversion goal of 75% by 2025 (County of San Diego 2017a).

Renewable Energy Plan

The County's Renewable Energy Plan researches and develops renewable energy options in the County. The planning effort covers the residential, commercial, and industrial sectors of the County, with a particular focus on unincorporated areas, and presents a comprehensive approach to renewable energy and energy efficiency (County of San Diego 2017b).

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4 SIGNIFICANCE CRITERIA AND ANALYSIS METHODOLOGIES

4.1 Significance Criteria

The significance criteria used to evaluate the Land Exchange Alternative's GHG emissions impacts are based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this GHG emissions analysis, the Land Exchange Alternative would have a significant environmental impact if it would (14 CCR 15000 et seq.):

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

As stated in CEQA Guidelines Section 15064.4(b)(1)-(3), "a lead agency should consider the following factors, among others, when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions."

Section 15064(h)(3) of the CEQA Guidelines also states that "A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program…that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located."

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific quantitative thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009a).

The Governor's Office of Planning and Research's Technical Advisory titled "CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review" states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice."

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established quantitative thresholds for assessing whether the GHG emissions of a project, such as the Land Exchange Alternative, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, although GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project level under CEQA.

4.2 Construction Emissions Methodology

4.2.1 Overall Schedule

Emissions from the construction phase of the Land Exchange Alternative were estimated using CalEEMod[11] Version 2016.3.1 (CAPCOA 2016).[12] Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on information provided by the Land Exchange Alternative applicant, and CalEEMod default values when Land Exchange Alternative specifics were not known.

For purposes of estimating Land Exchange Alternative emissions, and based on information provided by the Land Exchange Alternative applicant, it is assumed that construction of the Land

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11 CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development projects. The model was developed for the California Air Pollution Control Officers Association in collaboration with multiple air districts across the state. Numerous lead agencies in the state, including the San Diego Air Pollution Control District, use CalEEMod to estimate GHG emissions in accordance with CEQA Guidelines Section 15064.4(a)(1).

12 CalEEMod Version 2016.3.1 was the current version of CalEEMod when the Land Exchange Alternative's analysis was initiated. In October 2017, CalEEMod Version 2016.3.2 was released, followed by CalEEMod Version 2016.3.2.25 in November 2017, which fixed a Windows security update issue in Version 2016.3.2. CalEEMod Version 2016.3.2 included five upgrades and ten bug fixes. The most notable upgrade and bug fix, respectively, is the incorporation of percent reductions in default energy consumption to reflect compliance with the 2016 Title 24, Part 6 Building Energy Efficiency Standards and fixing the bug that overestimated annual construction PM_{10} and $PM_{2.5}$ emissions from fugitive dust in multiple year scenario runs (SCAQMD 2017). All CalEEMod Version 2016.3.2 updates were reviewed and it was determined that use of CalEEMod Version 2016.3.2 is not anticipated to result in greater GHG emissions compared to estimated Land Exchange Alternative emissions generated using CalEEMod Version 2016.3.1. Accordingly, use of CalEEMod Version 2016.3.1 is appropriate for the Land Exchange Alternative's GHG emissions analysis.

Exchange Alternative would commence in August 2019[13] and would last approximately 7 years, ending in May 2026. The analysis contained herein is based on the following subset schedule assumptions (duration of phases is approximate):

- Central Village 14: September 2019 – November 2024
  - Residential: September 2019 – March 2024
  - Non-Residential: August 2020 – November 2024
- North Village 14: September 2021 – April 2025
  - Residential: September 2021 – April 2025
  - Non-Residential: June 2023– September 2023
- South Village 14: September 2022 – December 2026
  - Residential: September 2022 – December 2025
  - Non-Residential: August 2023– May 2026
- Off-Site Improvements: August 2019 – May 2022

For modeling purposes, site preparation and mass grading phases, which are discussed in detail in the following section, were included in the residential development construction scenario; as such, the construction duration associated with those phases are included in the residential duration estimates presented above.

4.2.2 Mass Project Grading

Cut-and-fill quantities would be balanced on site (within the Land Exchange Area), and no external soil export would be required. Soil balance would occur within each subset area, and hauling would not be required between subset areas. A total of approximately 8,235,000 cubic yards of cut and fill would occur within the Land Exchange Area, which is broken down by subset area in Table 5, Construction Grading Assumptions.

With the exception of the construction of South Proctor Valley Road, as discussed below, all This import would be transported by large off-highway trucks. All other balancing activities are anticipated to be performed primarily through the use of off-road construction equipment (e.g.,

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13 The analysis assumes a construction start date of July 2019, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, and fleet turnover replacing older equipment and vehicles in later years.

excavators, graders, dozers, and scrapers). However, to present a conservative analysis, the use of haul trucks to transport a small portion (i.e., 2%) of the excavated soil within each subset area was assumed. This approach is considered conservative because moving of earth material to balance the site is anticipated to be performed using construction equipment, as assumed in CalEEMod. If haul trucks were used to transport earth material, instead of construction equipment, it is thereby reasonable to anticipate that a reduction in construction equipment operation hours would occur. Assuming operation of both construction equipment and haul trucks to perform the same activity is considered a conservative emissions modeling approach. For modeling purposes, it was assumed that a total of approximately 164,700 cubic yards of soil would be relocated within the Land Exchange Area (Hunsaker and Associates 2017), which is broken down by area in Table 5.

To estimate emissions from trucks hauling excavated rock and soil to various portions of the Land Exchange Area, daily haul truck quantities were conservatively estimated using a hauling capacity of 12 cubic yards. Average travel distances were estimated based on internal site movement of soil for grading of individual subset areas.

Table 5
Construction Grading Assumptions

Subset Area	Grading Period (work days)	On-Site Soil Cut and Fill (cubic yards)	Assumed On-Site Soil Movement (cubic yards)	Average On-Site Haul Distance (miles)
South Village 14	61	1,450,000	29,000	0.5
Central Village 14	187	4,450,00	89,000	0.5
North Village 14	80	2,335,000	46,700	0.5

Source: Hunsaker and Associates 2017.
Note: It was assumed that 2% of the total on-site soil cut and fill would be relocated internally.

Off-site improvements are anticipated to result in 379,000 cubic yards over 88 days.

In order to construct South Proctor Valley Road, approximately 240,000 cubic yards of fill would be transported from South Village 14 to South Proctor Valley Road. For purposes of this analysis, 120,000 cubic yards (50%) of that total are assumed to be transported using 100-ton rock trucks, which are categorized as off-highway trucks in CalEEMod. These off-highway trucks would transport fill from South Village 14 to the farthest reaches of Proctor Valley Road, resulting in a one-way trip length between approximately 0.75 and 1.5 miles. Off-road construction equipment, such as graders and scrapers, would move the remaining 120,000 cubic yards (50%) of that total from South Village 14 to the closest portions of Proctor Valley Road, resulting in a one-way trip length between approximately 0.1 and 0.75 miles. The following paragraphs describe the methodologies used to estimate the emissions associated with this aspect of the Project's construction phase.

To estimate the daily number of 100-ton rock trucks required to transport 120,000 cubic yards over 19 days (the estimated duration of this construction activity), it was assumed that the each truck would have a capacity of 97 cubic yards, thereby requiring approximately 65 total round trip truck trips per day.[14] Assuming a speed of 15 miles per hour, an average one-way trip distance of 1.1 miles (2.2 miles round trip),[15] 30 minutes per round trip,[16] and an 8-hour operation day, each truck is estimated to complete a minimum of 16 round trips per day. Accordingly, four off-highway trucks operating at 8 hours per day was assumed to be required to transport 120,000 cubic yards over 19 days.[17]

As for the remaining 120,000 cubic yards of fill required for construction of South Proctor Valley Road that would be transported using off-road construction equipment, the operation of such equipment is captured by the off-site grading portion of the CalEEMod run (discussed above; see Appendix A). The Off-Site Grading and Proctor Valley Road CalEEMod run evaluates emissions associated with grading (off-highway, rock truck operation and fugitive dust), paving, and asphalt striping (see Appendix A).

4.2.3 Residential Development Phasing and Equipment

For each distinct subset area, including South Village 14, Central Village 14, and North Village 14, a mass initial site preparation phase was assumed that would entail clearing and grubbing activities (e.g., removal of vegetation). Following the initial site preparation phase, a mass grading phase would occur that would prepare the entire subset area for subsequent development activities (e.g., utilities, landscaping, paving, and building construction) (see Section 4.2.2 for

14 Calculation parameters:
120,000 cubic yards ÷ 19 days of construction activity = 6,315 cubic yards per day
6,315 cubic yards per day ÷ 97 cubic yards per truck = 65 truck trips

15 The minimum one-way distance a rock truck would travel to transport fill material, versus transporting fill using off-road construction equipment, was assumed to be 0.75 miles. The maximum one-way distance a rock truck would travel to transport fill material was assumed to be 1.5 miles. Accordingly, an average one-way distance of 1.1 miles (0.75 + 1.5 = 2.25 miles; 2.25 miles ÷ 2 = 1.1 miles) was assumed for the rock truck (off-highway truck) travel.

16 The estimated average 30 minute trip duration conservatively assumes 10 minutes total travel time per trip (5 minutes each direction traveling at 15 miles per hour and a 1.1 mile one-way trip length), 15 minutes for loading, and 5 minutes for unloading.

17 Mathematically, four trucks completing 16 round trips a day would total 64 round trips per day. Because of the conservative assumptions regarding trip time and other averages used in the calculations, it is anticipated that four trucks can accomplish 65 round trips in one day.

grading assumptions). Utility installation and slope landscaping was assumed to occur after grading is complete, but in some subset areas, would occur concurrently with other post-grading construction phases such as paving and building construction. Utility installation would include trenching to install water, wastewater, sewer, and fiber-optic lines. Slope landscaping would include site improvement and fine grading, and other types of landscaping would include construction and planting of parks.

For each subset area, residential construction was broken down into distinct phases, each with an estimated number of housing products and total units developed. The total homes built within each phase would differ, but for emissions estimation purposes, it was assumed that each of the residential construction phases would occur over a 5-month period. Month 1 of the building construction phase would entail lot preparation where smaller grading-type equipment would perform minor residential site preparation activities (fine grading); residential utility lines would be installed; and a concrete pad would be poured for each of the lots identified in that phase. Months 2 through 4 would involve typical vertical construction of the residential buildings, including framing, wiring, and plumbing. Month 5 would include drywall and flooring installation, and lot finishing, such as driveway concrete pouring.

The architectural coating phase, which would involve application of paints and other finishes, would occur during months 3 and 4, concurrent with the vertical building construction phases. Although vertical construction and architectural coating would not occur simultaneously on the same residence, since dry wall construction would need to be completed prior to painting activities, it is reasonable to assume that architectural coating and building construction would occur concurrently in the 5-month phase because the construction crew could be working on two or more residential units concurrently. Since the construction crew would proceed from lot to lot in sequence, interior and/or exterior architectural coating could occur at one residential unit while construction of another unit on a different lot is in progress (e.g., construction crew would be painting residence 1 while framing residence 2).

Prior to each of the residential development phases, a paving phase would occur that would include internal circulation pavement installation (i.e., paving of neighborhood streets).

In summary, for residential development at each distinct subset area, the following general construction phases were assumed for residential development:

- Site preparation (Development Footprint): 1 month

- Grading (Development Footprint): ranging from 3 months to 9 months[18]
- Utility installation and slope landscaping (Development Footprint): ranging from 5 to 8 months[19]
- For each neighborhood phase:
  - Paving: 1 month
  - Building construction: 5 months total, consisting of the following:
    - Lot and pad site preparation: 1 month (month 1)
    - Vertical development: 3 months (months 2–4)
    - Finishing: 1 month (month 5)
  - Architectural coating: 2 months (months 3 and 4 of the "building construction" period)

General construction equipment assumptions were based on the anticipated activities associated with each type of construction phase (e.g., earth-moving and rough-grading activities during the grading phase) and the typical equipment used to perform those activities (e.g., graders, loaders, rollers, and scrapers for grading). Although subset areas would involve different residential unit totals and different non-residential land uses, the activities for each construction phase (i.e., site preparation, grading, utilities installation, slope landscaping, paving, building construction, architectural coasting) are anticipated to be similar. The equipment mix anticipated for construction was based on information provided by the Land Exchange Alternative applicant and best engineering judgment. The equipment mix is meant to represent a reasonably conservative estimate of construction activity.

General construction equipment modeling assumptions for residential development is provided in Table 6. Default values for horsepower and load factor as provided in CalEEMod were used for all construction equipment listed in Table 6. It was assumed that all equipment used during each construction subphase would be operating 8 hours per day, 5 days per week. Detailed construction equipment modeling assumptions are provided in Appendix A.

[18] Grading durations for South Village 14 would be 3 months, Central Village 14 would be 9 months, and North Village 14 would be 5 months.

[19] Utility and slope landscaping durations for South Village 14 would be 6 months, Central Village 14 would be 8 months, and North Village 14 would be 6 months.

Table 6
General Residential Development Construction Equipment Assumptions

Construction Subphase	Off-Road Equipment	
	Type	*Quantity*
Site Prep	Rubber Tired Dozer	3
	Tractor/Loader/Backhoe	4
	Other Construction Equipment (brush grinder)	1
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Utilities and Slope Landscaping	Excavator	1
	Rubber Tired Loader	1
Site Preparation (month 1)	Grader	1
	Skid Steer	1
	Trencher	1
	Pump	1
	Cement Mixer	1
Building Construction 1 (months 2-4)	Rough Terrain Forklift	1
	Backhoe	1
Building Construction 2 (month 5)	Rough Terrain Forklift	1
	Skid Steer	2
	Cement Mixer	1
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coating	Air Compressor	2

CalEEMod was used to estimate the number vendor (material delivery) trips and worker trips. Changes to any standard default values or assumptions are reported in the CalEEMod output (see Appendix A). Refer to Section 4.2.7 for vehicle trip assumptions.

Additional details of the construction schedule including hours of operation and duration for heavy construction equipment; worker, vendor (delivery) and internal hauling trips; and equipment mix are included in Appendix A.

4.2.4 Non-Residential Development Phasing and Equipment

For non-residential development at each distinct subset area, the following general construction phases were assumed for non-residential development land use (i.e., swimming pools, parks, fire station, and commercial area):

- Site preparation: less than 1 week
- Grading (entire site): ranging from 3 to 9 days
- Building construction: ranging from 4 to 6 months
- Paving: less than 1 month
- Architectural coating: ranging from 1 to 4 months

General construction equipment modeling assumptions for non-residential development is provided in Table 7. Default values for horsepower and load factor as provided in CalEEMod were used for all construction equipment listed in Table 7. It was assumed all equipment used during each subphase would be operating 8 hours per day, 5 days per week. Detailed construction equipment modeling assumptions are provided in Appendix A.

Table 7
General Non-Residential Construction Equipment Assumptions

Construction Subphase	Off-Road Equipment	
	Type	*Quantity*
Site Preparation (all non-residential land uses)	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	1
Grading (all non-residential land uses)	Excavators	1
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	1
Building Construction – Swimming Pools	Cranes	1
	Forklifts	1
	Generator Sets	1
	Tractors/Loaders/Backhoes	1
	Welders	3
Building Construction – Park	Forklift	1
	Tractor/Loader/Backhoe	1
	Welder	1

Table 7
General Non-Residential Construction Equipment Assumptions

Construction Subphase	Off-Road Equipment	
	Type	*Quantity*
Building Construction – Fire Station	Cranes	1
	Forklifts	2
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Building Construction – Commercial	Cranes	1
	Forklifts	1
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Paving (all non-residential land uses)	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coating (all non-residential land uses)	Air Compressors	1
Landscaping (all non-residential land uses)	Skid Steer	2

CalEEMod was used to estimate the number vendor (material delivery) trips and worker trips; see Section 4.2.7 for vehicle trip assumptions. Additional details of the construction scenario assumptions are included in Appendix A.

4.2.5 Off-Site Improvements Phasing and Equipment

For off-site improvements, the following phases were assumed:

- Grading (all areas): 4 months
- Paving (all areas): 7 months
- Architectural coating (striping): 1 month
- Landscaping (all areas): 12 months

Table 8 presents the construction equipment modeling assumptions for the Land Exchange Alternative off-site improvements. Default values for horsepower and load factor as provided in CalEEMod were used for all construction equipment listed in Table 8. It was assumed all equipment used during each subphase would be operating 8 hours per day, 5 days per week.

Table 8
Off-Site Improvements Construction Equipment Assumptions

Construction Subphase	Off-Road Equipment	
	Type	*Quantity*
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coating (striping)	Air Compressors	1
Landscaping	Skid Steer	2

CalEEMod was used to estimate the number vendor (material delivery) trips and worker trips; see Section 4.2.7 for vehicle trip assumptions. Additional details of the construction scenario assumptions are included in Appendix A.

4.2.6 Proctor Valley Road North and Trail Options

As explained in Section 1, the Land Exchange Alternative includes the Proctor Valley North Road Option for additional bike lanes to be constructed on Proctor Valley Road North if selected by the San Diego County Board of Supervisors. The construction of these bike lanes would require approximately 7,500 cubic yards of grading, 36,600 square feet of paving, and associated architectural coating for striping and bike lane signage. If constructed, it is expected that the additional grading, paving, and architectural coating associated with the bike lane option would use the same construction equipment used for off-site improvements, as presented in Table 9, and would result in a maximum of nine additional days of construction: two days for grading, five days for paving, and two days for architectural coating (striping and signage).[20] For

[20] It is anticipated that the additional construction associated with the Proctor Valley Road North Option would not occur as an independent construction phase, but instead would slightly increase the duration of the grading, paving, and architectural coating phases. The 9 construction days associated with the potential Proctor Valley Road North Option were modeled in CalEEMod to follow the overall construction phasing of Proctor Valley Road North. More specifically, it was assumed in CalEEMod that the 2 additional grading days would be added onto the off-site improvements' 4-month grading phase, the 5 additional paving days would be added onto the off-site improvements' 1-month paving phase, and the 2 additional architectural coating days would be added onto the off-site improvements' 1-month architectural coating phase.

disclosure, the additional construction activities were modeled separately in CalEEMod to estimate potential additional emissions resulting from equipment operation and worker trips. No additional haul truck trips would be required for the Proctor Valley Road North Option.

The Perimeter Trail Option, if selected by the San Diego County Board of Supervisors, would provide for an improved trail around the Land Exchange Area. Because this Perimeter Trail Option would be graded during the Development Footprint mass grading phase, no additional grading is anticipated for this option and no additional GHG emissions are anticipated to occur.

The Preserve Trails Option would not result in any physical improvements; therefore, no GHG emissions are anticipated from implementation of this option.

4.2.7 Vehicle Trips

Haul Truck Trips

As discussed in Section 4.2.2, Mass Project Grading, cut and fill would be balanced on site, and hauling would be limited to internal site movement within each village area. To provide a conservative estimate of emissions relating to hauling, it was assumed that 2% of cut and fill would be moved internally in medium-duty (12 cubic yard) haul trucks. Due to the size of the village sites (subset areas), haul truck trip length was assumed to be 0.5 miles. Table 9 presents estimated cubic yards of grading and associated haul truck trip by Village.

Table 9
Haul Truck Round Trip Estimates

Village	Total Graded Cubic Yards	Cubic Yards Hauled	Truck Trips (round trips)
South Village 14	1,450,000	29,000	2,417
Central Village 14	4,450,000	89,000	7,417
North Village 14	2,335,000	46,700	3,892

Worker and Truck Trips

Construction worker and vendor trips were calculated using the methodology presented in CalEEMod Users Guide, Appendix A (CAPCOA 2016). In CalEEMod, the estimate of worker trips for site preparation, grading, paving, and trenching are based on 1.25 workers per each individual piece of equipment. The CalEEMod worker rate was used for all phases of construction to provide a consistent methodology between land uses,[21] with the exception of the building construction phases of single-family homes, which is presented in Table 10. This approach reflects a conservative analysis due to the detailed and extensive construction equipment list provided by the applicant. Table 10 presents the CalEEMod worker and vendor truck trip generation rates for single-family residences.

Table 10
Worker and Vendor Truck Trip Estimate Methodology

Land Use Subtype	Rate Metric	Worker Trip Rate	Vendor Trip Rate
Single-Family	Daily Trips per Dwelling Unit	0.36	0.1069

Source: CAPCOA 2016.

In addition, architectural coating worker trips are 20% of building construction phase trips. Vendor trips associated with building construction are based on the land uses and trip rate indicated in the table above. For phases with construction less than 1,000 square feet, two trips (one worker round trip) were assumed. Additional vendor trips were included in site preparation, grading, and paving. Four trips were assumed for site preparation and grading phases, while 10 vendor trips were assumed for paving to conservatively estimate material delivery to the site.

4.2.8 Rock Crushing

Rock crushing would occur as part of the site preparation process. The crushing information provided by the Land Exchange Alternative applicant is listed below.

- Proctor Valley Road North – 27,625 tons crushed over 1 week
- South Village 14 – 185,640 tons crushed over 8 weeks
- Central Village 14 – 568,470 tons crushed over 12 weeks
- North Village 14 – 1,210,880 tons crushed over 16 weeks

The rock crushing equipment was assumed to consist of a crusher, screen, and conveyor, and the crushed rock would be stockpiled for future use. While a single primary crusher and screen may be all that is required, use of a secondary crusher and additional screen would expedite this process. To generate a conservative emission estimate, it was assumed that a feed hopper, primary and secondary crushers, two screens, and several conveyors for transfers would be used.

[21] CalEEMod does not include default rates for workers and vendors for all non-residential building phases, such as park structures and recreational swimming pools, which would be represented in the Land Exchange Alternative.

GHG emissions from the equipment were estimated using the CalEEMod. It was assumed that all equipment was operating 8 hours per day, 5 days per week, over each phase.

It is expected that the rock crushing equipment would be powered by a diesel engine-generator. It is assumed that the engine-generator would be rated at 750 kilowatts or approximately 1,000 horsepower. The engine-generator would operate up to 8 hours per day, 5 days per week. The GHG emissions from the diesel engine-generator were estimated using the off-road engine load factor and emission factors from the CalEEMod user's guide for a typical generator operating in 2019. It was assumed that the same equipment would be used for each phase; thus, the emission factors were based on the initial year of use (2019). Rock crushing emission calculations are provided in Appendix A.[22]

4.3 Operational Emissions Methodology

4.3.1 Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from hearths and landscape maintenance equipment. Emissions associated with natural gas usage in space heating, water heating, and stoves are calculated in the building energy use module of CalEEMod, as described in the following text.

Based on information provided by the applicant, each single-family unit was assumed to have a natural gas fireplace; courtyard homes were assumed to have no fireplace; and no woodstoves were included as a part of the development. The use of natural gas fireplaces was assumed to be included in the heating demand used in the Building Analysis (ConSol 2017). Fireplaces were not included separately in the CalEEMod area source calculations to avoid double counting.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of non-residential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. While electric equipment for landscaping maintenance activities could be used by future residents and/or homeowners

[22] Pursuant to EPA AP-42, Section 13.3 Explosives Detonation, there are no CO_2 and CH_4 emission factors for the explosive ANFO (composed of ammonium nitrate with 5.8% to 8% fuel oil). Accordingly, GHG emissions associated with blasting is not included in this GHG analysis.

association landscape maintenance contractors, default CalEEMod assumptions were used in estimating emissions as a conservative estimate.

4.3.2 Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to GHGs, since GHG emissions occur at the site of the power plant, which is typically off site. Emissions were calculated by multiplying the energy use by the utility's carbon intensity (pounds of GHGs per megawatt-hour for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs. Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using the emissions factors for SDG&E, which would be the energy source provider for the Land Exchange Alternative. For the operational year 2028,[23] the emission factors for SDG&E were adjusted to reflect SDG&E's compliance with the RPS standards. A renewable procurement percentage of 46.6% in 2028 was interpolated from the 2020 RPS goal of 33% and 2030 goal of 50%.

For residential land uses, Land Exchange Alternative–specific energy (electricity and natural gas) use data was used in place of CalEEMod default values (ConSol 2017). To calculate the total residential building energy input (i.e., electricity and natural gas use from regulated and unregulated loads[24]), Land Exchange Alternative–specific energy use data prepared by ConSol, which reflected energy use in residential development designed to meet the CEC's definition of ZNE buildings, was used. (ZNE buildings are designed to achieve enhanced energy efficiency in the building envelope and to use renewable energy sources, such as rooftop-mounted solar panels.) These data were calculated using the CEC's public-domain compliance software, known as CBECC-Res.[25] The prototype residences used in the ConSol analysis were a 2,686-square-

[23] While construction of the Land Exchange Alternative is anticipated to be complete in 2026, operational year 2028 was assumed instead of 2027 to provide a more meaning comparison to the Otay Ranch Village 14 and Planning Areas 16/19 GHG emissions analysis. Nonetheless, estimated operational GHG emissions in 2027 emissions are provided for disclosure in Section 5.1.3. In 2027, the interpolated renewable procurement percentage for 44.9% was calculated.

[24] For electricity in CalEEMod Version 2016.3.1, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses.

[25] "CBECC-Res" is shorthand for California Building Energy Code Compliance – Residential.

foot, two-story, single-family residence, and a 6,024-square-foot, two-story, four-plex. The plans for this buildings were provided from ConSol's library of building plans.[26]

For non-residential land uses, CalEEMod default values for energy consumption for each land use were applied for the Land Exchange Alternative analysis. The energy use for non-residential buildings is calculated in CalEEMod using energy intensity values (natural gas usage per square foot per year) assumptions, which were based on the California Commercial End-Use Survey database.

The current Title 24 building energy efficiency standards[27] are the 2016 Title 24 building energy efficiency standards, which became effective January 1, 2017. In general, non-residential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a). CalEEMod default values assume compliance with the 2013 Title 24 standards, which became effective on July 1, 2014. In accordance with PDF-AQ/GHG-3, non-residential land uses were adjusted to be 10% more energy efficient than required by the 2016 Title 24 energy efficiency standards.

The energy use (electricity and natural gas) rates assumed in CalEEMod are presented in Table 11.

Table 11
Energy Use Rates

Land Use	Title 24 Electricity	Non-Title 24 Electricity	Lighting Electricity	Total Electricity	Title 24 Natural Gas	Non-Title 24 Natural Gas	Total Natural Gas
	kWh per unit per year				*kBtu per unit per year*		
Single-Family Residential Units	1,102	3,936	764	5,802	17,700	5,200	22,900
Multi-Family Residential Units	793	3,639	470	4,902	11,500	1,400	12,900
Industrial Park (Fire Station)	4.17	4.25	3.34	11.76	13.74	3.59	17.33
Parking Lot	0.00	0.00	0.75	0.75	0.00	0.00	0.00
Regional Shopping Center	2.86	2.70	5.46	11.02	0.98	0.93	1.92
Arena (Community Facilities)	1.09	3.65	2.49	7.23	3.42	5.99	9.41

26 The Land Exchange Alternative proposes a variety of residential product types that may range from approximately 2,000 to 4,500 square feet.
27 Title 24, part 6 of the California Code of Regulations.

Table 11
Energy Use Rates

Land Use	Title 24 Electricity	Non-Title 24 Electricity	Lighting Electricity	Total Electricity	Title 24 Natural Gas	Non-Title 24 Natural Gas	Total Natural Gas
	kWh per unit per year				*kBtu per unit per year*		
Elementary School	1.37	1.01	2.23	4.61	4.28	0.00	4.28

Source: ConSol 2017.
Notes:
kWh = kilowatt hour; kBtu = kilo British thermal unit.
Assumptions represent implementation of PDF-AQ/GHG-2 (Zero Net Energy Development – Residential Land Uses).
Title 24 electricity is the "regulated loads" kWh shown in ConSol 2017.
Non-Title 24 electricity is the sum of "Appliance & Cooking kWh" and "Plug Load kWh" shown in ConSol 2017.
Lighting electricity is the sum of "Interior Lighting kWh" and "Exterior Lighting kWh" shown in ConSol 2017.
Title 24 natural gas is the "regulated loads" Therms shown in ConSol 2017.
Non-Title 24 natural gas is the "Appliance & Cooking Therms" shown in ConSol 2017.
Improvements on the 2016 code for non-residential uses were only applied to those regulated loads.

To meet ZNE design standards, each residential unit will be constructed with a rooftop photovoltaic (PV) system. The system's size was determined based on the estimated annual energy demand of a residence.

Private Swimming Pools

The Land Exchange Alternative would include three private swimming pools with an average size of 140,026 gallons each. Energy demand for swimming pools was estimated using a baseline demand in the SDG&E service area (SCE 2016). The swimming pools are assumed to use electricity for filters and pumps, and natural gas for water heating. Table 12 shows the estimated energy use associated with heating the Land Exchange's swimming pools. The natural gas demand for heating would be completely off-set through the implementation of PDF-AQ/GHG-5, which requires the installation of solar water heating on all recreational swimming pools. As shown in Table 12, pool heating would require 64.47 million British thermal units (MMBtu) daily, and thus the implementation of PDF-AQ/GHG-5 would reduce natural gas demand by 64.47 MMBtu.

Table 12
Swimming Pool Heating Demand

Facility Name	Pool Volume (gallons)	MMBtu/gallons/day	MMBtu/day
PP2	180,956	0.00015	27.77
PP4	81,861		12.56

Table 12
Swimming Pool Heating Demand

Facility Name	Pool Volume (gallons)	MMBtu/gallons/day	MMBtu/day
PP1	157,260		24.14
Average	*140,026*	N/A	21.49
Total	**420,077**	N/A	64.47

Sources: SCE 2016; DOE 2017.
Notes: MMBtu = million British thermal units.
Pool hours of operation assume 12 hours daily.
Pool heaters from the SDG&E study were assumed to use 78% efficient heaters (the minimum required by 10 CFR Part 431). Newer pools use heaters with 89% to 95% efficiency (DOE 2017). Heaters in the Land Exchange Alternative were assumed to use 90% efficient heaters.

4.3.3 Mobile Sources

Mobile sources for the Land Exchange Alternative would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the proposed land uses and would primarily include future residents. The anticipated Land Exchange Alternative trip generation, including the trip rates and total trips, is based on the Land Exchange Alternative's Transportation Impact Study prepared by Chen Ryan (Chen Ryan 2017a). CalEEMod was used to calculate the emissions resulting from on-road mobile sources associated with residents as well as workers, customers, and delivery vehicles traveling to and from the proposed land use types.

The calculation of Land Exchange Alternative–generated vehicle emissions is based on multiple variables, including trip rate, trip length, trip purpose, and trip type, which are all factors in estimating Land Exchange Alternative–generated VMT, and which are discussed in detail below.

Default trip generation rates and trip lengths included in CalEEMod for each analyzed Land Exchange Alternative land use in the buildout scenario were adjusted to match the average weekday trip rates and total weekday VMT data (149,587 VMT daily, discussed in detail below) provided in the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b). In addition, Saturday and Sunday trip rates for the Land Exchange Alternative land uses were adjusted in proportion to the CalEEMod default trips rates and the Land Exchange Alternative's assumed weekday trip rate (Chen Ryan 2017a). The CalEEMod default and assumed Land Exchange Alternative trip rates are depicted in Table 13.

Table 13
CalEEMod Default Trip Rates and Assumed Land Exchange Alternative Trip Rates

Land Use Type	Size Metric	CalEEMod Default Trip Rates			Land Exchange Alternative Trip Rates[a]		
		Weekday Trip Rate	*Saturday Trip Rate*	*Sunday Trip Rate*	*Weekday Trip Rate*	*Saturday Trip Rate*	*Sunday Trip Rate*
Single-Family Detached Housing	Dwelling Unit	9.52	9.91	8.62	8.79	9.15	7.96
Multi-Family	Dwelling Unit	5.81	5.67	4.84	6.68	6.52	5.56
Mixed Use: Commercial/Retail	KSF	42.7	49.97	25.24	110.00	128.73	65.02
Elementary	KSF	15.43	0.00	0.00	12.00	0.00	0.00
Neighborhood/County Park	Acre	1.89	22.75	16.74	5.00	60.19	44.29
Community Facilities	Acre	33.33	0.00	0.00	30.00	0.00	0.00
Fire Station	KSF	6.83	2.49	0.73	2.13	0.78	0.23

Sources: CAPCOA 2016; Chen Ryan 2017a.
KSF = thousand square feet
[a] Weekday trip rate provided in the Land Exchange Alternative's Traffic Impact Study and is not adjusted. Land Exchange Alternative Saturday and Sunday trips rates are adjusted based on the ratios of the CalEEMod default Saturday and Sunday trip rates to the CalEEMod default weekday trip rate.

The estimated daily and annual Land Exchange Alternative–generated trips at buildout conditions in 2028, based on the trip rates depicted in Table 13, is presented in Table 14.

Table 14
Estimated Daily and Annual Land Exchange Alternative Trips at Build-Out (2028)

Land Use Type	Units	Size Metric	Trips per Day			Trips per Year		
			Weekday Trips	*Saturday Trips*	*Sunday Trips*	*Weekday Trips*	*Saturday Trips*	*Sunday Trips*
Single-Family Detached Housing	1407	Dwelling Unit	12,368	12,874	11,198	3,215,558	669,458	582,313
Multi-Family	123	Dwelling Unit	822	802	684	213,626	41,696	35,592
Mixed Use: Commercial/Retail	15	KSF	1,650	1,931	975	429,000	100,408	50,716
Elementary	60	KSF	720	0	0	187,200	0	0
Neighborhood/ County Park	5	Acre	25	301	221	6,500	15,648	11,514
Community Facilities	5.6	Acre	168	0	0	43,680	0	0
Fire Station	7.5	KSF	16	6	2	4,154	303	89
					Total	**4,099,718**	**827,512**	**680,225**
					Total Annual Trips	**5,607,455**		

Source: Chen Ryan 2017b.
KSF = thousand square feet

Implementation of PDF-TR-1 would result in reductions of Land Exchange Alternative–generated VMT (see Section 4.3.6). The estimated VMT reductions are based on the California Air Pollution Control Officers Association *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (CAPCOA Quantification Report) (CAPCOA 2010) guidance document and the Land Exchange Alternative's TDM Program.

The CAPCOA Quantification Report notes that when determining the overall VMT reduction associated with a project, the VMT reduction for each individual strategy should be "dampened," that is adjusted to reflect the fact that some of the strategies may be redundant or applicable to the same populations (CAPCOA 2010). Based on the VMT reductions provided in Section 4.3.6, below, Village 14 would have a total VMT reduction of 4.6%. Before incorporation of VMT reductions associated with proposed TDM strategies, the estimated total daily VMT for the Land Exchange Alternative is 156,783 (Chen Ryan 2017b). As a result of implementation of the Land Exchange Alternative's TDM strategies (PDF-TR-1), there would be an overall reduction of 7,169 VMT per day. The estimated total daily VMT for the Land Exchange Alternative with implementation of the TDM Program is 149,587 (Chen Ryan 2017b).

In addition to trip rates (presented in Table 13), trip lengths, trip purpose, and trip type are factors in the calculation of Land Exchange Alternative–generated VMT and associated vehicle-generated emissions. In general, CalEEMod determines an overall average trip length for primary, diverted, and pass-by trip link types[28] where primary trips are 100% of the trip length; diverted trips are 25% of the primary trip length; and pass-by trips are 0.1 mile (CAPCOA 2016). For this Land Exchange Alternative analysis, the CalEEMod default trip type percentages were adjusted so that the CalEEMod-generated VMT would mathematically match the overall weekday VMT data (i.e., 149,587 daily VMT) provided in the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b). This simple mathematical adjustment was performed by assuming all trip lengths were the same and all trips were primary trips. This approach is consistent with the transportation modeling, which accounts for a full inventory of trip categories; that is, both primary and shorter trips are already assessed in the model (i.e., the modeled VMT estimates provided in the TDM Program Evaluation reflect primary trip, pass-by trips, and diverted trips). The CalEEMod default and adjusted trip lengths are depicted in Table 15.

[28] Trip link types further describe the characteristics of the trip attracted to each land use, whether it is a primary trip, a diverted link trip, or a pass-by trip. For example, a commercial customer pass-by trip could be a person going from home to shop on the way to work. In addition, a commercial customer diverted-link trip could be a person going from home to work, and making a diversion to shop (CAPCOA 2016).

Table 15
CalEEMod Default and Project Adjusted Trip Lengths

Land Use Type	CalEEMod Default Trip Lengths (Miles)			Adjusted Trip Lengths (Miles)		
Residential Trip Type	*Home–Work*	*Home–Shop*	*Home–Other*	*Home–Work*	*Home–Shop*	*Home–Other*
Single-Family Detached Housing	10.8	7.3	7.5	9.71	9.71	9.71
Multi-Family Detached Housing	10.8	7.3	7.5	9.71	9.71	9.71
Commercial Trip Type	*Commercial–Customer*	*Commercial–Work*	*Commercial–Non-Work*	*Commercial–Customer*	*Commercial–Work*	*Commercial–Non-Work*
Mixed Use: Commercial/Retail	7.3	9.5	7.3	9.71	9.71	9.71
Elementary	7.3	9.5	7.3	9.71	9.71	9.71
Neighborhood/County Park	7.3	9.5	7.3	9.71	9.71	9.71
Community Facilities	7.3	9.5	7.3	9.71	9.71	9.71
Fire Station	7.3	9.5	7.3	9.71	9.71	9.71

Sources: CAPCOA 2016; Chen Ryan 2017b.

Finally, CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs to estimate daily emissions from proposed vehicular sources.[29] Land Exchange Alternative–related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Emission factors representing the vehicle mix and emissions for 2028[30] were used to estimate emissions associated with full buildout of the Land Exchange Alternative.

Electrical Vehicle Charging Infrastructure

The Land Exchange Alternative would include a multi-pronged approach to increasing EV adoption for residents of the Land Exchange Alternative. As part of this strategy: Level 2 Electric Vehicle Supply Equipment (EVSE) would be installed in the garages in half of all residential units[31] (765 units) and 10 parking spaces located in the Village Core's commercial development area and P1 through P4 park areas[32] parking spaces would include charging

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29 Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The default vehicle mix (vehicle class distribution including automobiles, trucks, buses, motorcycles) provided in CalEEMod 2016.3.1, which is based on CARB's Mobile Source Emissions Inventory model, EMFAC, version 2014, was applied.

30 As discussed previously, estimated operational GHG emissions in 2027are provided for disclosure in Section 5.1.3.

31 Providing EVSE to half of all Land Exchange Alternative residential units was chosen as an estimate of market demand. It is assumed that providing EVSE would incentivize homeowners to purchase EVs or provide an opportunity to homeowners who own EVs to have in-home chargers.

32 To meet Governor Brown's goals, 15% of new car purchases in 2025 would need to be ZEVs; as a point of comparison, 3% of new car purchases in 2016 were ZEVs (CEC 2016). This adoption rate is anticipated to be slightly higher in urban areas with major destinations in typical EV range, which the Land Exchange Alternative's in-home

stations. These Land Exchange Alternative–specific strategies, in conjunction with market forces decreasing the cost and increasing the availability of EVs, regional charging initiatives decreasing range anxiety and increasing the share of miles driven by plug-in hybrid electric vehicles (PHEVs) in EV mode, and state targets fueling large programs and incentive pools making EV ownership more cost effective and appealing, will increase the market penetration of EVs and share of EV miles driven as a result of the Land Exchange Alternative.

The cornerstone of the Land Exchange Alternative's strategy to increase EV adoption by future residents is the availability of "fast-charging" through 240 volt Level 2 EVSE equipment. In a 2011 report investigating people's major decision making factors in purchasing an EV, the highest percentage of respondents (63%) cited the ability to charge at home (Accenture 2011). Home charging is also the most commonly used method of charging, accounting for more than 70% of all charging (Holland 2016). Charging at home is often the most convenient, since cars are parked over-night allowing them sufficient time to charge when they are not in use and when energy is priced at "super off-peak" and is the least expensive (SDG&E 2017).

Studies have found that the availability of charging at home increased the person's propensity to purchase both EVs and PHEVs (Hidrue et al. 2011; Tal et al. 2013). Additionally, the CEC identified home charging as a high-priority strategy to increase EV sales and increase the amount of miles driven by EVs (NREL 2014). The importance of charging EVs at home has been shown to be leveraged and made more appealing with the free installation of Level 2 EVSE. Of early EV owners surveyed in 2013, 56% of those respondents received a free or subsidized Level 2 charger, and almost 60% of those who received free or subsidized chargers cited the importance of that charger as either "a lot" or "a deciding factor" (CSE 2013). Of owners of PHEVs, 80% of them found the importance of the subsidy to install a Level 2 charger influential in their purchase (Krupa et al. 2014).

The Land Exchange Alternative's efforts to increase EV adoption is also supported by the charging infrastructure in the surrounding community. In the City of Chula Vista, there are over 20 public charging stations within 15 miles of the Land Exchange Area, and 140 public charging stations within the Greater San Diego Area (Plugshare 2017). This existing infrastructure is focused in areas where cars are parked for longer periods of time allowing for greater charging, such as shopping malls and downtowns. This infrastructure pattern allows for PHEVs to charge more frequently and achieve similar EV mode miles as full-EVs (INL 2016). Planned infrastructure in the San Diego region, notably at park and rides and the San Diego International

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EVSE would support. The non-residential spaces were determined to assist those with range anxiety and non-resident visitors to the site, as the entire Land Exchange Alternative is well within typical EV and PHEV range.

Airport is congruent with strategies outlined by the National Energy Renewable Laboratory (NREL 2014; Trabish 2017).

Of EV owners surveyed, 94% live in households with two or more people and most have access to a conventional gasoline or diesel car. For those households with both a conventional gas car and EV, the EV is used for over 85% of the household VMT and the conventional car is used primarily used for vacation and long distance travel (CSE 2012, 2013). The development pattern of the Land Exchange Alternative would serve households similar to those existing owners and is well within EV range of existing employment and retail centers in the City of Chula Vista. Therefore, the Land Exchange Alternative's majority single-family product type and proximity to daily needs well within current EV range, make it well suited for EV adoption and associated on-site mitigation would meaningfully reduce on-site GHG emissions. Substantial reduction in VMT related emissions would be expected from the Land Exchange Alternative's facilitation of EV ownership; however, to provide a conservative estimate, no reductions were assumed.

4.3.4 Solid Waste

The Land Exchange Alternative would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

4.3.5 Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the Land Exchange Alternative require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the Land Exchange Alternative requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using the Land Exchange Alternative's water conservation plan.[33]

[33] It was assumed that 50% of the Land Exchange Alternative's water usage would be indoor water use and 50% would be outdoor use for all land uses, with the exception of parks. Park water usage is assumed to be 75% outdoor water use, to account for the community facilities.

4.3.6 Regulatory Compliance Measures and Project Design Features that Reduce GHG Emissions

Table 16, Regulatory Compliance Measures that Reduce GHG Emissions, summarizes the regulatory measures that would be implemented to reduce the Land Exchange Alternative's operational GHG emissions.

Table 16
Regulatory Compliance Measures that Reduce GHG Emissions

Regulation Number	Regulatory Compliance Measure	Description	Quantification Details
Energy			
REG-GHG-1	Compliance with Title 24 Building Energy Efficiency Standards	Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. The most recent amendments to Title 24, Part 6, referred to as the 2016 standards, became effective on January 1, 2017. CalEEMod Version 2016.3.1 assumes compliance with 2013 Title 24 Standards. In general, single-family homes built to the 2016 standards are anticipated to use about 28% less energy for lighting, heating, cooling, ventilation, and water heating than those built to the 2013 standards, and non-residential buildings built to the 2016 standards will use an estimated 5% less energy than those built to the 2013 standards (CEC 2015a).	Per PDF-AQ/GHG-2, the Land Exchange Alternative residential land uses would be ZNE, which exceeds the energy efficiency requirements of the 2016 Title 24 standards. Accordingly, no emission reduction associated with compliance with 2016 Title 24 building energy efficiency standards was assumed for residential land uses. The CalEEMod default values for Title 24-regulated energy, natural gas, and lighting were assumed to be 5% more efficient, then improved another 10% from the 2016 estimated values to reflect demand after implementation of PDF-AQ/GHG-3.
REG-GHG-2	Solar-Ready Units	Per CEC's *2016 Residential Compliance Manual* (CEC 2015c), all single-family homes constructed as part of the Land Exchange Alternative would be designed with pre-plumbing for solar water heaters and solar and/or wind renewable energy systems.	No reduction assumed.
REG-GHG-3	Renewables Portfolio Standards (RPS)	Implementation of the 20% RPS mandate by 2010 would reduce GHG emissions in the near-term. Implementation of the 33% target by 2020 would reduce GHG emissions by following full implementation of the RPS. Implementation of the 33% RPS would reduce GHG emissions by 27% below 2006	The emissions intensity factors for utility energy use were adjusted in CalEEMod to account for implementation of RPS based on the SB 350, CalEEMod 2016.3.1, Appendix D, Table 1.2, and the SDG&E 2009 Power Content Label

Table 16
Regulatory Compliance Measures that Reduce GHG Emissions

Regulation Number	Regulatory Compliance Measure	Description	Quantification Details
		levels. Implementation of the 50% mandate by 2030 would reduce GHG emissions by an additional 17%.	(actual; SDG&E 2009). The RPS for operational year 2028 was 46.6% interpolated from the 2020 and 2030 goals of 33 and 50% respectively. (See Appendix A).
		Mobile Sources	
REG-GHG-4	Low Carbon Fuel Standard	The Low Carbon Fuel Standard is anticipated to achieve a 10% reduction in emissions from transportation fuels.	Although the Low Carbon Fuel Standard would reduce emissions from transportation fuels, EMFAC 2014 (CARB 2015c) – which forms the platform for CalEEMod Version 2016.3.1's mobile source emissions factors – does not account for it.
REG-GHG-5	State and Federal Mobile Source Reduction Strategies	• Advanced Clean Cars (for model years 2016 and beyond) The Advanced Clean Car standards would result in approximately 3% more reductions from passenger vehicles than the Pavley standards by 2020, 12% by 2025, 19.5% by 2030, and 33% by 2050. • Truck and Bus Rule (2014 Amendment) • Heavy-Duty Greenhouse Gas Phase 1 (2013), which includes the 2013 Tractor-Trailer Greenhouse Gas Regulation Amendments and Federal Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles • Pavley I federal standard for model years 2012 through 2016	Accounted for in EMFAC 2014 vehicle emission factors as part of CalEEMod version 2016.3.1.
REG-GHG-6	Pre-Wiring for Electric Vehicle Charging Equipment	Per CALGreen, pre-wiring for the installation of electric vehicle (EV) charging equipment in the garages in all residential units and in the Village Core would be implemented (CALGreen 2016b and 2016c).	Conservatively, no reduction was taken for this regulation.
		Solid Waste	
REG-GHG-7	Curbside Recycling	Land Exchange Alternative–wide curbside recycling for residential units, school, commercial, and retail establishments would be required in accordance with the California Integrated Waste Management Act (AB 939) and AB 341.	Measure would contribute toward 75% diversion rate as required by AB 939 and AB 341. The solid waste generation rate developed for the Land Exchange Alternative includes diversion requirements. No additional reductions were assumed.

Table 16
Regulatory Compliance Measures that Reduce GHG Emissions

Regulation Number	Regulatory Compliance Measure	Description	Quantification Details
Water Conservation			
REG-GHG-8	Low-Flow Fixtures	Indoor residential plumbing products would comply with the 2016 CALGreen Code, including future updates to CALGreen as these updates apply to homes in the Land Exchange Alternative built under the updated code.	Reductions accounted for in Water Conservation Plan (Dexter Wilson 2017). No further reductions were assumed in emissions estimates.
REG-GHG-9	Reduction in Indoor Water Use	The Land Exchange Alternative would comply with EO B-29-15, which calls for a 25% reduction in total water use below 2013 levels. Otay Water District has adopted a 20% reduction in water use.	Reductions accounted for in water demand study (Dexter Wilson 2017). No further reductions were assumed in emissions estimates.
REG-GHG-10	Reduction in Outdoor Water Use	The Land Exchange Alternative would comply with EO B-29-15, which calls for a 25% reduction in total water use below 2013 levels. To achieve this reduction, the Land Exchange Alternative would employ drought-tolerant landscaping and recycled water for irrigation, and may offer plumbing for grey water systems, if feasible. In addition, through the Land Exchange Alternative's plan process, and, in the case of individual homeowners, the Land Exchange Alternative's Covenants, Conditions, and Restrictions the Land Exchange Alternative would be required to comply with the County of San Diego's Landscape Ordinance and Water Efficient Landscape Design Manual for all outdoor landscapes, including common areas, public spaces, parkways, medians, parking lots, parks, and all builder- and homeowner-installed private frontyard and backyard landscaping.	Reductions associated with EO B-29-15 and the County's Landscape Ordinance and Water Efficient Landscape Design Manual (County of San Diego 2016) were accounted for in water demand study (Dexter Wilson 2017). No further reductions were assumed in emissions estimates.

The Land Exchange Alternative also includes PDFs that would reduce GHG emissions through the design of the Land Exchange Area's uses, including the transportation network. Table 17 identifies the PDFs and associated quantification details, where applicable.

Table 17
Project Design Features that Reduce GHG Emissions

PDF Number	Strategy to Reduce GHG Emissions	Description	Quantification Details
Energy Efficiency Measures			
PDF-AQ/GHG-1	Wood Burning Stoves and Fireplaces	Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating that no wood burning stoves or fireplaces would be constructed.	The number of wood burning stoves and fireplaces were set to zero in CalEEMod. Natural gas fireplace use was included in the natural gas consumption estimates in the energy module of CalEEMod.
PDF-AQ/GHG-2	Zero Net Energy Residences	Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating compliance with the zero net energy (ZNE) design standards defined by the California Energy Commission.	Land Exchange Alternative–specific electricity and natural gas assumptions were incorporated into CalEEMod for the residential land uses based on the Jackson Pendo Development Company Building Analysis (ConSol 2017).
PDF-AQ/GHG-3	Non-Residential Energy Improvement Standards	Prior to the issuance of non-residential building permits, the Land Exchange Alternative applicant or its designee shall submit building plans illustrating that the Land Exchange Alternative's non-residential land uses shall achieve a 10% greater building energy efficiency than required by the 2016 state energy efficiency standards in Title 24, Part 6 of the California Code of Regulations.	CalEEMod default energy rates reflect 2013 standards. Accordingly, title 24 energy use was adjusted to reflect the estimated 5% increase in efficiency for non-residential buildings (CEC 2015a), and then adjusted to reflect an additional 10% increase on the calculated 2016 energy demand factors.
PDF-AQ/GHG-4	Energy Star Appliances	All appliances (washer/dryers, refrigerators, and dishwashers) that will be installed by builders in residences and commercial businesses shall be Energy Star rated or equivalent.	The following percent improvement in energy efficiency was assumed in CalEEMod based on default values: Clothes washers: 30% Dishwashers: 15% Fan: 50% Refrigerator: 15%
PDF-AQ/GHG-5	Solar Water Heating	Prior to the issuance of private recreation center building permits, the Land Exchange Alternative applicant or its designee shall submit swimming pool heating design plans to San Diego County for review and approval. The design plans shall demonstrate that swimming pools located at private recreation centers in the Land Exchange Area are designed and shall be constructed to use solar water heating or other technology with an equivalent level of energy efficiency.	Emission reduction was calculated based on Metering and Measuring of Multi-Family Pool Pumps, Final Report (SCE 2016) and Gas Swimming Pool Heaters (DOE 2017).

Table 17
Project Design Features that Reduce GHG Emissions

PDF Number	Strategy to Reduce GHG Emissions	Description	Quantification Details
Mobile Emissions Reductions			
AQ/GHG-6	Electric Vehicle Charging Stations	Prior to the issuance of residential building permits, the Land Exchange Alternative applicant or its designee shall submit plans for the installation of one Level 2 electric vehicle (EV) charging station in the garage in half of all residential units to San Diego County for review and approval.	Conservatively, no credit was taken for implementation for EV chargers.
PDF-TR-1	Improve Design of Development	The Land Exchange Alternative will include improved design elements to enhance walkability and connectivity. Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments.	Conservatively, no credit was taken for implementation of improvement of design.
	Locate Project Near Bike Path/Bike Lane	The Land Exchange Alternative will be located within 1/2 mile of an existing Class I path or Class II bike lane. The Land Exchange Alternative design should include a comparable network that connects the Land Exchange Alternative uses to the existing off-site facilities.	A 0.625% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
	Provide Pedestrian Network Improvements	The Land Exchange Alternative will provide a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the Land Exchange Area. The Land Exchange Alternative will minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation will be eliminated.	A 2% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
	Provide Traffic Calming Measures	Land Exchange Alternative design will include pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction	A 0.556% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's

Table 17
Project Design Features that Reduce GHG Emissions

PDF Number	Strategy to Reduce GHG Emissions	Description	Quantification Details
		requirements. Roadways will be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.	TDM Program Evaluation (Chen Ryan 2017b).
	Dedicate Land for Bike Trails	Larger projects may be required to provide for, contribute to, or dedicate land for the provision of off-site bicycle trails linking the Land Exchange Alternative to designated bicycle commuting routes in accordance with an adopted citywide or countywide bikeway plan.	A 0.10% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
	Provide Ride-Sharing Programs	The Land Exchange Alternative will include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. Funding may be provided by Community Facilities, District, or County Service Area, or other non-revocable funding mechanism. The Land Exchange Alternative will promote ride-sharing programs through a multi-faceted approach such as: • Designating a certain percentage of parking spaces for ride sharing vehicles Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles	A 0.75% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
	Implement Commute Trip Reduction Marketing	• The Land Exchange Alternative will implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include:	A 0.40% reduction in VMT from Village 14 was assumed based on the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
	Implement Commute Trip	New employee orientation of trip reduction and alternative mode options	A 0.40% reduction in VMT from Village 14 was assumed based on

Table 17
Project Design Features that Reduce GHG Emissions

PDF Number	Strategy to Reduce GHG Emissions	Description	Quantification Details
	Reduction Marketing	• Event promotions • Publications	the Land Exchange Alternative's TDM Program Evaluation (Chen Ryan 2017b).
Water Reduction Measures			
PDF-UT-1	Hot Water Pipe Insulation – Residential and Non-Residential	All hot water pipes shall be insulated and hot and cold water piping shall be separated.	Estimated annual water savings of 2,400 gallons per unit. Reduction included in water use estimates. No additional reduction assumed.
PDF-UT-2	Pressure Reducing Valves – Residential and Non-Residential	The maximum service pressure shall be set to 60 pounds per square inch to reduce potential leakage and prevent excessive flow of water from all appliances and fixtures.	Estimated annual water savings of 1,800 gallons per unit. Reduction included in water use estimates. No additional reduction assumed.
PDF-UT-3	Water Efficient Dishwashers	Water efficient dishwashers that carry the Energy Star label shall be installed in all residential units and commercial uses where appropriate.	Estimated annual water savings of 650 gallons per unit. Reduction included in water use estimates. No additional reduction assumed.
PDF-UT-4	Residential Landscaping	All Land Exchange Alternative landscaping shall comply with the Model Water Efficient Landscape Ordinance, California Code of Regulations Title 23, Division 2, Chapter 2.7 (Section 490 et seq.).	Estimated that outdoor water use at single-family residences will be reduced by approximately 10%. Reduction included in water use estimates. No additional reduction assumed.

Note: PDF = project design feature

As provided in Tables 16 and 17, the emission reduction benefits of regulatory compliance measures and PDFs are not always readily quantifiable. As such, the emissions inventory estimates presented in this report provide a conservative representation of Land Exchange Alternative emissions.

4.4 Land Use Change and Vegetation Carbon Sequestration

4.4.1 Loss of Sequestered Carbon

The calculation methodology and default values provided in CalEEMod (CAPCOA 2016) were used to calculate potential CO_2 emissions associated with the one-time change in carbon sequestration capacity of a vegetation land use type. The calculation of the one-time loss of sequestered carbon is the product of the converted acreage value and the carbon content value for each land use type (vegetation community). The mass of sequestered carbon per unit area (expressed in units of MT of CO_2 per acre) is dependent on the specific land use type. Assuming that the sequestered carbon is released as CO_2 after removal of the vegetation, annual CO_2 is calculated by multiplying total biomass (MT of dry matter per acre) from IPCC data by the carbon fraction in plant material, and then converting MT of carbon to MT of CO_2 based on the molecular weights of carbon and CO_2.

It is conservatively assumed that all sequestered carbon from the removed vegetation will be returned to the atmosphere; that is, the wood from the trees and vegetation communities would not be re-used in a solid form or another form that would retain carbon. GHG emissions generated during construction activities, including clearing, tree removal, and grading, are estimated in the construction emissions analysis.

CalEEMod calculates GHG emissions resulting from land conversion and uses six[34] general IPCC land use classifications for assigning default carbon content values (in units of MT CO_2/acre). CalEEMod default carbon content values were assumed to estimate the loss of sequestered carbon (release of CO_2) from the removal of the scrub (14.3 MT CO_2/acre), forest (111 MT CO_2/acre), and grassland (4.31 MT CO_2/acre) vegetation categories, which are based on data and formulas provided in the IPCC reports. The Land Exchange Alternative would permanently disturb 653.5acres with varying carbon content values.

4.4.2 Gain of Sequestered Carbon

The calculation methodology and default values provided in CalEEMod were also used to estimate the one-time carbon-stock change from planting new trees. Trees sequester CO_2 while they are actively growing and the amount of CO_2 sequestered depends on the type of tree. Thereafter, the accumulation of carbon in biomass slows with age, and is assumed to be offset by losses from clipping, pruning, and occasional death. Active growing periods are subject to, among other things, species, climate regime, and planting density; however, for modeling purposes, CalEEMod assumes the IPCC active growing period of 20 years (CAPCOA 2016).

The sequestered carbon from new trees modeling does not include CO_2 emissions estimates associated with planting, care, and maintenance activities (e.g., tree planting and care vehicle travel and maintenance equipment operation). Landscape maintenance equipment emissions, which are anticipated to be minimal, were included in the area source emission estimates included in the operational GHG emissions calculations. Conservatively, this analysis does not consider carbon sequestration associated with land preservation or conservation.

34 Forest land (scrub), forest land (trees), cropland, grassland, wetlands, and other.

CalEEMod calculates GHG sequestration that results from planting of new trees and has default carbon content values (in units of MT CO_2/tree/year) for 10 different general tree species and a miscellaneous tree category.[35] As the types of tree species that will be planted within the Land Exchange Area are currently unknown, the CO_2 sequestration rate of 0.0354 MT CO_2/tree/year for the miscellaneous tree species category was assumed in this analysis. It is assumed that all 6,000 trees will grow for a minimum of 20 years.

[35] Aspen, soft maple, mixed hardwood, hardwood maple, juniper, cedar/larch, Douglas fir, true fir/hemlock, pine, spruce, and miscellaneous.

5 PROJECT IMPACT ANALYSIS

5.1 Potential to Generate Significant GHG Emissions

5.1.1 Guideline for Determining Significance

Based on Appendix G of the CEQA Guidelines, the Land Exchange Alternative would have a significant impact if it would:

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

5.1.2 Construction Related GHG Emissions

Table 18, Estimated Annual Construction GHG Emissions, shows the estimated annual GHG construction emissions associated with the Land Exchange Alternative by year.

Table 18
Estimated Annual Construction GHG Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2019	582.31	0.17	0.00	586.57
2020	1,367.46	0.38	0.00	1,376.87
2021	1,980.66	0.30	0.00	1,988.05
2022	1,562.30	0.36	0.00	1,571.24
2023	1,488.58	0.38	0.00	1,497.97
2024	600.49	0.13	0.00	603.79
2025	319.30	0.07	0.00	320.95
2026	42.16	0.01	0.00	42.37
Total	**7,943.26**	**1.78**	**0.00**	**7,987.81**

Notes:
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent
See Appendix A for complete results.
Includes rock crushing emissions (2019, 2020, 2021, and 2022). See Appendix A for detailed emissions.

As shown in Table 18, estimated total Land Exchange Alternative–generated construction GHG emissions are approximately 7,988 MT CO_2e over 8 years (2019 through 2026). In 2021, emissions would increase by 9.47 MT CO_2e if the Proctor Valley Road North Option is selected.

As discussed in Section 4.4.1, the loss of sequestered carbon is estimated based on the carbon content for each vegetation land use type (MT CO_2 per acre) and the initial and final acreage of the vegetation land use type. The Land Exchange Alternative would permanently impact 572 acres of scrub land, 3.1 acres of trees, and 50.1 acres of grasslands. The Land Exchange Alternative would also permanently impact 0.7 acres of wetlands and 27.6 acres of disturbed or developed land, which do not have carbon value per CalEEMod (CAPCOA 2016), but are presented for completeness. The loss of sequestered carbon associated with the Land Exchange Alternative's land use change is presented in Table 19.

Table 19
Vegetation Removal – Estimated Loss of Sequestered Carbon

Vegetation Type	CalEEMod Vegetation Land Use Category	CO_2 Emissions Factor (MT CO_2/acre)	Net Loss (acres)	Loss of Sequestered Carbon (MT CO_2)
Forest Land	Scrub	14.3	572.0	8,179.03
Forest Land	Trees	111	3.1	345.21
Grassland	Grassland	4.31	50.1	215.93
Wetlands	Wetlands	0	0.7	0
Others	Others	0	27.6	0
		Total	**653.5**	**8,740.17**

Source: CAPCOA 2016.
MT CO_2 = metric tons carbon dioxide.
See Appendix A for complete results.

As shown in Table 19, the estimated total one-time loss of sequestered carbon from land use conversion for the Land Exchange Alternative is 8,740 MT CO_2. The "project life" is assumed to be 30 years, which is consistent with the 30-year project life time frame used by the South Coast Air Quality Management District's GHG guidance (SCAQMD 2008). Accordingly, the loss of sequestered carbon amortized over 30 years is approximately 291 MT CO_2e per year.

As shown in Table 20, the total construction emissions for the Land Exchange Alternative were 7,988 MT CO_2e. The combined emissions for the construction period including the loss of carbon due to vegetation removal was 16,728 MT CO_2e. The amortized construction GHG emissions over the lifetime of the Land Exchange Alternative (30 years) would be approximately 558 MT CO_2e per year.

Construction-related GHG mitigation measures are provided in Section 5.1.4.

Table 20
Estimated Total Construction and Vegetation Removal GHG Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Construction Emissions	7,943.26	1.78	0.00	7,987.81
Vegetation Removal	8,740.17	0.00	0.00	8,740.17
			Total Emissions	**16,728**
			Emissions Amortized Over 30 Years	**558**

Notes:
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
See Appendix A for complete results.

Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis below.

5.1.3 Operational GHG Emissions

As discussed in Section 4.3, the Land Exchange Alternative would generate operational GHG emissions from area sources (hearths and landscape maintenance), energy sources (electricity and natural gas consumption), mobile sources (vehicle trips), water supply and wastewater treatment, and solid waste. In regards to energy use, as discussed in Section 4.3.2, the Land Exchange Alternative would produce on-site renewable solar energy, which would reduce GHG emissions that would otherwise be generated using non-renewable energy sources. Table 21 presents the GHG reduction from the total solar production. Energy demand on site was adjusted for the stringent efficiency standards of ZNE and reflected in the CalEEMod, but no reductions in demand from on-site solar CalEEMod were taken for the use of solar on site. Therefore, for the purpose of this analysis, all solar energy produced on site is assumed to be sold onto the SDG&E grid regardless if it is consumed on or off-site. The CO_2 intensity of SDG&E energy in 2028 is assumed to be 427.49 pounds of CO_2 per megawatt hour as interpolated from the 2009 CO_2 intensity of non-renewable sources and the RPS standards.[36] Solar produced on site is assumed to be carbon neutral.

[36] The use of 2009 as baseline was chosen consistent with CalEEMod. SDG&E 2009 power mix was assumed to include 10% renewable energy power sources as specified in the SDG&E power content label, which was removed to create an artificial baseline with no renewable power (SDG&E 2009).

Table 21
Greenhouse Gas Off-Set from On-Site Residential Solar Energy Production

Land Use	Rated Solar PV Production[a] (kW/system)	Number of Dwelling Units (DU)	Annual Renewable Energy Generated[b] (kWh/year/system)	Total Annual Renewable Energy Generated (kWh/year)	Total Annual Solar PV[c] CO_2 Reduction (MT CO_2/year)
Single-Family	5.0	1,407	8,286	*11,658,402*	2,265
Multi-Family[d]	14.3	30.75	19,608	602,946	117
			Total	**12,261,348**	**2,382**

Source: ConSol 2017.
Notes:
kW = kilowatt; DU = dwelling units; MT CO_2/year = metric tons carbon dioxide per year
[a] Based on ConSol study to achieve CEC definition of ZNE design for residences. For the Land Exchange Alternative, a two-story 2,686-square-foot single family home constructed to ZNE design standards would need a 5.0 kW solar power system and a 6,024-square-foor four-flex would need a 14.3 Kw solar power system to reach ZNE in Climate Zone 10, Chula Vista.
[b] Annual renewable energy generated per unit from ConSol Building Analysis (2017)
[c] Annual PV GHG Reduction is based on the CO_2e emission factor for SDG&E in 2028, assuming 46.6% RPS.
[d] Reflects a four-plex as analyzed by ConSol.

Table 22 presents the operational GHG emissions for the Land Exchange Alternative's consumption and generation (offset) of energy.

Table 22
Estimated Annual Operational Energy GHG Emissions (2028)

Energy Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
General Energy Demand	3,690.06	0.16	0.06	3,711.87
Reduction from Rooftop Solar	(2,382)	0.00	0.00	(2,382)
Energy Demand from Pools	1,270.57	0.02	0.02	1,278.65
Reduction from Solar Pool Heating	(1,257.91)	(0.02)	(0.02)	(1,265.94)
Energy (Net) Total	1,320.72	0.16	0.06	1,342.58

Notes:
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Numbers in parentheses represent negative numbers (i.e., a reduction in emissions).
See Appendix A for complete results.

Table 23 presents the long-term operational GHG emissions for the Land Exchange Alternative. See Table 17 for a description of what PDFs were quantitatively included in the Land Exchange Alternative operational emission estimates.

Table 23
Estimated Annual Operational GHG Emissions (2028)

Emissions Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	18.56	0.02	0.00	19.01
Energy (Net)	1,320.72	0.16	0.06	1,342.58
Mobile	17,726.31	0.84	0.00	17,747.34
Solid Waste	321.94	19.03	0.00	797.60
Water and Wastewater	807.86	5.15	0.13	975.71
			Total	**20,882**

Notes:
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Implementation of PDF-AQ/GHG-2 would result in an annual energy savings of 2,382 of CO_2e annually.
Numbers may not add exactly due to rounding.
See Appendix A for complete results.

As discussed in Section 4.3.3, operational emissions were modeled for 2028 to provide a meaningful comparison between the Land Exchange Alternative and the Proposed Project. However, as presented in the construction scenario, the first full year of operation is anticipated to occur in 2027. Accordingly, a CalEEMod operational run for 2027 was performed to estimate emissions in 2027 compared to 2028. Mobile source emissions slightly increased as a result of less stringent fuel standards and one year less of vehicle fleet turnover. Electricity use, including building electricity consumption and electricity used to provide water and wastewater treatment, slightly increased due to less renewable procurement. The electricity intensity factor was calculated as an interpolated value assuming linear improvement between the 2020 and 2030 RPS goals.[37] Emissions associated with area sources, natural gas consumption, and solid waste would be the same in 2027 and 2028. GHG emissions in 2027 was estimated to be 21,402 MT CO_2e per year in the first year of operation, which represents a 2.5% increase over 2028 GHG emissions.

As discussed in Section 4.4.2, this GHG analysis also estimates the gain of sequestered carbon that would result from planting and growth of trees on site. The gain of sequestered carbon resulting from planting and growth of approximately 6,000 miscellaneous trees on site is estimated based on the carbon sequestration rate for the tree species, the number of new trees, and the growing period. Table 24 presents the estimated one-time carbon-stock change resulting from proposed planting of new trees.

[37] As discussed in Section 3.2, the Statewide RPS goals for inventor owned utilities (including SDG&E which would serve the Land Exchange Alternative) are 33% renewables by 2030 and 50% by 2030. For 2027, a 44.9 renewable procurement rate was interpolated.

Table 24
Planted Trees – Estimated Gain of Sequestered Carbon

Land Exchange Alternative Tree Category/Species	Tree Category	Growing Period (year)	Number of Trees (trees)	Tree CO_2 Sequestered Factor (MT CO_2/Tree/Year)	Gain of Sequestered CO_2 (MT CO_2)
Unknown	Miscellaneous	20	6,000	0.0354	4,248
				Total	**4,248**

Source: CAPCOA 2016.
Notes: MT CO_2 = metric tons carbon dioxide.
See Appendix A for calculations and sources.

As presented in Table 24, the gain in sequestered carbon resulting from planting 6,000 trees would be approximately 4,248 MT CO_2. To interpret an annual sequestration, the total sequestered CO_2 was divided by the Land Exchange Alternative life time of 30 years, resulting in 141.6 MT CO_2 annually.

Table 25 presents estimated annual net GHG emissions from amortized construction and loss of sequestered carbon from vegetation removal, annual operational emissions, and amortized gain of sequestered carbon from tree plantings.

Table 25
Estimated Annual Net GHG Emissions (2028)

Emission Source	CO_2e
Total Construction Emissions (MT)	7,988
Loss of Carbon from Vegetation Removal (MT)	8,740
Subtotal (MT)	16,728
Amortized Over 30 Years (MT/Year)	*558*
Operational Emissions (MT/year)	20,882
Annual Gain from Sequestered Carbon (Amortized Over 30 Years) (MT/Year)	(142)
Subtotal (MT/Year)	*20,470*
Total Annual Operational Emissions (MT/Year)	**21,298**

Notes:
CO_2e = carbon dioxide equivalent; MT = metric tons.
Numbers in parentheses represent negative numbers.

As shown in Tables 24 and 25, the total Land Exchange Alternative emissions during operation were estimated to be approximately 20,882 MT CO_2e per year. The planting of trees sequestered carbon and thus reduced the amount of operational emissions by an estimated 142 MT CO_2e per year resulting in an overall operational GHG impact of 21,298 MT CO_2e per year. As such, the Land Exchange Alternative's emissions prior to mitigation would be **potentially significant**.

The emissions presented in Table 25 are conservative because the Land Exchange Alternative's GHG emissions are expected to decrease beyond the estimates presented here due – in part – to reasonably foreseeable improvements in fuel efficiency, fleet turnover, and other technological improvements related to transportation and energy. It also is anticipated that CARB, the CEC and other state, regional and local agencies will enact new or enhanced regulations prior to the Land Exchange Alternative's build-out year to reduce GHG emissions in furtherance of the state's GHG reduction policy goals. The full extent of such reductions cannot be quantified or estimated at this time due to the uncertainties regarding the precise technological and regulatory advancements, and the corresponding modeling limitations.

CARB recommends that "lead agencies prioritize on-site design features and direct investments in GHG reductions in the vicinity of the project" (CARB 2017). CARB also recognizes that "[w]here further project design or regional investments are infeasible or not proved to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry" (CARB 2017a). Similarly, the California Attorney General's Office, Addressing Climate Change at the Project Level (California Attorney General's Office 2010), states that if, after analyzing and requiring all reasonable and feasible on-site GHG emission reducing strategies for avoiding or reducing GHG-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. Examples of off-site mitigation include participation in GHG reduction projects or programs and the purchase of verifiable carbon "credits" from another entity that will undertake mitigation.

5.1.4 Mitigation Measures

For purposes of this analysis, Table 17, Project Design Features to Reduce GHG Emissions, lists the Land Exchange Alternative's on-site features and measures to reduce GHG emissions. The County has determined that additional on-site and off-site mitigation can further reduce impacts from GHG emissions to a less-than-significant level through the implementation of GHG emission reduction strategies, as well as purchase of carbon offsets. Collectively, implementation of mitigation measures M-GHG-1 through M-GHG-4, as set forth below, would result in the Land Exchange Alternative offsetting 100% of its annual GHG emissions in order to achieve carbon neutrality (i.e., a net zero emissions level). The use of carbon offsets to mitigate GHG emissions is expressly authorized by CEQA Guidelines Section 15126.4(c)(3)-(c)(4), and would reduce impacts associated with GHG emissions to a **less than significant level**.

M-GHG-1 As to construction greenhouse gas (GHG) emissions, prior to the County of San Diego's (County) issuance of the first grading permit, the Land Exchange

Alternative applicant or its designee shall purchase and retire carbon offsets in a quantity sufficient to offset 100% of the Land Exchange Alternative's construction emissions (including sequestration loss from vegetation removal) associated with each such grading permit, consistent with the performance standards and requirements set forth below.

First, "carbon offset" shall mean an instrument issued by any of the following: (i) the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard, (ii) any registry approved by the California Air Resources Board (CARB) to act as a registry under the state's cap-and-trade program, or (iii) if no registry is in existence as identified in options (i) and (ii), above, then any other reputable registry or entity that issues carbon offsets.

Second, any carbon offset used to reduce the Land Exchange Alternative's GHG emissions shall be a carbon offset that represents the past reduction or sequestration of one metric ton of carbon dioxide equivalent that is "not otherwise required" (CEQA Guidelines Section 15126.4(c)(3)).

Third, "Land Exchange Alternative applicant" shall mean Jackson Pendo Development Company or its designee.

Fourth, as to construction and vegetation removal, prior to the County's issuance of the Land Exchange Alternative's grading permit, the Land Exchange Alternative applicant or its designee shall provide evidence to the satisfaction of the Director of the Planning & Development Services Department (PDS) that the Land Exchange Alternative applicant has purchased and retired carbon offsets in a quantity sufficient to offset 100% of the construction GHG emissions and sequestration loss from vegetation removal generated by the Land Exchange Alternative, as associated with each such grading permit. The emissions reduction obligation associated with each grading permit shall be calculated by reference to the certified EIR's Greenhouse Gas Emissions Technical Report (Appendix 2.7-1), which determined total construction-related emissions as equaling 16,728 metric tons of carbon dioxide equivalent (MT CO_2e). This would increase to 16,737 MT CO_2e if the Proctor Valley Road North Option is selected.

Fifth, the purchased carbon offsets used to reduce construction and vegetation removal GHG emissions shall achieve real, permanent, quantifiable, verifiable, and enforceable reductions (Cal. Health and Safety Code Section 38562(d)(1)).

Sixth, the County of San Diego PDS will consider, to the satisfaction of the Director of PDS, the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: (1) project design features/on-site reduction measures; (2) off-site within the unincorporated areas of the County of San Diego; (3) off-site within the County of San Diego; (4) off-site within the State of California; (5) off-site within the United States; and (6) off-site internationally. As listed, geographic priorities would focus first on local reduction features (including projects and programs that would reduce GHG emissions) to ensure that reduction efforts achieved locally would provide cross-over benefits related to air quality criteria pollutant reductions within the San Diego Air Basin, and to aid in San Diego County jurisdictions' efforts to meet their GHG reduction goals. The Land Exchange Alternative applicant or its designee shall first pursue offset projects and programs locally within unincorporated areas of the County of San Diego to the extent such offset projects and programs are financially competitive in the global offset market.

M-GHG-2 Prior to the County of San Diego's (County) issuance of building permits for each implementing Site Plan ("D" Designator), the applicant or its designee shall purchase and retire carbon offsets for the incremental portion of the Land Exchange Alternative within the Site Plan in a quantity sufficient to offset, for a 30-year period, the operational GHG emissions from that incremental amount of development to net zero, consistent with the performance standards and requirements set forth below.

First, "carbon offset" shall have the same meaning as set forth in mitigation measure M-GHG-1.

Second, any carbon offset used to reduce the Land Exchange Alternative's GHG emissions shall be a carbon offset that represents the past reduction or sequestration of 1 metric ton of carbon dioxide equivalent that is "not otherwise required" (CEQA Guidelines Section 15126.4(c)(3)).

Third, "Land Exchange Alternative applicant" shall have the same meaning as set forth in M-GHG-1.

Fourth, as to operational emissions, prior to the County's issuance of building permits for each implementing Site Plan ("D" Designator), the Land Exchange Alternative applicant its designee shall provide evidence to the satisfaction of the

Director of the County's Planning & Development Services Department that it has purchased and retired carbon offsets for the incremental portion of the Land Exchange Alternative within the Site Plan in a quantity sufficient to offset, for a 30-year period, the operational GHG emissions from the incremental amount of development to net zero. The "project life" is 30 years. This methodology is consistent with the 30-year project life time frame used by the South Coast Air Quality Management District's GHG guidance (SCAQMD 2008). The emissions reduction obligation associated with each building permit shall be calculated by reference to the certified EIR's Greenhouse Gas Emissions Technical Report (Appendix 2.7-1), which determined total construction-related emissions as equaling 20,470 metric tons of carbon dioxide equivalent (MT CO_2e) annually, which equates to 614,100 CO_2e.

Fifth, the purchased carbon offsets used to reduce operational GHG emissions shall achieve real, permanent, quantifiable, verifiable, and enforceable reductions (Cal. Health and Safety Code Section 38562(d)(1)).

Sixth, the amount of carbon offsets required for each implementing Site Plan shall be based on the GHG emissions with the implementing Site Plan, and shall include operational GHG emissions as identified in the approved Greenhouse Gas Emissions Report.

Seventh, each implementing Site Plan shall include a tabulation that identifies the overall carbon offsets required to mitigate the entire Land Exchange Alternative's GHG emissions, and shall identify the amount of carbon offsets purchased to date as well as the remaining carbon offsets required to reduce the Land Exchange Alternative's emissions to net zero. Such tabulation and tracking shall be to the satisfaction of the Director of PDS.

Eighth, this EIR acknowledges that the Land Exchange Alternative's GHG emissions estimates are conservative because the Land Exchange Alternative's GHG emissions are expected to decrease beyond the estimates presented in the EIR's analysis, in part, due to reasonably foreseeable improvements in fuel efficiency, vehicle fleet turnover, technological improvements related to transportation and energy, and updates to emissions models and methodologies. Thus, subject to County oversight, the operational emission estimates that govern implementation of this Land Exchange Alternative are subject to a "true up" at the election of the Land Exchange Alternative applicant (as defined above) and subject to the satisfaction of the Director of PDS. Specifically, if new technological-advancements, regulatory updates, or model and methodology updates occur at a future date result in greater GHG efficiencies and less impacts from Land Exchange Alternative operations than the information projected in the certified Final EIR for the Land Exchange Alternative and a “true-up” exercise is undertaken, the Land Exchange Alternative applicant shall provide an operational GHG emissions inventory of the Land Exchange Alternative’s operational emissions for the “true up” operational conditions, including emissions from mobile sources, energy, area sources, water consumption, and solid waste. If updated GHG emission calculations are conducted for the “true-up” exercise at the Land Exchange Alternative applicant’s election, subject to the satisfaction of the Director of PDS, these calculations shall be conducted using a County-approved model and/or methodology. Alternatively, the Land Exchange Alternative applicant may purchase all carbon offset credits to reduce operational GHG emissions at issuance of the first building permit.

The “true up” operational GHG emissions inventory, if conducted, will be provided in the form of a project-specific Updated Emissions Inventory and Offset Report to the County’s Director of PDS (or its designee) prior to the issuance of building permits for the next buildout phase. The subject technical documentation shall be prepared by a County-approved, qualified air quality and greenhouse gas technical specialist. If the Director of PDS (or its designee) determines that the technical documentation demonstrates that the quantity of project-related GHG emissions would be lower than the quantity identified in the certified Final EIR for the Land Exchange Alternative, and finds that the technical documentation is supported by substantial evidence, such Planning Director may authorize a reduction in the total carbon offsets value required for the Land Exchange Alternative. In all instances, substantial evidence must confirm that any reduction to the total carbon offsets value as identified in the certified Final EIR for the Land Exchange Alternative is consistent with the Land Exchange Alternative commitment to achieve and maintain carbon neutrality (i.e., net zero emissions) for the 30-year life of the Land Exchange Alternative.

Ninth, the County of San Diego PDS will consider, to the satisfaction of the Director of PDS, the following geographic priorities for GHG reduction features, and GHG reduction projects and programs: (1) project design features/on-site reduction measures; (2) off-site within the unincorporated areas of the County of

San Diego; (3) off-site within the County of San Diego; (4) off-site within the State of California; (5) off-site within the United States; and (6) off-site internationally. As listed, geographic priorities would focus first on local reduction features (including projects and programs that would reduce GHG emissions) to ensure that reduction efforts achieved locally would provide cross-over benefits related to air quality criteria pollutant reductions within the San Diego Air Basin, and to aid in San Diego County jurisdictions' efforts to meet their GHG reduction goals. The Land Exchange Alternative applicant or its designee shall first pursue offset projects and programs locally within unincorporated areas of the County of San Diego to the extent such offset projects and programs are financially competitive in the global offset market.

M-GHG-3 Prior to the issuance of residential building permits, the applicant shall provide evidence to the County of San Diego that the design plans for residential structures include electrical outlets in the front and rear of the structure to facilitate use of electrical lawn and garden equipment.

M-GHG-4 To reduce greenhouse gas (GHG) emissions, the applicant shall provide evidence to the County of San Diego that the following project design features (PDFs) identified for the Land Exchange Alternative herein will be implemented: PDF-AQ/GHG-1, PDF-AQ/GHG-2, PDF-AQ/GHG-3, PDF-AQ/GHG-4, PDF-AQ/GHG-5, PDF-AQ/GHG-6, PDF-TR-1, PDF-UT-1, PDF-UT-2, PDF-UT-3, and PDF-UT-4.

As a result of M-GHG-1 and M-GHG-2, the applicant would be required to purchase a total of 638,935 MT CO_2e of carbon offset credits, representing 30 years of operation with an annual emissions rate of 20,470 and construction emissions of 16,728 MT CO_2e (see Table 26). The implementation of M-GHG-1 and M-GHG-2 would ensure that the Land Exchange Alternative would not increase GHG emissions as compared to the existing environmental setting (see CEQA Guidelines Section 15064.4(b)(1)). All three mitigation measures have been incorporated into the Land Exchange Alternative's Mitigation Monitoring and Reporting Program (MMRP) to ensure implementation and enforceability.

Table 26
Estimated Net GHG Emissions With Mitigation Measures (2028)

Emission Source	CO_2e (Metric Tons per Year)
Construction Emissions (one time)	16,728
Reductions from M-GHG-1	(16,728)

Table 26
Estimated Net GHG Emissions With Mitigation Measures (2028)

Emission Source	CO_2e (Metric Tons per Year)
Annual Operational Emissions	20,470
Project Life Operational Emissions (30 years)	622,270
Reductions from M-GHG-2	(622,207)
Net Emissions After Mitigation	**0**

Notes:
CO_2e = carbon dioxide equivalent.
Numbers in parentheses represent negative numbers.
Construction emissions include land conversion. Operational emissions include gain of carbon sequestration. M-GHG-3 is not quantified. M-GHG-4 is included in annual operational emissions.

5.1.5 Conclusion

The use of offsets to mitigate GHG emissions is expressly recognized in CEQA Guidelines Section 15126.4(c)(3)-(c)(4), and would reduce Land Exchange Alternative impacts associated with GHG emissions to a level that is **less than significant**.

5.2 Consistency with Applicable Plans, Policies and Regulations Adopted for the Purpose of Reducing GHG Emissions

5.2.1 Guideline for Determining Significance

Based on Appendix G of the CEQA Guidelines, the Land Exchange Alternative would have a significant impact if it would:

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.2.2 Consistency with SANDAG'S San Diego Forward: The Regional Plan

Regarding consistency with SANDAG's Regional Plan, the Land Exchange Alternative would include PDFs developed to support the policy objectives of the RTP and SB 375. For example, the Land Exchange Alternative includes an integrated walking and bicycling trail system that will connect the various components of the Land Exchange Alternative. Traffic calming design and dedicated space for non-automotive traffic will create safe and appealing environments for all residents to use. The convenient availability of walking and bicycling trails and parks will serve to reduce VMT. The Land Exchange Alternative would include parks and recreational facilities within safe walking or biking distance for residence, reducing the amount of car trips needed for recreation. Ride sharing and commute programs would decrease the number of trips for single occupancy vehicles for daily trips outside of the Land Exchange Alternative to regional transportation hubs and job centers in adjacent Chula Vista. Additionally, on-site generation of energy for electricity and water heating, along with EVSE equipment in the garage in half of all residential units and public charging stations would be provided within the Village Core and park areas.

Table 27 illustrates the Land Exchange Alternative's consistency with applicable goals and policies of *San Diego Forward: The Regional Plan* (SANDAG 2015).

Table 27
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
The Regional Plan – Policy Objectives		
Mobility Choices	Provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play.	*Consistent.* The Land Exchange Alternative's internal circulation features provide residents the opportunity to access recreational and commercial uses via multiple modes of transportation. Land Exchange Alternative travel demand measures will provide ride-sharing services to reduce single-occupancy vehicle trips.
Mobility Choices	Take advantage of new technologies to make the transportation system more efficient and environmentally friendly.	*Consistent.* The Land Exchange Alternative would include lane and intersection design configuration modifications where necessary, as well as installation of signalization where required per the Traffic Impact Study (Chen Ryan 2017a). Additionally, the Land Exchange Alternative would not impair SANDAG's ability to employ new technologies to make travel more reliable and convenient.
Habitat and Open Space Preservation	Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.	*Consistent.* The Land Exchange Alternative would be located near major urban and employment centers, including the City of Chula Vista. The Land Exchange Alternative would conserve 412.8 as preserve in Village 14 and 556.6 acres in Planning Areas 16/19.
Habitat and Open Space Preservation	Protect and restore our region's urban canyons, coastlines, beaches, and water resources.	*Consistent*. The Land Exchange Alternative would conserve 412.8 as preserve in Village 14 and 556.6 acres in Planning Areas 16/19.
Regional Economic Prosperity	Invest in transportation projects that provide access for all communities to a variety of jobs with competitive wages.	*Not Applicable*. The Land Exchange Alternative would not impair the ability of SANDAG to invest in transportation projects available to members of the Community.

Table 27
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Regional Economic Prosperity	Build infrastructure that makes the movement of freight in our community more efficient and environmentally friendly.	*Not Applicable*. The Land Exchange Alternative does not propose regional freight movement, nor would it impair SANDAG's ability to preserve and expand options for regional freight movement.
Partnerships/Collaboration	Collaborate with Native American tribes, Mexico, military bases, neighboring counties, infrastructure providers, the private sector, and local communities to design a transportation system that connects to the mega-region and national network, and works for everyone and fosters a high quality of life for all.	*Not Applicable*. The Land Exchange Alternative would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico, neighboring counties, and tribal nations. Furthermore, the Land Exchange Alternative has coordinated with Native American tribes and neighboring jurisdictions.
Partnerships/Collaboration	As we plan for our region, recognize the vital economic, environmental, cultural, and community linkages between the San Diego region and Baja California.	*Not Applicable*. The Land Exchange Alternative would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico.
Healthy and Complete Communities	Create great places for everyone to live, work, and play.	*Consistent*. The Land Exchange Alternative's internal circulation features would provide residents the opportunity to access recreational, and commercial uses via multiple modes of transportation. The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of an extensive walking and bicycling network.
Healthy and Complete Communities	Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.	*Consistent*. The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of bike lanes and an extensive walking and bicycling network. These will connect the Land Exchange Alternative with on-site and off-site amenities.
Environmental Stewardship	Make transportation investments that result in cleaner air, environmental protection, conservation, efficiency, and sustainable living.	*Consistent*. The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of bike lanes and an extensive walking and bicycling network.
Environmental Stewardship	Support energy programs that promote sustainability.	*Consistent*. The Land Exchange Alternative would include on-site renewable energy production through solar photovoltaic rooftop systems for all residential units.

Table 27
San Diego Forward: The Regional Plan Consistency Analysis

Category	Policy Objective or Strategy	Consistency Analysis
Sustainable Communities Strategy (SCS) – Strategies		
Strategy #1	Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.	*Consistent.* The Land Exchange Alternative would be located near major urban and employment centers, including the City of Chula Vista. The Land Exchange Alternative Area is not located next to existing or planned. Land Exchange Alternative travel demand measures will provide ride-sharing services and contribute to off-site improvements to reduce single occupancy vehicle trips.
Strategy #2	Protect the environment and help ensure the success of smart growth land use policies by preserving sensitive habitat, open space, cultural resources, and farmland.	*Consistent.* The Land Exchange Alternative would conserve 412.8 as preserve in Village 14 and 556.6 acres in Planning Areas 16/19.
Strategy #3	Invest in a transportation network that gives people transportation choices and reduces GHG emissions.	*Consistent.* The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of bike lanes and an extensive walking and bicycling network.
Strategy #4	Address the housing needs of all economic segments of the population.	*Consistent.* A variety of housing types would be developed, including a range of single-family and higher density courtyard homes.
Strategy #5	Implement the Regional Plan through incentives and collaboration.	*Not Applicable.* The Land Exchange Alternative would not impair the ability of SANDAG to implement the RTP through incentives and collaborations.

Source: SANDAG 2015

As shown in Table 27, the Land Exchange Alternative is consistent with applicable Policy Objectives and Strategies from the Regional Plan.

5.2.3 Consistency Analysis with County of San Diego General Plan

The Land Exchange Alternative also would be consistent with the goals set forth in the County's Conservation and Open Space Element of the General Plan that are designed to reduce the emissions of GHGs; reduce energy use in buildings and infrastructure; and promote the use of renewable energy sources, conservation, and other methods of efficiency. Table 28 outlines the Land Exchange Alternative's consistency with applicable General Plan goals.

Table 28
County of San Diego General Plan – Land Exchange Alternative Consistency Analysis

Goal	Consistency Analysis
Conservation and Open Space Element	
COS-4.1 Water Conservation. Require development to reduce the waste of potable water through use of efficient technologies and conservation efforts that minimize the County's dependence on imported water and conserve groundwater resources.	*Consistent*. The Land Exchange Alternative would implement drought-tolerant landscaping and fully comply with the San Diego County Model Water Efficiency Landscape Ordinance. The Land Exchange Alternative would also install low-flow fixtures in each residence in accordance with CALGreen.
COS-4.2 Drought-Efficient Landscaping. Require efficient irrigation systems and in new development encourage the use of native plant species and non-invasive drought tolerant/low water use plants in landscaping.	*Consistent*. The Land Exchange Alternative would implement drought-tolerant landscaping.
COS-4.5 Recycled Water. Promote the use of recycled water and grey water systems where feasible.	*Not Applicable*. Because of the Land Exchange Alternative's proximity to the Otay Reservoir, a drinking water source for the City of San Diego, recycled and grey water systems would not be used in the Land Exchange Alternative Area.
COS-14.1 Land Use Development Form. Require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact regional and community-level development patterns while maintaining community character.	*Consistent*. The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of a bike lanes and pedestrian network. These features would help reduce vehicle trips and associated air pollution through Community-level development patterns. The Land Exchange Alternative would include a mix of land uses including recreational and commercial uses and potentially would also include a school site. PDF-TR-1 would reduce vehicle miles traveled (VMT) associated with the Land Exchange Alternative through implementation of a TDM Program.
COS-14.2 Villages and Rural Villages. Incorporate a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit to reduce air pollution and GHG emissions.	*Consistent*. The Land Exchange Alternative would encourage non-vehicular modes of transportation through the inclusion of bike lanes and pedestrian network. These features would help reduce air pollution and GHG emissions. PDF-TR-1 would reduce VMT associated with the Land Exchange Alternative through implementation of a TDM Program.
COS-14.3 Require design of residential subdivisions and non-residential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.	*Consistent*. The Land Exchange Alternative's residences would meet ZNE design standards; in furtherance of ZNE, solar installations will be provided on all residential units. Additionally, the private community pools would be heated through solar-water heating systems and would not require natural gas. The Land Exchange Alternative would also include the installation of EV charging equipment in the garages of half of all residential units, the installation of charging stations in the Village Core. Moreover, the Land Exchange Alternative would be consistent with the most recent Title 24 standards, would offer drought- tolerant landscaping, and would offer other design features designed to conserve energy, water, open space, and natural resources.

Table 28
County of San Diego General Plan – Land Exchange Alternative Consistency Analysis

Goal	Consistency Analysis
COS-14.4 Sustainable Technology and Projects. Require technologies and projects that contribute to the conservation of resources in a sustainable manner, that are compatible with community character, and that increase the self-sufficiency of individual communities, residents, and businesses.	*Consistent*. The Land Exchange Alternative's residences would meet ZNE design standards as defined by the CEC. The Land Exchange Alternative would also include the installation of EV charging equipment in the garages in half of all residential units, the installation of charging stations in the Village Core and park areas. Additionally, the Land Exchange Alternative would also meet the most recent Title 24 standards, and would feature drought-tolerant landscaping. These Land Exchange Alternative features would contribute to the conservation of resources; would be compatible with community character; and would increase the self-sufficiency of individual communities, residents, and businesses.
COS-14.7 Alternative Energy Sources for Development Projects. Encourage development projects that use energy recovery, photovoltaic, and wind energy.	*Consistent*. All Land Exchange Alternative residences will meet ZNE design standards, as defined by the CEC, and use rooftop PV in furtherance of that standard. The Land Exchange Alternative would also include the installation of EV charging equipment in the garage in half of all residential units. The Land Exchange Alternative would also include the installation of charging stations in the Village Core.
COS-14.9 Significant Producers of Air Pollutants. Require projects that generate potentially significant levels of air pollutants and/or GHGs such as quarries, landfill operations, or large land development projects to incorporate renewable energy, and the best available control technologies and practices into the project design.	*Consistent*. Photovoltaic panels would be used on all residences to achieve ZNE design. The Land Exchange Alternative would also implement other best available control technologies and practices to minimize air pollutants and/or GHGs. The Land Exchange Alternative would also include the installation of EV charging equipment in the garage in half of all residential units and Village Core.
COS-14.10 Low Emission Construction Vehicles and Equipment. Require County contractors and encourage other developers to use low emission construction vehicles and equipment to improve air quality and reduce GHG emissions.	*Consistent*. Site grading was designed to be balanced, which would reduce off-site truck trips during construction of the Land Exchange Alternative. Additionally, Tier 4 construction equipment would be employed during construction activities when feasible and commercially available at the regional level.
COS-15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with green building programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.	*Consistent*. The Land Exchange Alternative would use solar panels on all residential units, and would not include wood-burning fire places. Also, by conforming to the ZNE and CALGreen standards (PDF-AQ/GHG-2), the Land Exchange Alternative would require that new buildings be designed and constructed in accordance with green building programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants. The Land Exchange Alternative would also include the installation of EV charging equipment in the garage in half of all residential units.
COS-15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.	*Consistent*. The Land Exchange Alternative would meet ZNE design standards as defined by the CEC.

Table 28
County of San Diego General Plan – Land Exchange Alternative Consistency Analysis

Goal	Consistency Analysis
COS-16.1 Alternative Transportation Modes. Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies.	*Consistent*. The Land Exchange Alternative would encourage alternative modes of transportation through bike lanes and pedestrian networks. These features would help reduce air pollution and GHG emissions. PDF-TR-1 would reduce VMT associated with the Land Exchange Alternative through implementation of a TDM Program.
COS-16.2 Single-Occupancy Vehicles. Support transportation management programs that reduce the use of single-occupancy vehicles.	*Consistent*. The Land Exchange Alternative would encourage alternative modes of transportation through the inclusion of bike lanes and pedestrian networks. PDF-TR-1 would reduce VMT associated with the Land Exchange Alternative through implementation of a TDM Program.
COS-16.3 Low-Emissions Vehicles and Equipment. Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions. [Refer also to Policy M- 9.3 (Preferred Parking) in the Mobility Element.]	*Consistent*. The Land Exchange Alternative would include the installation of EV charging equipment in the garages of half of all residential units, and the installation of charging stations in the Village Core.
COS-16.5 Transit-Center Development. Encourage compact development patterns along major transit routes.	*Not Applicable*. The Land Exchange Alternative would not include development along a major transit route.
COS-17.1 Reduction of Solid Waste Materials. Reduce GHG emissions and future landfill capacity needs through reduction, reuse, or recycling of all types of solid waste that is generated. Divert solid waste from landfills in compliance with state law.	*Consistent*. AB 341 requires a diversion of 75% of solid waste by 2020, and the Land Exchange Alternative would comply with all requirements of state law.
COS-17.6 Recycling Containers. Require that all new land development projects include space for recycling containers.	*Consistent*. The Land Exchange Alternative would include space for recycling containers in mixed-use and public use areas.
COS-19.1 Sustainable Development Practices. Require land development, building design, landscaping, and operational practices that minimize water consumption.	*Consistent*. The Land Exchange Alternative would have drought-tolerant landscaping, and would not allow front lawns/turf. Through these PDFs, the Land Exchange Alternative would minimize water consumption.

Source: County of San Diego 2011.

As shown in Table 28, the Land Exchange Alternative would be consistent with applicable and goals and policies of the County's General Plan to the extent feasible.

5.2.4 Consistency with EO S-3-05 and SB 32

- **EO S-3-05.** This EO establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

- **SB 32.** This bill establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030.

This section evaluates whether the GHG emissions trajectory after Land Exchange Alternative completion would impede the attainment of the 2030 and 2050 GHG reduction goals identified in EOs B-30-15 and S-3-05.

To begin, CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014, p. 34):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the *Second Update* which states (CARB 2017, p. 7):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

As discussed in Section 5.1, total Land Exchange Alternative emissions, including operation and amortized construction, would be approximately 20,364 MT CO_2e per year. As such, the Land

Exchange Alternative (without mitigation) would generate GHG emissions that may interfere with the implementation of GHG reduction goals for 2030 and 2050. Therefore, the Land Exchange Alternative would potentially conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions, and could result in a **potentially significant impact**.

5.2.5 Mitigation Measures

The Land Exchange Alternative was shown to be consistent with SANDAG's Regional Plan and the San Diego County General Plan, and would not require mitigation.

Implementation of M-GHG-1 through M-GHG-4 would be required to reduce impacts related to the potential for the Land Exchange Alternative to conflict with SB 32 and EO S-3-05. No mitigation measures in addition to M-GHG-1 through M-GHG-4 would be required.

5.2.6 Conclusion

The Land Exchange Alternative would not conflict with SANDAG's Regional Plan and the San Diego County's General Plan, resulting in a less than significant impact without mitigation.

With implementation of the Land Exchange Alternative's PDFs and M-GHG-1 and M-GHG-2, the Land Exchange Alternative would achieve carbon neutrality (i.e., a net zero emissions level) thereby resulting in no increase in GHG emissions relative to existing environmental conditions. Therefore, the Land Exchange Alternative would not interfere with implementation of any of the GHG reduction goals for 2030 or 2050 (described in Section 5.2.4) with implementation of mitigation. This is consistent with CARB's 2017 Climate Change Scoping Plan Update, which notes that achieving no net increase in carbon emissions is the correct overall objective (CARB 2017).[38] Furthermore, the Land Exchange Alternative emissions estimates presented are a conservative representation of Land Exchange Alternative emissions due to the reasonably foreseeable and anticipated technological and regulatory advancements that will continue to advance the state's GHG policies. The Land Exchange Alternative would be consistent with SB 32 and EO S-3-05 with implementation of mitigation.

With implementation of M-GHG-1 through M-GHG-4, the Land Exchange Alternative would not conflict with any plans adopted with the purpose of reducing GHG emissions; therefore, the Land Exchange Alternative's impacts on GHG emissions would be **less than significant with mitigation**.

[38] CARB's 2017 Climate Change Scoping Plan Update is not requiring all projects to achieve no net increase.

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7 LIST OF PREPARERS

Jennifer Reed	Air Quality Services Manager
Rose Kelly	Air Quality Specialist
Adam Poll	Air Quality Specialist
David Deckman	Senior Air Quality Analyst

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APPENDIX A

Emission Calculations

(included on thumb drive)

Greenhouse Gas Emissions Technical Report
for the
Otay Ranch Village 14 and Planning Areas 16/19
San Diego County, California

Appendices
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APPENDIX A CALEEMOD OUPUT FILES AND SUPPORTING FILES

Construction Output

- Proctor Valley EIR – South Village Residential
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  - Mitigation Report
  - Input Matrix
- Proctor Valley EIR – South Village Non-Residential
  - Annual
  - Mitigation Report
  - Input Matrix
- Proctor Valley EIR – Central Village Residential (Phases 1 – 5)
  - Annual
  - Mitigation Report
  - Input Matrix
- Proctor Valley EIR – Central Village Residential (Phases 6 – 11)
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  - Input Matrix
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  - Input Matrix
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  - Input Matrix
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  - Annual
  - Mitigation Report
  - Input Matrix
- Proctor Valley EIR – North Village Non-Residential
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  - Mitigation Report
  - Input Matrix
- Proctor Valley EIR – Offsite Grading
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  - Input Matrix
- Proctor Valley EIR – Proctor Valley Road
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Operation Output

- Proctor Valley EIR Operational
    - Annual
    - Mitigation Report
    - Input Matrix

APPENDIX B ROCK CRUSHING EMISSION ESTIMATES

- Rock Crushing Emissions

APPENDIX C ADDITIONAL CALCULATION WORKBOOKS

- Swimming Pool Calculations
- Renewables Portfolio Standard Calculation

CalEEMod Output Files
Construction – Unmitigated

CalEEMod Version: CalEEMod.2016.3.1

Date: 9/28/2017 9:03 AM

South Village Residential General Construction - LEA
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	0.00	0.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Refer to CalEEMod Input Matrix Table 5

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Trips and VMT - Refer to CalEEMod Input Matrix Table 9

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Woodstoves - operational analysis only

Construction Off-road Equipment Mitigation - Refer to CalEEMod Input Matrix Table 32

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblFireplaces	FireplaceHourDay	3.00	0.00
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tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	162.50	272.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
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tblOffRoadEquipment	PhaseName		Interact Paving -7
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Interact Utilities
tblOffRoadEquipment	PhaseName		Slope Landscaping
tblOffRoadEquipment	PhaseName		Interact Paving -1
tblOffRoadEquipment	PhaseName		Interact Paving -2
tblOffRoadEquipment	PhaseName		Interact Paving -3
tblOffRoadEquipment	PhaseName		Interact Paving -4
tblOffRoadEquipment	PhaseName		Interact Paving -5
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Interact Paving -6
tblOffRoadEquipment	PhaseName		Interact Paving -7
tblOffRoadEquipment	PhaseName		Interact Utilities
tblOffRoadEquipment	PhaseName		Slope Landscaping
tblOffRoadEquipment	PhaseName		Interact Paving -1
tblOffRoadEquipment	PhaseName		Interact Paving -2
tblOffRoadEquipment	PhaseName		Interact Paving -3
tblOffRoadEquipment	PhaseName		Interact Paving -4
tblOffRoadEquipment	PhaseName		Interact Paving -5
tblOffRoadEquipment	PhaseName		Grading

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tblOnRoadDust	VendorPercentPave	100.00	98.00
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tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
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tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00

tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
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tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
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tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	20.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
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tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	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	0.1606	1.7983	1.2352	2.7200e-003	1.4727	0.0732	1.5459	0.3263	0.0673	0.3937	0.0000	240.6842	240.6842	0.0737	0.0000	242.5272
2023	0.0628	0.5970	0.6463	1.6900e-003	0.1564	0.0215	0.1779	0.0171	0.0198	0.0369	0.0000	150.1546	150.1546	0.0434	0.0000	151.2389
2024	0.0152	0.1459	0.1648	4.6000e-004	0.1021	4.8100e-003	0.1069	0.0108	4.4300e-003	0.0152	0.0000	41.5651	41.5651	0.0111	0.0000	41.8430
2025	9.4100e-003	0.0842	0.1107	3.1000e-004	0.0691	2.7100e-003	0.0719	7.2900e-003	2.5000e-003	9.7800e-003	0.0000	28.0843	28.0843	7.5200e-003	0.0000	28.2723
Maximum	**0.1606**	**1.7983**	**1.2352**	**2.7200e-003**	**1.4727**	**0.0732**	**1.5459**	**0.3263**	**0.0673**	**0.3937**	**0.0000**	**240.6842**	**240.6842**	**0.0737**	**0.0000**	**242.5272**

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	0.1606	1.7983	1.2352	2.7200e-003	0.6128	0.0732	0.6860	0.1315	0.0673	0.1988	0.0000	240.6839	240.6839	0.0737	0.0000	242.5269
2023	0.0628	0.5970	0.6463	1.6900e-003	0.0718	0.0215	0.0933	8.6600e-003	0.0198	0.0284	0.0000	150.1544	150.1544	0.0434	0.0000	151.2387
2024	0.0152	0.1459	0.1648	4.6000e-004	0.0456	4.8100e-003	0.0504	5.1100e-003	4.4300e-003	9.5400e-003	0.0000	41.5651	41.5651	0.0111	0.0000	41.8430
2025	9.4100e-003	0.0842	0.1107	3.1000e-004	0.0309	2.7100e-003	0.0336	3.4600e-003	2.5000e-003	5.9600e-003	0.0000	28.0842	28.0842	7.5200e-003	0.0000	28.2722
Maximum	**0.1606**	**1.7983**	**1.2352**	**2.7200e-003**	**0.6128**	**0.0732**	**0.6860**	**0.1315**	**0.0673**	**0.1988**	**0.0000**	**240.6839**	**240.6839**	**0.0737**	**0.0000**	**242.5269**

	ROG	**NOx**	**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**	**57.73**	**0.00**	**54.63**	**58.86**	**0.00**	**46.70**	**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	9-1-2022	11-30-2022	1.4481	1.4481
2	12-1-2022	2-28-2023	0.5134	0.5134
4	6-1-2023	8-31-2023	0.0605	0.0605
5	9-1-2023	11-30-2023	0.0585	0.0585
7	3-1-2024	5-31-2024	0.0548	0.0548
8	6-1-2024	8-31-2024	0.0548	0.0548
9	9-1-2024	11-30-2024	0.0531	0.0531
11	3-1-2025	5-31-2025	0.0471	0.0471
12	6-1-2025	8-31-2025	0.0471	0.0471
		Highest	1.4481	1.4481

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	2.2000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.2000e-004**	**9.0000e-005**	**7.4300e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

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	2.2000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.2000e-004**	**9.0000e-005**	**7.4300e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

	ROG	**NOx**	**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	Site Preparation	Site Preparation	9/1/2022	9/30/2022	5	22	
2	Grading	Grading	10/1/2022	12/31/2022	5	65	
3	Interact Utilities	Site Preparation	1/1/2023	6/30/2023	5	130	
4	Slope Landscaping	Site Preparation	2/1/2023	6/1/2023	5	87	
5	Interact Paving -1	Paving	7/1/2023	7/31/2023	5	21	
6	Interact Paving -2	Paving	11/1/2023	11/30/2023	5	22	
7	Interact Paving -3	Paving	3/1/2024	3/31/2024	5	21	
8	Interact Paving -4	Paving	7/1/2024	7/31/2024	5	23	
9	Interact Paving -5	Paving	11/1/2024	11/30/2024	5	21	
10	Interact Paving -6	Paving	3/1/2025	3/31/2025	5	21	
11	Interact Paving -7	Paving	7/1/2025	7/31/2025	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 272.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Slope Landscaping	Excavators	1	8.00	158	0.38
Slope Landscaping	Rubber Tired Loaders	1	8.00	203	0.36
Interact Utilities	Excavators	1	8.00	158	0.38
Interact Utilities	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Interact Paving -1	Excavators	1	8.00	158	0.38
Interact Paving -1	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -2	Excavators	1	8.00	158	0.38
Interact Paving -2	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -3	Excavators	1	8.00	158	0.38
Interact Paving -3	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -4	Excavators	1	8.00	158	0.38
Interact Paving -4	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -5	Excavators	1	8.00	158	0.38
Interact Paving -5	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -6	Excavators	1	8.00	158	0.38
Interact Paving -6	Rubber Tired Loaders	1	8.00	203	0.36
Interact Paving -7	Excavators	1	8.00	158	0.38
Interact Paving -7	Rubber Tired Loaders	1	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	8	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Slope Landscaping	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Utilities	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	10.00	4.00	2,417.00	10.80	7.30	0.50	LD_Mix	HDT_Mix	HHDT
Interact Paving -1	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -2	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -3	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -4	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -5	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -6	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -7	2	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 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					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0390	0.4059	0.2609	4.9000e-004		0.0199	0.0199		0.0183	0.0183	0.0000	42.7541	42.7541	0.0138	0.0000	43.0998
Total	**0.0390**	**0.4059**	**0.2609**	**4.9000e-004**	**0.1987**	**0.0199**	**0.2187**	**0.1092**	**0.0183**	**0.1276**	**0.0000**	**42.7541**	**42.7541**	**0.0138**	**0.0000**	**43.0998**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.2700e-003	1.1400e-003	1.0000e-005	8.7100e-003	1.0000e-005	8.7100e-003	9.2000e-004	1.0000e-005	9.3000e-004	0.0000	1.1394	1.1394	8.0000e-005	0.0000	1.1415
Worker	1.4000e-004	1.0000e-004	1.0200e-003	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2971
Total	**2.7000e-004**	**4.3700e-003**	**2.1600e-003**	**1.0000e-005**	**0.0215**	**1.0000e-005**	**0.0215**	**2.2600e-003**	**1.0000e-005**	**2.2700e-003**	**0.0000**	**1.4364**	**1.4364**	**9.0000e-005**	**0.0000**	**1.4386**

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					0.0775	0.0000	0.0775	0.0426	0.0000	0.0426	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0390	0.4059	0.2609	4.9000e-004		0.0199	0.0199		0.0183	0.0183	0.0000	42.7541	42.7541	0.0138	0.0000	43.0997
Total	**0.0390**	**0.4059**	**0.2609**	**4.9000e-004**	**0.0775**	**0.0199**	**0.0974**	**0.0426**	**0.0183**	**0.0609**	**0.0000**	**42.7541**	**42.7541**	**0.0138**	**0.0000**	**43.0997**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.2700e-003	1.1400e-003	1.0000e-005	3.9000e-003	1.0000e-005	3.9000e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1394	1.1394	8.0000e-005	0.0000	1.1415
Worker	1.4000e-004	1.0000e-004	1.0200e-003	0.0000	5.6800e-003	0.0000	5.6900e-003	6.2000e-004	0.0000	6.3000e-004	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2971
Total	**2.7000e-004**	**4.3700e-003**	**2.1600e-003**	**1.0000e-005**	**9.5800e-003**	**1.0000e-005**	**9.5900e-003**	**1.0600e-003**	**1.0000e-005**	**1.0800e-003**	**0.0000**	**1.4364**	**1.4364**	**9.0000e-005**	**0.0000**	**1.4386**

3.3 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					0.3402	0.0000	0.3402	0.1232	0.0000	0.1232	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1178	1.2624	0.9439	2.0200e-003		0.0531	0.0531		0.0489	0.0489	0.0000	177.2375	177.2375	0.0573	0.0000	178.6705
Total	**0.1178**	**1.2624**	**0.9439**	**2.0200e-003**	**0.3402**	**0.0531**	**0.3933**	**0.1232**	**0.0489**	**0.1721**	**0.0000**	**177.2375**	**177.2375**	**0.0573**	**0.0000**	**178.6705**

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	2.0900e-003	0.1123	0.0174	1.4000e-004	0.7920	7.0000e-005	0.7920	0.0791	7.0000e-005	0.0791	0.0000	13.6965	13.6965	2.1800e-003	0.0000	13.7509
Vendor	3.7000e-004	0.0126	3.3700e-003	3.0000e-005	0.0257	2.0000e-005	0.0258	2.7300e-003	2.0000e-005	2.7500e-003	0.0000	3.3665	3.3665	2.4000e-004	0.0000	3.3726
Worker	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	0.0946	2.0000e-005	0.0946	9.8600e-003	2.0000e-005	9.8800e-003	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**3.5300e-003**	**0.1257**	**0.0283**	**1.9000e-004**	**0.9122**	**1.1000e-004**	**0.9124**	**0.0917**	**1.1000e-004**	**0.0918**	**0.0000**	**19.2562**	**19.2562**	**2.4800e-003**	**0.0000**	**19.3183**

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					0.1327	0.0000	0.1327	0.0480	0.0000	0.0480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1178	1.2624	0.9439	2.0200e-003		0.0531	0.0531		0.0489	0.0489	0.0000	177.2372	177.2372	0.0573	0.0000	178.6703
Total	**0.1178**	**1.2624**	**0.9439**	**2.0200e-003**	**0.1327**	**0.0531**	**0.1858**	**0.0480**	**0.0489**	**0.0969**	**0.0000**	**177.2372**	**177.2372**	**0.0573**	**0.0000**	**178.6703**

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	2.0900e-003	0.1123	0.0174	1.4000e-004	0.3395	7.0000e-005	0.3396	0.0339	7.0000e-005	0.0339	0.0000	13.6965	13.6965	2.1800e-003	0.0000	13.7509
Vendor	3.7000e-004	0.0126	3.3700e-003	3.0000e-005	0.0115	2.0000e-005	0.0115	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	3.3665	3.3665	2.4000e-004	0.0000	3.3726
Worker	1.0700e-003	7.3000e-004	7.5400e-003	2.0000e-005	0.0420	2.0000e-005	0.0420	4.6100e-003	2.0000e-005	4.6300e-003	0.0000	2.1932	2.1932	6.0000e-005	0.0000	2.1947
Total	**3.5300e-003**	**0.1257**	**0.0283**	**1.9000e-004**	**0.3930**	**1.1000e-004**	**0.3931**	**0.0398**	**1.1000e-004**	**0.0399**	**0.0000**	**19.2562**	**19.2562**	**2.4800e-003**	**0.0000**	**19.3183**

3.4 Interact Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0299	0.2732	0.3099	7.4000e-004		0.0107	0.0107		9.8500e-003	9.8500e-003	0.0000	65.1979	65.1979	0.0211	0.0000	65.7250
Total	**0.0299**	**0.2732**	**0.3099**	**7.4000e-004**	**0.0000**	**0.0107**	**0.0107**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**65.1979**	**65.1979**	**0.0211**	**0.0000**	**65.7250**

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	5.8000e-004	0.0198	6.1400e-003	7.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	5.0000e-004	2.0000e-005	5.2000e-004	0.0000	6.5636	6.5636	4.5000e-004	0.0000	6.5747
Worker	8.1000e-004	5.4000e-004	5.5900e-003	2.0000e-005	2.0800e-003	1.0000e-005	2.1000e-003	5.5000e-004	1.0000e-005	5.7000e-004	0.0000	1.6876	1.6876	4.0000e-005	0.0000	1.6887
Total	**1.3900e-003**	**0.0204**	**0.0117**	**9.0000e-005**	**3.8100e-003**	**3.0000e-005**	**3.8500e-003**	**1.0500e-003**	**3.0000e-005**	**1.0900e-003**	**0.0000**	**8.2511**	**8.2511**	**4.9000e-004**	**0.0000**	**8.2634**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0299	0.2732	0.3099	7.4000e-004		0.0107	0.0107		9.8500e-003	9.8500e-003	0.0000	65.1978	65.1978	0.0211	0.0000	65.7249
Total	**0.0299**	**0.2732**	**0.3099**	**7.4000e-004**	**0.0000**	**0.0107**	**0.0107**	**0.0000**	**9.8500e-003**	**9.8500e-003**	**0.0000**	**65.1978**	**65.1978**	**0.0211**	**0.0000**	**65.7249**

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	5.8000e-004	0.0198	6.1400e-003	7.0000e-005	1.7300e-003	2.0000e-005	1.7500e-003	5.0000e-004	2.0000e-005	5.2000e-004	0.0000	6.5636	6.5636	4.5000e-004	0.0000	6.5747
Worker	8.1000e-004	5.4000e-004	5.5900e-003	2.0000e-005	2.0800e-003	1.0000e-005	2.1000e-003	5.5000e-004	1.0000e-005	5.7000e-004	0.0000	1.6876	1.6876	4.0000e-005	0.0000	1.6887
Total	**1.3900e-003**	**0.0204**	**0.0117**	**9.0000e-005**	**3.8100e-003**	**3.0000e-005**	**3.8500e-003**	**1.0500e-003**	**3.0000e-005**	**1.0900e-003**	**0.0000**	**8.2511**	**8.2511**	**4.9000e-004**	**0.0000**	**8.2634**

3.5 Slope Landscaping - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0200	0.1828	0.2074	5.0000e-004		7.1600e-003	7.1600e-003		6.5900e-003	6.5900e-003	0.0000	43.6324	43.6324	0.0141	0.0000	43.9852
Total	**0.0200**	**0.1828**	**0.2074**	**5.0000e-004**	**0.0000**	**7.1600e-003**	**7.1600e-003**	**0.0000**	**6.5900e-003**	**6.5900e-003**	**0.0000**	**43.6324**	**43.6324**	**0.0141**	**0.0000**	**43.9852**

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	3.9000e-004	0.0133	4.1100e-003	4.0000e-005	0.0344	2.0000e-005	0.0344	3.6500e-003	2.0000e-005	3.6700e-003	0.0000	4.3925	4.3925	3.0000e-004	0.0000	4.4000
Worker	5.4000e-004	3.6000e-004	3.7400e-003	1.0000e-005	0.0506	1.0000e-005	0.0506	5.2800e-003	1.0000e-005	5.2900e-003	0.0000	1.1294	1.1294	3.0000e-005	0.0000	1.1301
Total	**9.3000e-004**	**0.0136**	**7.8500e-003**	**5.0000e-005**	**0.0851**	**3.0000e-005**	**0.0851**	**8.9300e-003**	**3.0000e-005**	**8.9600e-003**	**0.0000**	**5.5219**	**5.5219**	**3.3000e-004**	**0.0000**	**5.5301**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0200	0.1828	0.2074	5.0000e-004		7.1600e-003	7.1600e-003		6.5900e-003	6.5900e-003	0.0000	43.6324	43.6324	0.0141	0.0000	43.9852
Total	**0.0200**	**0.1828**	**0.2074**	**5.0000e-004**	**0.0000**	**7.1600e-003**	**7.1600e-003**	**0.0000**	**6.5900e-003**	**6.5900e-003**	**0.0000**	**43.6324**	**43.6324**	**0.0141**	**0.0000**	**43.9852**

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	3.9000e-004	0.0133	4.1100e-003	4.0000e-005	0.0154	2.0000e-005	0.0154	1.7500e-003	2.0000e-005	1.7700e-003	0.0000	4.3925	4.3925	3.0000e-004	0.0000	4.4000
Worker	5.4000e-004	3.6000e-004	3.7400e-003	1.0000e-005	0.0225	1.0000e-005	0.0225	2.4700e-003	1.0000e-005	2.4800e-003	0.0000	1.1294	1.1294	3.0000e-005	0.0000	1.1301
Total	**9.3000e-004**	**0.0136**	**7.8500e-003**	**5.0000e-005**	**0.0379**	**3.0000e-005**	**0.0379**	**4.2200e-003**	**3.0000e-005**	**4.2500e-003**	**0.0000**	**5.5219**	**5.5219**	**3.3000e-004**	**0.0000**	**5.5301**

3.6 Interact Paving -1 - 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	4.8200e-003	0.0441	0.0501	1.2000e-004		1.7300e-003	1.7300e-003		1.5900e-003	1.5900e-003	0.0000	10.5320	10.5320	3.4100e-003	0.0000	10.6171
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0441**	**0.0501**	**1.2000e-004**		**1.7300e-003**	**1.7300e-003**		**1.5900e-003**	**1.5900e-003**	**0.0000**	**10.5320**	**10.5320**	**3.4100e-003**	**0.0000**	**10.6171**

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	2.3000e-004	8.0000e-003	2.4800e-003	3.0000e-005	0.0208	1.0000e-005	0.0208	2.2000e-003	1.0000e-005	2.2100e-003	0.0000	2.6507	2.6507	1.8000e-004	0.0000	2.6552
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2726	0.2726	1.0000e-005	0.0000	0.2728
Total	**3.6000e-004**	**8.0900e-003**	**3.3800e-003**	**3.0000e-005**	**0.0330**	**1.0000e-005**	**0.0330**	**3.4700e-003**	**1.0000e-005**	**3.4900e-003**	**0.0000**	**2.9233**	**2.9233**	**1.9000e-004**	**0.0000**	**2.9280**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8200e-003	0.0441	0.0501	1.2000e-004		1.7300e-003	1.7300e-003		1.5900e-003	1.5900e-003	0.0000	10.5320	10.5320	3.4100e-003	0.0000	10.6171
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.8200e-003**	**0.0441**	**0.0501**	**1.2000e-004**		**1.7300e-003**	**1.7300e-003**		**1.5900e-003**	**1.5900e-003**	**0.0000**	**10.5320**	**10.5320**	**3.4100e-003**	**0.0000**	**10.6171**

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	2.3000e-004	8.0000e-003	2.4800e-003	3.0000e-005	9.3000e-003	1.0000e-005	9.3100e-003	1.0600e-003	1.0000e-005	1.0700e-003	0.0000	2.6507	2.6507	1.8000e-004	0.0000	2.6552
Worker	1.3000e-004	9.0000e-005	9.0000e-004	0.0000	5.4300e-003	0.0000	5.4300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.2726	0.2726	1.0000e-005	0.0000	0.2728
Total	**3.6000e-004**	**8.0900e-003**	**3.3800e-003**	**3.0000e-005**	**0.0147**	**1.0000e-005**	**0.0147**	**1.6600e-003**	**1.0000e-005**	**1.6700e-003**	**0.0000**	**2.9233**	**2.9233**	**1.9000e-004**	**0.0000**	**2.9280**

3.7 Interact Paving -2 - 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	5.0500e-003	0.0462	0.0524	1.3000e-004		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	11.0335	11.0335	3.5700e-003	0.0000	11.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0500e-003**	**0.0462**	**0.0524**	**1.3000e-004**		**1.8100e-003**	**1.8100e-003**		**1.6700e-003**	**1.6700e-003**	**0.0000**	**11.0335**	**11.0335**	**3.5700e-003**	**0.0000**	**11.1227**

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	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	0.0218	1.0000e-005	0.0218	2.3100e-003	1.0000e-005	2.3200e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0346**	**1.0000e-005**	**0.0346**	**3.6500e-003**	**1.0000e-005**	**3.6600e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.0500e-003	0.0462	0.0524	1.3000e-004		1.8100e-003	1.8100e-003		1.6700e-003	1.6700e-003	0.0000	11.0335	11.0335	3.5700e-003	0.0000	11.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0500e-003**	**0.0462**	**0.0524**	**1.3000e-004**		**1.8100e-003**	**1.8100e-003**		**1.6700e-003**	**1.6700e-003**	**0.0000**	**11.0335**	**11.0335**	**3.5700e-003**	**0.0000**	**11.1227**

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	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	9.7400e-003	1.0000e-005	9.7500e-003	1.1100e-003	1.0000e-005	1.1200e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	5.6800e-003	0.0000	5.6900e-003	6.2000e-004	0.0000	6.3000e-004	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0154**	**1.0000e-005**	**0.0154**	**1.7300e-003**	**1.0000e-005**	**1.7500e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

3.8 Interact Paving -3 - 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	4.5600e-003	0.0392	0.0500	1.2000e-004		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	10.5330	10.5330	3.4100e-003	0.0000	10.6182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5600e-003**	**0.0392**	**0.0500**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**10.5330**	**10.5330**	**3.4100e-003**	**0.0000**	**10.6182**

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	2.2000e-004	7.8900e-003	2.4000e-003	3.0000e-005	0.0208	1.0000e-005	0.0208	2.2000e-003	1.0000e-005	2.2100e-003	0.0000	2.6338	2.6338	1.8000e-004	0.0000	2.6383
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.4000e-004**	**7.9700e-003**	**3.2400e-003**	**3.0000e-005**	**0.0330**	**1.0000e-005**	**0.0330**	**3.4700e-003**	**1.0000e-005**	**3.4900e-003**	**0.0000**	**2.8957**	**2.8957**	**1.9000e-004**	**0.0000**	**2.9003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5600e-003	0.0392	0.0500	1.2000e-004		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	10.5330	10.5330	3.4100e-003	0.0000	10.6182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5600e-003**	**0.0392**	**0.0500**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**10.5330**	**10.5330**	**3.4100e-003**	**0.0000**	**10.6182**

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	2.2000e-004	7.8900e-003	2.4000e-003	3.0000e-005	9.3000e-003	1.0000e-005	9.3100e-003	1.0600e-003	1.0000e-005	1.0700e-003	0.0000	2.6338	2.6338	1.8000e-004	0.0000	2.6383
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	5.4300e-003	0.0000	5.4300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.4000e-004**	**7.9700e-003**	**3.2400e-003**	**3.0000e-005**	**0.0147**	**1.0000e-005**	**0.0147**	**1.6600e-003**	**1.0000e-005**	**1.6700e-003**	**0.0000**	**2.8957**	**2.8957**	**1.9000e-004**	**0.0000**	**2.9003**

3.9 Interact Paving -4 - 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	4.9900e-003	0.0429	0.0548	1.3000e-004		1.6900e-003	1.6900e-003		1.5600e-003	1.5600e-003	0.0000	11.5362	11.5362	3.7300e-003	0.0000	11.6295
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9900e-003**	**0.0429**	**0.0548**	**1.3000e-004**		**1.6900e-003**	**1.6900e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**11.5362**	**11.5362**	**3.7300e-003**	**0.0000**	**11.6295**

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	2.5000e-004	8.6400e-003	2.6300e-003	3.0000e-005	0.0228	1.0000e-005	0.0228	2.4100e-003	1.0000e-005	2.4200e-003	0.0000	2.8847	2.8847	1.9000e-004	0.0000	2.8895
Worker	1.4000e-004	9.0000e-005	9.2000e-004	0.0000	0.0134	0.0000	0.0134	1.4000e-003	0.0000	1.4000e-003	0.0000	0.2868	0.2868	1.0000e-005	0.0000	0.2870
Total	**3.9000e-004**	**8.7300e-003**	**3.5500e-003**	**3.0000e-005**	**0.0361**	**1.0000e-005**	**0.0362**	**3.8100e-003**	**1.0000e-005**	**3.8200e-003**	**0.0000**	**3.1715**	**3.1715**	**2.0000e-004**	**0.0000**	**3.1765**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9900e-003	0.0429	0.0548	1.3000e-004		1.6900e-003	1.6900e-003		1.5600e-003	1.5600e-003	0.0000	11.5362	11.5362	3.7300e-003	0.0000	11.6294
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.9900e-003**	**0.0429**	**0.0548**	**1.3000e-004**		**1.6900e-003**	**1.6900e-003**		**1.5600e-003**	**1.5600e-003**	**0.0000**	**11.5362**	**11.5362**	**3.7300e-003**	**0.0000**	**11.6294**

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	2.5000e-004	8.6400e-003	2.6300e-003	3.0000e-005	0.0102	1.0000e-005	0.0102	1.1600e-003	1.0000e-005	1.1700e-003	0.0000	2.8847	2.8847	1.9000e-004	0.0000	2.8895
Worker	1.4000e-004	9.0000e-005	9.2000e-004	0.0000	5.9400e-003	0.0000	5.9500e-003	6.5000e-004	0.0000	6.5000e-004	0.0000	0.2868	0.2868	1.0000e-005	0.0000	0.2870
Total	**3.9000e-004**	**8.7300e-003**	**3.5500e-003**	**3.0000e-005**	**0.0161**	**1.0000e-005**	**0.0161**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**0.0000**	**3.1715**	**3.1715**	**2.0000e-004**	**0.0000**	**3.1765**

3.10 Interact Paving -5 - 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	4.5600e-003	0.0392	0.0500	1.2000e-004		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	10.5330	10.5330	3.4100e-003	0.0000	10.6182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5600e-003**	**0.0392**	**0.0500**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**10.5330**	**10.5330**	**3.4100e-003**	**0.0000**	**10.6182**

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	2.2000e-004	7.8900e-003	2.4000e-003	3.0000e-005	0.0208	1.0000e-005	0.0208	2.2000e-003	1.0000e-005	2.2100e-003	0.0000	2.6338	2.6338	1.8000e-004	0.0000	2.6383
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.4000e-004**	**7.9700e-003**	**3.2400e-003**	**3.0000e-005**	**0.0330**	**1.0000e-005**	**0.0330**	**3.4700e-003**	**1.0000e-005**	**3.4900e-003**	**0.0000**	**2.8957**	**2.8957**	**1.9000e-004**	**0.0000**	**2.9003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5600e-003	0.0392	0.0500	1.2000e-004		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	10.5330	10.5330	3.4100e-003	0.0000	10.6182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5600e-003**	**0.0392**	**0.0500**	**1.2000e-004**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**10.5330**	**10.5330**	**3.4100e-003**	**0.0000**	**10.6182**

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	2.2000e-004	7.8900e-003	2.4000e-003	3.0000e-005	9.3000e-003	1.0000e-005	9.3100e-003	1.0600e-003	1.0000e-005	1.0700e-003	0.0000	2.6338	2.6338	1.8000e-004	0.0000	2.6383
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	5.4300e-003	0.0000	5.4300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.4000e-004**	**7.9700e-003**	**3.2400e-003**	**3.0000e-005**	**0.0147**	**1.0000e-005**	**0.0147**	**1.6600e-003**	**1.0000e-005**	**1.6700e-003**	**0.0000**	**2.8957**	**2.8957**	**1.9000e-004**	**0.0000**	**2.9003**

3.11 Interact Paving -6 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1500e-003	0.0323	0.0497	1.2000e-004		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	10.5348	10.5348	3.4100e-003	0.0000	10.6199
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.1500e-003**	**0.0323**	**0.0497**	**1.2000e-004**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**10.5348**	**10.5348**	**3.4100e-003**	**0.0000**	**10.6199**

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	2.2000e-004	7.7800e-003	2.3500e-003	3.0000e-005	0.0208	1.0000e-005	0.0208	2.2000e-003	1.0000e-005	2.2100e-003	0.0000	2.6178	2.6178	1.8000e-004	0.0000	2.6222
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2513	0.2513	1.0000e-005	0.0000	0.2514
Total	**3.4000e-004**	**7.8500e-003**	**3.1400e-003**	**3.0000e-005**	**0.0330**	**1.0000e-005**	**0.0330**	**3.4700e-003**	**1.0000e-005**	**3.4900e-003**	**0.0000**	**2.8691**	**2.8691**	**1.9000e-004**	**0.0000**	**2.8737**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1500e-003	0.0323	0.0497	1.2000e-004		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	10.5347	10.5347	3.4100e-003	0.0000	10.6199
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.1500e-003**	**0.0323**	**0.0497**	**1.2000e-004**		**1.2800e-003**	**1.2800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**10.5347**	**10.5347**	**3.4100e-003**	**0.0000**	**10.6199**

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	2.2000e-004	7.7800e-003	2.3500e-003	3.0000e-005	9.3000e-003	1.0000e-005	9.3100e-003	1.0600e-003	1.0000e-005	1.0700e-003	0.0000	2.6178	2.6178	1.8000e-004	0.0000	2.6222
Worker	1.2000e-004	7.0000e-005	7.9000e-004	0.0000	5.4300e-003	0.0000	5.4300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.2513	0.2513	1.0000e-005	0.0000	0.2514
Total	**3.4000e-004**	**7.8500e-003**	**3.1400e-003**	**3.0000e-005**	**0.0147**	**1.0000e-005**	**0.0147**	**1.6600e-003**	**1.0000e-005**	**1.6700e-003**	**0.0000**	**2.8691**	**2.8691**	**1.9000e-004**	**0.0000**	**2.8737**

3.12 Interact Paving -7 - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5500e-003	0.0354	0.0544	1.3000e-004		1.4100e-003	1.4100e-003		1.2900e-003	1.2900e-003	0.0000	11.5381	11.5381	3.7300e-003	0.0000	11.6314
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5500e-003**	**0.0354**	**0.0544**	**1.3000e-004**		**1.4100e-003**	**1.4100e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**11.5381**	**11.5381**	**3.7300e-003**	**0.0000**	**11.6314**

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	2.4000e-004	8.5200e-003	2.5800e-003	3.0000e-005	0.0228	1.0000e-005	0.0228	2.4100e-003	1.0000e-005	2.4200e-003	0.0000	2.8671	2.8671	1.9000e-004	0.0000	2.8719
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	0.0134	0.0000	0.0134	1.4000e-003	0.0000	1.4000e-003	0.0000	0.2752	0.2752	1.0000e-005	0.0000	0.2754
Total	**3.7000e-004**	**8.6000e-003**	**3.4400e-003**	**3.0000e-005**	**0.0361**	**1.0000e-005**	**0.0362**	**3.8100e-003**	**1.0000e-005**	**3.8200e-003**	**0.0000**	**3.1423**	**3.1423**	**2.0000e-004**	**0.0000**	**3.1473**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5500e-003	0.0354	0.0544	1.3000e-004		1.4100e-003	1.4100e-003		1.2900e-003	1.2900e-003	0.0000	11.5381	11.5381	3.7300e-003	0.0000	11.6313
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.5500e-003**	**0.0354**	**0.0544**	**1.3000e-004**		**1.4100e-003**	**1.4100e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**11.5381**	**11.5381**	**3.7300e-003**	**0.0000**	**11.6313**

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	2.4000e-004	8.5200e-003	2.5800e-003	3.0000e-005	0.0102	1.0000e-005	0.0102	1.1600e-003	1.0000e-005	1.1700e-003	0.0000	2.8671	2.8671	1.9000e-004	0.0000	2.8719
Worker	1.3000e-004	8.0000e-005	8.6000e-004	0.0000	5.9400e-003	0.0000	5.9400e-003	6.5000e-004	0.0000	6.5000e-004	0.0000	0.2752	0.2752	1.0000e-005	0.0000	0.2754
Total	**3.7000e-004**	**8.6000e-003**	**3.4400e-003**	**3.0000e-005**	**0.0161**	**1.0000e-005**	**0.0161**	**1.8100e-003**	**1.0000e-005**	**1.8200e-003**	**0.0000**	**3.1423**	**3.1423**	**2.0000e-004**	**0.0000**	**3.1473**

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Date: 9/28/2017 9:10 AM

South Village Residential General Construction - LEA

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slope Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	Tier 4 Interim	0	11	No Change	0.00
Graders	Diesel	Tier 4 Interim	0	1	No Change	0.00
Other Construction Equipment	Diesel	Tier 4 Interim	0	1	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 4 Interim	0	4	No Change	0.00
Rubber Tired Loaders	Diesel	Tier 4 Interim	0	9	No Change	0.00
Scrapers	Diesel	Tier 4 Interim	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	0	6	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Excavators	4.72200E-002	3.89290E-001	8.12910E-001	1.29000E-003	1.90000E-002	1.74800E-002	0.00000E+000	1.13199E+002	1.13199E+002	3.66100E-002	0.00000E+000	1.14115E+002
Graders	1.34900E-002	1.70870E-001	5.59600E-002	2.20000E-004	5.43000E-003	5.00000E-003	0.00000E+000	1.89072E+001	1.89072E+001	6.11000E-003	0.00000E+000	1.90600E+001
Other Construction Equipment	4.14000E-003	4.19700E-002	4.42200E-002	7.00000E-005	2.19000E-003	2.01000E-003	0.00000E+000	5.97077E+000	5.97077E+000	1.93000E-003	0.00000E+000	6.01904E+000
Rubber Tired Dozers	5.48300E-002	5.75980E-001	2.34620E-001	5.60000E-004	2.73400E-002	2.51500E-002	0.00000E+000	4.91429E+001	4.91429E+001	1.58900E-002	0.00000E+000	4.95403E+001
Rubber Tired Loaders	4.84500E-002	4.61650E-001	2.77270E-001	1.15000E-003	1.54600E-002	1.42200E-002	0.00000E+000	1.01356E+002	1.01356E+002	3.27800E-002	0.00000E+000	1.02175E+002
Scrapers	5.32500E-002	5.81330E-001	4.14430E-001	9.90000E-004	2.26900E-002	2.08800E-002	0.00000E+000	8.66988E+001	8.66988E+001	2.80400E-002	0.00000E+000	8.73998E+001
Tractors/Loaders/ Backhoes	1.79500E-002	1.82640E-001	2.43940E-001	3.40000E-004	9.82000E-003	9.04000E-003	0.00000E+000	2.97875E+001	2.97875E+001	9.63000E-003	0.00000E+000	3.00283E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Excavators	4.72200E-002	3.89290E-001	8.12910E-001	1.29000E-003	1.90000E-002	1.74800E-002	0.00000E+000	1.13199E+002	1.13199E+002	3.66100E-002	0.00000E+000	1.14114E+002
Graders	1.34900E-002	1.70870E-001	5.59600E-002	2.20000E-004	5.43000E-003	5.00000E-003	0.00000E+000	1.89071E+001	1.89071E+001	6.11000E-003	0.00000E+000	1.90600E+001
Other Construction Equipment	4.14000E-003	4.19700E-002	4.42200E-002	7.00000E-005	2.19000E-003	2.01000E-003	0.00000E+000	5.97076E+000	5.97076E+000	1.93000E-003	0.00000E+000	6.01904E+000
Rubber Tired Dozers	5.48300E-002	5.75980E-001	2.34620E-001	5.60000E-004	2.73400E-002	2.51500E-002	0.00000E+000	4.91429E+001	4.91429E+001	1.58900E-002	0.00000E+000	4.95402E+001
Rubber Tired Loaders	4.84500E-002	4.61650E-001	2.77270E-001	1.15000E-003	1.54600E-002	1.42200E-002	0.00000E+000	1.01356E+002	1.01356E+002	3.27800E-002	0.00000E+000	1.02175E+002
Scrapers	5.32500E-002	5.81330E-001	4.14430E-001	9.90000E-004	2.26900E-002	2.08800E-002	0.00000E+000	8.66987E+001	8.66987E+001	2.80400E-002	0.00000E+000	8.73997E+001
Tractors/Loaders/Ba ckhoes	1.79500E-002	1.82640E-001	2.43940E-001	3.40000E-004	9.82000E-003	9.04000E-003	0.00000E+000	2.97874E+001	2.97874E+001	9.63000E-003	0.00000E+000	3.00283E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14842E-006	1.14842E-006	0.00000E+000	0.00000E+000	1.22684E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.05780E-006	1.05780E-006	0.00000E+000	0.00000E+000	1.04932E-006
Other Construction Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.67483E-006	1.67483E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22093E-006	1.22093E-006	0.00000E+000	0.00000E+000	1.21114E-006
Rubber Tired Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18395E-006	1.18395E-006	0.00000E+000	0.00000E+000	1.17445E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15342E-006	1.15342E-006	0.00000E+000	0.00000E+000	1.25858E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.00714E-006	1.00714E-006	0.00000E+000	0.00000E+000	1.33208E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
Yes	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.34	0.12	0.13	0.05	0.61	0.61
Grading	Roads	0.91	0.09	0.39	0.04	0.57	0.57
Interact Paving -1	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -1	Roads	0.03	0.00	0.01	0.00	0.55	0.52
Interact Paving -2	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -2	Roads	0.03	0.00	0.02	0.00	0.55	0.53
Interact Paving -3	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -3	Roads	0.03	0.00	0.01	0.00	0.55	0.52
Interact Paving -4	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -4	Roads	0.04	0.00	0.02	0.00	0.55	0.52
Interact Paving -5	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -5	Roads	0.03	0.00	0.01	0.00	0.55	0.52
Interact Paving -6	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -6	Roads	0.03	0.00	0.01	0.00	0.55	0.52
Interact Paving -7	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -7	Roads	0.04	0.00	0.02	0.00	0.55	0.52
Interact Utilities	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Utilities	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.20	0.11	0.08	0.04	0.61	0.61
Site Preparation	Roads	0.02	0.00	0.01	0.00	0.55	0.53
Slope Landscaping	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Slope Landscaping	Roads	0.09	0.01	0.04	0.00	0.55	0.53

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.00	0.15		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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

Water Mitigation Measures

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

Solid Waste Mitigation

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

CalEEMod Input Matrix
Project Characteristics

Table 1: Project Detail			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Project Name	South Village Residential General Construction - LEA	--	Project Description
Project Location	San Diego County	--	--
Wind speed (m/s)	default		
Precipitation Frequency (days)	default		
CEC Climate Forecasting Zone	13	--	CalEEMod Appendix E
Land Use Setting	Urban	based on availability of uses	--
Start of Construction	9/1/2022	Central Village Schedule	Proctor Valley EIR Assumptions
Operational Year	--	Central Village Schedule	Proctor Valley EIR Assumptions

Table 2: Utility Information			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Select Utility Company	San Diego Gas and Electric	project location	CEC, 2014
CO2 Intensity Factor (lb./Mwh)	--		
CH4 Intensity Factor (lb./Mwh)	default		
N20 Intensity Factor (lb./Mwh)	default		

CalEEMod Input Matrix
Project Characteristics

Table 3: Pollutants			
Pollutant Selection	**Pollutant Full Name**	**Notes**	**Source**
checked	ROG	--	--
checked	NOx	--	--
checked	CO	--	--
checked	SO2	--	--
checked	PM 10	--	--
checked	PM 2.5	--	--
checked	Fugitive PM 10	--	--
checked	Fugitive PM 2.5	--	--
checked	Biogenic CO2	--	--
checked	Non-biogenic CO2	--	--
checked	CO2	--	--
checked	CH4	--	--
checked	N20	--	--
checked	CO2e	--	--

Table 4 pertains to operational emissions and is therefore omitted

CalEEMod Input Matrix
Construction Phase

Table 5: Construction Phase					
Phase Name	**Phase Type**	**Start Date**	**End Date**	**Days/Week**	**Total Days**
Site Preparation	Site Preparation	2022/09/01	2022/09/30	5	22
Grading	Grading	2022/10/01	2022/12/31	5	65
Interact Utilities	Site Preparation	2023/01/01	2023/06/30	5	130
Slope Landscaping	Site Preparation	2023/02/01	2023/06/01	5	87
Interact Paving -1	Paving	2023/07/01	2023/07/31	5	21
Interact Paving -2	Paving	2023/11/01	2023/11/30	5	22
Interact Paving -3	Paving	2024/03/01	2024/03/31	5	21
Interact Paving -4	Paving	2024/07/01	2024/07/31	5	23
Interact Paving -5	Paving	2024/11/01	2024/11/30	5	21
Interact Paving -6	Paving	2025/03/01	2025/03/31	5	21
Interact Paving -7	Paving	2025/07/01	2025/07/31	5	23

<table>
<tr><th colspan="6">Table 6: Off-Road Equipment</th></tr>
<tr><th>Phase Name</th><th>Equipment Type</th><th>Unit Amount</th><th>Hours/Day</th><th>Horsepower (hp)</th><th>Load Factor</th></tr>
<tr><td rowspan="3">Site Preparation</td><td>Rubber Tired Dozer</td><td rowspan="2">default</td><td rowspan="9" colspan="3">default</td></tr>
<tr><td>Tractor/Loader/Backhoe</td></tr>
<tr><td>Other Construction Equipment (brush grinder)</td><td>1</td></tr>
<tr><td>Grading</td><td colspan="2">default</td></tr>
<tr><td rowspan="2">Slope Landscaping</td><td>Excavator</td><td>1</td></tr>
<tr><td>Rubber Tired Loader</td><td>1</td></tr>
<tr><td rowspan="2">Utilities</td><td>Excavator</td><td>1</td></tr>
<tr><td>Rubber Tired Loader</td><td>1</td></tr>
</table>

CalEEMod Input Matrix
Construction Phase

Table 7: Dust from Material Movement							
Phase Name	Material Imported	Material Exported	Material Import/Export Phased?	Mean Vehicle Speed (mph)	Total Acres Graded	Material Moisture Content (%) Bulldozing	Material Silt Content
Site Prep	default				--	default	
Grading					110		

Table 8: Demolition		
Phase Name	Size Metric	Unit Amount
default		

Table 9: Construction Trips and VMT									
Phase Name	# Trips Worker (/day)	# Trips Vendor (/day)	Total # Trips Hauling	Trip Length Worker (miles)	Trip Length Worker (miles)	Trip Length Hauling (miles)	Vehicle Class Worker	Vehicle Class Vendor	Vehicle Class Hauling
Site Preparation									
Grading			2,417			0.5			MHDT
Slope Landscaping	Refer to Construction VMT worksheet								
Utilities									
Paving									
Note: Internal hauling distance 0.5 miles to reflect onsite cut and fill									

CalEEMod Input Matrix
Construction Phase

<table>
<tr><th colspan="9">Table 10: On-Road Fugitive Dust</th></tr>
<tr><th>Phase Name</th><th>% Pave Worker</th><th>% Pave Vendor</th><th>% Pave Hauling</th><th>Road Silt Loading (g/m2)</th><th>Material Silt Content (%)</th><th>Material Moisture Content (%)</th><th>Average Vehicle Weight (tons)</th><th>Mean Vehicle Speed (mph)</th></tr>
<tr><td>Site Preparation</td><td colspan="2" rowspan="4">98</td><td rowspan="2"></td><td colspan="5" rowspan="5">default</td></tr>
<tr><td>Grading</td></tr>
<tr><td>Slope Landscaping</td><td>0</td></tr>
<tr><td>Utilities</td><td>0</td></tr>
<tr><td>Paving</td><td colspan="2"></td><td></td></tr>
</table>

Table 11: Architectural Coating
Phase Name
N/A

Tables 12 through 31 pertain to operational emissions and are therefore omitted

CalEEMod Input Sheet
Construction Mitigation

Table 32: Off-Road Equipment						
Equipment Type	Fuel Type	Engine Tier	Number of Equipments Mitigated	Total Number of Off-road Equipments	DPF Level	Using Oxidation Catalyst (% Reduction)
--						

Table 33: Fugitive Dust	
Soil Stabilizer for Unpaved Roads	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Replace Ground Cover of Area Disturbed	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Water Exposed Area	
Frequency (per day)	3
PM 10 (% Reduction)	default
PM 2.5 (% Reduction)	
Unpaved Road Mitigation	
Moisture Content (%)	--
Vehicle Speed (mph)	15
Clean Paved Road	
% PM Reduction	--

CalEEMod Version: CalEEMod.2016.3.1 Date: 9/28/2017 9:39 AM

South Village Residential - LEA
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	0.00	0.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Refer to CalEEMod Input Matrix Table 5

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Architectural Coating - Refer to CalEEMod Input Matrix Table 11

Woodstoves - operational anaylsis only

Construction Off-road Equipment Mitigation - Refer to CalEEMod Input Matrix Table 32 and 33

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	86,337.90
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	74,346.53
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tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	100,727.55
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	100,727.55
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	38,372.40
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	259,013.70
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	223,039.58
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tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
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tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblProjectCharacteristics	OperationalYear	2018	2024
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	14.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00

tblTripsAndVMT	WorkerTripNumber	1.00	14.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	12.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	1.00	12.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	1.00	16.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6363	0.4967	0.5529	1.0700e-003	0.4080	0.0215	0.4295	0.0427	0.0204	0.0631	0.0000	93.6598	93.6598	0.0183	0.0000	94.1160
2024	1.7798	1.0386	1.3323	2.5000e-003	1.0062	0.0419	1.0481	0.1053	0.0398	0.1451	0.0000	220.0815	220.0815	0.0423	0.0000	221.1397
2025	1.3266	0.8349	1.1875	2.1600e-003	0.7140	0.0307	0.7447	0.0748	0.0292	0.1040	0.0000	189.7976	189.7976	0.0374	0.0000	190.7318
Maximum	**1.7798**	**1.0386**	**1.3323**	**2.5000e-003**	**1.0062**	**0.0419**	**1.0481**	**0.1053**	**0.0398**	**0.1451**	**0.0000**	**220.0815**	**220.0815**	**0.0423**	**0.0000**	**221.1397**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6363	0.4967	0.5529	1.0700e-003	0.1808	0.0215	0.2022	0.0200	0.0204	0.0403	0.0000	93.6597	93.6597	0.0183	0.0000	94.1159
2024	1.7798	1.0386	1.3323	2.5000e-003	0.4465	0.0419	0.4884	0.0493	0.0398	0.0891	0.0000	220.0812	220.0812	0.0423	0.0000	221.1395
2025	1.3266	0.8349	1.1875	2.1600e-003	0.3169	0.0307	0.3476	0.0350	0.0292	0.0643	0.0000	189.7974	189.7974	0.0374	0.0000	190.7316
Maximum	**1.7798**	**1.0386**	**1.3323**	**2.5000e-003**	**0.4465**	**0.0419**	**0.4884**	**0.0493**	**0.0398**	**0.0891**	**0.0000**	**220.0812**	**220.0812**	**0.0423**	**0.0000**	**221.1395**

	ROG	**NOx**	**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**	**55.64**	**0.00**	**53.28**	**53.17**	**0.00**	**37.95**	**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	8-1-2023	10-31-2023	0.2270	0.2270
2	11-1-2023	1-31-2024	0.9461	0.9461
3	2-1-2024	4-30-2024	0.9315	0.9315
4	5-1-2024	7-31-2024	0.4033	0.4033
5	8-1-2024	10-31-2024	0.5498	0.5498
6	11-1-2024	1-31-2025	0.9367	0.9367
7	2-1-2025	4-30-2025	0.9063	0.9063
8	5-1-2025	7-31-2025	0.3644	0.3644
9	8-1-2025	9-30-2025	0.4582	0.4582
		Highest	0.9461	0.9461

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	2.2000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.2000e-004**	**9.0000e-005**	**7.4200e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

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	2.2000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.2000e-004**	**9.0000e-005**	**7.4200e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

	ROG	**NOx**	**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	P1 Site Preparation (mo. 1)	Site Preparation	8/1/2023	8/31/2023	5	23	
2	P1 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2023	11/30/2023	5	65	
3	P1 Architectural Coating	Architectural Coating	11/1/2023	12/30/2023	5	43	
4	P2 Site Preparation (mo. 1)	Site Preparation	12/1/2023	12/31/2023	5	21	
5	P1 Building Construction 2 (mo. 5)	Building Construction	12/1/2023	12/31/2023	5	21	
6	P2 Building Construction 1 (mo. 2-4)	Building Construction	1/1/2024	3/31/2024	5	65	
7	P2 Architectural Coating	Architectural Coating	3/1/2024	4/30/2024	5	43	
8	P3 Site Preparation (mo. 1)	Site Preparation	4/1/2024	4/30/2024	5	22	
9	P2 Building Construction 2 (mo. 5)	Building Construction	4/1/2024	4/30/2024	5	22	
10	P3 Building Construction 1 (mo. 2-4)	Building Construction	5/1/2024	7/31/2024	5	66	
11	P3 Architectural Coating	Architectural Coating	7/1/2024	8/31/2024	5	45	
12	P4 Site Preparation (mo. 1)	Site Preparation	8/1/2024	8/31/2024	5	22	
13	P3 Building Construction 2 (mo. 5)	Building Construction	8/1/2024	8/31/2024	5	22	
14	P4 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2024	11/30/2024	5	65	
15	P4 Architectural Coating	Architectural Coating	11/1/2024	12/31/2024	5	43	
16	P5 Site Preparation (mo. 1)	Site Preparation	12/1/2024	12/31/2024	5	22	
17	P4 Building Construction 2 (mo. 5)	Building Construction	12/1/2024	12/31/2024	5	22	
18	P5 Building Construction 1 (mo. 2-4)	Building Construction	1/1/2025	3/31/2025	5	64	
19	P5 Architectural Coating	Architectural Coating	3/1/2025	4/30/2025	5	43	
20	P6 Site Preparation (mo. 1)	Site Preparation	4/1/2025	4/30/2025	5	22	

21	P5 Building Construction 2 (mo. 5)	Building Construction	4/1/2025	4/30/2025	5	22	
22	P6 Building Construction 1 (mo. 2-4)	Building Construction	5/1/2025	7/31/2025	5	66	
23	P6 Architectural Coating	Architectural Coating	7/1/2025	8/31/2025	5	44	
24	P7 Site Preparation (mo. 1)	Site Preparation	8/1/2025	8/31/2025	5	21	
25	P6 Building Construction 2 (mo. 5)	Building Construction	8/1/2025	8/31/2025	5	21	
26	P7 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2025	11/30/2025	5	65	
27	P7 Architectural Coating (mo. 1)	Architectural Coating	11/1/2025	12/31/2025	5	43	
28	P7 Building Construction 2 (mo. 5)	Building Construction	12/1/2025	12/31/2025	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 302,183; Residential Outdoor: 100,728; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P1 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P1 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P1 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P1 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P1 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P1 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1 Architectural Coating	Air Compressors	2	8.00	78	0.48
P2 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P2 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P2 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P2 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P2 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P1 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P1 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P1 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37
P2 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P2 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Architectural Coating	Air Compressors	2	8.00	78	0.48
P3 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P3 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P3 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P3 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P3 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P2 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P2 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P2 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37

P3 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P3 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Architectural Coating	Air Compressors	2	8.00	78	0.48
P4 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P4 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P4 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P4 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P4 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P3 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P3 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P3 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37
P4 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P4 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P4 Architectural Coating	Air Compressors	2	8.00	78	0.48
P5 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P5 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P5 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P5 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P5 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P4 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P4 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P4 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37
P5 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P5 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P5 Architectural Coating	Air Compressors	2	8.00	78	0.48
P6 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P6 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P6 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P6 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37

P6 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P5 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P5 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P5 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37
P6 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P6 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P6 Architectural Coating	Air Compressors	2	8.00	78	0.48
P7 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P7 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P7 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P7 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P7 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P6 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P6 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P6 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37
P7 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P7 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P7 Architectural Coating (mo. 1)	Air Compressors	2	8.00	78	0.48
P7 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P7 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P7 Building Construction 2 (mo. 5)	Skid Steer Loaders	2	8.00	65	0.37

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
P1 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Construction 1 (mo. 2-	2	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Construction 2 (mo. 5)	4	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Site Preparation (mo. 1)	5	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction 1 (mo. 2-	2	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction 2 (mo. 5)	4	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Site Preparation (mo. 1)	5	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction 1 (mo. 2-	2	14.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction 2 (mo. 5)	4	14.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Site Preparation (mo. 1)	5	14.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Building Construction 1 (mo. 2-	2	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Building Construction 2 (mo. 5)	4	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Site Preparation (mo. 1)	5	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

P5 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Building Construction 1 (mo. 2-	2	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Building Construction 2 (mo. 5)	4	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Site Preparation (mo. 1)	5	16.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Architectural Coating	2	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Building Construction 1 (mo. 2-	2	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Building Construction 2 (mo. 5)	4	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Site Preparation (mo. 1)	5	12.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Architectural Coating (mo. 1)	2	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Building Construction 1 (mo. 2-	2	6.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Building Construction 2 (mo. 5)	4	6.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Site Preparation (mo. 1)	5	5.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 P1 Site Preparation (mo. 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1000e-003	0.0000	6.1000e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1365	0.1116	2.2000e-004		6.3600e-003	6.3600e-003		5.9900e-003	5.9900e-003	0.0000	19.2179	19.2179	4.2900e-003	0.0000	19.3252
Total	**0.0136**	**0.1365**	**0.1116**	**2.2000e-004**	**6.1000e-003**	**6.3600e-003**	**0.0125**	**6.6000e-004**	**5.9900e-003**	**6.6500e-003**	**0.0000**	**19.2179**	**19.2179**	**4.2900e-003**	**0.0000**	**19.3252**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5100e-003	1.0900e-003	1.0000e-005	9.1000e-003	0.0000	9.1100e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	1.1613	1.1613	8.0000e-005	0.0000	1.1632
Worker	5.7000e-004	3.8000e-004	3.9600e-003	1.0000e-005	0.0535	1.0000e-005	0.0535	5.5800e-003	1.0000e-005	5.5900e-003	0.0000	1.1943	1.1943	3.0000e-005	0.0000	1.1951
Total	**6.7000e-004**	**3.8900e-003**	**5.0500e-003**	**2.0000e-005**	**0.0626**	**1.0000e-005**	**0.0627**	**6.5500e-003**	**1.0000e-005**	**6.5600e-003**	**0.0000**	**2.3555**	**2.3555**	**1.1000e-004**	**0.0000**	**2.3583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3800e-003	0.0000	2.3800e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1365	0.1116	2.2000e-004		6.3600e-003	6.3600e-003		5.9900e-003	5.9900e-003	0.0000	19.2178	19.2178	4.2900e-003	0.0000	19.3252
Total	**0.0136**	**0.1365**	**0.1116**	**2.2000e-004**	**2.3800e-003**	**6.3600e-003**	**8.7400e-003**	**2.6000e-004**	**5.9900e-003**	**6.2500e-003**	**0.0000**	**19.2178**	**19.2178**	**4.2900e-003**	**0.0000**	**19.3252**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5100e-003	1.0900e-003	1.0000e-005	4.0700e-003	0.0000	4.0800e-003	4.6000e-004	0.0000	4.7000e-004	0.0000	1.1613	1.1613	8.0000e-005	0.0000	1.1632
Worker	5.7000e-004	3.8000e-004	3.9600e-003	1.0000e-005	0.0238	1.0000e-005	0.0238	2.6100e-003	1.0000e-005	2.6200e-003	0.0000	1.1943	1.1943	3.0000e-005	0.0000	1.1951
Total	**6.7000e-004**	**3.8900e-003**	**5.0500e-003**	**2.0000e-005**	**0.0278**	**1.0000e-005**	**0.0279**	**3.0700e-003**	**1.0000e-005**	**3.0900e-003**	**0.0000**	**2.3555**	**2.3555**	**1.1000e-004**	**0.0000**	**2.3583**

3.3 P1 Building Construction 1 (mo. 2-4) - 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	8.3600e-003	0.0954	0.1469	2.1000e-004		3.9200e-003	3.9200e-003		3.6100e-003	3.6100e-003	0.0000	18.7332	18.7332	6.0600e-003	0.0000	18.8847
Total	**8.3600e-003**	**0.0954**	**0.1469**	**2.1000e-004**		**3.9200e-003**	**3.9200e-003**		**3.6100e-003**	**3.6100e-003**	**0.0000**	**18.7332**	**18.7332**	**6.0600e-003**	**0.0000**	**18.8847**

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	2.9000e-004	9.9100e-003	3.0700e-003	3.0000e-005	0.0257	1.0000e-005	0.0257	2.7300e-003	1.0000e-005	2.7400e-003	0.0000	3.2818	3.2818	2.2000e-004	0.0000	3.2874
Worker	1.6200e-003	1.0700e-003	0.0112	4.0000e-005	0.1513	3.0000e-005	0.1513	0.0158	3.0000e-005	0.0158	0.0000	3.3751	3.3751	9.0000e-005	0.0000	3.3773
Total	**1.9100e-003**	**0.0110**	**0.0143**	**7.0000e-005**	**0.1770**	**4.0000e-005**	**0.1770**	**0.0185**	**4.0000e-005**	**0.0185**	**0.0000**	**6.6569**	**6.6569**	**3.1000e-004**	**0.0000**	**6.6647**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.3600e-003	0.0954	0.1469	2.1000e-004		3.9200e-003	3.9200e-003		3.6100e-003	3.6100e-003	0.0000	18.7332	18.7332	6.0600e-003	0.0000	18.8847
Total	**8.3600e-003**	**0.0954**	**0.1469**	**2.1000e-004**		**3.9200e-003**	**3.9200e-003**		**3.6100e-003**	**3.6100e-003**	**0.0000**	**18.7332**	**18.7332**	**6.0600e-003**	**0.0000**	**18.8847**

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	2.9000e-004	9.9100e-003	3.0700e-003	3.0000e-005	0.0115	1.0000e-005	0.0115	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	3.2818	3.2818	2.2000e-004	0.0000	3.2874
Worker	1.6200e-003	1.0700e-003	0.0112	4.0000e-005	0.0672	3.0000e-005	0.0672	7.3800e-003	3.0000e-005	7.4000e-003	0.0000	3.3751	3.3751	9.0000e-005	0.0000	3.3773
Total	**1.9100e-003**	**0.0110**	**0.0143**	**7.0000e-005**	**0.0787**	**4.0000e-005**	**0.0787**	**8.6900e-003**	**4.0000e-005**	**8.7200e-003**	**0.0000**	**6.6569**	**6.6569**	**3.1000e-004**	**0.0000**	**6.6647**

3.4 P1 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6387	14.6387	8.8000e-004	0.0000	14.6606
Total	**0.5946**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6387**	**14.6387**	**8.8000e-004**	**0.0000**	**14.6606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	2.7000e-004	1.8000e-004	1.8500e-003	1.0000e-005	0.0250	0.0000	0.0250	2.6100e-003	0.0000	2.6100e-003	0.0000	0.5582	0.5582	1.0000e-005	0.0000	0.5586
Total	**4.6000e-004**	**6.7400e-003**	**3.8800e-003**	**3.0000e-005**	**0.0420**	**1.0000e-005**	**0.0420**	**4.4100e-003**	**1.0000e-005**	**4.4200e-003**	**0.0000**	**2.7292**	**2.7292**	**1.6000e-004**	**0.0000**	**2.7333**

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	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6386	14.6386	8.8000e-004	0.0000	14.6605
Total	**0.5946**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6386**	**14.6386**	**8.8000e-004**	**0.0000**	**14.6605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	7.6100e-003	1.0000e-005	7.6200e-003	8.7000e-004	1.0000e-005	8.7000e-004	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	2.7000e-004	1.8000e-004	1.8500e-003	1.0000e-005	0.0111	0.0000	0.0111	1.2200e-003	0.0000	1.2200e-003	0.0000	0.5582	0.5582	1.0000e-005	0.0000	0.5586
Total	**4.6000e-004**	**6.7400e-003**	**3.8800e-003**	**3.0000e-005**	**0.0187**	**1.0000e-005**	**0.0187**	**2.0900e-003**	**1.0000e-005**	**2.0900e-003**	**0.0000**	**2.7292**	**2.7292**	**1.6000e-004**	**0.0000**	**2.7333**

3.5 P2 Site Preparation (mo. 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1247	0.1019	2.0000e-004		5.8100e-003	5.8100e-003		5.4700e-003	5.4700e-003	0.0000	17.5467	17.5467	3.9200e-003	0.0000	17.6448
Total	**0.0124**	**0.1247**	**0.1019**	**2.0000e-004**	**5.8300e-003**	**5.8100e-003**	**0.0116**	**6.3000e-004**	**5.4700e-003**	**6.1000e-003**	**0.0000**	**17.5467**	**17.5467**	**3.9200e-003**	**0.0000**	**17.6448**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.9000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	0.0489	1.0000e-005	0.0489	5.1000e-003	1.0000e-005	5.1100e-003	0.0000	1.0904	1.0904	3.0000e-005	0.0000	1.0911
Total	**6.1000e-004**	**3.5500e-003**	**4.6000e-003**	**2.0000e-005**	**0.0572**	**1.0000e-005**	**0.0572**	**5.9800e-003**	**1.0000e-005**	**6.0000e-003**	**0.0000**	**2.1507**	**2.1507**	**1.0000e-004**	**0.0000**	**2.1532**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1247	0.1019	2.0000e-004		5.8100e-003	5.8100e-003		5.4700e-003	5.4700e-003	0.0000	17.5467	17.5467	3.9200e-003	0.0000	17.6448
Total	**0.0124**	**0.1247**	**0.1019**	**2.0000e-004**	**2.2700e-003**	**5.8100e-003**	**8.0800e-003**	**2.5000e-004**	**5.4700e-003**	**5.7200e-003**	**0.0000**	**17.5467**	**17.5467**	**3.9200e-003**	**0.0000**	**17.6448**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	0.0217	1.0000e-005	0.0217	2.3800e-003	1.0000e-005	2.3900e-003	0.0000	1.0904	1.0904	3.0000e-005	0.0000	1.0911
Total	**6.1000e-004**	**3.5500e-003**	**4.6000e-003**	**2.0000e-005**	**0.0254**	**1.0000e-005**	**0.0254**	**2.8000e-003**	**1.0000e-005**	**2.8200e-003**	**0.0000**	**2.1507**	**2.1507**	**1.0000e-004**	**0.0000**	**2.1532**

3.6 P1 Building Construction 2 (mo. 5) - 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	3.0900e-003	0.0367	0.0564	9.0000e-005		1.2400e-003	1.2400e-003		1.1500e-003	1.1500e-003	0.0000	7.4803	7.4803	2.3100e-003	0.0000	7.5381
Total	**3.0900e-003**	**0.0367**	**0.0564**	**9.0000e-005**		**1.2400e-003**	**1.2400e-003**		**1.1500e-003**	**1.1500e-003**	**0.0000**	**7.4803**	**7.4803**	**2.3100e-003**	**0.0000**	**7.5381**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.9000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	0.0489	1.0000e-005	0.0489	5.1000e-003	1.0000e-005	5.1100e-003	0.0000	1.0904	1.0904	3.0000e-005	0.0000	1.0911
Total	**6.1000e-004**	**3.5500e-003**	**4.6000e-003**	**2.0000e-005**	**0.0572**	**1.0000e-005**	**0.0572**	**5.9800e-003**	**1.0000e-005**	**6.0000e-003**	**0.0000**	**2.1507**	**2.1507**	**1.0000e-004**	**0.0000**	**2.1532**

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	3.0900e-003	0.0367	0.0564	9.0000e-005		1.2400e-003	1.2400e-003		1.1500e-003	1.1500e-003	0.0000	7.4802	7.4802	2.3100e-003	0.0000	7.5381
Total	**3.0900e-003**	**0.0367**	**0.0564**	**9.0000e-005**		**1.2400e-003**	**1.2400e-003**		**1.1500e-003**	**1.1500e-003**	**0.0000**	**7.4802**	**7.4802**	**2.3100e-003**	**0.0000**	**7.5381**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	5.2000e-004	3.5000e-004	3.6100e-003	1.0000e-005	0.0217	1.0000e-005	0.0217	2.3800e-003	1.0000e-005	2.3900e-003	0.0000	1.0904	1.0904	3.0000e-005	0.0000	1.0911
Total	**6.1000e-004**	**3.5500e-003**	**4.6000e-003**	**2.0000e-005**	**0.0254**	**1.0000e-005**	**0.0254**	**2.8000e-003**	**1.0000e-005**	**2.8200e-003**	**0.0000**	**2.1507**	**2.1507**	**1.0000e-004**	**0.0000**	**2.1532**

3.7 P2 Building Construction 1 (mo. 2-4) - 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	8.0100e-003	0.0910	0.1471	2.1000e-004		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	18.7369	18.7369	6.0600e-003	0.0000	18.8884
Total	**8.0100e-003**	**0.0910**	**0.1471**	**2.1000e-004**		**3.5000e-003**	**3.5000e-003**		**3.2200e-003**	**3.2200e-003**	**0.0000**	**18.7369**	**18.7369**	**6.0600e-003**	**0.0000**	**18.8884**

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	2.8000e-004	9.7700e-003	2.9700e-003	3.0000e-005	0.0257	1.0000e-005	0.0257	2.7300e-003	1.0000e-005	2.7400e-003	0.0000	3.2609	3.2609	2.2000e-004	0.0000	3.2664
Worker	1.5400e-003	9.8000e-004	0.0105	4.0000e-005	0.1513	3.0000e-005	0.1513	0.0158	3.0000e-005	0.0158	0.0000	3.2423	3.2423	8.0000e-005	0.0000	3.2443
Total	**1.8200e-003**	**0.0108**	**0.0134**	**7.0000e-005**	**0.1770**	**4.0000e-005**	**0.1770**	**0.0185**	**4.0000e-005**	**0.0185**	**0.0000**	**6.5032**	**6.5032**	**3.0000e-004**	**0.0000**	**6.5107**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.0100e-003	0.0910	0.1471	2.1000e-004		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	18.7368	18.7368	6.0600e-003	0.0000	18.8883
Total	**8.0100e-003**	**0.0910**	**0.1471**	**2.1000e-004**		**3.5000e-003**	**3.5000e-003**		**3.2200e-003**	**3.2200e-003**	**0.0000**	**18.7368**	**18.7368**	**6.0600e-003**	**0.0000**	**18.8883**

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	2.8000e-004	9.7700e-003	2.9700e-003	3.0000e-005	0.0115	1.0000e-005	0.0115	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	3.2609	3.2609	2.2000e-004	0.0000	3.2664
Worker	1.5400e-003	9.8000e-004	0.0105	4.0000e-005	0.0672	3.0000e-005	0.0672	7.3800e-003	3.0000e-005	7.4000e-003	0.0000	3.2423	3.2423	8.0000e-005	0.0000	3.2443
Total	**1.8200e-003**	**0.0108**	**0.0134**	**7.0000e-005**	**0.0787**	**4.0000e-005**	**0.0787**	**8.6900e-003**	**4.0000e-005**	**8.7200e-003**	**0.0000**	**6.5032**	**6.5032**	**3.0000e-004**	**0.0000**	**6.5107**

3.8 P2 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	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0699	0.1038	1.7000e-004		3.4900e-003	3.4900e-003		3.4900e-003	3.4900e-003	0.0000	14.6387	14.6387	8.2000e-004	0.0000	14.6593
Total	**0.5940**	**0.0699**	**0.1038**	**1.7000e-004**		**3.4900e-003**	**3.4900e-003**		**3.4900e-003**	**3.4900e-003**	**0.0000**	**14.6387**	**14.6387**	**8.2000e-004**	**0.0000**	**14.6593**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	2.6000e-004	1.6000e-004	1.7300e-003	1.0000e-005	0.0250	0.0000	0.0250	2.6100e-003	0.0000	2.6100e-003	0.0000	0.5362	0.5362	1.0000e-005	0.0000	0.5366
Total	**4.4000e-004**	**6.6200e-003**	**3.7000e-003**	**3.0000e-005**	**0.0420**	**1.0000e-005**	**0.0420**	**4.4100e-003**	**1.0000e-005**	**4.4200e-003**	**0.0000**	**2.6935**	**2.6935**	**1.6000e-004**	**0.0000**	**2.6974**

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	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0699	0.1038	1.7000e-004		3.4900e-003	3.4900e-003		3.4900e-003	3.4900e-003	0.0000	14.6386	14.6386	8.2000e-004	0.0000	14.6592
Total	**0.5940**	**0.0699**	**0.1038**	**1.7000e-004**		**3.4900e-003**	**3.4900e-003**		**3.4900e-003**	**3.4900e-003**	**0.0000**	**14.6386**	**14.6386**	**8.2000e-004**	**0.0000**	**14.6592**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	7.6100e-003	1.0000e-005	7.6200e-003	8.7000e-004	1.0000e-005	8.7000e-004	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	2.6000e-004	1.6000e-004	1.7300e-003	1.0000e-005	0.0111	0.0000	0.0111	1.2200e-003	0.0000	1.2200e-003	0.0000	0.5362	0.5362	1.0000e-005	0.0000	0.5366
Total	**4.4000e-004**	**6.6200e-003**	**3.7000e-003**	**3.0000e-005**	**0.0187**	**1.0000e-005**	**0.0187**	**2.0900e-003**	**1.0000e-005**	**2.0900e-003**	**0.0000**	**2.6935**	**2.6935**	**1.6000e-004**	**0.0000**	**2.6974**

3.9 P3 Site Preparation (mo. 1) - 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					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**5.3000e-003**	**5.6300e-003**	**0.0109**	**5.7000e-004**	**5.2900e-003**	**5.8600e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	4.6000e-004	2.9000e-004	3.0900e-003	1.0000e-005	0.0448	1.0000e-005	0.0448	4.6700e-003	1.0000e-005	4.6800e-003	0.0000	0.9602	0.9602	2.0000e-005	0.0000	0.9608
Total	**5.5000e-004**	**3.6000e-003**	**4.1000e-003**	**2.0000e-005**	**0.0535**	**1.0000e-005**	**0.0535**	**5.5900e-003**	**1.0000e-005**	**5.6100e-003**	**0.0000**	**2.0639**	**2.0639**	**9.0000e-005**	**0.0000**	**2.0664**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**2.0700e-003**	**5.6300e-003**	**7.7000e-003**	**2.2000e-004**	**5.2900e-003**	**5.5100e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	4.6000e-004	2.9000e-004	3.0900e-003	1.0000e-005	0.0199	1.0000e-005	0.0199	2.1800e-003	1.0000e-005	2.1900e-003	0.0000	0.9602	0.9602	2.0000e-005	0.0000	0.9608
Total	**5.5000e-004**	**3.6000e-003**	**4.1000e-003**	**2.0000e-005**	**0.0238**	**1.0000e-005**	**0.0238**	**2.6200e-003**	**1.0000e-005**	**2.6400e-003**	**0.0000**	**2.0639**	**2.0639**	**9.0000e-005**	**0.0000**	**2.0664**

3.10 P2 Building Construction 2 (mo. 5) - 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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0599**	**1.0000e-005**	**0.0599**	**6.2600e-003**	**1.0000e-005**	**6.2800e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0227	1.0000e-005	0.0228	2.5000e-003	1.0000e-005	2.5100e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0266**	**1.0000e-005**	**0.0267**	**2.9400e-003**	**1.0000e-005**	**2.9600e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

3.11 P3 Building Construction 1 (mo. 2-4) - 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	8.1300e-003	0.0924	0.1493	2.2000e-004		3.5500e-003	3.5500e-003		3.2700e-003	3.2700e-003	0.0000	19.0251	19.0251	6.1500e-003	0.0000	19.1789
Total	**8.1300e-003**	**0.0924**	**0.1493**	**2.2000e-004**		**3.5500e-003**	**3.5500e-003**		**3.2700e-003**	**3.2700e-003**	**0.0000**	**19.0251**	**19.0251**	**6.1500e-003**	**0.0000**	**19.1789**

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	2.8000e-004	9.9200e-003	3.0200e-003	3.0000e-005	0.0261	1.0000e-005	0.0261	2.7700e-003	1.0000e-005	2.7800e-003	0.0000	3.3111	3.3111	2.2000e-004	0.0000	3.3167
Worker	1.3700e-003	8.7000e-004	9.2800e-003	3.0000e-005	0.1344	2.0000e-005	0.1344	0.0140	2.0000e-005	0.0140	0.0000	2.8806	2.8806	7.0000e-005	0.0000	2.8824
Total	**1.6500e-003**	**0.0108**	**0.0123**	**6.0000e-005**	**0.1605**	**3.0000e-005**	**0.1606**	**0.0168**	**3.0000e-005**	**0.0168**	**0.0000**	**6.1917**	**6.1917**	**2.9000e-004**	**0.0000**	**6.1991**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1300e-003	0.0924	0.1493	2.2000e-004		3.5500e-003	3.5500e-003		3.2700e-003	3.2700e-003	0.0000	19.0251	19.0251	6.1500e-003	0.0000	19.1789
Total	**8.1300e-003**	**0.0924**	**0.1493**	**2.2000e-004**		**3.5500e-003**	**3.5500e-003**		**3.2700e-003**	**3.2700e-003**	**0.0000**	**19.0251**	**19.0251**	**6.1500e-003**	**0.0000**	**19.1789**

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	2.8000e-004	9.9200e-003	3.0200e-003	3.0000e-005	0.0117	1.0000e-005	0.0117	1.3300e-003	1.0000e-005	1.3400e-003	0.0000	3.3111	3.3111	2.2000e-004	0.0000	3.3167
Worker	1.3700e-003	8.7000e-004	9.2800e-003	3.0000e-005	0.0597	2.0000e-005	0.0597	6.5500e-003	2.0000e-005	6.5800e-003	0.0000	2.8806	2.8806	7.0000e-005	0.0000	2.8824
Total	**1.6500e-003**	**0.0108**	**0.0123**	**6.0000e-005**	**0.0714**	**3.0000e-005**	**0.0714**	**7.8800e-003**	**3.0000e-005**	**7.9200e-003**	**0.0000**	**6.1917**	**6.1917**	**2.9000e-004**	**0.0000**	**6.1991**

3.12 P3 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	0.5002					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0731	0.1086	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	15.3195	15.3195	8.6000e-004	0.0000	15.3411
Total	**0.5111**	**0.0731**	**0.1086**	**1.8000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**8.6000e-004**	**0.0000**	**15.3411**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.7600e-003	2.0600e-003	2.0000e-005	0.0178	1.0000e-005	0.0178	1.8900e-003	1.0000e-005	1.9000e-003	0.0000	2.2576	2.2576	1.5000e-004	0.0000	2.2614
Worker	2.7000e-004	1.7000e-004	1.8100e-003	1.0000e-005	0.0262	0.0000	0.0262	2.7300e-003	0.0000	2.7400e-003	0.0000	0.5612	0.5612	1.0000e-005	0.0000	0.5615
Total	**4.6000e-004**	**6.9300e-003**	**3.8700e-003**	**3.0000e-005**	**0.0440**	**1.0000e-005**	**0.0440**	**4.6200e-003**	**1.0000e-005**	**4.6400e-003**	**0.0000**	**2.8187**	**2.8187**	**1.6000e-004**	**0.0000**	**2.8229**

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	0.5002					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0731	0.1086	1.8000e-004		3.6500e-003	3.6500e-003		3.6500e-003	3.6500e-003	0.0000	15.3195	15.3195	8.6000e-004	0.0000	15.3411
Total	**0.5111**	**0.0731**	**0.1086**	**1.8000e-004**		**3.6500e-003**	**3.6500e-003**		**3.6500e-003**	**3.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**8.6000e-004**	**0.0000**	**15.3411**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.7600e-003	2.0600e-003	2.0000e-005	7.9700e-003	1.0000e-005	7.9800e-003	9.1000e-004	1.0000e-005	9.1000e-004	0.0000	2.2576	2.2576	1.5000e-004	0.0000	2.2614
Worker	2.7000e-004	1.7000e-004	1.8100e-003	1.0000e-005	0.0116	0.0000	0.0116	1.2800e-003	0.0000	1.2800e-003	0.0000	0.5612	0.5612	1.0000e-005	0.0000	0.5615
Total	**4.6000e-004**	**6.9300e-003**	**3.8700e-003**	**3.0000e-005**	**0.0196**	**1.0000e-005**	**0.0196**	**2.1900e-003**	**1.0000e-005**	**2.1900e-003**	**0.0000**	**2.8187**	**2.8187**	**1.6000e-004**	**0.0000**	**2.8229**

3.13 P4 Site Preparation (mo. 1) - 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					
Fugitive Dust					6.1000e-003	0.0000	6.1000e-003	6.6000e-004	0.0000	6.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**6.1000e-003**	**5.6300e-003**	**0.0117**	**6.6000e-004**	**5.2900e-003**	**5.9500e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0599**	**1.0000e-005**	**0.0599**	**6.2600e-003**	**1.0000e-005**	**6.2800e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3800e-003	0.0000	2.3800e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**2.3800e-003**	**5.6300e-003**	**8.0100e-003**	**2.6000e-004**	**5.2900e-003**	**5.5500e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0227	1.0000e-005	0.0228	2.5000e-003	1.0000e-005	2.5100e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0266**	**1.0000e-005**	**0.0267**	**2.9400e-003**	**1.0000e-005**	**2.9600e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

3.14 P3 Building Construction 2 (mo. 5) - 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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	4.6000e-004	2.9000e-004	3.0900e-003	1.0000e-005	0.0448	1.0000e-005	0.0448	4.6700e-003	1.0000e-005	4.6800e-003	0.0000	0.9602	0.9602	2.0000e-005	0.0000	0.9608
Total	**5.5000e-004**	**3.6000e-003**	**4.1000e-003**	**2.0000e-005**	**0.0535**	**1.0000e-005**	**0.0535**	**5.5900e-003**	**1.0000e-005**	**5.6100e-003**	**0.0000**	**2.0639**	**2.0639**	**9.0000e-005**	**0.0000**	**2.0664**

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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	4.6000e-004	2.9000e-004	3.0900e-003	1.0000e-005	0.0199	1.0000e-005	0.0199	2.1800e-003	1.0000e-005	2.1900e-003	0.0000	0.9602	0.9602	2.0000e-005	0.0000	0.9608
Total	**5.5000e-004**	**3.6000e-003**	**4.1000e-003**	**2.0000e-005**	**0.0238**	**1.0000e-005**	**0.0238**	**2.6200e-003**	**1.0000e-005**	**2.6400e-003**	**0.0000**	**2.0639**	**2.0639**	**9.0000e-005**	**0.0000**	**2.0664**

3.15 P4 Building Construction 1 (mo. 2-4) - 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	8.0100e-003	0.0910	0.1471	2.1000e-004		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	18.7369	18.7369	6.0600e-003	0.0000	18.8884
Total	**8.0100e-003**	**0.0910**	**0.1471**	**2.1000e-004**		**3.5000e-003**	**3.5000e-003**		**3.2200e-003**	**3.2200e-003**	**0.0000**	**18.7369**	**18.7369**	**6.0600e-003**	**0.0000**	**18.8884**

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	2.8000e-004	9.7700e-003	2.9700e-003	3.0000e-005	0.0257	1.0000e-005	0.0257	2.7300e-003	1.0000e-005	2.7400e-003	0.0000	3.2609	3.2609	2.2000e-004	0.0000	3.2664
Worker	1.5400e-003	9.8000e-004	0.0105	4.0000e-005	0.1513	3.0000e-005	0.1513	0.0158	3.0000e-005	0.0158	0.0000	3.2423	3.2423	8.0000e-005	0.0000	3.2443
Total	**1.8200e-003**	**0.0108**	**0.0134**	**7.0000e-005**	**0.1770**	**4.0000e-005**	**0.1770**	**0.0185**	**4.0000e-005**	**0.0185**	**0.0000**	**6.5032**	**6.5032**	**3.0000e-004**	**0.0000**	**6.5107**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.0100e-003	0.0910	0.1471	2.1000e-004		3.5000e-003	3.5000e-003		3.2200e-003	3.2200e-003	0.0000	18.7368	18.7368	6.0600e-003	0.0000	18.8883
Total	**8.0100e-003**	**0.0910**	**0.1471**	**2.1000e-004**		**3.5000e-003**	**3.5000e-003**		**3.2200e-003**	**3.2200e-003**	**0.0000**	**18.7368**	**18.7368**	**6.0600e-003**	**0.0000**	**18.8883**

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	2.8000e-004	9.7700e-003	2.9700e-003	3.0000e-005	0.0115	1.0000e-005	0.0115	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	3.2609	3.2609	2.2000e-004	0.0000	3.2664
Worker	1.5400e-003	9.8000e-004	0.0105	4.0000e-005	0.0672	3.0000e-005	0.0672	7.3800e-003	3.0000e-005	7.4000e-003	0.0000	3.2423	3.2423	8.0000e-005	0.0000	3.2443
Total	**1.8200e-003**	**0.0108**	**0.0134**	**7.0000e-005**	**0.0787**	**4.0000e-005**	**0.0787**	**8.6900e-003**	**4.0000e-005**	**8.7200e-003**	**0.0000**	**6.5032**	**6.5032**	**3.0000e-004**	**0.0000**	**6.5107**

3.16 P4 Architectural Coating - 2024

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Archit. Coating	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0699	0.1038	1.7000e-004		3.4900e-003	3.4900e-003		3.4900e-003	3.4900e-003	0.0000	14.6387	14.6387	8.2000e-004	0.0000	14.6593
Total	**0.5940**	**0.0699**	**0.1038**	**1.7000e-004**		**3.4900e-003**	**3.4900e-003**		**3.4900e-003**	**3.4900e-003**	**0.0000**	**14.6387**	**14.6387**	**8.2000e-004**	**0.0000**	**14.6593**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	2.6000e-004	1.6000e-004	1.7300e-003	1.0000e-005	0.0250	0.0000	0.0250	2.6100e-003	0.0000	2.6100e-003	0.0000	0.5362	0.5362	1.0000e-005	0.0000	0.5366
Total	**4.4000e-004**	**6.6200e-003**	**3.7000e-003**	**3.0000e-005**	**0.0420**	**1.0000e-005**	**0.0420**	**4.4100e-003**	**1.0000e-005**	**4.4200e-003**	**0.0000**	**2.6935**	**2.6935**	**1.6000e-004**	**0.0000**	**2.6974**

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	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.0699	0.1038	1.7000e-004		3.4900e-003	3.4900e-003		3.4900e-003	3.4900e-003	0.0000	14.6386	14.6386	8.2000e-004	0.0000	14.6592
Total	**0.5940**	**0.0699**	**0.1038**	**1.7000e-004**		**3.4900e-003**	**3.4900e-003**		**3.4900e-003**	**3.4900e-003**	**0.0000**	**14.6386**	**14.6386**	**8.2000e-004**	**0.0000**	**14.6592**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	7.6100e-003	1.0000e-005	7.6200e-003	8.7000e-004	1.0000e-005	8.7000e-004	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	2.6000e-004	1.6000e-004	1.7300e-003	1.0000e-005	0.0111	0.0000	0.0111	1.2200e-003	0.0000	1.2200e-003	0.0000	0.5362	0.5362	1.0000e-005	0.0000	0.5366
Total	**4.4000e-004**	**6.6200e-003**	**3.7000e-003**	**3.0000e-005**	**0.0187**	**1.0000e-005**	**0.0187**	**2.0900e-003**	**1.0000e-005**	**2.0900e-003**	**0.0000**	**2.6935**	**2.6935**	**1.6000e-004**	**0.0000**	**2.6974**

3.17 P5 Site Preparation (mo. 1) - 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					
Fugitive Dust					5.5700e-003	0.0000	5.5700e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**5.5700e-003**	**5.6300e-003**	**0.0112**	**6.0000e-004**	**5.2900e-003**	**5.8900e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0599**	**1.0000e-005**	**0.0599**	**6.2600e-003**	**1.0000e-005**	**6.2800e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0123	0.1220	0.1063	2.1000e-004		5.6300e-003	5.6300e-003		5.2900e-003	5.2900e-003	0.0000	18.3792	18.3792	4.1000e-003	0.0000	18.4816
Total	**0.0123**	**0.1220**	**0.1063**	**2.1000e-004**	**2.1700e-003**	**5.6300e-003**	**7.8000e-003**	**2.3000e-004**	**5.2900e-003**	**5.5200e-003**	**0.0000**	**18.3792**	**18.3792**	**4.1000e-003**	**0.0000**	**18.4816**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0227	1.0000e-005	0.0228	2.5000e-003	1.0000e-005	2.5100e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0266**	**1.0000e-005**	**0.0267**	**2.9400e-003**	**1.0000e-005**	**2.9600e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

3.18 P4 Building Construction 2 (mo. 5) - 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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0599**	**1.0000e-005**	**0.0599**	**6.2600e-003**	**1.0000e-005**	**6.2800e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

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	3.1400e-003	0.0371	0.0590	9.0000e-005		1.1900e-003	1.1900e-003		1.1100e-003	1.1100e-003	0.0000	7.8374	7.8374	2.4200e-003	0.0000	7.8980
Total	**3.1400e-003**	**0.0371**	**0.0590**	**9.0000e-005**		**1.1900e-003**	**1.1900e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**7.8374**	**7.8374**	**2.4200e-003**	**0.0000**	**7.8980**

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	9.0000e-005	3.3100e-003	1.0100e-003	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.1037	1.1037	7.0000e-005	0.0000	1.1056
Worker	5.2000e-004	3.3000e-004	3.5400e-003	1.0000e-005	0.0227	1.0000e-005	0.0228	2.5000e-003	1.0000e-005	2.5100e-003	0.0000	1.0974	1.0974	3.0000e-005	0.0000	1.0981
Total	**6.1000e-004**	**3.6400e-003**	**4.5500e-003**	**2.0000e-005**	**0.0266**	**1.0000e-005**	**0.0267**	**2.9400e-003**	**1.0000e-005**	**2.9600e-003**	**0.0000**	**2.2011**	**2.2011**	**1.0000e-004**	**0.0000**	**2.2036**

3.19 P5 Building Construction 1 (mo. 2-4) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.3300e-003	0.0838	0.1445	2.1000e-004		2.8900e-003	2.8900e-003		2.6500e-003	2.6500e-003	0.0000	18.4564	18.4564	5.9700e-003	0.0000	18.6057
Total	**7.3300e-003**	**0.0838**	**0.1445**	**2.1000e-004**		**2.8900e-003**	**2.8900e-003**		**2.6500e-003**	**2.6500e-003**	**0.0000**	**18.4564**	**18.4564**	**5.9700e-003**	**0.0000**	**18.6057**

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	2.7000e-004	9.4800e-003	2.8700e-003	3.0000e-005	0.0253	1.0000e-005	0.0253	2.6900e-003	1.0000e-005	2.7000e-003	0.0000	3.1912	3.1912	2.1000e-004	0.0000	3.1966
Worker	1.4500e-003	8.9000e-004	9.6000e-003	3.0000e-005	0.1490	3.0000e-005	0.1490	0.0155	2.0000e-005	0.0156	0.0000	3.0633	3.0633	7.0000e-005	0.0000	3.0652
Total	**1.7200e-003**	**0.0104**	**0.0125**	**6.0000e-005**	**0.1743**	**4.0000e-005**	**0.1743**	**0.0182**	**3.0000e-005**	**0.0183**	**0.0000**	**6.2546**	**6.2546**	**2.8000e-004**	**0.0000**	**6.2617**

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	7.3300e-003	0.0838	0.1445	2.1000e-004		2.8900e-003	2.8900e-003		2.6500e-003	2.6500e-003	0.0000	18.4564	18.4564	5.9700e-003	0.0000	18.6057
Total	**7.3300e-003**	**0.0838**	**0.1445**	**2.1000e-004**		**2.8900e-003**	**2.8900e-003**		**2.6500e-003**	**2.6500e-003**	**0.0000**	**18.4564**	**18.4564**	**5.9700e-003**	**0.0000**	**18.6057**

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	2.7000e-004	9.4800e-003	2.8700e-003	3.0000e-005	0.0113	1.0000e-005	0.0113	1.2900e-003	1.0000e-005	1.3000e-003	0.0000	3.1912	3.1912	2.1000e-004	0.0000	3.1966
Worker	1.4500e-003	8.9000e-004	9.6000e-003	3.0000e-005	0.0661	3.0000e-005	0.0662	7.2600e-003	2.0000e-005	7.2900e-003	0.0000	3.0633	3.0633	7.0000e-005	0.0000	3.0652
Total	**1.7200e-003**	**0.0104**	**0.0125**	**6.0000e-005**	**0.0775**	**4.0000e-005**	**0.0775**	**8.5500e-003**	**3.0000e-005**	**8.5900e-003**	**0.0000**	**6.2546**	**6.2546**	**2.8000e-004**	**0.0000**	**6.2617**

3.20 P5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-003	0.0657	0.1037	1.7000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	14.6387	14.6387	8.0000e-004	0.0000	14.6586
Total	**0.5934**	**0.0657**	**0.1037**	**1.7000e-004**		**2.9500e-003**	**2.9500e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**14.6387**	**14.6387**	**8.0000e-004**	**0.0000**	**14.6586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3700e-003	1.9300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1441	2.1441	1.4000e-004	0.0000	2.1477
Worker	2.4000e-004	1.5000e-004	1.6100e-003	1.0000e-005	0.0250	0.0000	0.0250	2.6100e-003	0.0000	2.6100e-003	0.0000	0.5145	0.5145	1.0000e-005	0.0000	0.5149
Total	**4.2000e-004**	**6.5200e-003**	**3.5400e-003**	**3.0000e-005**	**0.0420**	**1.0000e-005**	**0.0420**	**4.4100e-003**	**1.0000e-005**	**4.4200e-003**	**0.0000**	**2.6587**	**2.6587**	**1.5000e-004**	**0.0000**	**2.6626**

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	0.5836					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-003	0.0657	0.1037	1.7000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	14.6386	14.6386	8.0000e-004	0.0000	14.6586
Total	**0.5934**	**0.0657**	**0.1037**	**1.7000e-004**		**2.9500e-003**	**2.9500e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**14.6386**	**14.6386**	**8.0000e-004**	**0.0000**	**14.6586**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3700e-003	1.9300e-003	2.0000e-005	7.6100e-003	1.0000e-005	7.6200e-003	8.7000e-004	1.0000e-005	8.7000e-004	0.0000	2.1441	2.1441	1.4000e-004	0.0000	2.1477
Worker	2.4000e-004	1.5000e-004	1.6100e-003	1.0000e-005	0.0111	0.0000	0.0111	1.2200e-003	0.0000	1.2200e-003	0.0000	0.5145	0.5145	1.0000e-005	0.0000	0.5149
Total	**4.2000e-004**	**6.5200e-003**	**3.5400e-003**	**3.0000e-005**	**0.0187**	**1.0000e-005**	**0.0187**	**2.0900e-003**	**1.0000e-005**	**2.0900e-003**	**0.0000**	**2.6587**	**2.6587**	**1.5000e-004**	**0.0000**	**2.6626**

3.21 P6 Site Preparation (mo. 1) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1099	0.1052	2.1000e-004		4.9100e-003	4.9100e-003		4.6200e-003	4.6200e-003	0.0000	18.3775	18.3775	4.0700e-003	0.0000	18.4793
Total	**0.0113**	**0.1099**	**0.1052**	**2.1000e-004**	**5.8300e-003**	**4.9100e-003**	**0.0107**	**6.3000e-004**	**4.6200e-003**	**5.2500e-003**	**0.0000**	**18.3775**	**18.3775**	**4.0700e-003**	**0.0000**	**18.4793**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	3.7000e-004	2.3000e-004	2.4700e-003	1.0000e-005	0.0384	1.0000e-005	0.0384	4.0100e-003	1.0000e-005	4.0100e-003	0.0000	0.7898	0.7898	2.0000e-005	0.0000	0.7902
Total	**4.6000e-004**	**3.4900e-003**	**3.4600e-003**	**2.0000e-005**	**0.0471**	**1.0000e-005**	**0.0471**	**4.9300e-003**	**1.0000e-005**	**4.9400e-003**	**0.0000**	**1.8867**	**1.8867**	**9.0000e-005**	**0.0000**	**1.8891**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0113	0.1099	0.1052	2.1000e-004		4.9100e-003	4.9100e-003		4.6200e-003	4.6200e-003	0.0000	18.3775	18.3775	4.0700e-003	0.0000	18.4793
Total	**0.0113**	**0.1099**	**0.1052**	**2.1000e-004**	**2.2700e-003**	**4.9100e-003**	**7.1800e-003**	**2.5000e-004**	**4.6200e-003**	**4.8700e-003**	**0.0000**	**18.3775**	**18.3775**	**4.0700e-003**	**0.0000**	**18.4793**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	3.7000e-004	2.3000e-004	2.4700e-003	1.0000e-005	0.0171	1.0000e-005	0.0171	1.8700e-003	1.0000e-005	1.8800e-003	0.0000	0.7898	0.7898	2.0000e-005	0.0000	0.7902
Total	**4.6000e-004**	**3.4900e-003**	**3.4600e-003**	**2.0000e-005**	**0.0210**	**1.0000e-005**	**0.0210**	**2.3100e-003**	**1.0000e-005**	**2.3300e-003**	**0.0000**	**1.8867**	**1.8867**	**9.0000e-005**	**0.0000**	**1.8891**

3.22 P5 Building Construction 2 (mo. 5) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.0200e-003	0.0356	0.0589	9.0000e-005		1.0800e-003	1.0800e-003		1.0100e-003	1.0100e-003	0.0000	7.8354	7.8354	2.4200e-003	0.0000	7.8960
Total	**3.0200e-003**	**0.0356**	**0.0589**	**9.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0100e-003**	**1.0100e-003**	**0.0000**	**7.8354**	**7.8354**	**2.4200e-003**	**0.0000**	**7.8960**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	5.0000e-004	3.1000e-004	3.3000e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.0530	1.0530	3.0000e-005	0.0000	1.0537
Total	**5.9000e-004**	**3.5700e-003**	**4.2900e-003**	**2.0000e-005**	**0.0599**	**1.0000e-005**	**0.0599**	**6.2600e-003**	**1.0000e-005**	**6.2800e-003**	**0.0000**	**2.1500**	**2.1500**	**1.0000e-004**	**0.0000**	**2.1525**

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	3.0200e-003	0.0356	0.0589	9.0000e-005		1.0800e-003	1.0800e-003		1.0100e-003	1.0100e-003	0.0000	7.8354	7.8354	2.4200e-003	0.0000	7.8960
Total	**3.0200e-003**	**0.0356**	**0.0589**	**9.0000e-005**		**1.0800e-003**	**1.0800e-003**		**1.0100e-003**	**1.0100e-003**	**0.0000**	**7.8354**	**7.8354**	**2.4200e-003**	**0.0000**	**7.8960**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	5.0000e-004	3.1000e-004	3.3000e-003	1.0000e-005	0.0227	1.0000e-005	0.0228	2.5000e-003	1.0000e-005	2.5100e-003	0.0000	1.0530	1.0530	3.0000e-005	0.0000	1.0537
Total	**5.9000e-004**	**3.5700e-003**	**4.2900e-003**	**2.0000e-005**	**0.0266**	**1.0000e-005**	**0.0267**	**2.9400e-003**	**1.0000e-005**	**2.9600e-003**	**0.0000**	**2.1500**	**2.1500**	**1.0000e-004**	**0.0000**	**2.1525**

3.23 P6 Building Construction 1 (mo. 2-4) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.5600e-003	0.0864	0.1490	2.2000e-004		2.9800e-003	2.9800e-003		2.7400e-003	2.7400e-003	0.0000	19.0332	19.0332	6.1600e-003	0.0000	19.1871
Total	**7.5600e-003**	**0.0864**	**0.1490**	**2.2000e-004**		**2.9800e-003**	**2.9800e-003**		**2.7400e-003**	**2.7400e-003**	**0.0000**	**19.0332**	**19.0332**	**6.1600e-003**	**0.0000**	**19.1871**

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	2.7000e-004	9.7800e-003	2.9600e-003	3.0000e-005	0.0261	1.0000e-005	0.0261	2.7700e-003	1.0000e-005	2.7800e-003	0.0000	3.2910	3.2910	2.2000e-004	0.0000	3.2965
Worker	1.1200e-003	6.9000e-004	7.4200e-003	3.0000e-005	0.1152	2.0000e-005	0.1152	0.0120	2.0000e-005	0.0120	0.0000	2.3693	2.3693	6.0000e-005	0.0000	2.3707
Total	**1.3900e-003**	**0.0105**	**0.0104**	**6.0000e-005**	**0.1413**	**3.0000e-005**	**0.1414**	**0.0148**	**3.0000e-005**	**0.0148**	**0.0000**	**5.6602**	**5.6602**	**2.8000e-004**	**0.0000**	**5.6672**

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	7.5600e-003	0.0864	0.1490	2.2000e-004		2.9800e-003	2.9800e-003		2.7400e-003	2.7400e-003	0.0000	19.0332	19.0332	6.1600e-003	0.0000	19.1871
Total	**7.5600e-003**	**0.0864**	**0.1490**	**2.2000e-004**		**2.9800e-003**	**2.9800e-003**		**2.7400e-003**	**2.7400e-003**	**0.0000**	**19.0332**	**19.0332**	**6.1600e-003**	**0.0000**	**19.1871**

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	2.7000e-004	9.7800e-003	2.9600e-003	3.0000e-005	0.0117	1.0000e-005	0.0117	1.3300e-003	1.0000e-005	1.3400e-003	0.0000	3.2910	3.2910	2.2000e-004	0.0000	3.2965
Worker	1.1200e-003	6.9000e-004	7.4200e-003	3.0000e-005	0.0512	2.0000e-005	0.0512	5.6200e-003	2.0000e-005	5.6400e-003	0.0000	2.3693	2.3693	6.0000e-005	0.0000	2.3707
Total	**1.3900e-003**	**0.0105**	**0.0104**	**6.0000e-005**	**0.0629**	**3.0000e-005**	**0.0629**	**6.9500e-003**	**3.0000e-005**	**6.9800e-003**	**0.0000**	**5.6602**	**5.6602**	**2.8000e-004**	**0.0000**	**5.6672**

3.24 P6 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0672	0.1061	1.7000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	14.9791	14.9791	8.2000e-004	0.0000	14.9995
Total	**0.4408**	**0.0672**	**0.1061**	**1.7000e-004**		**3.0200e-003**	**3.0200e-003**		**3.0200e-003**	**3.0200e-003**	**0.0000**	**14.9791**	**14.9791**	**8.2000e-004**	**0.0000**	**14.9995**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.5200e-003	1.9700e-003	2.0000e-005	0.0174	1.0000e-005	0.0174	1.8500e-003	1.0000e-005	1.8500e-003	0.0000	2.1940	2.1940	1.5000e-004	0.0000	2.1977
Worker	1.2000e-004	8.0000e-005	8.2000e-004	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2633	0.2633	1.0000e-005	0.0000	0.2634
Total	**3.0000e-004**	**6.6000e-003**	**2.7900e-003**	**2.0000e-005**	**0.0302**	**1.0000e-005**	**0.0302**	**3.1900e-003**	**1.0000e-005**	**3.1900e-003**	**0.0000**	**2.4572**	**2.4572**	**1.6000e-004**	**0.0000**	**2.4611**

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	0.4308					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0100	0.0672	0.1061	1.7000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	14.9791	14.9791	8.2000e-004	0.0000	14.9995
Total	**0.4408**	**0.0672**	**0.1061**	**1.7000e-004**		**3.0200e-003**	**3.0200e-003**		**3.0200e-003**	**3.0200e-003**	**0.0000**	**14.9791**	**14.9791**	**8.2000e-004**	**0.0000**	**14.9995**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.5200e-003	1.9700e-003	2.0000e-005	7.7900e-003	1.0000e-005	7.8000e-003	8.9000e-004	1.0000e-005	8.9000e-004	0.0000	2.1940	2.1940	1.5000e-004	0.0000	2.1977
Worker	1.2000e-004	8.0000e-005	8.2000e-004	0.0000	5.6800e-003	0.0000	5.6900e-003	6.2000e-004	0.0000	6.3000e-004	0.0000	0.2633	0.2633	1.0000e-005	0.0000	0.2634
Total	**3.0000e-004**	**6.6000e-003**	**2.7900e-003**	**2.0000e-005**	**0.0135**	**1.0000e-005**	**0.0135**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**0.0000**	**2.4572**	**2.4572**	**1.6000e-004**	**0.0000**	**2.4611**

3.25 P7 Site Preparation (mo. 1) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1049	0.1004	2.0000e-004		4.6900e-003	4.6900e-003		4.4100e-003	4.4100e-003	0.0000	17.5422	17.5422	3.8900e-003	0.0000	17.6394
Total	**0.0108**	**0.1049**	**0.1004**	**2.0000e-004**	**5.8300e-003**	**4.6900e-003**	**0.0105**	**6.3000e-004**	**4.4100e-003**	**5.0400e-003**	**0.0000**	**17.5422**	**17.5422**	**3.8900e-003**	**0.0000**	**17.6394**

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	4.0000e-005	1.5600e-003	4.7000e-004	1.0000e-005	8.2700e-003	0.0000	8.2700e-003	8.7000e-004	0.0000	8.7000e-004	0.0000	0.5236	0.5236	4.0000e-005	0.0000	0.5244
Worker	1.5000e-004	9.0000e-005	9.8000e-004	0.0000	0.0305	0.0000	0.0305	3.1600e-003	0.0000	3.1700e-003	0.0000	0.3141	0.3141	1.0000e-005	0.0000	0.3143
Total	**1.9000e-004**	**1.6500e-003**	**1.4500e-003**	**1.0000e-005**	**0.0388**	**0.0000**	**0.0388**	**4.0300e-003**	**0.0000**	**4.0400e-003**	**0.0000**	**0.8377**	**0.8377**	**5.0000e-005**	**0.0000**	**0.8387**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.1049	0.1004	2.0000e-004		4.6900e-003	4.6900e-003		4.4100e-003	4.4100e-003	0.0000	17.5421	17.5421	3.8900e-003	0.0000	17.6393
Total	**0.0108**	**0.1049**	**0.1004**	**2.0000e-004**	**2.2700e-003**	**4.6900e-003**	**6.9600e-003**	**2.5000e-004**	**4.4100e-003**	**4.6600e-003**	**0.0000**	**17.5421**	**17.5421**	**3.8900e-003**	**0.0000**	**17.6393**

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	4.0000e-005	1.5600e-003	4.7000e-004	1.0000e-005	3.6800e-003	0.0000	3.6800e-003	4.1000e-004	0.0000	4.1000e-004	0.0000	0.5236	0.5236	4.0000e-005	0.0000	0.5244
Worker	1.5000e-004	9.0000e-005	9.8000e-004	0.0000	0.0135	0.0000	0.0135	1.4700e-003	0.0000	1.4700e-003	0.0000	0.3141	0.3141	1.0000e-005	0.0000	0.3143
Total	**1.9000e-004**	**1.6500e-003**	**1.4500e-003**	**1.0000e-005**	**0.0172**	**0.0000**	**0.0172**	**1.8800e-003**	**0.0000**	**1.8800e-003**	**0.0000**	**0.8377**	**0.8377**	**5.0000e-005**	**0.0000**	**0.8387**

3.26 P6 Building Construction 2 (mo. 5) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8800e-003	0.0340	0.0562	9.0000e-005		1.0300e-003	1.0300e-003		9.6000e-004	9.6000e-004	0.0000	7.4792	7.4792	2.3100e-003	0.0000	7.5371
Total	**2.8800e-003**	**0.0340**	**0.0562**	**9.0000e-005**		**1.0300e-003**	**1.0300e-003**		**9.6000e-004**	**9.6000e-004**	**0.0000**	**7.4792**	**7.4792**	**2.3100e-003**	**0.0000**	**7.5371**

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	9.0000e-005	3.1100e-003	9.4000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	1.0471	1.0471	7.0000e-005	0.0000	1.0489
Worker	3.6000e-004	2.2000e-004	2.3600e-003	1.0000e-005	0.0367	1.0000e-005	0.0367	3.8200e-003	1.0000e-005	3.8300e-003	0.0000	0.7539	0.7539	2.0000e-005	0.0000	0.7543
Total	**4.5000e-004**	**3.3300e-003**	**3.3000e-003**	**2.0000e-005**	**0.0450**	**1.0000e-005**	**0.0450**	**4.7000e-003**	**1.0000e-005**	**4.7100e-003**	**0.0000**	**1.8010**	**1.8010**	**9.0000e-005**	**0.0000**	**1.8032**

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	2.8800e-003	0.0340	0.0562	9.0000e-005		1.0300e-003	1.0300e-003		9.6000e-004	9.6000e-004	0.0000	7.4792	7.4792	2.3100e-003	0.0000	7.5370
Total	**2.8800e-003**	**0.0340**	**0.0562**	**9.0000e-005**		**1.0300e-003**	**1.0300e-003**		**9.6000e-004**	**9.6000e-004**	**0.0000**	**7.4792**	**7.4792**	**2.3100e-003**	**0.0000**	**7.5370**

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	9.0000e-005	3.1100e-003	9.4000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0471	1.0471	7.0000e-005	0.0000	1.0489
Worker	3.6000e-004	2.2000e-004	2.3600e-003	1.0000e-005	0.0163	1.0000e-005	0.0163	1.7900e-003	1.0000e-005	1.7900e-003	0.0000	0.7539	0.7539	2.0000e-005	0.0000	0.7543
Total	**4.5000e-004**	**3.3300e-003**	**3.3000e-003**	**2.0000e-005**	**0.0200**	**1.0000e-005**	**0.0200**	**2.2100e-003**	**1.0000e-005**	**2.2200e-003**	**0.0000**	**1.8010**	**1.8010**	**9.0000e-005**	**0.0000**	**1.8032**

3.27 P7 Building Construction 1 (mo. 2-4) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.4400e-003	0.0851	0.1467	2.1000e-004		2.9300e-003	2.9300e-003		2.7000e-003	2.7000e-003	0.0000	18.7448	18.7448	6.0600e-003	0.0000	18.8964
Total	**7.4400e-003**	**0.0851**	**0.1467**	**2.1000e-004**		**2.9300e-003**	**2.9300e-003**		**2.7000e-003**	**2.7000e-003**	**0.0000**	**18.7448**	**18.7448**	**6.0600e-003**	**0.0000**	**18.8964**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.8100e-003	1.4600e-003	2.0000e-005	0.0129	1.0000e-005	0.0129	1.3600e-003	1.0000e-005	1.3700e-003	0.0000	1.6205	1.6205	1.1000e-004	0.0000	1.6233
Worker	5.5000e-004	3.4000e-004	3.6600e-003	1.0000e-005	0.0567	1.0000e-005	0.0567	5.9200e-003	1.0000e-005	5.9300e-003	0.0000	1.1667	1.1667	3.0000e-005	0.0000	1.1674
Total	**6.8000e-004**	**5.1500e-003**	**5.1200e-003**	**3.0000e-005**	**0.0696**	**2.0000e-005**	**0.0696**	**7.2800e-003**	**2.0000e-005**	**7.3000e-003**	**0.0000**	**2.7872**	**2.7872**	**1.4000e-004**	**0.0000**	**2.7907**

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	7.4400e-003	0.0851	0.1467	2.1000e-004		2.9300e-003	2.9300e-003		2.7000e-003	2.7000e-003	0.0000	18.7448	18.7448	6.0600e-003	0.0000	18.8964
Total	**7.4400e-003**	**0.0851**	**0.1467**	**2.1000e-004**		**2.9300e-003**	**2.9300e-003**		**2.7000e-003**	**2.7000e-003**	**0.0000**	**18.7448**	**18.7448**	**6.0600e-003**	**0.0000**	**18.8964**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.8100e-003	1.4600e-003	2.0000e-005	5.7500e-003	1.0000e-005	5.7600e-003	6.5000e-004	1.0000e-005	6.6000e-004	0.0000	1.6205	1.6205	1.1000e-004	0.0000	1.6233
Worker	5.5000e-004	3.4000e-004	3.6600e-003	1.0000e-005	0.0252	1.0000e-005	0.0252	2.7700e-003	1.0000e-005	2.7800e-003	0.0000	1.1667	1.1667	3.0000e-005	0.0000	1.1674
Total	**6.8000e-004**	**5.1500e-003**	**5.1200e-003**	**3.0000e-005**	**0.0309**	**2.0000e-005**	**0.0310**	**3.4200e-003**	**2.0000e-005**	**3.4400e-003**	**0.0000**	**2.7872**	**2.7872**	**1.4000e-004**	**0.0000**	**2.7907**

3.28 P7 Architectural Coating (mo. 1) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-003	0.0657	0.1037	1.7000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	14.6387	14.6387	8.0000e-004	0.0000	14.6586
Total	**0.2321**	**0.0657**	**0.1037**	**1.7000e-004**		**2.9500e-003**	**2.9500e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**14.6387**	**14.6387**	**8.0000e-004**	**0.0000**	**14.6586**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3700e-003	1.9300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1441	2.1441	1.4000e-004	0.0000	2.1477
Worker	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	0.0125	0.0000	0.0125	1.3000e-003	0.0000	1.3100e-003	0.0000	0.2573	0.2573	1.0000e-005	0.0000	0.2574
Total	**3.0000e-004**	**6.4500e-003**	**2.7400e-003**	**2.0000e-005**	**0.0295**	**1.0000e-005**	**0.0295**	**3.1000e-003**	**1.0000e-005**	**3.1200e-003**	**0.0000**	**2.4014**	**2.4014**	**1.5000e-004**	**0.0000**	**2.4051**

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	0.2223					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.8000e-003	0.0657	0.1037	1.7000e-004		2.9500e-003	2.9500e-003		2.9500e-003	2.9500e-003	0.0000	14.6386	14.6386	8.0000e-004	0.0000	14.6586
Total	**0.2321**	**0.0657**	**0.1037**	**1.7000e-004**		**2.9500e-003**	**2.9500e-003**		**2.9500e-003**	**2.9500e-003**	**0.0000**	**14.6386**	**14.6386**	**8.0000e-004**	**0.0000**	**14.6586**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3700e-003	1.9300e-003	2.0000e-005	7.6100e-003	1.0000e-005	7.6200e-003	8.7000e-004	1.0000e-005	8.7000e-004	0.0000	2.1441	2.1441	1.4000e-004	0.0000	2.1477
Worker	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	5.5600e-003	0.0000	5.5600e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	0.2573	0.2573	1.0000e-005	0.0000	0.2574
Total	**3.0000e-004**	**6.4500e-003**	**2.7400e-003**	**2.0000e-005**	**0.0132**	**1.0000e-005**	**0.0132**	**1.4800e-003**	**1.0000e-005**	**1.4800e-003**	**0.0000**	**2.4014**	**2.4014**	**1.5000e-004**	**0.0000**	**2.4051**

3.29 P7 Building Construction 2 (mo. 5) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1500e-003	0.0372	0.0616	1.0000e-004		1.1300e-003	1.1300e-003		1.0500e-003	1.0500e-003	0.0000	8.1915	8.1915	2.5300e-003	0.0000	8.2549
Total	**3.1500e-003**	**0.0372**	**0.0616**	**1.0000e-004**		**1.1300e-003**	**1.1300e-003**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**8.1915**	**8.1915**	**2.5300e-003**	**0.0000**	**8.2549**

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	5.0000e-005	1.7000e-003	5.2000e-004	1.0000e-005	4.5500e-003	0.0000	4.5500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.5734	0.5734	4.0000e-005	0.0000	0.5744
Worker	2.0000e-004	1.2000e-004	1.2900e-003	0.0000	0.0201	0.0000	0.0201	2.0900e-003	0.0000	2.1000e-003	0.0000	0.4128	0.4128	1.0000e-005	0.0000	0.4131
Total	**2.5000e-004**	**1.8200e-003**	**1.8100e-003**	**1.0000e-005**	**0.0246**	**0.0000**	**0.0246**	**2.5700e-003**	**0.0000**	**2.5800e-003**	**0.0000**	**0.9863**	**0.9863**	**5.0000e-005**	**0.0000**	**0.9875**

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	3.1500e-003	0.0372	0.0616	1.0000e-004		1.1300e-003	1.1300e-003		1.0500e-003	1.0500e-003	0.0000	8.1915	8.1915	2.5300e-003	0.0000	8.2549
Total	**3.1500e-003**	**0.0372**	**0.0616**	**1.0000e-004**		**1.1300e-003**	**1.1300e-003**		**1.0500e-003**	**1.0500e-003**	**0.0000**	**8.1915**	**8.1915**	**2.5300e-003**	**0.0000**	**8.2549**

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	5.0000e-005	1.7000e-003	5.2000e-004	1.0000e-005	2.0400e-003	0.0000	2.0400e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.5734	0.5734	4.0000e-005	0.0000	0.5744
Worker	2.0000e-004	1.2000e-004	1.2900e-003	0.0000	8.9100e-003	0.0000	8.9200e-003	9.8000e-004	0.0000	9.8000e-004	0.0000	0.4128	0.4128	1.0000e-005	0.0000	0.4131
Total	**2.5000e-004**	**1.8200e-003**	**1.8100e-003**	**1.0000e-005**	**0.0110**	**0.0000**	**0.0110**	**1.2100e-003**	**0.0000**	**1.2100e-003**	**0.0000**	**0.9863**	**0.9863**	**5.0000e-005**	**0.0000**	**0.9875**

CalEEMod Version: CalEEMod.2016.3.1

Date: 8/21/2017 12:19 PM

South Village Residential - LEA

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
P1 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Architectural Coating (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 4 Interim	0	14	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 4 Interim	0	14	No Change	0.00
Graders	Diesel	Tier 4 Interim	0	7	No Change	0.00
Pumps	Diesel	Tier 4 Interim	0	7	No Change	0.00
Rough Terrain Forklifts	Diesel	Tier 4 Interim	0	14	No Change	0.00
Skid Steer Loaders	Diesel	Tier 4 Interim	0	21	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	0	7	No Change	0.00
Trenchers	Diesel	Tier 4 Interim	0	7	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	6.92600E-002	4.64310E-001	7.33300E-001	1.20000E-003	2.08800E-002	2.08800E-002	0.00000E+000	1.03492E+002	1.03492E+002	5.65000E-003	0.00000E+000	1.03633E+002
Cement and Mortar Mixers	8.99000E-003	5.63300E-002	4.71800E-002	1.10000E-004	2.19000E-003	2.19000E-003	0.00000E+000	7.01163E+000	7.01163E+000	7.30000E-004	0.00000E+000	7.02983E+000
Graders	2.87000E-002	3.45020E-001	1.28690E-001	5.10000E-004	1.11800E-002	1.02900E-002	0.00000E+000	4.44682E+001	4.44682E+001	1.43800E-002	0.00000E+000	4.48277E+001
Pumps	2.45900E-002	2.06760E-001	2.84860E-001	5.00000E-004	9.93000E-003	9.93000E-003	0.00000E+000	4.32384E+001	4.32384E+001	1.96000E-003	0.00000E+000	4.32873E+001
Rough Terrain Forklifts	3.01100E-002	3.98260E-001	6.96330E-001	1.05000E-003	1.15300E-002	1.06100E-002	0.00000E+000	9.21872E+001	9.21872E+001	2.98200E-002	0.00000E+000	9.29326E+001
Skid Steer Loaders	1.41200E-002	1.87970E-001	3.17210E-001	4.80000E-004	5.96000E-003	5.49000E-003	0.00000E+000	4.17447E+001	4.17447E+001	1.35000E-002	0.00000E+000	4.20822E+001
Tractors/Loaders/ Backhoes	3.11600E-002	3.14300E-001	5.08880E-001	7.10000E-004	1.34200E-002	1.23400E-002	0.00000E+000	6.24537E+001	6.24537E+001	2.02000E-002	0.00000E+000	6.29587E+001
Trenchers	2.63700E-002	2.45710E-001	1.98300E-001	2.60000E-004	1.70300E-002	1.56700E-002	0.00000E+000	2.27068E+001	2.27068E+001	7.34000E-003	0.00000E+000	2.28904E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	6.92600E-002	4.64310E-001	7.33300E-001	1.20000E-003	2.08800E-002	2.08800E-002	0.00000E+000	1.03492E+002	1.03492E+002	5.65000E-003	0.00000E+000	1.03633E+002
Cement and Mortar Mixers	8.99000E-003	5.63300E-002	4.71800E-002	1.10000E-004	2.19000E-003	2.19000E-003	0.00000E+000	7.01162E+000	7.01162E+000	7.30000E-004	0.00000E+000	7.02982E+000
Graders	2.87000E-002	3.45020E-001	1.28690E-001	5.10000E-004	1.11800E-002	1.02900E-002	0.00000E+000	4.44681E+001	4.44681E+001	1.43800E-002	0.00000E+000	4.48277E+001
Pumps	2.45900E-002	2.06760E-001	2.84860E-001	5.00000E-004	9.93000E-003	9.93000E-003	0.00000E+000	4.32383E+001	4.32383E+001	1.96000E-003	0.00000E+000	4.32872E+001
Rough Terrain Forklifts	3.01100E-002	3.98260E-001	6.96330E-001	1.05000E-003	1.15300E-002	1.06100E-002	0.00000E+000	9.21871E+001	9.21871E+001	2.98200E-002	0.00000E+000	9.29325E+001
Skid Steer Loaders	1.41200E-002	1.87970E-001	3.17210E-001	4.80000E-004	5.96000E-003	5.49000E-003	0.00000E+000	4.17446E+001	4.17446E+001	1.35000E-002	0.00000E+000	4.20821E+001
Tractors/Loaders/Bac khoes	3.11600E-002	3.14300E-001	5.08880E-001	7.10000E-004	1.34200E-002	1.23400E-002	0.00000E+000	6.24536E+001	6.24536E+001	2.02000E-002	0.00000E+000	6.29586E+001
Trenchers	2.63700E-002	2.45710E-001	1.98300E-001	2.60000E-004	1.70300E-002	1.56700E-002	0.00000E+000	2.27067E+001	2.27067E+001	7.34000E-003	0.00000E+000	2.28903E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25614E-006	1.25614E-006	0.00000E+000	0.00000E+000	1.15793E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.42620E-006	1.42620E-006	0.00000E+000	0.00000E+000	1.42251E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12440E-006	1.12440E-006	0.00000E+000	0.00000E+000	1.11538E-006
Pumps	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15638E-006	1.15638E-006	0.00000E+000	0.00000E+000	1.15507E-006
Rough Terrain Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19322E-006	1.19322E-006	0.00000E+000	0.00000E+000	1.18365E-006
Skid Steer Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19776E-006	1.19776E-006	0.00000E+000	0.00000E+000	1.18815E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28095E-006	1.28095E-006	0.00000E+000	0.00000E+000	1.27067E-006
Trenchers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32119E-006	1.32119E-006	0.00000E+000	0.00000E+000	1.31060E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
Yes	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
P1 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Architectural Coating	Roads	0.04	0.00	0.02	0.00	0.55	0.53
P1 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 1 (mo. 2-4)	Roads	0.18	0.02	0.08	0.01	0.56	0.53
P1 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 2 (mo. 5)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P1 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P1 Site Preparation (mo. 1)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P2 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Architectural Coating	Roads	0.04	0.00	0.02	0.00	0.55	0.53
P2 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 1 (mo. 2-4)	Roads	0.18	0.02	0.08	0.01	0.56	0.53
P2 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 2 (mo. 5)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P2 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P2 Site Preparation (mo. 1)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P3 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Architectural Coating	Roads	0.04	0.00	0.02	0.00	0.55	0.53
P3 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 1 (mo. 2-4)	Roads	0.16	0.02	0.07	0.01	0.56	0.53
P3 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 2 (mo. 5)	Roads	0.05	0.01	0.02	0.00	0.56	0.53
P3 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P3 Site Preparation (mo. 1)	Roads	0.05	0.01	0.02	0.00	0.56	0.53
P4 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Architectural Coating	Roads	0.04	0.00	0.02	0.00	0.55	0.53
P4 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 1 (mo. 2-4)	Roads	0.18	0.02	0.08	0.01	0.56	0.53
P4 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 2 (mo. 5)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P4 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P4 Site Preparation (mo. 1)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P5 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Architectural Coating	Roads	0.04	0.00	0.02	0.00	0.55	0.53

P5 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 1 (mo. 2-4)	Roads	0.17	0.02	0.08	0.01	0.56	0.53
P5 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 2 (mo. 5)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P5 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P5 Site Preparation (mo. 1)	Roads	0.06	0.01	0.03	0.00	0.56	0.53
P6 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Architectural Coating	Roads	0.03	0.00	0.01	0.00	0.55	0.53
P6 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 1 (mo. 2-4)	Roads	0.14	0.01	0.06	0.01	0.56	0.53
P6 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 2 (mo. 5)	Roads	0.04	0.00	0.02	0.00	0.56	0.53
P6 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P6 Site Preparation (mo. 1)	Roads	0.05	0.00	0.02	0.00	0.56	0.53
P7 Architectural Coating (mo. 1)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Architectural Coating (mo. 1)	Roads	0.03	0.00	0.01	0.00	0.55	0.52
P7 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 1 (mo. 2-4)	Roads	0.07	0.01	0.03	0.00	0.56	0.53
P7 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 2 (mo. 5)	Roads	0.02	0.00	0.01	0.00	0.56	0.53
P7 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P7 Site Preparation (mo. 1)	Roads	0.04	0.00	0.02	0.00	0.56	0.53

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.00	0.15		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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

Water Mitigation Measures

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

Solid Waste Mitigation

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

CalEEMod Input Matrix
Project Characteristics

Table 1: Project Detail			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Project Name	South Village Residential - LEA	--	Project Description
Project Location	San Diego County	--	--
Wind speed (m/s)	default		
Precipitation Frequency (days)	default		
CEC Climate Forecasting Zone	13	--	CalEEMod Appendix E
Land Use Setting	Urban	based on availability of uses	--
Start of Construction	8/1/2023	Central Village Schedule	Proctor Valley EIR Assumptions
Operational Year	--	Central Village Schedule	Proctor Valley EIR Assumptions

Table 2: Utility Information			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Select Utility Company	San Diego Gas and Electric	project location	CEC, 2014
CO2 Intensity Factor (lb./Mwh)	--		
CH4 Intensity Factor (lb./Mwh)	default		
N20 Intensity Factor (lb./Mwh)	default		

CalEEMod Input Matrix
Project Characteristics

Table 3: Pollutants			
Pollutant Selection	**Pollutant Full Name**	**Notes**	**Source**
checked	ROG	--	--
checked	NOx	--	--
checked	CO	--	--
checked	SO2	--	--
checked	PM 10	--	--
checked	PM 2.5	--	--
checked	Fugitive PM 10	--	--
checked	Fugitive PM 2.5	--	--
checked	Biogenic CO2	--	--
checked	Non-biogenic CO2	--	--
checked	CO2	--	--
checked	CH4	--	--
checked	N20	--	--
checked	CO2e	--	--

Table 4 pertains to operational emissions and is therefore omitted

CalEEMod Input Matrix
Construction Phase

Table 5: Construction Phase					
Phase Name	**Phase Type**	**Start Date**	**End Date**	**Days/Week**	**Total Days**
P1 Site Preparation (mo. 1)	Site Preparation	2023/08/01	2023/08/31	5	23
P1 Building Construction 1 (mo. 2-4)	Building Construction	2023/09/01	2023/11/30	5	65
P1 Architectural Coating	Architectural Coating	2023/11/01	2023/12/30	5	43
P1 Building Construction 2 (mo. 5)	Building Construction	2023/12/01	2023/12/31	5	21
P2 Site Preparation (mo. 1)	Site Preparation	2023/12/01	2023/12/31	5	21
P2 Building Construction 1 (mo. 2-4)	Building Construction	2024/01/01	2024/03/31	5	65
P2 Architectural Coating	Architectural Coating	2024/03/01	2024/04/30	5	43
P2 Building Construction 2 (mo. 5)	Building Construction	2024/04/01	2024/04/30	5	22
P3 Site Preparation (mo. 1)	Site Preparation	2024/04/01	2024/04/30	5	22
P3 Building Construction 1 (mo. 2-4)	Building Construction	2024/05/01	2024/07/31	5	66
P3 Architectural Coating	Architectural Coating	2024/07/01	2024/08/31	5	45
P3 Building Construction 2 (mo. 5)	Building Construction	2024/08/01	2024/08/31	5	22
P4 Site Preparation (mo. 1)	Site Preparation	2024/08/01	2024/08/31	5	22
P4 Building Construction 1 (mo. 2-4)	Building Construction	2024/09/01	2024/11/30	5	65
P4 Architectural Coating	Architectural Coating	2024/11/01	2024/12/31	5	43
P4 Building Construction 2 (mo. 5)	Building Construction	2024/12/01	2024/12/31	5	22
P5 Site Preparation (mo. 1)	Site Preparation	2024/12/01	2024/12/31	5	22
P5 Building Construction 1 (mo. 2-4)	Building Construction	2025/01/01	2025/03/31	5	64
P5 Architectural Coating	Architectural Coating	2025/03/01	2025/04/30	5	43
P5 Building Construction 2 (mo. 5)	Building Construction	2025/04/01	2025/04/30	5	22
P6 Site Preparation (mo. 1)	Site Preparation	2025/04/01	2025/04/30	5	22
P6 Building Construction 1 (mo. 2-4)	Building Construction	2025/05/01	2025/07/31	5	66
P6 Architectural Coating	Architectural Coating	2025/07/01	2025/08/31	5	44
P6 Building Construction 2 (mo. 5)	Building Construction	2025/08/01	2025/08/31	5	21
P7 Site Preparation (mo. 1)	Site Preparation	2025/08/01	2025/08/31	5	21
P7 Building Construction 1 (mo. 2-4)	Building Construction	2025/09/01	2025/11/30	5	65
P7 Architectural Coating (mo. 1)	Architectural Coating	2025/11/01	2025/12/31	5	43
P7 Building Construction 2 (mo. 5)	Building Construction	2025/12/01	2025/12/31	5	23

CalEEMod Input Matrix
Construction Phase

Table 6: Off-Road Equipment					
Phase Name	**Equipment Type**	**Unit Amount**	**Hours/Day**	**Horsepower (hp)**	**Load Factor**
All Phases Site Preparation (mo. 1)	Grader	1	default		
	Skid Steer	1			
	Trencher	1			
	Pump	1			
	Cement Mixer	1			
All Phases Building Construction 1 (mo. 2-4)	Rough Terrain Forklift	1			
	Backhoe	1			
All Phases Building Construction 2 (mo. 5)	Rough Terrain Forklift	1			
	Skid Steer	2			
	Cement Mixer	1			
All Phases Architectural Coating	Air Compressor	2			

CalEEMod Input Matrix
Construction Phase

Table 7: Dust from Material Movement							
Phase Name	**Material Imported**	**Material Exported**	**Material Import/ Export Phased?**	**Mean Vehicle Speed (mph)**	**Total Acres Graded**	**Material Moisture Content (%) Bulldozing**	**Material Silt Content**
Site Prep	default						
Grading							

Table 8: Demolition		
Phase Name	**Size Metric**	**Unit Amount**
default		

Table 9: Construction Trips and VMT									
Phase Name	**# Trips Worker (/day)**	**# Trips Vendor (/day)**	**Total # Trips Hauling**	**Trip Length Worker (miles)**	**Trip Length Worker (miles)**	**Trip Length Hauling (miles)**	**Vehicle Class Worker**	**Vehicle Class Vendor**	**Vehicle Class Hauling**
All Phases Site Pre	Refer to Construction VMT worksheet								
All Phases Buildin									
All Phases Buildin									
All Phases Archite									

CalEEMod Input Matrix
Construction Phase

Table 10: On-Road Fugitive Dust								
Phase Name	% Pave Worker	% Pave Vendor	% Pave Hauling	Road Silt Loading (g/m2)	Material Silt Content (%)	Material Moisture Content (%)	Average Vehicle Weight (tons)	Mean Vehicle Speed (mph)
All Phases Site Pre	98			default				
All Phases Buildin								
All Phases Buildin								
All Phases Paving								
All Phases Archite								

Table 11: Architectural Coating										
Phase Name	Residential Interior VOC (g/L)	Residential Interior Area (sqft)	Residential Exterior VOC (g/L)	Residential Exterior Area (sqft)	Non-Residential Interior VOC (g/L)	Non-Residential Interior Area (sqft)	Non-Residential Exterior VOC (g/L)	Non-Residential Exterior Area (sqft)	VOC for Parking Lot Paint (g/L)	Parking Area (sqft)
P1 Architectural C	50	302,183	100	100,728	N/A	0	N/A	0	N/A	default
P2 Architectural C	50	302,183	100	100,728	N/A	0	N/A	0	N/A	
P3 Architectural C	50	259,014	100	86,338	N/A	0	N/A	0	N/A	
P4 Architectural C	50	302,183	100	100,728	N/A	0	N/A	0	N/A	
P5 Architectural C	50	302,183	100	100,728	N/A	0	N/A	0	N/A	
P6 Architectural C	50	223,040	100	74,347	N/A	0	N/A	0	N/A	
P7 Architectural C	50	115,117	100	38,372	N/A	0	N/A	0	N/A	

Tables 12 through 31 pertain to operational emissions and are therefore omitted

CalEEMod Input Matrix
Construction Mitigation

Table 32: Off-Road Equipment						
Equipment Type	Fuel Type	Engine Tier	Number of Equipments Mitigated	Total Number of Off-road Equipments	DPF Level	Using Oxidation Catalyst (% Reduction)
All Tier 4 Interim						

Table 33: Fugitive Dust	
Soil Stabilizer for Unpaved Roads	
PM 10 (% Reduction)	30
PM 2.5 (% Reduction)	
Replace Ground Cover of Area Disturbed	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	
Water Exposed Area	
Frequency (per day)	3
PM 10 (% Reduction)	61
PM 2.5 (% Reduction)	61
Unpaved Road Mitigation	
Moisture Content (%)	--
Vehicle Speed (mph)	
Clean Paved Road	
% PM Reduction	--

CalEEMod Version: CalEEMod.2016.3.1

Date: 9/28/2017 11:29 AM

South Village Non-Residential -LEA

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	0.80	1,920.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Private park and swim club south

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Trips and VMT - Refer to CalEEMod Input Matrix Table 9

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Architectural Coating - Refer to CalEEMod Input Matrix Table 11

Vehicle Trips - Operational Emissions Modeled Separately

Woodstoves - Operational Emissions Modeled Separately

Consumer Products - Operational Emissions Modeled Separately

Area Coating - Operational Emissions Modeled Separately

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	5.00	21.00
tblConstructionPhase	NumDays	5.00	21.00
tblConstructionPhase	NumDays	100.00	81.00
tblConstructionPhase	NumDays	100.00	81.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	2.00	3.00
tblConstructionPhase	NumDays	5.00	21.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDays	1.00	21.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	NumDays	1.00	2.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblGrading	AcresOfGrading	1.00	0.50
tblGrading	AcresOfGrading	1.00	0.50
tblGrading	AcresOfGrading	0.00	10.50
tblLandUse	BuildingSpaceSquareFeet	0.00	1,920.00
tblLandUse	LandUseSquareFeet	0.00	1,920.00
tblLandUse	LotAcreage	0.00	0.80

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName		Park 1- Building Construction
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	4.00	0.00
tblOffRoadEquipment	UsageHours	4.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	98.00

tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblProjectCharacteristics	OperationalYear	2018	2023
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	10.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00
tblTripsAndVMT	WorkerTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	6.00
tblTripsAndVMT	WorkerTripNumber	1.00	6.00

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					
2025	0.0595	0.2574	0.3497	6.2000e-004	0.1939	9.3100e-003	0.2032	0.0205	8.7800e-003	0.0293	0.0000	53.5519	53.5519	0.0114	0.0000	53.8374
2026	0.0541	0.2059	0.2836	4.9000e-004	0.1504	7.3700e-003	0.1578	0.0163	6.9800e-003	0.0233	0.0000	42.1565	42.1565	8.5300e-003	0.0000	42.3697
Maximum	**0.0595**	**0.2574**	**0.3497**	**6.2000e-004**	**0.1939**	**9.3100e-003**	**0.2032**	**0.0205**	**8.7800e-003**	**0.0293**	**0.0000**	**53.5519**	**53.5519**	**0.0114**	**0.0000**	**53.8374**

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					
2025	0.0595	0.2574	0.3497	6.2000e-004	0.0863	9.3100e-003	0.0956	9.6600e-003	8.7800e-003	0.0184	0.0000	53.5518	53.5518	0.0114	0.0000	53.8373
2026	0.0541	0.2059	0.2836	4.9000e-004	0.0666	7.3700e-003	0.0740	7.5900e-003	6.9800e-003	0.0146	0.0000	42.1565	42.1565	8.5300e-003	0.0000	42.3696
Maximum	**0.0595**	**0.2574**	**0.3497**	**6.2000e-004**	**0.0863**	**9.3100e-003**	**0.0956**	**9.6600e-003**	**8.7800e-003**	**0.0184**	**0.0000**	**53.5518**	**53.5518**	**0.0114**	**0.0000**	**53.8373**

	ROG	**NOx**	**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**	**55.59**	**0.00**	**53.03**	**53.14**	**0.00**	**37.21**	**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)**
14	**1-1-2025**	**3-31-2025**	0.1866	0.1866
15	**4-1-2025**	**6-30-2025**	0.1130	0.1130
18	**1-1-2026**	**3-31-2026**	0.1370	0.1370
19	**4-1-2026**	**6-30-2026**	0.0984	0.0984
		Highest	0.1866	0.1866

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0660	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.6000e-004	8.0000e-005	1.5266
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	**0.0660**	**1.3100e-003**	**0.0849**	**1.4000e-004**	**0.0000**	**0.0109**	**0.0109**	**0.0000**	**0.0109**	**0.0109**	**1.0330**	**0.4453**	**1.4783**	**9.6000e-004**	**8.0000e-005**	**1.5266**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0660	1.3100e-003	0.0849	1.4000e-004		0.0109	0.0109		0.0109	0.0109	1.0330	0.4453	1.4783	9.6000e-004	8.0000e-005	1.5266
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	**0.0660**	**1.3100e-003**	**0.0849**	**1.4000e-004**	**0.0000**	**0.0109**	**0.0109**	**0.0000**	**0.0109**	**0.0109**	**1.0330**	**0.4453**	**1.4783**	**9.6000e-004**	**8.0000e-005**	**1.5266**

	ROG	**NOx**	**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	Park 1- Site Preparation	Site Preparation	1/1/2025	1/2/2025	5	2	
2	Park 1- Grading	Grading	1/3/2025	1/5/2025	5	1	
3	Park 1- Building Construction	Building Construction	1/8/2025	4/30/2025	5	81	
4	Park 1 - Architectural Coating	Architectural Coating	3/1/2025	3/31/2025	5	21	
5	Park 1- Landscaping	Site Preparation	5/1/2025	5/30/2025	5	22	
6	Park 1- Paving	Paving	6/1/2025	6/30/2025	5	21	
7	Swim Club South - Site Prep	Site Preparation	1/1/2026	1/2/2026	5	2	
8	Swim Club South - Grading	Grading	1/3/2026	1/7/2026	5	3	
9	Swim Club South - Building Construction	Building Construction	1/8/2026	4/30/2026	5	81	
10	Swim Club South - Landscaping	Site Preparation	5/1/2026	5/30/2026	5	21	
11	Swim Club South - Architectural Coating	Architectural Coating	5/1/2026	5/30/2026	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 3,888; Residential Outdoor: 1,296; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Park 1- Site Preparation	Graders	1	8.00	187	0.41
Park 1- Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Park 1- Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Park 1- Grading	Rubber Tired Dozers	1	1.00	247	0.40
Park 1- Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Park 1- Building Construction	Forklifts	1	8.00	89	0.20
Park 1- Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Park 1- Building Construction	Welders	1	8.00	46	0.45
Park 1 - Architectural Coating	Air Compressors	1	6.00	78	0.48
Park 1- Landscaping	Skid Steer Loaders	2	8.00	65	0.37
Park 1- Paving	Cement and Mortar Mixers	4	6.00	9	0.56

Park 1- Paving	Pavers	1	7.00	130	0.42
Park 1- Paving	Rollers	1	7.00	80	0.38
Park 1- Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Swim Club South - Site Prep	Graders	1	8.00	187	0.41
Swim Club South - Site Prep	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Swim Club South - Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Swim Club South - Grading	Rubber Tired Dozers	1	1.00	247	0.40
Swim Club South - Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Swim Club South - Building Construction	Forklifts	1	8.00	89	0.20
Swim Club South - Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Swim Club South - Building Construction	Welders	1	8.00	46	0.45
Swim Club South - Landscaping	Skid Steer Loaders	2	8.00	65	0.37
Swim Club South - Architectural Coating	Air Compressors	1	8.00	78	0.48
Park 1- Building Construction	Cranes	0	0.00	231	0.29
Swim Club South - Building Construction	Cranes	0	0.00	231	0.29
Swim Club South - Landscaping	Graders	0	0.00	187	0.41
Swim Club South - Landscaping	Tractors/Loaders/Backhoes	0	0.00	97	0.37

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
Park 1- Site Preparation	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Park 1- Landscaping	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Swim Club South - Site Prep	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Swim Club South - Landscaping	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Park 1- Grading	4	6.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Swim Club South - Grading	4	6.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Park 1- Building Construction	3	6.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Swim Club South - Building Construction	3	6.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Park 1- Paving	7	10.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Park 1 - Architectural Coating	1	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Swim Club South - Architectural Coating	1	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Park 1- Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4000e-004	4.7900e-003	3.8200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.8548	0.8548	2.8000e-004	0.0000	0.8618
Total	**4.4000e-004**	**4.7900e-003**	**3.8200e-003**	**1.0000e-005**	**2.7000e-004**	**1.7000e-004**	**4.4000e-004**	**3.0000e-005**	**1.5000e-004**	**1.8000e-004**	**0.0000**	**0.8548**	**0.8548**	**2.8000e-004**	**0.0000**	**0.8618**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.0000e-004	9.0000e-005	0.0000	7.9000e-004	0.0000	7.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0997	0.0997	1.0000e-005	0.0000	0.0999
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.1600e-003	0.0000	1.1600e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0239	0.0239	0.0000	0.0000	0.0240
Total	**2.0000e-005**	**3.1000e-004**	**1.6000e-004**	**0.0000**	**1.9500e-003**	**0.0000**	**1.9500e-003**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.1237**	**0.1237**	**1.0000e-005**	**0.0000**	**0.1238**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4000e-004	4.7900e-003	3.8200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.8548	0.8548	2.8000e-004	0.0000	0.8618
Total	**4.4000e-004**	**4.7900e-003**	**3.8200e-003**	**1.0000e-005**	**1.0000e-004**	**1.7000e-004**	**2.7000e-004**	**1.0000e-005**	**1.5000e-004**	**1.6000e-004**	**0.0000**	**0.8548**	**0.8548**	**2.8000e-004**	**0.0000**	**0.8618**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	3.0000e-004	9.0000e-005	0.0000	3.5000e-004	0.0000	3.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0997	0.0997	1.0000e-005	0.0000	0.0999
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0239	0.0239	0.0000	0.0000	0.0240
Total	**2.0000e-005**	**3.1000e-004**	**1.6000e-004**	**0.0000**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.1237**	**0.1237**	**1.0000e-005**	**0.0000**	**0.1238**

3.3 Park 1- Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.8000e-004	0.0000	3.8000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	2.5500e-003	3.6800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.5212	0.5212	9.0000e-005	0.0000	0.5236
Total	**2.9000e-004**	**2.5500e-003**	**3.6800e-003**	**1.0000e-005**	**3.8000e-004**	**1.1000e-004**	**4.9000e-004**	**2.1000e-004**	**1.0000e-004**	**3.1000e-004**	**0.0000**	**0.5212**	**0.5212**	**9.0000e-005**	**0.0000**	**0.5236**

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	1.5000e-004	4.0000e-005	0.0000	4.0000e-004	0.0000	4.0000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0499	0.0499	0.0000	0.0000	0.0500
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	8.7000e-004	0.0000	8.7000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.0180	0.0180	0.0000	0.0000	0.0180
Total	**1.0000e-005**	**1.6000e-004**	**1.0000e-004**	**0.0000**	**1.2700e-003**	**0.0000**	**1.2700e-003**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.0678**	**0.0678**	**0.0000**	**0.0000**	**0.0679**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5000e-004	0.0000	1.5000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9000e-004	2.5500e-003	3.6800e-003	1.0000e-005		1.1000e-004	1.1000e-004		1.0000e-004	1.0000e-004	0.0000	0.5212	0.5212	9.0000e-005	0.0000	0.5236
Total	**2.9000e-004**	**2.5500e-003**	**3.6800e-003**	**1.0000e-005**	**1.5000e-004**	**1.1000e-004**	**2.6000e-004**	**8.0000e-005**	**1.0000e-004**	**1.8000e-004**	**0.0000**	**0.5212**	**0.5212**	**9.0000e-005**	**0.0000**	**0.5236**

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	1.5000e-004	4.0000e-005	0.0000	1.8000e-004	0.0000	1.8000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0499	0.0499	0.0000	0.0000	0.0500
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	3.9000e-004	0.0000	3.9000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0180	0.0180	0.0000	0.0000	0.0180
Total	**1.0000e-005**	**1.6000e-004**	**1.0000e-004**	**0.0000**	**5.7000e-004**	**0.0000**	**5.7000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.0678**	**0.0678**	**0.0000**	**0.0000**	**0.0679**

3.4 Park 1- Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0178	0.1416	0.2031	2.9000e-004		5.6200e-003	5.6200e-003		5.3000e-003	5.3000e-003	0.0000	24.1596	24.1596	6.0700e-003	0.0000	24.3114
Total	**0.0178**	**0.1416**	**0.2031**	**2.9000e-004**		**5.6200e-003**	**5.6200e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**24.1596**	**24.1596**	**6.0700e-003**	**0.0000**	**24.3114**

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	3.4000e-004	0.0120	3.6300e-003	4.0000e-005	0.0321	1.0000e-005	0.0321	3.4000e-003	1.0000e-005	3.4100e-003	0.0000	4.0389	4.0389	2.7000e-004	0.0000	4.0457
Worker	6.9000e-004	4.2000e-004	4.5600e-003	2.0000e-005	0.0707	1.0000e-005	0.0707	7.3700e-003	1.0000e-005	7.3800e-003	0.0000	1.4539	1.4539	3.0000e-005	0.0000	1.4548
Total	**1.0300e-003**	**0.0124**	**8.1900e-003**	**6.0000e-005**	**0.1028**	**2.0000e-005**	**0.1028**	**0.0108**	**2.0000e-005**	**0.0108**	**0.0000**	**5.4928**	**5.4928**	**3.0000e-004**	**0.0000**	**5.5004**

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	0.0178	0.1416	0.2031	2.9000e-004		5.6200e-003	5.6200e-003		5.3000e-003	5.3000e-003	0.0000	24.1595	24.1595	6.0700e-003	0.0000	24.3114
Total	**0.0178**	**0.1416**	**0.2031**	**2.9000e-004**		**5.6200e-003**	**5.6200e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**24.1595**	**24.1595**	**6.0700e-003**	**0.0000**	**24.3114**

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	3.4000e-004	0.0120	3.6300e-003	4.0000e-005	0.0143	1.0000e-005	0.0144	1.6300e-003	1.0000e-005	1.6400e-003	0.0000	4.0389	4.0389	2.7000e-004	0.0000	4.0457
Worker	6.9000e-004	4.2000e-004	4.5600e-003	2.0000e-005	0.0314	1.0000e-005	0.0314	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	1.4539	1.4539	3.0000e-005	0.0000	1.4548
Total	**1.0300e-003**	**0.0124**	**8.1900e-003**	**6.0000e-005**	**0.0457**	**2.0000e-005**	**0.0458**	**5.0800e-003**	**2.0000e-005**	**5.1000e-003**	**0.0000**	**5.4928**	**5.4928**	**3.0000e-004**	**0.0000**	**5.5004**

3.5 Park 1 - Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0318**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

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	9.0000e-005	3.1100e-003	9.4000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	1.0471	1.0471	7.0000e-005	0.0000	1.0489
Worker	6.0000e-005	4.0000e-005	3.9000e-004	0.0000	6.1100e-003	0.0000	6.1100e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	0.1256	0.1256	0.0000	0.0000	0.1257
Total	**1.5000e-004**	**3.1500e-003**	**1.3300e-003**	**1.0000e-005**	**0.0144**	**0.0000**	**0.0144**	**1.5200e-003**	**0.0000**	**1.5200e-003**	**0.0000**	**1.1728**	**1.1728**	**7.0000e-005**	**0.0000**	**1.1746**

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	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7900e-003	0.0120	0.0190	3.0000e-005		5.4000e-004	5.4000e-004		5.4000e-004	5.4000e-004	0.0000	2.6809	2.6809	1.5000e-004	0.0000	2.6846
Total	**0.0318**	**0.0120**	**0.0190**	**3.0000e-005**		**5.4000e-004**	**5.4000e-004**		**5.4000e-004**	**5.4000e-004**	**0.0000**	**2.6809**	**2.6809**	**1.5000e-004**	**0.0000**	**2.6846**

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	9.0000e-005	3.1100e-003	9.4000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0471	1.0471	7.0000e-005	0.0000	1.0489
Worker	6.0000e-005	4.0000e-005	3.9000e-004	0.0000	2.7100e-003	0.0000	2.7100e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.1256	0.1256	0.0000	0.0000	0.1257
Total	**1.5000e-004**	**3.1500e-003**	**1.3300e-003**	**1.0000e-005**	**6.4300e-003**	**0.0000**	**6.4300e-003**	**7.2000e-004**	**0.0000**	**7.3000e-004**	**0.0000**	**1.1728**	**1.1728**	**7.0000e-005**	**0.0000**	**1.1746**

3.6 Park 1- Landscaping - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-003	0.0174	0.0303	5.0000e-005		5.3000e-004	5.3000e-004		4.9000e-004	4.9000e-004	0.0000	4.0011	4.0011	1.2900e-003	0.0000	4.0334
Total	**1.3000e-003**	**0.0174**	**0.0303**	**5.0000e-005**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**4.9000e-004**	**4.9000e-004**	**0.0000**	**4.0011**	**4.0011**	**1.2900e-003**	**0.0000**	**4.0334**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	1.2000e-004	8.0000e-005	8.2000e-004	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2633	0.2633	1.0000e-005	0.0000	0.2634
Total	**2.1000e-004**	**3.3400e-003**	**1.8100e-003**	**1.0000e-005**	**0.0215**	**0.0000**	**0.0215**	**2.2600e-003**	**0.0000**	**2.2700e-003**	**0.0000**	**1.3602**	**1.3602**	**8.0000e-005**	**0.0000**	**1.3622**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3000e-003	0.0174	0.0303	5.0000e-005		5.3000e-004	5.3000e-004		4.9000e-004	4.9000e-004	0.0000	4.0011	4.0011	1.2900e-003	0.0000	4.0334
Total	**1.3000e-003**	**0.0174**	**0.0303**	**5.0000e-005**	**0.0000**	**5.3000e-004**	**5.3000e-004**	**0.0000**	**4.9000e-004**	**4.9000e-004**	**0.0000**	**4.0011**	**4.0011**	**1.2900e-003**	**0.0000**	**4.0334**

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	9.0000e-005	3.2600e-003	9.9000e-004	1.0000e-005	3.9000e-003	0.0000	3.9000e-003	4.4000e-004	0.0000	4.5000e-004	0.0000	1.0970	1.0970	7.0000e-005	0.0000	1.0988
Worker	1.2000e-004	8.0000e-005	8.2000e-004	0.0000	5.6800e-003	0.0000	5.6900e-003	6.2000e-004	0.0000	6.3000e-004	0.0000	0.2633	0.2633	1.0000e-005	0.0000	0.2634
Total	**2.1000e-004**	**3.3400e-003**	**1.8100e-003**	**1.0000e-005**	**9.5800e-003**	**0.0000**	**9.5900e-003**	**1.0600e-003**	**0.0000**	**1.0800e-003**	**0.0000**	**1.3602**	**1.3602**	**8.0000e-005**	**0.0000**	**1.3622**

3.7 Park 1- Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0517	0.0738	1.2000e-004		2.3000e-003	2.3000e-003		2.1500e-003	2.1500e-003	0.0000	9.8709	9.8709	2.8800e-003	0.0000	9.9428
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9200e-003**	**0.0517**	**0.0738**	**1.2000e-004**		**2.3000e-003**	**2.3000e-003**		**2.1500e-003**	**2.1500e-003**	**0.0000**	**9.8709**	**9.8709**	**2.8800e-003**	**0.0000**	**9.9428**

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	2.2000e-004	7.7800e-003	2.3500e-003	3.0000e-005	0.0208	1.0000e-005	0.0208	2.2000e-003	1.0000e-005	2.2100e-003	0.0000	2.6178	2.6178	1.8000e-004	0.0000	2.6222
Worker	3.0000e-004	1.8000e-004	1.9700e-003	1.0000e-005	0.0306	1.0000e-005	0.0306	3.1900e-003	1.0000e-005	3.1900e-003	0.0000	0.6282	0.6282	1.0000e-005	0.0000	0.6286
Total	**5.2000e-004**	**7.9600e-003**	**4.3200e-003**	**4.0000e-005**	**0.0513**	**2.0000e-005**	**0.0513**	**5.3900e-003**	**2.0000e-005**	**5.4000e-003**	**0.0000**	**3.2460**	**3.2460**	**1.9000e-004**	**0.0000**	**3.2508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0517	0.0738	1.2000e-004		2.3000e-003	2.3000e-003		2.1500e-003	2.1500e-003	0.0000	9.8709	9.8709	2.8800e-003	0.0000	9.9428
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.9200e-003**	**0.0517**	**0.0738**	**1.2000e-004**		**2.3000e-003**	**2.3000e-003**		**2.1500e-003**	**2.1500e-003**	**0.0000**	**9.8709**	**9.8709**	**2.8800e-003**	**0.0000**	**9.9428**

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	2.2000e-004	7.7800e-003	2.3500e-003	3.0000e-005	9.3000e-003	1.0000e-005	9.3100e-003	1.0600e-003	1.0000e-005	1.0700e-003	0.0000	2.6178	2.6178	1.8000e-004	0.0000	2.6222
Worker	3.0000e-004	1.8000e-004	1.9700e-003	1.0000e-005	0.0136	1.0000e-005	0.0136	1.4900e-003	1.0000e-005	1.4900e-003	0.0000	0.6282	0.6282	1.0000e-005	0.0000	0.6286
Total	**5.2000e-004**	**7.9600e-003**	**4.3200e-003**	**4.0000e-005**	**0.0229**	**2.0000e-005**	**0.0229**	**2.5500e-003**	**2.0000e-005**	**2.5600e-003**	**0.0000**	**3.2460**	**3.2460**	**1.9000e-004**	**0.0000**	**3.2508**

3.8 Swim Club South - Site Prep - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4000e-004	4.7900e-003	3.8200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.8548	0.8548	2.8000e-004	0.0000	0.8618
Total	**4.4000e-004**	**4.7900e-003**	**3.8200e-003**	**1.0000e-005**	**2.7000e-004**	**1.7000e-004**	**4.4000e-004**	**3.0000e-005**	**1.5000e-004**	**1.8000e-004**	**0.0000**	**0.8548**	**0.8548**	**2.8000e-004**	**0.0000**	**0.8618**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.9000e-004	9.0000e-005	0.0000	7.9000e-004	0.0000	7.9000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0992	0.0992	1.0000e-005	0.0000	0.0993
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	1.1600e-003	0.0000	1.1600e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0231	0.0231	0.0000	0.0000	0.0231
Total	**2.0000e-005**	**3.0000e-004**	**1.6000e-004**	**0.0000**	**1.9500e-003**	**0.0000**	**1.9500e-003**	**2.0000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.1222**	**0.1222**	**1.0000e-005**	**0.0000**	**0.1224**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-004	0.0000	1.0000e-004	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.4000e-004	4.7900e-003	3.8200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.5000e-004	1.5000e-004	0.0000	0.8548	0.8548	2.8000e-004	0.0000	0.8618
Total	**4.4000e-004**	**4.7900e-003**	**3.8200e-003**	**1.0000e-005**	**1.0000e-004**	**1.7000e-004**	**2.7000e-004**	**1.0000e-005**	**1.5000e-004**	**1.6000e-004**	**0.0000**	**0.8548**	**0.8548**	**2.8000e-004**	**0.0000**	**0.8618**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.9000e-004	9.0000e-005	0.0000	3.5000e-004	0.0000	3.5000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0992	0.0992	1.0000e-005	0.0000	0.0993
Worker	1.0000e-005	1.0000e-005	7.0000e-005	0.0000	5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0231	0.0231	0.0000	0.0000	0.0231
Total	**2.0000e-005**	**3.0000e-004**	**1.6000e-004**	**0.0000**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.1222**	**0.1222**	**1.0000e-005**	**0.0000**	**0.1224**

3.9 Swim Club South - Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1300e-003	0.0000	1.1300e-003	6.2000e-004	0.0000	6.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	7.6500e-003	0.0111	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.5637	1.5637	2.8000e-004	0.0000	1.5707
Total	**8.6000e-004**	**7.6500e-003**	**0.0111**	**2.0000e-005**	**1.1300e-003**	**3.2000e-004**	**1.4500e-003**	**6.2000e-004**	**3.0000e-004**	**9.2000e-004**	**0.0000**	**1.5637**	**1.5637**	**2.8000e-004**	**0.0000**	**1.5707**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.4000e-004	1.3000e-004	0.0000	1.1900e-003	0.0000	1.1900e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.1487	0.1487	1.0000e-005	0.0000	0.1490
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	2.6200e-003	0.0000	2.6200e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.0519	0.0519	0.0000	0.0000	0.0519
Total	**3.0000e-005**	**4.5000e-004**	**2.9000e-004**	**0.0000**	**3.8100e-003**	**0.0000**	**3.8100e-003**	**4.0000e-004**	**0.0000**	**4.0000e-004**	**0.0000**	**0.2006**	**0.2006**	**1.0000e-005**	**0.0000**	**0.2009**

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					4.4000e-004	0.0000	4.4000e-004	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	7.6500e-003	0.0111	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.5637	1.5637	2.8000e-004	0.0000	1.5707
Total	**8.6000e-004**	**7.6500e-003**	**0.0111**	**2.0000e-005**	**4.4000e-004**	**3.2000e-004**	**7.6000e-004**	**2.4000e-004**	**3.0000e-004**	**5.4000e-004**	**0.0000**	**1.5637**	**1.5637**	**2.8000e-004**	**0.0000**	**1.5707**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.4000e-004	1.3000e-004	0.0000	5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1487	0.1487	1.0000e-005	0.0000	0.1490
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	1.1600e-003	0.0000	1.1600e-003	1.3000e-004	0.0000	1.3000e-004	0.0000	0.0519	0.0519	0.0000	0.0000	0.0519
Total	**3.0000e-005**	**4.5000e-004**	**2.9000e-004**	**0.0000**	**1.6900e-003**	**0.0000**	**1.6900e-003**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.2006**	**0.2006**	**1.0000e-005**	**0.0000**	**0.2009**

3.10 Swim Club South - Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0178	0.1416	0.2031	2.9000e-004		5.6200e-003	5.6200e-003		5.3000e-003	5.3000e-003	0.0000	24.1596	24.1596	6.0700e-003	0.0000	24.3114
Total	**0.0178**	**0.1416**	**0.2031**	**2.9000e-004**		**5.6200e-003**	**5.6200e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**24.1596**	**24.1596**	**6.0700e-003**	**0.0000**	**24.3114**

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	3.3000e-004	0.0118	3.5800e-003	4.0000e-005	0.0321	1.0000e-005	0.0321	3.4000e-003	1.0000e-005	3.4100e-003	0.0000	4.0158	4.0158	2.7000e-004	0.0000	4.0225
Worker	6.6000e-004	3.9000e-004	4.2800e-003	2.0000e-005	0.0707	1.0000e-005	0.0707	7.3700e-003	1.0000e-005	7.3800e-003	0.0000	1.4006	1.4006	3.0000e-005	0.0000	1.4015
Total	**9.9000e-004**	**0.0122**	**7.8600e-003**	**6.0000e-005**	**0.1028**	**2.0000e-005**	**0.1028**	**0.0108**	**2.0000e-005**	**0.0108**	**0.0000**	**5.4164**	**5.4164**	**3.0000e-004**	**0.0000**	**5.4240**

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	0.0178	0.1416	0.2031	2.9000e-004		5.6200e-003	5.6200e-003		5.3000e-003	5.3000e-003	0.0000	24.1595	24.1595	6.0700e-003	0.0000	24.3114
Total	**0.0178**	**0.1416**	**0.2031**	**2.9000e-004**		**5.6200e-003**	**5.6200e-003**		**5.3000e-003**	**5.3000e-003**	**0.0000**	**24.1595**	**24.1595**	**6.0700e-003**	**0.0000**	**24.3114**

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	3.3000e-004	0.0118	3.5800e-003	4.0000e-005	0.0143	1.0000e-005	0.0144	1.6300e-003	1.0000e-005	1.6400e-003	0.0000	4.0158	4.0158	2.7000e-004	0.0000	4.0225
Worker	6.6000e-004	3.9000e-004	4.2800e-003	2.0000e-005	0.0314	1.0000e-005	0.0314	3.4500e-003	1.0000e-005	3.4600e-003	0.0000	1.4006	1.4006	3.0000e-005	0.0000	1.4015
Total	**9.9000e-004**	**0.0122**	**7.8600e-003**	**6.0000e-005**	**0.0457**	**2.0000e-005**	**0.0458**	**5.0800e-003**	**2.0000e-005**	**5.1000e-003**	**0.0000**	**5.4164**	**5.4164**	**3.0000e-004**	**0.0000**	**5.4240**

3.11 Swim Club South - Landscaping - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5700e-003	0.0000	5.5700e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0166	0.0290	4.0000e-005		5.0000e-004	5.0000e-004		4.6000e-004	4.6000e-004	0.0000	3.8192	3.8192	1.2400e-003	0.0000	3.8501
Total	**1.2500e-003**	**0.0166**	**0.0290**	**4.0000e-005**	**5.5700e-003**	**5.0000e-004**	**6.0700e-003**	**6.0000e-004**	**4.6000e-004**	**1.0600e-003**	**0.0000**	**3.8192**	**3.8192**	**1.2400e-003**	**0.0000**	**3.8501**

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	8.0000e-005	3.0700e-003	9.3000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	1.0411	1.0411	7.0000e-005	0.0000	1.0429
Worker	1.1000e-004	7.0000e-005	7.4000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2421	0.2421	1.0000e-005	0.0000	0.2422
Total	**1.9000e-004**	**3.1400e-003**	**1.6700e-003**	**1.0000e-005**	**0.0205**	**0.0000**	**0.0205**	**2.1500e-003**	**0.0000**	**2.1600e-003**	**0.0000**	**1.2832**	**1.2832**	**8.0000e-005**	**0.0000**	**1.2851**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2500e-003	0.0166	0.0290	4.0000e-005		5.0000e-004	5.0000e-004		4.6000e-004	4.6000e-004	0.0000	3.8192	3.8192	1.2400e-003	0.0000	3.8501
Total	**1.2500e-003**	**0.0166**	**0.0290**	**4.0000e-005**	**2.1700e-003**	**5.0000e-004**	**2.6700e-003**	**2.3000e-004**	**4.6000e-004**	**6.9000e-004**	**0.0000**	**3.8192**	**3.8192**	**1.2400e-003**	**0.0000**	**3.8501**

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	8.0000e-005	3.0700e-003	9.3000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0411	1.0411	7.0000e-005	0.0000	1.0429
Worker	1.1000e-004	7.0000e-005	7.4000e-004	0.0000	5.4300e-003	0.0000	5.4300e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.2421	0.2421	1.0000e-005	0.0000	0.2422
Total	**1.9000e-004**	**3.1400e-003**	**1.6700e-003**	**1.0000e-005**	**9.1500e-003**	**0.0000**	**9.1500e-003**	**1.0200e-003**	**0.0000**	**1.0300e-003**	**0.0000**	**1.2832**	**1.2832**	**8.0000e-005**	**0.0000**	**1.2851**

3.12 Swim Club South - Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3900e-003	0.0160	0.0253	4.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	3.5746	3.5746	1.9000e-004	0.0000	3.5794
Total	**0.0324**	**0.0160**	**0.0253**	**4.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**3.5746**	**3.5746**	**1.9000e-004**	**0.0000**	**3.5794**

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	8.0000e-005	3.0700e-003	9.3000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	1.0411	1.0411	7.0000e-005	0.0000	1.0429
Worker	6.0000e-005	3.0000e-005	3.7000e-004	0.0000	6.1100e-003	0.0000	6.1100e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	0.1210	0.1210	0.0000	0.0000	0.1211
Total	**1.4000e-004**	**3.1000e-003**	**1.3000e-003**	**1.0000e-005**	**0.0144**	**0.0000**	**0.0144**	**1.5200e-003**	**0.0000**	**1.5200e-003**	**0.0000**	**1.1622**	**1.1622**	**7.0000e-005**	**0.0000**	**1.1640**

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	0.0300					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3900e-003	0.0160	0.0253	4.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004	0.0000	3.5746	3.5746	1.9000e-004	0.0000	3.5794
Total	**0.0324**	**0.0160**	**0.0253**	**4.0000e-005**		**7.2000e-004**	**7.2000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**3.5746**	**3.5746**	**1.9000e-004**	**0.0000**	**3.5794**

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	8.0000e-005	3.0700e-003	9.3000e-004	1.0000e-005	3.7200e-003	0.0000	3.7200e-003	4.2000e-004	0.0000	4.3000e-004	0.0000	1.0411	1.0411	7.0000e-005	0.0000	1.0429
Worker	6.0000e-005	3.0000e-005	3.7000e-004	0.0000	2.7100e-003	0.0000	2.7100e-003	3.0000e-004	0.0000	3.0000e-004	0.0000	0.1210	0.1210	0.0000	0.0000	0.1211
Total	**1.4000e-004**	**3.1000e-003**	**1.3000e-003**	**1.0000e-005**	**6.4300e-003**	**0.0000**	**6.4300e-003**	**7.2000e-004**	**0.0000**	**7.3000e-004**	**0.0000**	**1.1622**	**1.1622**	**7.0000e-005**	**0.0000**	**1.1640**

CalEEMod Version: CalEEMod.2016.3.1

Date: 9/28/2017 11:44 AM

South Village Non-Residential -LEA

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Park 1 - Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Site Prep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	3	No Change	0.00
Cement and Mortar Mixers	Diesel	No Change	0	8	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	4	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Skid Steer Loaders	Diesel	No Change	0	4	No Change	0.00
Forklifts	Diesel	No Change	0	4	No Change	0.00
Graders	Diesel	No Change	0	3	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	17	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	4.19000E-003	2.80600E-002	4.43200E-002	7.00000E-005	1.26000E-003	1.26000E-003	0.00000E+000	6.25547E+000	6.25547E+000	3.40000E-004	0.00000E+000	6.26400E+000
Cement and Mortar Mixers	1.85000E-003	1.16000E-002	9.71000E-003	2.00000E-005	4.50000E-004	4.50000E-004	0.00000E+000	1.44357E+000	1.44357E+000	1.50000E-004	0.00000E+000	1.44732E+000
Concrete/Industrial Saws	5.90000E-004	4.54000E-003	7.29000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	1.07531E+000	1.07531E+000	5.00000E-005	0.00000E+000	1.07650E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Forklifts	7.04000E-003	6.63000E-002	9.18300E-002	1.20000E-004	3.55000E-003	3.27000E-003	0.00000E+000	1.08776E+001	1.08776E+001	3.52000E-003	0.00000E+000	1.09656E+001
Graders	6.20000E-004	6.91000E-003	3.19000E-003	1.00000E-005	2.20000E-004	2.00000E-004	0.00000E+000	1.16163E+000	1.16163E+000	3.80000E-004	0.00000E+000	1.17102E+000
Pavers	1.60000E-003	1.45400E-002	2.66000E-002	4.00000E-005	6.80000E-004	6.30000E-004	0.00000E+000	3.79226E+000	3.79226E+000	1.23000E-003	0.00000E+000	3.82292E+000
Rollers	1.26000E-003	1.32600E-002	1.69700E-002	2.00000E-005	6.70000E-004	6.10000E-004	0.00000E+000	2.11755E+000	2.11755E+000	6.80000E-004	0.00000E+000	2.13467E+000
Rubber Tired Dozers	1.60000E-004	1.66000E-003	7.50000E-004	0.00000E+000	7.00000E-005	7.00000E-005	0.00000E+000	1.87550E-001	1.87550E-001	6.00000E-005	0.00000E+000	1.89070E-001
Skid Steer Loaders	2.55000E-003	3.40600E-002	5.93100E-002	9.00000E-005	1.03000E-003	9.50000E-004	0.00000E+000	7.82032E+000	7.82032E+000	2.53000E-003	0.00000E+000	7.88355E+000
Tractors/Loaders/ Backhoes	1.25800E-002	1.27080E-001	2.12240E-001	3.00000E-004	5.15000E-003	4.74000E-003	0.00000E+000	2.60833E+001	2.60833E+001	8.44000E-003	0.00000E+000	2.62942E+001
Welders	1.78000E-002	1.08710E-001	1.33780E-001	2.10000E-004	3.31000E-003	3.31000E-003	0.00000E+000	1.52459E+001	1.52459E+001	1.45000E-003	0.00000E+000	1.52821E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	4.19000E-003	2.80600E-002	4.43200E-002	7.00000E-005	1.26000E-003	1.26000E-003	0.00000E+000	6.25546E+000	6.25546E+000	3.40000E-004	0.00000E+000	6.26399E+000
Cement and Mortar Mixers	1.85000E-003	1.16000E-002	9.71000E-003	2.00000E-005	4.50000E-004	4.50000E-004	0.00000E+000	1.44357E+000	1.44357E+000	1.50000E-004	0.00000E+000	1.44732E+000
Concrete/Industrial Saws	5.90000E-004	4.54000E-003	7.29000E-003	1.00000E-005	1.90000E-004	1.90000E-004	0.00000E+000	1.07531E+000	1.07531E+000	5.00000E-005	0.00000E+000	1.07650E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Forklifts	7.04000E-003	6.63000E-002	9.18300E-002	1.20000E-004	3.55000E-003	3.27000E-003	0.00000E+000	1.08776E+001	1.08776E+001	3.52000E-003	0.00000E+000	1.09655E+001
Graders	6.20000E-004	6.91000E-003	3.19000E-003	1.00000E-005	2.20000E-004	2.00000E-004	0.00000E+000	1.16163E+000	1.16163E+000	3.80000E-004	0.00000E+000	1.17102E+000
Pavers	1.60000E-003	1.45400E-002	2.66000E-002	4.00000E-005	6.80000E-004	6.30000E-004	0.00000E+000	3.79225E+000	3.79225E+000	1.23000E-003	0.00000E+000	3.82292E+000
Rollers	1.26000E-003	1.32600E-002	1.69700E-002	2.00000E-005	6.70000E-004	6.10000E-004	0.00000E+000	2.11754E+000	2.11754E+000	6.80000E-004	0.00000E+000	2.13466E+000
Rubber Tired Dozers	1.60000E-004	1.66000E-003	7.50000E-004	0.00000E+000	7.00000E-005	7.00000E-005	0.00000E+000	1.87550E-001	1.87550E-001	6.00000E-005	0.00000E+000	1.89070E-001
Skid Steer Loaders	2.55000E-003	3.40600E-002	5.93100E-002	9.00000E-005	1.03000E-003	9.50000E-004	0.00000E+000	7.82031E+000	7.82031E+000	2.53000E-003	0.00000E+000	7.88354E+000
Tractors/Loaders/Backhoes	1.25800E-002	1.27080E-001	2.12240E-001	3.00000E-004	5.15000E-003	4.74000E-003	0.00000E+000	2.60833E+001	2.60833E+001	8.44000E-003	0.00000E+000	2.62942E+001
Welders	1.78000E-002	1.08710E-001	1.33780E-001	2.10000E-004	3.31000E-003	3.31000E-003	0.00000E+000	1.52459E+001	1.52459E+001	1.45000E-003	0.00000E+000	1.52821E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Percent Reduction											
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.59860E-006	1.59860E-006	0.00000E+000	0.00000E+000	1.59642E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.83864E-006	1.83864E-006	0.00000E+000	0.00000E+000	1.82389E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.63695E-006	2.63695E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	4.72244E-006	4.72244E-006	0.00000E+000	0.00000E+000	4.68456E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Skid Steer Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27872E-006	1.27872E-006	0.00000E+000	0.00000E+000	1.26846E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15016E-006	1.15016E-006	0.00000E+000	0.00000E+000	1.14094E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31183E-006	1.31183E-006	0.00000E+000	0.00000E+000	1.30872E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Park 1 - Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Park 1 - Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.55	0.53
Park 1- Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Building Construction	Roads	0.10	0.01	0.05	0.01	0.55	0.53
Park 1- Grading	Fugitive Dust	0.00	0.00	0.00	0.00	0.61	0.62
Park 1- Grading	Roads	0.00	0.00	0.00	0.00	0.55	0.54
Park 1- Landscaping	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Landscaping	Roads	0.02	0.00	0.01	0.00	0.55	0.53
Park 1- Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Park 1- Paving	Roads	0.05	0.01	0.02	0.00	0.55	0.53
Park 1- Site Preparation	Fugitive Dust	0.00	0.00	0.00	0.00	0.63	0.67
Park 1- Site Preparation	Roads	0.00	0.00	0.00	0.00	0.55	0.50
Swim Club South - Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.55	0.53
Swim Club South - Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Swim Club South - Building Construction	Roads	0.10	0.01	0.05	0.01	0.55	0.53
Swim Club South - Grading	Fugitive Dust	0.00	0.00	0.00	0.00	0.61	0.61
Swim Club South - Grading	Roads	0.00	0.00	0.00	0.00	0.56	0.53
Swim Club South - Landscaping	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.62
Swim Club South - Landscaping	Roads	0.02	0.00	0.01	0.00	0.55	0.53
Swim Club South - Site Prep	Fugitive Dust	0.00	0.00	0.00	0.00	0.63	0.67
Swim Club South - Site Prep	Roads	0.00	0.00	0.00	0.00	0.55	0.50

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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

Water Mitigation Measures

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

Solid Waste Mitigation

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

CalEEMod Input Matrix
Project Characteristics

Table 1: Project Detail			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Project Name	South Village Non-Residential -LEA	--	Project Description
Project Location	San Diego County	--	--
Wind speed (m/s)	default		
Precipitation Frequency (days)	default		
CEC Climate Forecasting Zone	13	--	CalEEMod Appendix E
Land Use Setting	Urban	based on availability of uses	--
Start of Construction	1-Oct-21	Central Village Schedule	Proctor Valley EIR Assumptions
Operational Year	--	Central Village Schedule	Proctor Valley EIR Assumptions

Table 2: Utility Information			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Select Utility Company	San Diego Gas and Electric	project location	CEC, 2014
CO2 Intensity Factor (lb./Mwh)	--		
CH4 Intensity Factor (lb./Mwh)	default		
N20 Intensity Factor (lb./Mwh)	default		

CalEEMod Input Matrix
Project Characteristics

Table 3: Pollutants			
Pollutant Selection	**Pollutant Full Name**	**Notes**	**Source**
checked	ROG	--	--
checked	NOx	--	--
checked	CO	--	--
checked	SO2	--	--
checked	PM 10	--	--
checked	PM 2.5	--	--
checked	Fugitive PM 10	--	--
checked	Fugitive PM 2.5	--	--
checked	Biogenic CO2	--	--
checked	Non-biogenic CO2	--	--
checked	CO2	--	--
checked	CH4	--	--
checked	N20	--	--
checked	CO2e	--	--

Table 4 pertains to operational emissions and is therefore omitted

CalEEMod Input Matrix

Construction Phase

Table 5: Construction					
Phase Name	**Phase Type**	**Start Date**	**End Date**	**Days/Week**	**Total Days**
Park 1- Site Preparation	Site Preparation	1/1/2025	1/2/2025	5	2
Park 1- Grading	Grading	1/3/2025	1/5/2025	5	1
Park 1- Building Construction	Building Construction	1/8/2025	4/30/2025	5	81
Park 1 - Architectural Coating	Architectural Coating	3/1/2025	3/31/2025	5	21
Park 1- Landscaping	Site Preparation	5/1/2025	5/30/2025	5	22
Park 1- Paving	Paving	6/1/2025	6/30/2025	5	21
Swim Club South - Site Prep	Site Preparation	1/1/2026	1/2/2026	5	2
Swim Club South - Grading	Grading	1/3/2026	1/7/2026	5	3
Construction	Building Construction	1/8/2026	4/30/2026	5	81
Swim Club South - Landscaping	Site Preparation	5/1/2026	5/30/2026	5	21
Coating	Architectural Coating	5/1/2026	5/30/2026	5	21

Table 6: Off-Road Equipment					
Phase Name	**Equipment**	**Unit Amount**	**Hours/Day**	**Horsepower (hp)**	**Load Factor**
Site Preparation - all	default				
Grading- all					
Landscaping - all	Skidsteer	2	default		
Building Construction -parks	Forklift	1	default		
	Tractor/Loader/Backhoe	1			
	Welder	1			
Paving - all	default				
Architectural Coating -all					
Building Construction - Non-park					

CalEEMod Input Matrix
Construction Phase

Table 7: Dust from Material Movement							
Phase Name	Material Imported	Material Exported	Material Import/Export Phased?	Mean Vehicle Speed (mph)	Total Acres Graded	Material Moisture Content (%) Bulldozing	Material Silt Content
Site Prep	--						
Grading	--						
Notes: All soil export assumed in Central Village Residential CalEEMod inputs							

Table 8: Demolition		
Phase Name	Size Metric	Unit Amount
--		

Table 7: Dust from Material Movement							
Phase Name	Material Imported	Material Exported	Material Import/Export Phased?	Mean Vehicle Speed (mph)	Total Acres Graded	Material Moisture Content (%) Bulldozing	Material Silt Content
Site Prep	--						
Grading	--						
Notes: All soil export assumed in Central Village Residential CalEEMod inputs							

Table 8: Demolition		
Phase Name	Size Metric	Unit Amount
--		

CalEEMod Input Matrix
Construction Phase

Table 9: Construction Trips and VMT									
Phase Name	**# Trips Worker (/day)**	**# Trips Vendor (/day)**	**Total # Trips Hauling**	**Trip Length Worker (miles)**	**Trip Length Worker (miles)**	**Trip Length Hauling (miles)**	**Vehicle Class Worker**	**Vehicle Class Vendor**	**Vehicle Class Hauling**
Refer to Construction VMT Worksheet									

Table 10: On-Road Fugitive Dust								
Phase Name	**% Pave Worker**	**% Pave Vendor**	**% Pave Hauling**	**Road Silt Loading (g/m2)**	**Material Silt Content (%)**	**Material Moisture Content (%)**	**Average Vehicle Weight (tons)**	**Mean Vehicle Speed (mph)**
--								

Table 11: Architectural Coating										
Phase Name	**Residential Interior VOC (g/L)**	**Residential Interior Area (sqft)**	**Residential Exterior VOC (g/L)**	**Residential Exterior Area (sqft)**	**Non-Residential Interior VOC (g/L)**	**Non-Residential Interior Area (sqft)**	**Non-Residential Exterior VOC (g/L)**	**Non-Residential Exterior Area (sqft)**	**VOC for Parking Lot Paint (g/L)**	**Parking Area (sqft)**
Swim Club South - Architectural Coating	N/A	N/A	N/A	N/A	50	2,250	100	750	100	0
Park 1 - Architectural Coating	N/A	N/A	N/A	N/A	50	630	100	210	100	87

Tables 12 through 31 pertain to operational emissions and are therefore omitted

CalEEMod Input Matrix
Construction Mitigation

Table 32: Off-Road Equipment						
Equipment Type	Fuel Type	Engine Tier	Number of Equipments Mitigated	Total Number of Off-road Equipments	DPF Level	Using Oxidation Catalyst (% Reduction)
--						

Table 33: Fugitive Dust	
Soil Stabilizer for Unpaved Roads	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	
Replace Ground Cover of Area Disturbed	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	
Water Exposed Area	
Frequency (per day)	3
PM 10 (% Reduction)	61
PM 2.5 (% Reduction)	61
Unpaved Road Mitigation	
Moisture Content (%)	--
Vehicle Speed (mph)	
Clean Paved Road	
% PM Reduction	--

CalEEMod Version: CalEEMod.2016.3.1 | Date: 9/28/2017 1:25 PM

Central Village Residential General Construction - LEA
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	270.00	0.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Trips and VMT - Refer to CalEEMod Input Matrix Table 9

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Grading - Refer to CalEEMod Input Matrix Table 7

Woodstoves - Operational Emissions Modeled Separately

Consumer Products - Operational Emissions Modeled Separately

Construction Off-road Equipment Mitigation - Refer to CalEEMod Input Matrix Table 32 and 33

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-12
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-14
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	490.00	308.10
tblLandUse	LotAcreage	0.00	270.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Slope Landscaping
tblOffRoadEquipment	PhaseName		Interact Utilities
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Slope Landscaping

tblOffRoadEquipment	PhaseName		Interact Utilities
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00

tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblProjectCharacteristics	OperationalYear	2018	2021
tblTripsAndVMT	HaulingTripLength	20.00	0.50
tblTripsAndVMT	HaulingTripNumber	0.00	7,417.00
tblTripsAndVMT	HaulingVehicleClass	HHDT	MHDT
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	WorkerTripNumber	20.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00
tblTripsAndVMT	WorkerTripNumber	20.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblTripsAndVMT	WorkerTripNumber	15.00	4.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	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					
2019	0.2117	2.3992	1.4184	2.6100e-003	3.5159	0.1072	3.6231	0.7038	0.0986	0.8024	0.0000	235.2772	235.2772	0.0721	0.0000	237.0785
2020	0.4402	4.9741	3.3733	7.0100e-003	3.8347	0.2047	4.0394	0.6530	0.1884	0.8414	0.0000	619.2684	619.2684	0.1885	0.0000	623.9808
2021	0.0436	0.4676	0.5034	8.6000e-004	0.1053	0.0228	0.1281	0.0111	0.0210	0.0321	0.0000	76.7756	76.7756	0.0224	0.0000	77.3349
2022	0.0378	0.3994	0.4928	8.5000e-004	0.1037	0.0188	0.1225	0.0109	0.0173	0.0282	0.0000	75.5276	75.5276	0.0220	0.0000	76.0780
2023	0.0342	0.3508	0.4770	8.2000e-004	0.1006	0.0164	0.1169	0.0106	0.0151	0.0257	0.0000	72.9950	72.9950	0.0213	0.0000	73.5275
Maximum	**0.4402**	**4.9741**	**3.3733**	**7.0100e-003**	**3.8347**	**0.2047**	**4.0394**	**0.7038**	**0.1884**	**0.8414**	**0.0000**	**619.2684**	**619.2684**	**0.1885**	**0.0000**	**623.9808**

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					
2019	0.2117	2.3992	1.4184	2.6100e-003	2.1700	0.1072	2.2772	0.3547	0.0986	0.4533	0.0000	235.2769	235.2769	0.0721	0.0000	237.0782
2020	0.4402	4.9741	3.3733	7.0100e-003	2.4565	0.2047	2.6612	0.3527	0.1884	0.5411	0.0000	619.2677	619.2677	0.1885	0.0000	623.9801
2021	0.0436	0.4676	0.5034	8.6000e-004	0.0747	0.0228	0.0975	8.0400e-003	0.0210	0.0290	0.0000	76.7755	76.7755	0.0224	0.0000	77.3348
2022	0.0378	0.3994	0.4928	8.5000e-004	0.0736	0.0188	0.0924	7.9200e-003	0.0173	0.0252	0.0000	75.5275	75.5275	0.0220	0.0000	76.0780
2023	0.0342	0.3508	0.4770	8.2000e-004	0.0713	0.0164	0.0877	7.6800e-003	0.0151	0.0227	0.0000	72.9949	72.9949	0.0213	0.0000	73.5274
Maximum	**0.4402**	**4.9741**	**3.3733**	**7.0100e-003**	**2.4565**	**0.2047**	**2.6612**	**0.3547**	**0.1884**	**0.5411**	**0.0000**	**619.2677**	**619.2677**	**0.1885**	**0.0000**	**623.9801**

	ROG	NOx	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	36.74	0.00	35.04	47.39	0.00	38.06	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	9-1-2019	11-30-2019	1.9377	1.9377
2	12-1-2019	2-29-2020	1.8841	1.8841
3	3-1-2020	5-31-2020	1.8515	1.8515
4	6-1-2020	8-31-2020	0.7876	0.7876
5	9-1-2020	11-30-2020	0.1780	0.1780
7	3-1-2021	5-31-2021	0.1688	0.1688
8	6-1-2021	8-31-2021	0.1634	0.1634
9	9-1-2021	11-30-2021	0.1634	0.1634
11	3-1-2022	5-31-2022	0.1466	0.1466
12	6-1-2022	8-31-2022	0.1466	0.1466
13	9-1-2022	11-30-2022	0.1419	0.1419
14	12-1-2022	2-28-2023	0.1202	0.1202
16	6-1-2023	8-31-2023	0.1288	0.1288
		Highest	1.9377	1.9377

2.2 Overall Operational

Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	2.3000e-004	9.0000e-005	7.4400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.3000e-004**	**9.0000e-005**	**7.4400e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	2.3000e-004	9.0000e-005	7.4400e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.3000e-004**	**9.0000e-005**	**7.4400e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

	ROG	**NOx**	**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	Site Preparation	Site Preparation	9/1/2019	9/30/2019	5	21	
2	Grading	Grading	10/1/2019	6/30/2020	5	196	
3	Interact Utilities	Site Preparation	4/1/2020	11/30/2020	5	174	
4	Slope Landscaping	Site Preparation	5/1/2020	12/31/2020	5	175	
5	Interact Paving -1	Paving	7/1/2020	7/31/2020	5	23	
6	Interact Paving -2	Paving	11/1/2020	11/30/2020	5	21	
7	Interact Paving -3	Paving	3/1/2021	3/31/2021	5	23	
8	Interact Paving -4	Paving	6/1/2021	6/30/2021	5	22	
9	Interact Paving -5	Paving	11/1/2021	11/30/2021	5	22	
10	Interact Paving -6	Paving	3/1/2022	3/31/2022	5	23	
11	Interact Paving -7	Paving	7/1/2022	7/31/2022	5	21	
12	Interact Paving -8	Paving	11/1/2022	11/30/2022	5	22	
13	Interact Paving -9	Paving	2/1/2023	2/28/2023	5	20	
14	Interact Paving -10	Paving	6/1/2023	6/30/2023	5	22	
15	Interact Paving -11	Paving	10/1/2023	10/31/2023	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 308.1

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Other Construction Equipment	1	8.00	172	0.42
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Slope Landscaping	Excavators	1	8.00	158	0.38
Slope Landscaping	Rubber Tired Loaders	1	8.00	203	0.36
Interact Utilities	Excavators	1	8.00	158	0.38
Interact Utilities	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Interact Paving -1	Pavers	2	8.00	130	0.42
Interact Paving -1	Paving Equipment	2	8.00	132	0.36
Interact Paving -1	Rollers	2	8.00	80	0.38
Interact Paving -2	Pavers	2	8.00	130	0.42
Interact Paving -2	Paving Equipment	2	8.00	132	0.36
Interact Paving -2	Rollers	2	8.00	80	0.38
Interact Paving -3	Pavers	2	8.00	130	0.42
Interact Paving -3	Paving Equipment	2	8.00	132	0.36
Interact Paving -3	Rollers	2	8.00	80	0.38
Interact Paving -4	Pavers	2	8.00	130	0.42
Interact Paving -4	Paving Equipment	2	8.00	132	0.36
Interact Paving -4	Rollers	2	8.00	80	0.38
Interact Paving -5	Pavers	2	8.00	130	0.42
Interact Paving -5	Paving Equipment	2	8.00	132	0.36
Interact Paving -5	Rollers	2	8.00	80	0.38

Interact Paving -6	Pavers	2	8.00	130	0.42
Interact Paving -6	Paving Equipment	2	8.00	132	0.36
Interact Paving -6	Rollers	2	8.00	80	0.38
Interact Paving -7	Pavers	2	8.00	130	0.42
Interact Paving -7	Paving Equipment	2	8.00	132	0.36
Interact Paving -7	Rollers	2	8.00	80	0.38
Interact Paving -8	Pavers	2	8.00	130	0.42
Interact Paving -8	Paving Equipment	2	8.00	132	0.36
Interact Paving -8	Rollers	2	8.00	80	0.38
Interact Paving -9	Pavers	2	8.00	130	0.42
Interact Paving -9	Paving Equipment	2	8.00	132	0.36
Interact Paving -9	Rollers	2	8.00	80	0.38
Interact Paving -10	Pavers	2	8.00	130	0.42
Interact Paving -10	Paving Equipment	2	8.00	132	0.36
Interact Paving -10	Rollers	2	8.00	80	0.38
Interact Paving -11	Pavers	2	8.00	130	0.42
Interact Paving -11	Paving Equipment	2	8.00	132	0.36
Interact Paving -11	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	8	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Slope Landscaping	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Utilities	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	10.00	4.00	7,417.00	10.80	7.30	0.50	LD_Mix	HDT_Mix	MHDT
Interact Paving -1	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -2	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -3	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -4	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -5	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -6	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -7	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -8	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -9	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -10	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Interact Paving -11	6	4.00	10.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1897	0.0000	0.1897	0.1043	0.0000	0.1043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.5378	0.2752	4.6000e-004		0.0282	0.0282		0.0260	0.0260	0.0000	41.7080	41.7080	0.0132	0.0000	42.0379
Total	**0.0510**	**0.5378**	**0.2752**	**4.6000e-004**	**0.1897**	**0.0282**	**0.2179**	**0.1043**	**0.0260**	**0.1302**	**0.0000**	**41.7080**	**41.7080**	**0.0132**	**0.0000**	**42.0379**

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	2.0000e-004	5.2700e-003	1.4200e-003	1.0000e-005	8.3100e-003	4.0000e-005	8.3500e-003	8.8000e-004	3.0000e-005	9.2000e-004	0.0000	1.1159	1.1159	9.0000e-005	0.0000	1.1181
Worker	1.7000e-004	1.3000e-004	1.2300e-003	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.3144	0.3144	1.0000e-005	0.0000	0.3146
Total	**3.7000e-004**	**5.4000e-003**	**2.6500e-003**	**1.0000e-005**	**0.0205**	**4.0000e-005**	**0.0206**	**2.1500e-003**	**3.0000e-005**	**2.2000e-003**	**0.0000**	**1.4302**	**1.4302**	**1.0000e-004**	**0.0000**	**1.4327**

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					0.0740	0.0000	0.0740	0.0407	0.0000	0.0407	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0510	0.5378	0.2752	4.6000e-004		0.0282	0.0282		0.0260	0.0260	0.0000	41.7080	41.7080	0.0132	0.0000	42.0379
Total	**0.0510**	**0.5378**	**0.2752**	**4.6000e-004**	**0.0740**	**0.0282**	**0.1022**	**0.0407**	**0.0260**	**0.0666**	**0.0000**	**41.7080**	**41.7080**	**0.0132**	**0.0000**	**42.0379**

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	2.0000e-004	5.2700e-003	1.4200e-003	1.0000e-005	5.9000e-003	4.0000e-005	5.9400e-003	6.4000e-004	3.0000e-005	6.8000e-004	0.0000	1.1159	1.1159	9.0000e-005	0.0000	1.1181
Worker	1.7000e-004	1.3000e-004	1.2300e-003	0.0000	8.6500e-003	0.0000	8.6500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.3144	0.3144	1.0000e-005	0.0000	0.3146
Total	**3.7000e-004**	**5.4000e-003**	**2.6500e-003**	**1.0000e-005**	**0.0146**	**4.0000e-005**	**0.0146**	**1.5600e-003**	**3.0000e-005**	**1.6000e-003**	**0.0000**	**1.4302**	**1.4302**	**1.0000e-004**	**0.0000**	**1.4327**

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7535	0.0000	0.7535	0.3420	0.0000	0.3420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1564	1.7992	1.1014	2.0500e-003		0.0786	0.0786		0.0723	0.0723	0.0000	183.8144	183.8144	0.0582	0.0000	185.2683
Total	**0.1564**	**1.7992**	**1.1014**	**2.0500e-003**	**0.7535**	**0.0786**	**0.8322**	**0.3420**	**0.0723**	**0.4144**	**0.0000**	**183.8144**	**183.8144**	**0.0582**	**0.0000**	**185.2683**

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	1.9500e-003	0.0392	0.0250	3.0000e-005	2.4300	1.4000e-004	2.4302	0.2426	1.4000e-004	0.2427	0.0000	2.3476	2.3476	2.4000e-004	0.0000	2.3536
Vendor	6.2000e-004	0.0166	4.4500e-003	4.0000e-005	0.0261	1.1000e-004	0.0262	2.7700e-003	1.1000e-004	2.8800e-003	0.0000	3.5070	3.5070	2.8000e-004	0.0000	3.5140
Worker	1.3000e-003	1.0000e-003	9.6600e-003	3.0000e-005	0.0960	2.0000e-005	0.0960	0.0100	2.0000e-005	0.0100	0.0000	2.4700	2.4700	8.0000e-005	0.0000	2.4720
Total	**3.8700e-003**	**0.0568**	**0.0391**	**1.0000e-004**	**2.5522**	**2.7000e-004**	**2.5524**	**0.2553**	**2.7000e-004**	**0.2556**	**0.0000**	**8.3246**	**8.3246**	**6.0000e-004**	**0.0000**	**8.3396**

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					0.2939	0.0000	0.2939	0.1334	0.0000	0.1334	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1564	1.7992	1.1014	2.0500e-003		0.0786	0.0786		0.0723	0.0723	0.0000	183.8141	183.8141	0.0582	0.0000	185.2681
Total	**0.1564**	**1.7992**	**1.1014**	**2.0500e-003**	**0.2939**	**0.0786**	**0.3725**	**0.1334**	**0.0723**	**0.2057**	**0.0000**	**183.8141**	**183.8141**	**0.0582**	**0.0000**	**185.2681**

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	1.9500e-003	0.0392	0.0250	3.0000e-005	1.7011	1.4000e-004	1.7012	0.1698	1.4000e-004	0.1700	0.0000	2.3476	2.3476	2.4000e-004	0.0000	2.3536
Vendor	6.2000e-004	0.0166	4.4500e-003	4.0000e-005	0.0185	1.1000e-004	0.0187	2.0100e-003	1.1000e-004	2.1200e-003	0.0000	3.5070	3.5070	2.8000e-004	0.0000	3.5140
Worker	1.3000e-003	1.0000e-003	9.6600e-003	3.0000e-005	0.0680	2.0000e-005	0.0680	7.2200e-003	2.0000e-005	7.2300e-003	0.0000	2.4700	2.4700	8.0000e-005	0.0000	2.4720
Total	**3.8700e-003**	**0.0568**	**0.0391**	**1.0000e-004**	**1.7876**	**2.7000e-004**	**1.7879**	**0.1791**	**2.7000e-004**	**0.1793**	**0.0000**	**8.3246**	**8.3246**	**6.0000e-004**	**0.0000**	**8.3396**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7535	0.0000	0.7535	0.3420	0.0000	0.3420	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2893	3.2628	2.0773	4.0300e-003		0.1413	0.1413		0.1300	0.1300	0.0000	354.1479	354.1479	0.1145	0.0000	357.0114
Total	**0.2893**	**3.2628**	**2.0773**	**4.0300e-003**	**0.7535**	**0.1413**	**0.8948**	**0.3420**	**0.1300**	**0.4720**	**0.0000**	**354.1479**	**354.1479**	**0.1145**	**0.0000**	**357.0114**

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	3.2800e-003	0.0732	0.0439	5.0000e-005	2.4303	1.7000e-004	2.4304	0.2427	1.6000e-004	0.2428	0.0000	4.5966	4.5966	4.2000e-004	0.0000	4.6072
Vendor	9.9000e-004	0.0296	7.8700e-003	7.0000e-005	0.0514	1.4000e-004	0.0516	5.4600e-003	1.4000e-004	5.5900e-003	0.0000	6.8604	6.8604	5.3000e-004	0.0000	6.8735
Worker	2.4000e-003	1.7700e-003	0.0174	5.0000e-005	0.1891	4.0000e-005	0.1891	0.0197	3.0000e-005	0.0198	0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total	**6.6700e-003**	**0.1046**	**0.0692**	**1.7000e-004**	**2.6708**	**3.5000e-004**	**2.6712**	**0.2678**	**3.3000e-004**	**0.2682**	**0.0000**	**16.1687**	**16.1687**	**1.0900e-003**	**0.0000**	**16.1960**

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					0.2939	0.0000	0.2939	0.1334	0.0000	0.1334	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2893	3.2628	2.0773	4.0300e-003		0.1413	0.1413		0.1300	0.1300	0.0000	354.1475	354.1475	0.1145	0.0000	357.0110
Total	**0.2893**	**3.2628**	**2.0773**	**4.0300e-003**	**0.2939**	**0.1413**	**0.4352**	**0.1334**	**0.1300**	**0.2634**	**0.0000**	**354.1475**	**354.1475**	**0.1145**	**0.0000**	**357.0110**

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	3.2800e-003	0.0732	0.0439	5.0000e-005	1.7013	1.7000e-004	1.7015	0.1699	1.6000e-004	0.1701	0.0000	4.5966	4.5966	4.2000e-004	0.0000	4.6072
Vendor	9.9000e-004	0.0296	7.8700e-003	7.0000e-005	0.0365	1.4000e-004	0.0367	3.9700e-003	1.4000e-004	4.1100e-003	0.0000	6.8604	6.8604	5.3000e-004	0.0000	6.8735
Worker	2.4000e-003	1.7700e-003	0.0174	5.0000e-005	0.1339	4.0000e-005	0.1340	0.0142	3.0000e-005	0.0143	0.0000	4.7117	4.7117	1.4000e-004	0.0000	4.7152
Total	**6.6700e-003**	**0.1046**	**0.0692**	**1.7000e-004**	**1.8718**	**3.5000e-004**	**1.8721**	**0.1881**	**3.3000e-004**	**0.1884**	**0.0000**	**16.1687**	**16.1687**	**1.0900e-003**	**0.0000**	**16.1960**

3.4 Interact Utilities - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0539	0.5935	0.4266	9.9000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	87.2342	87.2342	0.0282	0.0000	87.9395
Total	**0.0539**	**0.5935**	**0.4266**	**9.9000e-004**	**0.0000**	**0.0229**	**0.0229**	**0.0000**	**0.0211**	**0.0211**	**0.0000**	**87.2342**	**87.2342**	**0.0282**	**0.0000**	**87.9395**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0397	0.0105	9.0000e-005	0.0689	1.9000e-004	0.0691	7.3000e-003	1.9000e-004	7.4900e-003	0.0000	9.1824	9.1824	7.0000e-004	0.0000	9.2000
Worker	1.2800e-003	9.5000e-004	9.3100e-003	3.0000e-005	0.1012	2.0000e-005	0.1013	0.0106	2.0000e-005	0.0106	0.0000	2.5226	2.5226	8.0000e-005	0.0000	2.5245
Total	**2.6100e-003**	**0.0406**	**0.0199**	**1.2000e-004**	**0.1701**	**2.1000e-004**	**0.1703**	**0.0179**	**2.1000e-004**	**0.0181**	**0.0000**	**11.7050**	**11.7050**	**7.8000e-004**	**0.0000**	**11.7244**

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0539	0.5935	0.4266	9.9000e-004		0.0229	0.0229		0.0211	0.0211	0.0000	87.2341	87.2341	0.0282	0.0000	87.9394
Total	**0.0539**	**0.5935**	**0.4266**	**9.9000e-004**	**0.0000**	**0.0229**	**0.0229**	**0.0000**	**0.0211**	**0.0211**	**0.0000**	**87.2341**	**87.2341**	**0.0282**	**0.0000**	**87.9394**

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0397	0.0105	9.0000e-005	0.0489	1.9000e-004	0.0491	5.3100e-003	1.9000e-004	5.4900e-003	0.0000	9.1824	9.1824	7.0000e-004	0.0000	9.2000
Worker	1.2800e-003	9.5000e-004	9.3100e-003	3.0000e-005	0.0717	2.0000e-005	0.0717	7.6100e-003	2.0000e-005	7.6300e-003	0.0000	2.5226	2.5226	8.0000e-005	0.0000	2.5245
Total	**2.6100e-003**	**0.0406**	**0.0199**	**1.2000e-004**	**0.1206**	**2.1000e-004**	**0.1208**	**0.0129**	**2.1000e-004**	**0.0131**	**0.0000**	**11.7050**	**11.7050**	**7.8000e-004**	**0.0000**	**11.7244**

3.5 Slope Landscaping - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0542	0.5969	0.4290	1.0000e-003		0.0230	0.0230		0.0212	0.0212	0.0000	87.7355	87.7355	0.0284	0.0000	88.4449
Total	**0.0542**	**0.5969**	**0.4290**	**1.0000e-003**	**0.0000**	**0.0230**	**0.0230**	**0.0000**	**0.0212**	**0.0212**	**0.0000**	**87.7355**	**87.7355**	**0.0284**	**0.0000**	**88.4449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0399	0.0106	9.0000e-005	0.0693	1.9000e-004	0.0695	7.3400e-003	1.9000e-004	7.5300e-003	0.0000	9.2352	9.2352	7.1000e-004	0.0000	9.2529
Worker	1.2900e-003	9.6000e-004	9.3700e-003	3.0000e-005	0.1018	2.0000e-005	0.1018	0.0106	2.0000e-005	0.0106	0.0000	2.5371	2.5371	8.0000e-005	0.0000	2.5390
Total	**2.6200e-003**	**0.0409**	**0.0200**	**1.2000e-004**	**0.1711**	**2.1000e-004**	**0.1713**	**0.0180**	**2.1000e-004**	**0.0182**	**0.0000**	**11.7722**	**11.7722**	**7.9000e-004**	**0.0000**	**11.7918**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0542	0.5969	0.4290	1.0000e-003		0.0230	0.0230		0.0212	0.0212	0.0000	87.7354	87.7354	0.0284	0.0000	88.4448
Total	**0.0542**	**0.5969**	**0.4290**	**1.0000e-003**	**0.0000**	**0.0230**	**0.0230**	**0.0000**	**0.0212**	**0.0212**	**0.0000**	**87.7354**	**87.7354**	**0.0284**	**0.0000**	**88.4448**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3300e-003	0.0399	0.0106	9.0000e-005	0.0492	1.9000e-004	0.0494	5.3400e-003	1.9000e-004	5.5300e-003	0.0000	9.2352	9.2352	7.1000e-004	0.0000	9.2529
Worker	1.2900e-003	9.6000e-004	9.3700e-003	3.0000e-005	0.0721	2.0000e-005	0.0721	7.6500e-003	2.0000e-005	7.6700e-003	0.0000	2.5371	2.5371	8.0000e-005	0.0000	2.5390
Total	**2.6200e-003**	**0.0409**	**0.0200**	**1.2000e-004**	**0.1213**	**2.1000e-004**	**0.1215**	**0.0130**	**2.1000e-004**	**0.0132**	**0.0000**	**11.7722**	**11.7722**	**7.9000e-004**	**0.0000**	**11.7918**

3.6 Interact Paving -1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0156	0.1618	0.1685	2.6000e-004		8.6600e-003	8.6600e-003		7.9600e-003	7.9600e-003	0.0000	23.0325	23.0325	7.4500e-003	0.0000	23.2187
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0156**	**0.1618**	**0.1685**	**2.6000e-004**		**8.6600e-003**	**8.6600e-003**		**7.9600e-003**	**7.9600e-003**	**0.0000**	**23.0325**	**23.0325**	**7.4500e-003**	**0.0000**	**23.2187**

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	4.4000e-004	0.0131	3.4800e-003	3.0000e-005	0.0228	6.0000e-005	0.0228	2.4100e-003	6.0000e-005	2.4700e-003	0.0000	3.0344	3.0344	2.3000e-004	0.0000	3.0402
Worker	1.7000e-004	1.3000e-004	1.2300e-003	0.0000	0.0134	0.0000	0.0134	1.4000e-003	0.0000	1.4000e-003	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**6.1000e-004**	**0.0132**	**4.7100e-003**	**3.0000e-005**	**0.0361**	**6.0000e-005**	**0.0362**	**3.8100e-003**	**6.0000e-005**	**3.8700e-003**	**0.0000**	**3.3679**	**3.3679**	**2.4000e-004**	**0.0000**	**3.3739**

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	0.0156	0.1618	0.1685	2.6000e-004		8.6600e-003	8.6600e-003		7.9600e-003	7.9600e-003	0.0000	23.0324	23.0324	7.4500e-003	0.0000	23.2187
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0156**	**0.1618**	**0.1685**	**2.6000e-004**		**8.6600e-003**	**8.6600e-003**		**7.9600e-003**	**7.9600e-003**	**0.0000**	**23.0324**	**23.0324**	**7.4500e-003**	**0.0000**	**23.2187**

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	4.4000e-004	0.0131	3.4800e-003	3.0000e-005	0.0162	6.0000e-005	0.0162	1.7500e-003	6.0000e-005	1.8200e-003	0.0000	3.0344	3.0344	2.3000e-004	0.0000	3.0402
Worker	1.7000e-004	1.3000e-004	1.2300e-003	0.0000	9.4800e-003	0.0000	9.4800e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.3334	0.3334	1.0000e-005	0.0000	0.3337
Total	**6.1000e-004**	**0.0132**	**4.7100e-003**	**3.0000e-005**	**0.0256**	**6.0000e-005**	**0.0257**	**2.7600e-003**	**6.0000e-005**	**2.8300e-003**	**0.0000**	**3.3679**	**3.3679**	**2.4000e-004**	**0.0000**	**3.3739**

3.7 Interact Paving -2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0142	0.1477	0.1539	2.4000e-004		7.9000e-003	7.9000e-003		7.2700e-003	7.2700e-003	0.0000	21.0296	21.0296	6.8000e-003	0.0000	21.1997
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1477**	**0.1539**	**2.4000e-004**		**7.9000e-003**	**7.9000e-003**		**7.2700e-003**	**7.2700e-003**	**0.0000**	**21.0296**	**21.0296**	**6.8000e-003**	**0.0000**	**21.1997**

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	4.0000e-004	0.0120	3.1800e-003	3.0000e-005	0.0208	6.0000e-005	0.0208	2.2000e-003	6.0000e-005	2.2600e-003	0.0000	2.7706	2.7706	2.1000e-004	0.0000	2.7759
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	**5.5000e-004**	**0.0121**	**4.3000e-003**	**3.0000e-005**	**0.0330**	**6.0000e-005**	**0.0331**	**3.4700e-003**	**6.0000e-005**	**3.5400e-003**	**0.0000**	**3.0750**	**3.0750**	**2.2000e-004**	**0.0000**	**3.0805**

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	0.0142	0.1477	0.1539	2.4000e-004		7.9000e-003	7.9000e-003		7.2700e-003	7.2700e-003	0.0000	21.0296	21.0296	6.8000e-003	0.0000	21.1996
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0142**	**0.1477**	**0.1539**	**2.4000e-004**		**7.9000e-003**	**7.9000e-003**		**7.2700e-003**	**7.2700e-003**	**0.0000**	**21.0296**	**21.0296**	**6.8000e-003**	**0.0000**	**21.1996**

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	4.0000e-004	0.0120	3.1800e-003	3.0000e-005	0.0148	6.0000e-005	0.0148	1.6000e-003	6.0000e-005	1.6600e-003	0.0000	2.7706	2.7706	2.1000e-004	0.0000	2.7759
Worker	1.5000e-004	1.1000e-004	1.1200e-003	0.0000	8.6500e-003	0.0000	8.6500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.3045	0.3045	1.0000e-005	0.0000	0.3047
Total	**5.5000e-004**	**0.0121**	**4.3000e-003**	**3.0000e-005**	**0.0234**	**6.0000e-005**	**0.0235**	**2.5200e-003**	**6.0000e-005**	**2.5800e-003**	**0.0000**	**3.0750**	**3.0750**	**2.2000e-004**	**0.0000**	**3.0805**

3.8 Interact Paving -3 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0144	0.1486	0.1685	2.6000e-004		7.7900e-003	7.7900e-003		7.1700e-003	7.1700e-003	0.0000	23.0270	23.0270	7.4500e-003	0.0000	23.2132
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0144**	**0.1486**	**0.1685**	**2.6000e-004**		**7.7900e-003**	**7.7900e-003**		**7.1700e-003**	**7.1700e-003**	**0.0000**	**23.0270**	**23.0270**	**7.4500e-003**	**0.0000**	**23.2132**

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	3.6000e-004	0.0118	3.1500e-003	3.0000e-005	0.0228	3.0000e-005	0.0228	2.4100e-003	2.0000e-005	2.4400e-003	0.0000	3.0066	3.0066	2.2000e-004	0.0000	3.0121
Worker	1.6000e-004	1.1000e-004	1.1500e-003	0.0000	0.0134	0.0000	0.0134	1.4000e-003	0.0000	1.4000e-003	0.0000	0.3222	0.3222	1.0000e-005	0.0000	0.3225
Total	**5.2000e-004**	**0.0119**	**4.3000e-003**	**3.0000e-005**	**0.0361**	**3.0000e-005**	**0.0362**	**3.8100e-003**	**2.0000e-005**	**3.8400e-003**	**0.0000**	**3.3288**	**3.3288**	**2.3000e-004**	**0.0000**	**3.3346**

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	0.0144	0.1486	0.1685	2.6000e-004		7.7900e-003	7.7900e-003		7.1700e-003	7.1700e-003	0.0000	23.0270	23.0270	7.4500e-003	0.0000	23.2132
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0144**	**0.1486**	**0.1685**	**2.6000e-004**		**7.7900e-003**	**7.7900e-003**		**7.1700e-003**	**7.1700e-003**	**0.0000**	**23.0270**	**23.0270**	**7.4500e-003**	**0.0000**	**23.2132**

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	3.6000e-004	0.0118	3.1500e-003	3.0000e-005	0.0162	3.0000e-005	0.0162	1.7500e-003	2.0000e-005	1.7800e-003	0.0000	3.0066	3.0066	2.2000e-004	0.0000	3.0121
Worker	1.6000e-004	1.1000e-004	1.1500e-003	0.0000	9.4800e-003	0.0000	9.4800e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.3222	0.3222	1.0000e-005	0.0000	0.3225
Total	**5.2000e-004**	**0.0119**	**4.3000e-003**	**3.0000e-005**	**0.0256**	**3.0000e-005**	**0.0257**	**2.7600e-003**	**2.0000e-005**	**2.7900e-003**	**0.0000**	**3.3288**	**3.3288**	**2.3000e-004**	**0.0000**	**3.3346**

3.9 Interact Paving -4 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.1421	0.1612	2.5000e-004		7.4500e-003	7.4500e-003		6.8600e-003	6.8600e-003	0.0000	22.0258	22.0258	7.1200e-003	0.0000	22.2039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1421**	**0.1612**	**2.5000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8600e-003**	**6.8600e-003**	**0.0000**	**22.0258**	**22.0258**	**7.1200e-003**	**0.0000**	**22.2039**

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	3.4000e-004	0.0113	3.0100e-003	3.0000e-005	0.0218	2.0000e-005	0.0218	2.3100e-003	2.0000e-005	2.3300e-003	0.0000	2.8758	2.8758	2.1000e-004	0.0000	2.8812
Worker	1.5000e-004	1.1000e-004	1.1000e-003	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.3082	0.3082	1.0000e-005	0.0000	0.3085
Total	**4.9000e-004**	**0.0114**	**4.1100e-003**	**3.0000e-005**	**0.0346**	**2.0000e-005**	**0.0346**	**3.6500e-003**	**2.0000e-005**	**3.6700e-003**	**0.0000**	**3.1841**	**3.1841**	**2.2000e-004**	**0.0000**	**3.1896**

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	0.0138	0.1421	0.1612	2.5000e-004		7.4500e-003	7.4500e-003		6.8600e-003	6.8600e-003	0.0000	22.0258	22.0258	7.1200e-003	0.0000	22.2039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1421**	**0.1612**	**2.5000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8600e-003**	**6.8600e-003**	**0.0000**	**22.0258**	**22.0258**	**7.1200e-003**	**0.0000**	**22.2039**

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	3.4000e-004	0.0113	3.0100e-003	3.0000e-005	0.0155	2.0000e-005	0.0155	1.6800e-003	2.0000e-005	1.7000e-003	0.0000	2.8758	2.8758	2.1000e-004	0.0000	2.8812
Worker	1.5000e-004	1.1000e-004	1.1000e-003	0.0000	9.0600e-003	0.0000	9.0700e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.3082	0.3082	1.0000e-005	0.0000	0.3085
Total	**4.9000e-004**	**0.0114**	**4.1100e-003**	**3.0000e-005**	**0.0245**	**2.0000e-005**	**0.0246**	**2.6400e-003**	**2.0000e-005**	**2.6600e-003**	**0.0000**	**3.1841**	**3.1841**	**2.2000e-004**	**0.0000**	**3.1896**

3.10 Interact Paving -5 - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.1421	0.1612	2.5000e-004		7.4500e-003	7.4500e-003		6.8600e-003	6.8600e-003	0.0000	22.0258	22.0258	7.1200e-003	0.0000	22.2039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1421**	**0.1612**	**2.5000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8600e-003**	**6.8600e-003**	**0.0000**	**22.0258**	**22.0258**	**7.1200e-003**	**0.0000**	**22.2039**

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	3.4000e-004	0.0113	3.0100e-003	3.0000e-005	0.0218	2.0000e-005	0.0218	2.3100e-003	2.0000e-005	2.3300e-003	0.0000	2.8758	2.8758	2.1000e-004	0.0000	2.8812
Worker	1.5000e-004	1.1000e-004	1.1000e-003	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.3082	0.3082	1.0000e-005	0.0000	0.3085
Total	**4.9000e-004**	**0.0114**	**4.1100e-003**	**3.0000e-005**	**0.0346**	**2.0000e-005**	**0.0346**	**3.6500e-003**	**2.0000e-005**	**3.6700e-003**	**0.0000**	**3.1841**	**3.1841**	**2.2000e-004**	**0.0000**	**3.1896**

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	0.0138	0.1421	0.1612	2.5000e-004		7.4500e-003	7.4500e-003		6.8600e-003	6.8600e-003	0.0000	22.0258	22.0258	7.1200e-003	0.0000	22.2039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1421**	**0.1612**	**2.5000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8600e-003**	**6.8600e-003**	**0.0000**	**22.0258**	**22.0258**	**7.1200e-003**	**0.0000**	**22.2039**

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	3.4000e-004	0.0113	3.0100e-003	3.0000e-005	0.0155	2.0000e-005	0.0155	1.6800e-003	2.0000e-005	1.7000e-003	0.0000	2.8758	2.8758	2.1000e-004	0.0000	2.8812
Worker	1.5000e-004	1.1000e-004	1.1000e-003	0.0000	9.0600e-003	0.0000	9.0700e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.3082	0.3082	1.0000e-005	0.0000	0.3085
Total	**4.9000e-004**	**0.0114**	**4.1100e-003**	**3.0000e-005**	**0.0245**	**2.0000e-005**	**0.0246**	**2.6400e-003**	**2.0000e-005**	**2.6600e-003**	**0.0000**	**3.1841**	**3.1841**	**2.2000e-004**	**0.0000**	**3.1896**

3.11 Interact Paving -6 - 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	0.0127	0.1279	0.1677	2.6000e-004		6.5300e-003	6.5300e-003		6.0100e-003	6.0100e-003	0.0000	23.0317	23.0317	7.4500e-003	0.0000	23.2179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1279**	**0.1677**	**2.6000e-004**		**6.5300e-003**	**6.5300e-003**		**6.0100e-003**	**6.0100e-003**	**0.0000**	**23.0317**	**23.0317**	**7.4500e-003**	**0.0000**	**23.2179**

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	3.3000e-004	0.0112	2.9800e-003	3.0000e-005	0.0228	2.0000e-005	0.0228	2.4100e-003	2.0000e-005	2.4300e-003	0.0000	2.9781	2.9781	2.2000e-004	0.0000	2.9835
Worker	1.5000e-004	1.0000e-004	1.0700e-003	0.0000	0.0134	0.0000	0.0134	1.4000e-003	0.0000	1.4000e-003	0.0000	0.3104	0.3104	1.0000e-005	0.0000	0.3106
Total	**4.8000e-004**	**0.0113**	**4.0500e-003**	**3.0000e-005**	**0.0361**	**2.0000e-005**	**0.0362**	**3.8100e-003**	**2.0000e-005**	**3.8300e-003**	**0.0000**	**3.2885**	**3.2885**	**2.3000e-004**	**0.0000**	**3.2941**

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	0.0127	0.1279	0.1677	2.6000e-004		6.5300e-003	6.5300e-003		6.0100e-003	6.0100e-003	0.0000	23.0317	23.0317	7.4500e-003	0.0000	23.2179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1279**	**0.1677**	**2.6000e-004**		**6.5300e-003**	**6.5300e-003**		**6.0100e-003**	**6.0100e-003**	**0.0000**	**23.0317**	**23.0317**	**7.4500e-003**	**0.0000**	**23.2179**

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	3.3000e-004	0.0112	2.9800e-003	3.0000e-005	0.0162	2.0000e-005	0.0162	1.7500e-003	2.0000e-005	1.7800e-003	0.0000	2.9781	2.9781	2.2000e-004	0.0000	2.9835
Worker	1.5000e-004	1.0000e-004	1.0700e-003	0.0000	9.4800e-003	0.0000	9.4800e-003	1.0100e-003	0.0000	1.0100e-003	0.0000	0.3104	0.3104	1.0000e-005	0.0000	0.3106
Total	**4.8000e-004**	**0.0113**	**4.0500e-003**	**3.0000e-005**	**0.0256**	**2.0000e-005**	**0.0257**	**2.7600e-003**	**2.0000e-005**	**2.7900e-003**	**0.0000**	**3.2885**	**3.2885**	**2.3000e-004**	**0.0000**	**3.2941**

3.12 Interact Paving -7 - 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	0.0116	0.1168	0.1531	2.4000e-004		5.9600e-003	5.9600e-003		5.4900e-003	5.4900e-003	0.0000	21.0289	21.0289	6.8000e-003	0.0000	21.1990
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0116**	**0.1168**	**0.1531**	**2.4000e-004**		**5.9600e-003**	**5.9600e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**21.0289**	**21.0289**	**6.8000e-003**	**0.0000**	**21.1990**

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	3.0000e-004	0.0102	2.7200e-003	3.0000e-005	0.0208	2.0000e-005	0.0208	2.2000e-003	2.0000e-005	2.2200e-003	0.0000	2.7191	2.7191	2.0000e-004	0.0000	2.7241
Worker	1.4000e-004	9.0000e-005	9.7000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2834	0.2834	1.0000e-005	0.0000	0.2836
Total	**4.4000e-004**	**0.0103**	**3.6900e-003**	**3.0000e-005**	**0.0330**	**2.0000e-005**	**0.0330**	**3.4700e-003**	**2.0000e-005**	**3.5000e-003**	**0.0000**	**3.0026**	**3.0026**	**2.1000e-004**	**0.0000**	**3.0077**

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	0.0116	0.1168	0.1531	2.4000e-004		5.9600e-003	5.9600e-003		5.4900e-003	5.4900e-003	0.0000	21.0289	21.0289	6.8000e-003	0.0000	21.1989
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0116**	**0.1168**	**0.1531**	**2.4000e-004**		**5.9600e-003**	**5.9600e-003**		**5.4900e-003**	**5.4900e-003**	**0.0000**	**21.0289**	**21.0289**	**6.8000e-003**	**0.0000**	**21.1989**

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	3.0000e-004	0.0102	2.7200e-003	3.0000e-005	0.0148	2.0000e-005	0.0148	1.6000e-003	2.0000e-005	1.6200e-003	0.0000	2.7191	2.7191	2.0000e-004	0.0000	2.7241
Worker	1.4000e-004	9.0000e-005	9.7000e-004	0.0000	8.6500e-003	0.0000	8.6500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.2834	0.2834	1.0000e-005	0.0000	0.2836
Total	**4.4000e-004**	**0.0103**	**3.6900e-003**	**3.0000e-005**	**0.0234**	**2.0000e-005**	**0.0234**	**2.5200e-003**	**2.0000e-005**	**2.5400e-003**	**0.0000**	**3.0026**	**3.0026**	**2.1000e-004**	**0.0000**	**3.0077**

3.13 Interact Paving -8 - 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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

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	3.2000e-004	0.0107	2.8500e-003	3.0000e-005	0.0218	2.0000e-005	0.0218	2.3100e-003	2.0000e-005	2.3300e-003	0.0000	2.8486	2.8486	2.1000e-004	0.0000	2.8538
Worker	1.4000e-004	1.0000e-004	1.0200e-003	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2971
Total	**4.6000e-004**	**0.0108**	**3.8700e-003**	**3.0000e-005**	**0.0346**	**2.0000e-005**	**0.0346**	**3.6500e-003**	**2.0000e-005**	**3.6700e-003**	**0.0000**	**3.1455**	**3.1455**	**2.2000e-004**	**0.0000**	**3.1509**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**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**

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	3.2000e-004	0.0107	2.8500e-003	3.0000e-005	0.0155	2.0000e-005	0.0155	1.6800e-003	2.0000e-005	1.7000e-003	0.0000	2.8486	2.8486	2.1000e-004	0.0000	2.8538
Worker	1.4000e-004	1.0000e-004	1.0200e-003	0.0000	9.0600e-003	0.0000	9.0700e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.2969	0.2969	1.0000e-005	0.0000	0.2971
Total	**4.6000e-004**	**0.0108**	**3.8700e-003**	**3.0000e-005**	**0.0245**	**2.0000e-005**	**0.0245**	**2.6400e-003**	**2.0000e-005**	**2.6600e-003**	**0.0000**	**3.1455**	**3.1455**	**2.2000e-004**	**0.0000**	**3.1509**

3.14 Interact Paving -9 - 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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0269**	**20.0269**	**6.4800e-003**	**0.0000**	**20.1888**

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	2.2000e-004	7.6200e-003	2.3600e-003	3.0000e-005	0.0198	1.0000e-005	0.0198	2.1000e-003	1.0000e-005	2.1100e-003	0.0000	2.5245	2.5245	1.7000e-004	0.0000	2.5287
Worker	1.2000e-004	8.0000e-005	8.6000e-004	0.0000	0.0116	0.0000	0.0116	1.2100e-003	0.0000	1.2200e-003	0.0000	0.2596	0.2596	1.0000e-005	0.0000	0.2598
Total	**3.4000e-004**	**7.7000e-003**	**3.2200e-003**	**3.0000e-005**	**0.0314**	**1.0000e-005**	**0.0314**	**3.3100e-003**	**1.0000e-005**	**3.3300e-003**	**0.0000**	**2.7841**	**2.7841**	**1.8000e-004**	**0.0000**	**2.7885**

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.1019**	**0.1458**	**2.3000e-004**		**5.1000e-003**	**5.1000e-003**		**4.6900e-003**	**4.6900e-003**	**0.0000**	**20.0268**	**20.0268**	**6.4800e-003**	**0.0000**	**20.1888**

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	2.2000e-004	7.6200e-003	2.3600e-003	3.0000e-005	0.0141	1.0000e-005	0.0141	1.5300e-003	1.0000e-005	1.5300e-003	0.0000	2.5245	2.5245	1.7000e-004	0.0000	2.5287
Worker	1.2000e-004	8.0000e-005	8.6000e-004	0.0000	8.2400e-003	0.0000	8.2400e-003	8.7000e-004	0.0000	8.8000e-004	0.0000	0.2596	0.2596	1.0000e-005	0.0000	0.2598
Total	**3.4000e-004**	**7.7000e-003**	**3.2200e-003**	**3.0000e-005**	**0.0223**	**1.0000e-005**	**0.0223**	**2.4000e-003**	**1.0000e-005**	**2.4100e-003**	**0.0000**	**2.7841**	**2.7841**	**1.8000e-004**	**0.0000**	**2.7885**

3.15 Interact Paving -10 - 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	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0296	22.0296	7.1200e-003	0.0000	22.2077
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0296**	**22.0296**	**7.1200e-003**	**0.0000**	**22.2077**

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	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	0.0218	1.0000e-005	0.0218	2.3100e-003	1.0000e-005	2.3200e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0346**	**1.0000e-005**	**0.0346**	**3.6500e-003**	**1.0000e-005**	**3.6600e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

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	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0295	22.0295	7.1200e-003	0.0000	22.2077
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0295**	**22.0295**	**7.1200e-003**	**0.0000**	**22.2077**

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	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	0.0155	1.0000e-005	0.0155	1.6800e-003	1.0000e-005	1.6900e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	9.0600e-003	0.0000	9.0700e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0245**	**1.0000e-005**	**0.0245**	**2.6400e-003**	**1.0000e-005**	**2.6500e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

3.16 Interact Paving -11 - 2023

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0296	22.0296	7.1200e-003	0.0000	22.2077
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0296**	**22.0296**	**7.1200e-003**	**0.0000**	**22.2077**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	0.0218	1.0000e-005	0.0218	2.3100e-003	1.0000e-005	2.3200e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	0.0128	0.0000	0.0128	1.3400e-003	0.0000	1.3400e-003	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0346**	**1.0000e-005**	**0.0346**	**3.6500e-003**	**1.0000e-005**	**3.6600e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

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	0.0114	0.1121	0.1604	2.5000e-004		5.6100e-003	5.6100e-003		5.1600e-003	5.1600e-003	0.0000	22.0295	22.0295	7.1200e-003	0.0000	22.2077
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1121**	**0.1604**	**2.5000e-004**		**5.6100e-003**	**5.6100e-003**		**5.1600e-003**	**5.1600e-003**	**0.0000**	**22.0295**	**22.0295**	**7.1200e-003**	**0.0000**	**22.2077**

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	2.4000e-004	8.3900e-003	2.6000e-003	3.0000e-005	0.0155	1.0000e-005	0.0155	1.6800e-003	1.0000e-005	1.6900e-003	0.0000	2.7769	2.7769	1.9000e-004	0.0000	2.7816
Worker	1.4000e-004	9.0000e-005	9.5000e-004	0.0000	9.0600e-003	0.0000	9.0700e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.2856	0.2856	1.0000e-005	0.0000	0.2858
Total	**3.8000e-004**	**8.4800e-003**	**3.5500e-003**	**3.0000e-005**	**0.0245**	**1.0000e-005**	**0.0245**	**2.6400e-003**	**1.0000e-005**	**2.6500e-003**	**0.0000**	**3.0625**	**3.0625**	**2.0000e-004**	**0.0000**	**3.0674**

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Date: 9/28/2017 1:31 PM

Central Village Residential General Construction - LEA

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interact Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Slope Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Loaders	Diesel	Tier 4 Interim	0	2	No Change	0.00
Excavators	Diesel	Tier 4 Interim	0	4	No Change	0.00
Graders	Diesel	Tier 4 Interim	0	1	No Change	0.00
Other Construction Equipment	Diesel	Tier 4 Interim	0	1	No Change	0.00
Pavers	Diesel	Tier 4 Interim	0	22	No Change	0.00
Paving Equipment	Diesel	Tier 4 Interim	0	22	No Change	0.00
Rollers	Diesel	Tier 4 Interim	0	22	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 4 Interim	0	4	No Change	0.00
Scrapers	Diesel	Tier 4 Interim	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	0	6	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Excavators	9.18100E-002	9.11650E-001	1.21042E+000	1.91000E-003	4.41200E-002	4.05900E-002	0.00000E+000	1.68755E+002	1.68755E+002	5.43600E-002	0.00000E+000	1.70114E+002
Graders	4.69900E-002	6.28290E-001	1.78600E-001	6.50000E-004	2.01100E-002	1.85000E-002	0.00000E+000	5.75866E+001	5.75866E+001	1.84900E-002	0.00000E+000	5.80488E+001
Other Construction Equipment	5.51000E-003	5.93100E-002	4.35600E-002	6.00000E-005	3.12000E-003	2.87000E-003	0.00000E+000	5.83092E+000	5.83092E+000	1.84000E-003	0.00000E+000	5.87704E+000
Pavers	5.39900E-002	5.56550E-001	6.97000E-001	1.13000E-003	2.66600E-002	2.45300E-002	0.00000E+000	9.95200E+001	9.95200E+001	3.21900E-002	0.00000E+000	1.00325E+002
Paving Equipment	4.46800E-002	4.41490E-001	6.13450E-001	9.80000E-004	2.17200E-002	1.99800E-002	0.00000E+000	8.62448E+001	8.62448E+001	2.78900E-002	0.00000E+000	8.69421E+001
Rollers	4.26700E-002	4.37450E-001	4.50620E-001	6.30000E-004	2.59500E-002	2.38800E-002	0.00000E+000	5.55529E+001	5.55529E+001	1.79700E-002	0.00000E+000	5.60021E+001
Rubber Tired Dozers	1.43350E-001	1.51540E+000	5.44880E-001	1.10000E-003	7.40500E-002	6.81200E-002	0.00000E+000	9.82548E+001	9.82548E+001	3.14300E-002	0.00000E+000	9.90406E+001
Rubber Tired Loaders	6.52800E-002	7.69470E-001	2.85380E-001	1.09000E-003	2.55400E-002	2.35000E-002	0.00000E+000	9.57991E+001	9.57991E+001	3.09800E-002	0.00000E+000	9.65737E+001
Scrapers	1.99390E-001	2.38008E+000	1.50167E+000	2.97000E-003	9.29800E-002	8.55400E-002	0.00000E+000	2.62811E+002	2.62811E+002	8.43700E-002	0.00000E+000	2.64920E+002
Tractors/Loaders/Backhoes	5.23800E-002	5.26100E-001	5.45050E-001	7.40000E-004	3.41600E-002	3.14300E-002	0.00000E+000	6.56025E+001	6.56025E+001	2.10100E-002	0.00000E+000	6.61277E+001

Central Village Residential General Construction - LEA

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Excavators	9.18100E-002	9.11650E-001	1.21042E+000	1.91000E-003	4.41200E-002	4.05900E-002	0.00000E+000	1.68755E+002	1.68755E+002	5.43600E-002	0.00000E+000	1.70114E+002
Graders	4.69900E-002	6.28290E-001	1.78590E-001	6.50000E-004	2.01100E-002	1.85000E-002	0.00000E+000	5.75866E+001	5.75866E+001	1.84900E-002	0.00000E+000	5.80487E+001
Other Construction Equipment	5.51000E-003	5.93100E-002	4.35600E-002	6.00000E-005	3.12000E-003	2.87000E-003	0.00000E+000	5.83091E+000	5.83091E+000	1.84000E-003	0.00000E+000	5.87703E+000
Pavers	5.39900E-002	5.56540E-001	6.97000E-001	1.13000E-003	2.66600E-002	2.45300E-002	0.00000E+000	9.95199E+001	9.95199E+001	3.21900E-002	0.00000E+000	1.00325E+002
Paving Equipment	4.46800E-002	4.41490E-001	6.13450E-001	9.80000E-004	2.17200E-002	1.99800E-002	0.00000E+000	8.62447E+001	8.62447E+001	2.78900E-002	0.00000E+000	8.69420E+001
Rollers	4.26700E-002	4.37450E-001	4.50620E-001	6.30000E-004	2.59500E-002	2.38800E-002	0.00000E+000	5.55529E+001	5.55529E+001	1.79700E-002	0.00000E+000	5.60020E+001
Rubber Tired Dozers	1.43350E-001	1.51539E+000	5.44880E-001	1.10000E-003	7.40500E-002	6.81200E-002	0.00000E+000	9.82547E+001	9.82547E+001	3.14300E-002	0.00000E+000	9.90405E+001
Rubber Tired Loaders	6.52800E-002	7.69470E-001	2.85380E-001	1.09000E-003	2.55400E-002	2.35000E-002	0.00000E+000	9.57990E+001	9.57990E+001	3.09800E-002	0.00000E+000	9.65736E+001
Scrapers	1.99390E-001	2.38008E+000	1.50167E+000	2.97000E-003	9.29800E-002	8.55400E-002	0.00000E+000	2.62811E+002	2.62811E+002	8.43700E-002	0.00000E+000	2.64920E+002
Tractors/Loaders/Backhoes	5.23800E-002	5.26100E-001	5.45050E-001	7.40000E-004	3.41600E-002	3.14300E-002	0.00000E+000	6.56025E+001	6.56025E+001	2.10100E-002	0.00000E+000	6.61276E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18515E-006	1.18515E-006	0.00000E+000	0.00000E+000	1.17568E-006
Graders	0.00000E+000	0.00000E+000	5.59910E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.04191E-006	1.04191E-006	0.00000E+000	0.00000E+000	1.20588E-006
Other Construction Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.71500E-006	1.71500E-006	0.00000E+000	0.00000E+000	1.70154E-006
Pavers	0.00000E+000	1.79678E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10531E-006	1.10531E-006	0.00000E+000	0.00000E+000	1.19612E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15949E-006	1.15949E-006	0.00000E+000	0.00000E+000	1.26521E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26006E-006	1.26006E-006	0.00000E+000	0.00000E+000	1.07139E-006
Rubber Tired Dozers	0.00000E+000	6.59892E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22131E-006	1.22131E-006	0.00000E+000	0.00000E+000	1.21162E-006
Rubber Tired Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25262E-006	1.25262E-006	0.00000E+000	0.00000E+000	1.13903E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21760E-006	1.21760E-006	0.00000E+000	0.00000E+000	1.17016E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.06703E-006	1.06703E-006	0.00000E+000	0.00000E+000	1.20978E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	40.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	1.51	0.68	0.59	0.27	0.61	0.61
Grading	Roads	5.22	0.52	3.66	0.37	0.30	0.30
Interact Paving -1	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -1	Roads	0.04	0.00	0.03	0.00	0.29	0.28
Interact Paving -10	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -10	Roads	0.03	0.00	0.02	0.00	0.29	0.28
Interact Paving -11	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -11	Roads	0.03	0.00	0.02	0.00	0.29	0.28
Interact Paving -2	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -2	Roads	0.03	0.00	0.02	0.00	0.29	0.27
Interact Paving -3	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -3	Roads	0.04	0.00	0.03	0.00	0.29	0.28
Interact Paving -4	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -4	Roads	0.03	0.00	0.02	0.00	0.29	0.28
Interact Paving -5	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -5	Roads	0.03	0.00	0.02	0.00	0.29	0.28
Interact Paving -6	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -6	Roads	0.04	0.00	0.03	0.00	0.29	0.28
Interact Paving -7	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -7	Roads	0.03	0.00	0.02	0.00	0.29	0.27
Interact Paving -8	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -8	Roads	0.03	0.00	0.02	0.00	0.29	0.28
Interact Paving -9	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Paving -9	Roads	0.03	0.00	0.02	0.00	0.29	0.27
Interact Utilities	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Interact Utilities	Roads	0.17	0.02	0.12	0.01	0.29	0.28
Site Preparation	Fugitive Dust	0.19	0.10	0.07	0.04	0.61	0.61
Site Preparation	Roads	0.02	0.00	0.01	0.00	0.29	0.27
Slope Landscaping	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Slope Landscaping	Roads	0.17	0.02	0.12	0.01	0.29	0.28

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.00	0.15		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				

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

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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

Water Mitigation Measures

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

Solid Waste Mitigation

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

CalEEMod Input Matrix
Project Characteristics

Table 1: Project Detail			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Project Name	Central Village Residential General Construction - LEA	--	Project Description
Project Location	San Diego County	--	--
Wind speed (m/s)	default		
Precipitation Frequency (days)	default		
CEC Climate Forecasting Zone	13	--	CalEEMod Appendix E
Land Use Setting	Urban	based on availability of uses	--
Start of Construction	9/1/2019	Central Village Schedule	Proctor Valley EIR Assumptions
Operational Year	--	Central Village Schedule	Proctor Valley EIR Assumptions

Table 2: Utility Information			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Select Utility Company	San Diego Gas and Electric	project location	CEC, 2014
CO2 Intensity Factor (lb./Mwh)	--		
CH4 Intensity Factor (lb./Mwh)	default		
N20 Intensity Factor (lb./Mwh)	default		

CalEEMod Input Matrix
Project Characteristics

Table 3: Pollutants			
Pollutant Selection	**Pollutant Full Name**	**Notes**	**Source**
checked	ROG	--	--
checked	NOx	--	--
checked	CO	--	--
checked	SO2	--	--
checked	PM 10	--	--
checked	PM 2.5	--	--
checked	Fugitive PM 10	--	--
checked	Fugitive PM 2.5	--	--
checked	Biogenic CO2	--	--
checked	Non-biogenic CO2	--	--
checked	CO2	--	--
checked	CH4	--	--
checked	N20	--	--
checked	CO2e	--	--

Table 4 pertains to operational emissions and is therefore omitted

CalEEMod Input Matrix
Construction Phase

Table 5: Construction Phase					
Phase Name	**Phase Type**	**Start Date**	**End Date**	**Days/Week**	**Total Days**
Site Preparation	Site Preparation	2019/09/01	2019/09/30	5	21
Grading	Grading	2019/10/01	2020/06/30	5	196
Slope Landscaping	Site Preparation	2020/05/01	2020/12/31	5	175
Interact Paving -1	Paving	2020/07/01	2020/07/31	5	23
Interact Paving -2	Paving	2020/11/01	2020/11/30	5	21
Interact Paving -3	Paving	2021/03/01	2021/03/31	5	23
Interact Paving -4	Paving	2021/06/01	2021/06/30	5	22
Interact Paving -5	Paving	2021/11/01	2021/11/30	5	22
Interact Paving -6	Paving	2022/03/01	2022/03/31	5	23
Interact Paving -7	Paving	2022/07/01	2022/07/31	5	21
Interact Paving -8	Paving	11/1/2022	2022/11/30	5	22
Interact Paving -9	Paving	2023/02/01	2023/02/28	5	20
Interact Paving -10	Paving	2023/06/01	2023/06/30	5	22
Interact Paving -11	Paving	2023/10/01	2023/10/31	5	22
Interact Utilities	Site Preparation	2020/04/01	2020/11/30	5	174

CalEEMod Input Matrix
Construction Phase

Table 6: Off-Road Equipment					
Phase Name	**Equipment Type**	**Unit Amount**	**Hours/Day**	**Horsepower (hp)**	**Load Factor**
Site Preparation	Rubber Tired Dozer	default	default		
	Tractor/Loader/Backh				
	Other Construction Equipment (brush	1			
Grading	default				
Slope Landscaping	Excavator	1			
	Rubber Tired Loader	1			
Utilities	Excavator	1			
	Rubber Tired Loader	1			
Paving	default				

Table 7: Dust from Material Movement							
Phase Name	**Material Imported**	**Material Exported**	**Material Import/Export Phased?**	**Mean Vehicle Speed (mph)**	**Total Acres Graded**	**Material Moisture Content (%) Bulldozing**	**Material Silt Content**
Site Prep	default				270	default	
Slope Landscaping	default				95.9	default	
Grading	default				--	default	

Table 8: Demolition		
Phase Name	**Size Metric**	**Unit Amount**
default		

CalEEMod Input Matrix
Construction Phase

Table 9: Construction Trips and VMT									
Phase Name	# Trips Worker (/day)	# Trips Vendor (/day)	Total # Trips Hauling	Trip Length Worker (miles)	Trip Length Worker (miles)	Trip Length Hauling (miles)	Vehicle Class Worker	Vehicle Class Vendor	Vehicle Class Hauling
Site Preparation									
Grading			7,417			0.5			MHDT
Slope Landscaping	Refer to Construction VMT worksheet								
Utilities									
Paving									
Note: Internal hauling distance 0.5 miles to reflect onsite cut and fill									

Table 10: On-Road Fugitive Dust								
Phase Name	% Pave Worker	% Pave Vendor	% Pave Hauling	Road Silt Loading (g/m2)	Material Silt Content (%)	Material Moisture Content (%)	Average Vehicle Weight (tons)	Mean Vehicle Speed (mph)
Site Preparation				default				
Grading								
Slope Landscaping	98		0					
Utilities			0					
Paving								

Table 11: Architectural Coating										
Phase Name	Residential Interior VOC (g/L)	Residential Interior Area (sqft)	Residential Exterior VOC (g/L)	Residential Exterior Area (sqft)	Non-Residential Interior VOC (g/L)	Non-Residential Interior Area (sqft)	Non-Residential Exterior VOC (g/L)	Non-Residential Exterior Area (sqft)	VOC for Parking Lot Paint (g/L)	Parking Area (sqft)
N/A										

CalEEMod Input Matrix
Construction Mobile

Table 12: Vehicle Trips	
Land Use Subtype	**Size Metric**
Refer to VMT Worksheet	

Table 13: Vehicle Emissions
default

Table 14: Fleet Mix													
Land Use Subtype	**LDA**	**LDT1**	**LDT2**	**MDV**	**LHD1**	**LHD2**	**MHD**	**HHD**	**OBUS**	**UBUS**	**MCY**	**SBUS**	**MH**
Single Family Housing	default												

Table 15: Paved Road Dust	
% Pave	default
Road Silt Loading (g/m2)	
Weight (tons)	

Table 16: Paved Road Dust	
Material Silt Content (%)	default
Material Moisture Content (%)	
Mean Vechile Speed (mph)	
CARB Unmitigated Unpaved Road Statewide Emissions Inventory Method	

Tables 12 through 31 pertain to operational emissions and are therefore omitted

CalEEMod Input Sheet
Construction Mitigation

Table 32: Off-Road Equipment						
Equipment Type	Fuel Type	Engine Tier	Number of Equipments Mitigated	Total Number of Off-road Equipments	DPF Level	Using Oxidation Catalyst (% Reduction)
--						

Table 33: Fugitive Dust	
Soil Stabilizer for Unpaved Roads	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Replace Ground Cover of Area Disturbed	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Water Exposed Area	
Frequency (per day)	3
PM 10 (% Reduction)	default
PM 2.5 (% Reduction)	
Unpaved Road Mitigation	
Moisture Content (%)	--
Vehicle Speed (mph)	15
Clean Paved Road	
% PM Reduction	--

CalEEMod Version: CalEEMod.2016.3.1

Date: 8/22/2017 9:44 AM

Central Village Residential P1-P6
San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	0.00	1,129,450.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Refer to CalEEMod Input Matrix Table 1

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Trips and VMT - Refer to CalEEMod Input Matrix Table 9

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Architectural Coating - Refer to CalEEMod Input Matrix Table 11

Construction Off-road Equipment Mitigation - Refer to CalEEMod Input Matrix Table 32 and 33

Woodstoves - Operational Emissions Modeled Separately

Consumer Products - Operational Emissions Modeled Separately

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	224,172.90
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	218,375.33
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	200,982.60
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	216,442.80
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	200,982.60
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	216,442.80
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	672,518.70
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	655,125.98
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	602,947.80
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	649,328.40
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	602,947.80
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	649,328.40
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00

tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	2.14E-05	1E-10
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-12
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-12
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	10.50	11.00
tblGrading	AcresOfGrading	11.00	10.00
tblGrading	AcresOfGrading	11.50	10.50
tblGrading	AcresOfGrading	10.50	11.00
tblGrading	AcresOfGrading	11.50	11.00
tblGrading	AcresOfGrading	11.00	10.00
tblLandUse	BuildingSpaceSquareFeet	0.00	1,129,450.00
tblLandUse	LandUseSquareFeet	0.00	1,129,450.00
tblOffRoadEquipment	HorsePower	97.00	221.00
tblOffRoadEquipment	LoadFactor	0.37	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		P4 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P3 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P5 Site Preparation (mo. 1)
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tblOffRoadEquipment	PhaseName		P3 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P2 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P4 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P5 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P2 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P3 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P3 Building Construction 1 (mo. 2-4)
tblOffRoadEquipment	PhaseName		P3 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P4 Building Construction 1 (mo. 2-4)

tblOffRoadEquipment	PhaseName		P4 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P5 Building Construction 1 (mo. 2-4)
tblOffRoadEquipment	PhaseName		P1 Building Construction 1 (mo. 2-4)
tblOffRoadEquipment	PhaseName		P1 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P2 Building Construction 1 (mo. 2-4)
tblOffRoadEquipment	PhaseName		P2 Building Construction 2 (mo. 5)
tblOffRoadEquipment	PhaseName		P4 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P3 Building Construction 2 (mo. 5)
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tblOffRoadEquipment	PhaseName		P4 Building Construction 2 (mo. 5)
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tblOffRoadEquipment	PhaseName		P3 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P2 Building Construction 2 (mo. 5)
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tblOffRoadEquipment	PhaseName		P3 Site Preparation (mo. 1)
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00

tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00

tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblProjectCharacteristics	OperationalYear	2018	2022
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00

tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	13.00	37.00
tblTripsAndVMT	WorkerTripNumber	1.00	42.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	42.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	1.00	37.00
tblTripsAndVMT	WorkerTripNumber	13.00	41.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	41.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	37.00
tblTripsAndVMT	WorkerTripNumber	1.00	37.00
tblTripsAndVMT	WorkerTripNumber	1.00	37.00

tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	42.00
tblTripsAndVMT	WorkerTripNumber	1.00	37.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	1.2380	0.6990	0.6169	1.3300e-003	0.9474	0.0319	0.9794	0.0992	0.0303	0.1295	0.0000	118.7661	118.7661	0.0198	0.0000	119.2614
2021	3.8719	1.4300	1.4670	3.1700e-003	2.5172	0.0612	2.5784	0.2634	0.0582	0.3216	0.0000	283.2474	283.2474	0.0450	0.0000	284.3734
2022	2.5993	0.7273	0.7695	1.8500e-003	1.4694	0.0280	1.4974	0.1536	0.0267	0.1802	0.0000	165.2349	165.2349	0.0284	0.0000	165.9460
Maximum	**3.8719**	**1.4300**	**1.4670**	**3.1700e-003**	**2.5172**	**0.0612**	**2.5784**	**0.2634**	**0.0582**	**0.3216**	**0.0000**	**283.2474**	**283.2474**	**0.0450**	**0.0000**	**284.3734**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	1.2380	0.6990	0.6169	1.3300e-003	0.6675	0.0319	0.6994	0.0712	0.0303	0.1015	0.0000	118.7660	118.7660	0.0198	0.0000	119.2614
2021	3.8719	1.4300	1.4670	3.1700e-003	1.7781	0.0612	1.8393	0.1895	0.0582	0.2477	0.0000	283.2472	283.2472	0.0450	0.0000	284.3732
2022	2.5993	0.7273	0.7695	1.8500e-003	1.0390	0.0280	1.0669	0.1106	0.0267	0.1372	0.0000	165.2348	165.2348	0.0284	0.0000	165.9458
Maximum	**3.8719**	**1.4300**	**1.4670**	**3.1700e-003**	**1.7781**	**0.0612**	**1.8393**	**0.1895**	**0.0582**	**0.2477**	**0.0000**	**283.2472**	**283.2472**	**0.0450**	**0.0000**	**284.3732**

	ROG	**NOx**	**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**	**29.38**	**0.00**	**28.67**	**28.06**	**0.00**	**22.94**	**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	8-1-2020	10-31-2020	0.3279	0.3279
2	11-1-2020	1-31-2021	1.6555	1.6555
3	2-1-2021	4-30-2021	1.5822	1.5822
4	5-1-2021	7-31-2021	0.8850	0.8850
5	8-1-2021	10-31-2021	1.0653	1.0653
6	11-1-2021	1-31-2022	1.6764	1.6764
7	2-1-2022	4-30-2022	1.6617	1.6617
8	5-1-2022	7-31-2022	0.9241	0.9241
9	8-1-2022	9-30-2022	0.6892	0.6892
		Highest	1.6764	1.6764

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	2.5000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.5000e-004**	**9.0000e-005**	**7.4300e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

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	2.5000e-004	9.0000e-005	7.4300e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.5000e-004**	**9.0000e-005**	**7.4300e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

	ROG	**NOx**	**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	P1 Site Preparation (mo. 1)	Site Preparation	8/1/2020	8/31/2020	5	21	
2	P1 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2020	11/30/2020	5	65	
3	P1 Architectural Coating	Architectural Coating	11/1/2020	12/31/2020	5	44	
4	P2 Site Preparation (mo. 1)	Site Preparation	12/1/2020	12/31/2020	5	23	
5	P1 Building Construction 2 (mo. 5)	Building Construction	12/1/2020	12/31/2020	5	23	
6	P2 Building Construction 1 (mo. 2-4)	Building Construction	1/1/2021	3/31/2021	5	64	
7	P2 Architectural Coating	Architectural Coating	3/1/2021	4/30/2021	5	45	
8	P3 Site Preparation (mo. 1)	Site Preparation	4/1/2021	4/30/2021	5	22	
9	P2 Building Construction 2 (mo. 5)	Building Construction	4/1/2021	4/30/2021	5	22	
10	P3 Building Construction 1 (mo. 2-4)	Building Construction	5/1/2021	7/31/2021	5	65	
11	P3 Architectural Coating	Architectural Coating	7/1/2021	8/31/2021	5	44	
12	P4 Site Preparation (mo. 1)	Site Preparation	8/1/2021	8/31/2021	5	22	
13	P3 Building Construction 2 (mo. 5)	Building Construction	8/1/2021	8/31/2021	5	22	
14	P4 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2021	11/30/2021	5	65	
15	P4 Architectural Coating	Architectural Coating	11/1/2021	12/31/2021	5	45	
16	P5 Site Preparation (mo. 1)	Site Preparation	12/1/2021	12/31/2021	5	23	
17	P4 Building Construction 2 (mo. 5)	Building Construction	12/1/2021	12/31/2021	5	23	
18	P5 Building Construction 1 (mo. 2-4)	Building Construction	1/1/2022	3/31/2022	5	64	
19	P5 Architectural Coating	Architectural Coating	3/1/2022	4/30/2022	5	44	
20	P6 Site Preparation (mo. 1)	Site Preparation	4/1/2022	4/30/2022	5	21	
21	P5 Building Construction 2 (mo. 5)	Building Construction	4/1/2022	4/30/2022	5	21	
22	P6 Building Construction 1 (mo. 2-4)	Building Construction	5/1/2022	7/31/2022	5	65	
23	P6 Architectural Coating	Architectural Coating	7/1/2022	8/31/2022	5	44	
24	P6 Building Construction 2 (mo. 5)	Building Construction	8/1/2022	8/31/2022	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 602,948; Residential Outdoor: 200,983; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P1 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P1 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P1 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P1 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P1 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P1 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P1 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P1 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P1 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P1 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P1 Architectural Coating	Air Compressors	2	8.00	78	0.48
P2 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P2 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P2 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P2 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P2 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P2 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P2 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P2 Architectural Coating	Air Compressors	2	8.00	78	0.48
P3 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P3 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P3 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74

P3 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P3 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P4 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P4 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P4 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P4 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P4 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P2 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P2 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P2 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P3 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P3 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P3 Architectural Coating	Air Compressors	2	8.00	78	0.48
P3 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P3 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P3 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P4 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P4 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P4 Architectural Coating	Air Compressors	2	8.00	78	0.48
P5 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P5 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P5 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P5 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P5 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P4 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P4 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P4 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P5 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P5 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37

P5 Architectural Coating	Air Compressors	2	8.00	78	0.48
P6 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P6 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P6 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P6 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P6 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P5 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P5 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P5 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P6 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P6 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	221	0.50
P6 Architectural Coating	Air Compressors	2	8.00	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
P1 Site Preparation (mo. 1)	5	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Construction 1 (mo. 2-	2	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Building Construction 2 (mo. 5)	3	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P1 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Site Preparation (mo. 1)	5	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction 1 (mo. 2-	2	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Site Preparation (mo. 1)	5	42.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Site Preparation (mo. 1)	5	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P2 Building Construction 2 (mo. 5)	3	37.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction 1 (mo. 2-	2	42.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P3 Building Construction 2 (mo. 5)	3	42.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Building Construction 1 (mo. 2-	2	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Site Preparation (mo. 1)	5	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P4 Building Construction 2 (mo. 5)	3	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Building Construction 1 (mo. 2-	2	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Site Preparation (mo. 1)	5	41.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P5 Building Construction 2 (mo. 5)	3	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Building Construction 1 (mo. 2-	2	41.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P6 Building Construction 2 (mo. 5)	0	28.00	10.00	0.00	10.80	7.30				

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 P1 Site Preparation (mo. 1) - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1584	0.1041	2.0000e-004		7.9200e-003	7.9200e-003		7.4700e-003	7.4700e-003	0.0000	17.5578	17.5578	4.0100e-003	0.0000	17.6580
Total	**0.0153**	**0.1584**	**0.1041**	**2.0000e-004**	**5.8300e-003**	**7.9200e-003**	**0.0138**	**6.3000e-004**	**7.4700e-003**	**8.1000e-003**	**0.0000**	**17.5578**	**17.5578**	**4.0100e-003**	**0.0000**	**17.6580**

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	4.8000e-004	0.0144	3.8200e-003	3.0000e-005	0.0249	7.0000e-005	0.0250	2.6400e-003	7.0000e-005	2.7100e-003	0.0000	3.3247	3.3247	2.5000e-004	0.0000	3.3310
Worker	1.4300e-003	1.0600e-003	0.0104	3.0000e-005	0.1130	2.0000e-005	0.1131	0.0118	2.0000e-005	0.0118	0.0000	2.8161	2.8161	8.0000e-005	0.0000	2.8183
Total	**1.9100e-003**	**0.0154**	**0.0142**	**6.0000e-005**	**0.1380**	**9.0000e-005**	**0.1381**	**0.0144**	**9.0000e-005**	**0.0145**	**0.0000**	**6.1408**	**6.1408**	**3.3000e-004**	**0.0000**	**6.1493**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0153	0.1584	0.1041	2.0000e-004		7.9200e-003	7.9200e-003		7.4700e-003	7.4700e-003	0.0000	17.5578	17.5578	4.0100e-003	0.0000	17.6580
Total	**0.0153**	**0.1584**	**0.1041**	**2.0000e-004**	**2.2700e-003**	**7.9200e-003**	**0.0102**	**2.5000e-004**	**7.4700e-003**	**7.7200e-003**	**0.0000**	**17.5578**	**17.5578**	**4.0100e-003**	**0.0000**	**17.6580**

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	4.8000e-004	0.0144	3.8200e-003	3.0000e-005	0.0177	7.0000e-005	0.0178	1.9200e-003	7.0000e-005	1.9900e-003	0.0000	3.3247	3.3247	2.5000e-004	0.0000	3.3310
Worker	1.4300e-003	1.0600e-003	0.0104	3.0000e-005	0.0800	2.0000e-005	0.0801	8.5000e-003	2.0000e-005	8.5200e-003	0.0000	2.8161	2.8161	8.0000e-005	0.0000	2.8183
Total	**1.9100e-003**	**0.0154**	**0.0142**	**6.0000e-005**	**0.0977**	**9.0000e-005**	**0.0978**	**0.0104**	**9.0000e-005**	**0.0105**	**0.0000**	**6.1408**	**6.1408**	**3.3000e-004**	**0.0000**	**6.1493**

3.3 P1 Building Construction 1 (mo. 2-4) - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0112	0.1246	0.1487	2.1000e-004		6.6800e-003	6.6800e-003		6.1400e-003	6.1400e-003	0.0000	18.7058	18.7058	6.0500e-003	0.0000	18.8570
Total	**0.0112**	**0.1246**	**0.1487**	**2.1000e-004**		**6.6800e-003**	**6.6800e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**18.7058**	**18.7058**	**6.0500e-003**	**0.0000**	**18.8570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4900e-003	0.0445	0.0118	1.1000e-004	0.0772	2.2000e-004	0.0774	8.1800e-003	2.1000e-004	8.3900e-003	0.0000	10.2906	10.2906	7.9000e-004	0.0000	10.3103
Worker	4.4300e-003	3.2800e-003	0.0322	1.0000e-004	0.3498	7.0000e-005	0.3499	0.0365	6.0000e-005	0.0366	0.0000	8.7166	8.7166	2.6000e-004	0.0000	8.7232
Total	**5.9200e-003**	**0.0477**	**0.0440**	**2.1000e-004**	**0.4270**	**2.9000e-004**	**0.4273**	**0.0447**	**2.7000e-004**	**0.0449**	**0.0000**	**19.0072**	**19.0072**	**1.0500e-003**	**0.0000**	**19.0335**

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	0.0112	0.1246	0.1487	2.1000e-004		6.6800e-003	6.6800e-003		6.1400e-003	6.1400e-003	0.0000	18.7058	18.7058	6.0500e-003	0.0000	18.8570
Total	**0.0112**	**0.1246**	**0.1487**	**2.1000e-004**		**6.6800e-003**	**6.6800e-003**		**6.1400e-003**	**6.1400e-003**	**0.0000**	**18.7058**	**18.7058**	**6.0500e-003**	**0.0000**	**18.8570**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4900e-003	0.0445	0.0118	1.1000e-004	0.0548	2.2000e-004	0.0550	5.9500e-003	2.1000e-004	6.1600e-003	0.0000	10.2906	10.2906	7.9000e-004	0.0000	10.3103
Worker	4.4300e-003	3.2800e-003	0.0322	1.0000e-004	0.2477	7.0000e-005	0.2478	0.0263	6.0000e-005	0.0264	0.0000	8.7166	8.7166	2.6000e-004	0.0000	8.7232
Total	**5.9200e-003**	**0.0477**	**0.0440**	**2.1000e-004**	**0.3025**	**2.9000e-004**	**0.3028**	**0.0323**	**2.7000e-004**	**0.0325**	**0.0000**	**19.0072**	**19.0072**	**1.0500e-003**	**0.0000**	**19.0335**

3.4 P1 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0988	0.1074	1.7000e-004		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	14.9791	14.9791	1.1600e-003	0.0000	15.0081
Total	**1.1787**	**0.0988**	**0.1074**	**1.7000e-004**		**6.5100e-003**	**6.5100e-003**		**6.5100e-003**	**6.5100e-003**	**0.0000**	**14.9791**	**14.9791**	**1.1600e-003**	**0.0000**	**15.0081**

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	3.4000e-004	0.0100	2.6700e-003	2.0000e-005	0.0174	5.0000e-005	0.0175	1.8500e-003	5.0000e-005	1.8900e-003	0.0000	2.3220	2.3220	1.8000e-004	0.0000	2.3264
Worker	6.5000e-004	4.8000e-004	4.7100e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.2758	1.2758	4.0000e-005	0.0000	1.2767
Total	**9.9000e-004**	**0.0105**	**7.3800e-003**	**3.0000e-005**	**0.0686**	**6.0000e-005**	**0.0687**	**7.1900e-003**	**6.0000e-005**	**7.2400e-003**	**0.0000**	**3.5978**	**3.5978**	**2.2000e-004**	**0.0000**	**3.6032**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.0988	0.1074	1.7000e-004		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	14.9791	14.9791	1.1600e-003	0.0000	15.0081
Total	**1.1787**	**0.0988**	**0.1074**	**1.7000e-004**		**6.5100e-003**	**6.5100e-003**		**6.5100e-003**	**6.5100e-003**	**0.0000**	**14.9791**	**14.9791**	**1.1600e-003**	**0.0000**	**15.0081**

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	3.4000e-004	0.0100	2.6700e-003	2.0000e-005	0.0124	5.0000e-005	0.0124	1.3400e-003	5.0000e-005	1.3900e-003	0.0000	2.3220	2.3220	1.8000e-004	0.0000	2.3264
Worker	6.5000e-004	4.8000e-004	4.7100e-003	1.0000e-005	0.0363	1.0000e-005	0.0363	3.8500e-003	1.0000e-005	3.8600e-003	0.0000	1.2758	1.2758	4.0000e-005	0.0000	1.2767
Total	**9.9000e-004**	**0.0105**	**7.3800e-003**	**3.0000e-005**	**0.0486**	**6.0000e-005**	**0.0487**	**5.1900e-003**	**6.0000e-005**	**5.2500e-003**	**0.0000**	**3.5978**	**3.5978**	**2.2000e-004**	**0.0000**	**3.6032**

3.5 P2 Site Preparation (mo. 1) - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1734	0.1140	2.2000e-004		8.6700e-003	8.6700e-003		8.1800e-003	8.1800e-003	0.0000	19.2299	19.2299	4.3900e-003	0.0000	19.3397
Total	**0.0168**	**0.1734**	**0.1140**	**2.2000e-004**	**5.8300e-003**	**8.6700e-003**	**0.0145**	**6.3000e-004**	**8.1800e-003**	**8.8100e-003**	**0.0000**	**19.2299**	**19.2299**	**4.3900e-003**	**0.0000**	**19.3397**

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	5.3000e-004	0.0157	4.1800e-003	4.0000e-005	0.0273	8.0000e-005	0.0274	2.9000e-003	7.0000e-005	2.9700e-003	0.0000	3.6413	3.6413	2.8000e-004	0.0000	3.6483
Worker	1.5700e-003	1.1600e-003	0.0114	3.0000e-005	0.1238	2.0000e-005	0.1238	0.0129	2.0000e-005	0.0129	0.0000	3.0844	3.0844	9.0000e-005	0.0000	3.0867
Total	**2.1000e-003**	**0.0169**	**0.0156**	**7.0000e-005**	**0.1511**	**1.0000e-004**	**0.1512**	**0.0158**	**9.0000e-005**	**0.0159**	**0.0000**	**6.7256**	**6.7256**	**3.7000e-004**	**0.0000**	**6.7349**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1734	0.1140	2.2000e-004		8.6700e-003	8.6700e-003		8.1800e-003	8.1800e-003	0.0000	19.2299	19.2299	4.3900e-003	0.0000	19.3397
Total	**0.0168**	**0.1734**	**0.1140**	**2.2000e-004**	**2.2700e-003**	**8.6700e-003**	**0.0109**	**2.5000e-004**	**8.1800e-003**	**8.4300e-003**	**0.0000**	**19.2299**	**19.2299**	**4.3900e-003**	**0.0000**	**19.3397**

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	5.3000e-004	0.0157	4.1800e-003	4.0000e-005	0.0194	8.0000e-005	0.0195	2.1100e-003	7.0000e-005	2.1800e-003	0.0000	3.6413	3.6413	2.8000e-004	0.0000	3.6483
Worker	1.5700e-003	1.1600e-003	0.0114	3.0000e-005	0.0877	2.0000e-005	0.0877	9.3000e-003	2.0000e-005	9.3300e-003	0.0000	3.0844	3.0844	9.0000e-005	0.0000	3.0867
Total	**2.1000e-003**	**0.0169**	**0.0156**	**7.0000e-005**	**0.1070**	**1.0000e-004**	**0.1071**	**0.0114**	**9.0000e-005**	**0.0115**	**0.0000**	**6.7256**	**6.7256**	**3.7000e-004**	**0.0000**	**6.7349**

3.6 P1 Building Construction 2 (mo. 5) - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.1300e-003	0.0364	0.0460	7.0000e-005		1.5300e-003	1.5300e-003		1.4200e-003	1.4200e-003	0.0000	6.0965	6.0965	1.8600e-003	0.0000	6.1429
Total	**3.1300e-003**	**0.0364**	**0.0460**	**7.0000e-005**		**1.5300e-003**	**1.5300e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**6.0965**	**6.0965**	**1.8600e-003**	**0.0000**	**6.1429**

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	5.3000e-004	0.0157	4.1800e-003	4.0000e-005	0.0273	8.0000e-005	0.0274	2.9000e-003	7.0000e-005	2.9700e-003	0.0000	3.6413	3.6413	2.8000e-004	0.0000	3.6483
Worker	1.5700e-003	1.1600e-003	0.0114	3.0000e-005	0.1238	2.0000e-005	0.1238	0.0129	2.0000e-005	0.0129	0.0000	3.0844	3.0844	9.0000e-005	0.0000	3.0867
Total	**2.1000e-003**	**0.0169**	**0.0156**	**7.0000e-005**	**0.1511**	**1.0000e-004**	**0.1512**	**0.0158**	**9.0000e-005**	**0.0159**	**0.0000**	**6.7256**	**6.7256**	**3.7000e-004**	**0.0000**	**6.7349**

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	3.1300e-003	0.0364	0.0460	7.0000e-005		1.5300e-003	1.5300e-003		1.4200e-003	1.4200e-003	0.0000	6.0965	6.0965	1.8600e-003	0.0000	6.1429
Total	**3.1300e-003**	**0.0364**	**0.0460**	**7.0000e-005**		**1.5300e-003**	**1.5300e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**6.0965**	**6.0965**	**1.8600e-003**	**0.0000**	**6.1429**

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	5.3000e-004	0.0157	4.1800e-003	4.0000e-005	0.0194	8.0000e-005	0.0195	2.1100e-003	7.0000e-005	2.1800e-003	0.0000	3.6413	3.6413	2.8000e-004	0.0000	3.6483
Worker	1.5700e-003	1.1600e-003	0.0114	3.0000e-005	0.0877	2.0000e-005	0.0877	9.3000e-003	2.0000e-005	9.3300e-003	0.0000	3.0844	3.0844	9.0000e-005	0.0000	3.0867
Total	**2.1000e-003**	**0.0169**	**0.0156**	**7.0000e-005**	**0.1070**	**1.0000e-004**	**0.1071**	**0.0114**	**9.0000e-005**	**0.0115**	**0.0000**	**6.7256**	**6.7256**	**3.7000e-004**	**0.0000**	**6.7349**

3.7 P2 Building Construction 1 (mo. 2-4) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9400e-003	0.1123	0.1457	2.1000e-004		5.5800e-003	5.5800e-003		5.1300e-003	5.1300e-003	0.0000	18.4244	18.4244	5.9600e-003	0.0000	18.5734
Total	**9.9400e-003**	**0.1123**	**0.1457**	**2.1000e-004**		**5.5800e-003**	**5.5800e-003**		**5.1300e-003**	**5.1300e-003**	**0.0000**	**18.4244**	**18.4244**	**5.9600e-003**	**0.0000**	**18.5734**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0395	0.0105	1.0000e-004	0.0760	8.0000e-005	0.0761	8.0600e-003	8.0000e-005	8.1400e-003	0.0000	10.0393	10.0393	7.5000e-004	0.0000	10.0579
Worker	4.1200e-003	2.9400e-003	0.0296	9.0000e-005	0.3445	7.0000e-005	0.3445	0.0359	6.0000e-005	0.0360	0.0000	8.2942	8.2942	2.4000e-004	0.0000	8.3001
Total	**5.3100e-003**	**0.0424**	**0.0401**	**1.9000e-004**	**0.4204**	**1.5000e-004**	**0.4206**	**0.0440**	**1.4000e-004**	**0.0441**	**0.0000**	**18.3335**	**18.3335**	**9.9000e-004**	**0.0000**	**18.3581**

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	9.9400e-003	0.1123	0.1457	2.1000e-004		5.5800e-003	5.5800e-003		5.1300e-003	5.1300e-003	0.0000	18.4244	18.4244	5.9600e-003	0.0000	18.5733
Total	**9.9400e-003**	**0.1123**	**0.1457**	**2.1000e-004**		**5.5800e-003**	**5.5800e-003**		**5.1300e-003**	**5.1300e-003**	**0.0000**	**18.4244**	**18.4244**	**5.9600e-003**	**0.0000**	**18.5733**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1900e-003	0.0395	0.0105	1.0000e-004	0.0539	8.0000e-005	0.0540	5.8600e-003	8.0000e-005	5.9400e-003	0.0000	10.0393	10.0393	7.5000e-004	0.0000	10.0579
Worker	4.1200e-003	2.9400e-003	0.0296	9.0000e-005	0.2439	7.0000e-005	0.2440	0.0259	6.0000e-005	0.0260	0.0000	8.2942	8.2942	2.4000e-004	0.0000	8.3001
Total	**5.3100e-003**	**0.0424**	**0.0401**	**1.9000e-004**	**0.2979**	**1.5000e-004**	**0.2980**	**0.0318**	**1.4000e-004**	**0.0319**	**0.0000**	**18.3335**	**18.3335**	**9.9000e-004**	**0.0000**	**18.3581**

3.8 P2 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0916	0.1091	1.8000e-004		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	15.3195	15.3195	1.0500e-003	0.0000	15.3458
Total	**1.1776**	**0.0916**	**0.1091**	**1.8000e-004**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**1.0500e-003**	**0.0000**	**15.3458**

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	2.8000e-004	9.2500e-003	2.4700e-003	2.0000e-005	0.0178	2.0000e-005	0.0178	1.8900e-003	2.0000e-005	1.9100e-003	0.0000	2.3530	2.3530	1.7000e-004	0.0000	2.3573
Worker	6.3000e-004	4.5000e-004	4.5000e-003	1.0000e-005	0.0524	1.0000e-005	0.0524	5.4600e-003	1.0000e-005	5.4700e-003	0.0000	1.2609	1.2609	4.0000e-005	0.0000	1.2618
Total	**9.1000e-004**	**9.7000e-003**	**6.9700e-003**	**3.0000e-005**	**0.0702**	**3.0000e-005**	**0.0702**	**7.3500e-003**	**3.0000e-005**	**7.3800e-003**	**0.0000**	**3.6139**	**3.6139**	**2.1000e-004**	**0.0000**	**3.6192**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1644					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0916	0.1091	1.8000e-004		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	15.3195	15.3195	1.0500e-003	0.0000	15.3458
Total	**1.1776**	**0.0916**	**0.1091**	**1.8000e-004**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**1.0500e-003**	**0.0000**	**15.3458**

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	2.8000e-004	9.2500e-003	2.4700e-003	2.0000e-005	0.0126	2.0000e-005	0.0127	1.3700e-003	2.0000e-005	1.3900e-003	0.0000	2.3530	2.3530	1.7000e-004	0.0000	2.3573
Worker	6.3000e-004	4.5000e-004	4.5000e-003	1.0000e-005	0.0371	1.0000e-005	0.0371	3.9400e-003	1.0000e-005	3.9500e-003	0.0000	1.2609	1.2609	4.0000e-005	0.0000	1.2618
Total	**9.1000e-004**	**9.7000e-003**	**6.9700e-003**	**3.0000e-005**	**0.0497**	**3.0000e-005**	**0.0498**	**5.3100e-003**	**3.0000e-005**	**5.3400e-003**	**0.0000**	**3.6139**	**3.6139**	**2.1000e-004**	**0.0000**	**3.6192**

3.9 P3 Site Preparation (mo. 1) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1542	0.1079	2.1000e-004		7.4300e-003	7.4300e-003		7.0000e-003	7.0000e-003	0.0000	18.3849	18.3849	4.1600e-003	0.0000	18.4890
Total	**0.0149**	**0.1542**	**0.1079**	**2.1000e-004**	**5.3000e-003**	**7.4300e-003**	**0.0127**	**5.7000e-004**	**7.0000e-003**	**7.5700e-003**	**0.0000**	**18.3849**	**18.3849**	**4.1600e-003**	**0.0000**	**18.4890**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0261	3.0000e-005	0.0262	2.7700e-003	3.0000e-005	2.8000e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.6100e-003	1.1500e-003	0.0115	4.0000e-005	0.1344	3.0000e-005	0.1344	0.0140	2.0000e-005	0.0140	0.0000	3.2364	3.2364	9.0000e-005	0.0000	3.2387
Total	**2.0200e-003**	**0.0147**	**0.0152**	**8.0000e-005**	**0.1605**	**6.0000e-005**	**0.1606**	**0.0168**	**5.0000e-005**	**0.0168**	**0.0000**	**6.6874**	**6.6874**	**3.5000e-004**	**0.0000**	**6.6961**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1542	0.1079	2.1000e-004		7.4300e-003	7.4300e-003		7.0000e-003	7.0000e-003	0.0000	18.3849	18.3849	4.1600e-003	0.0000	18.4890
Total	**0.0149**	**0.1542**	**0.1079**	**2.1000e-004**	**2.0700e-003**	**7.4300e-003**	**9.5000e-003**	**2.2000e-004**	**7.0000e-003**	**7.2200e-003**	**0.0000**	**18.3849**	**18.3849**	**4.1600e-003**	**0.0000**	**18.4890**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0185	3.0000e-005	0.0186	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.6100e-003	1.1500e-003	0.0115	4.0000e-005	0.0952	3.0000e-005	0.0952	0.0101	2.0000e-005	0.0101	0.0000	3.2364	3.2364	9.0000e-005	0.0000	3.2387
Total	**2.0200e-003**	**0.0147**	**0.0152**	**8.0000e-005**	**0.1137**	**6.0000e-005**	**0.1138**	**0.0121**	**5.0000e-005**	**0.0122**	**0.0000**	**6.6874**	**6.6874**	**3.5000e-004**	**0.0000**	**6.6961**

3.10 P2 Building Construction 2 (mo. 5) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8300e-003	0.0328	0.0439	7.0000e-005		1.2900e-003	1.2900e-003		1.2000e-003	1.2000e-003	0.0000	5.8326	5.8326	1.7800e-003	0.0000	5.8770
Total	**2.8300e-003**	**0.0328**	**0.0439**	**7.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2000e-003**	**1.2000e-003**	**0.0000**	**5.8326**	**5.8326**	**1.7800e-003**	**0.0000**	**5.8770**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0261	3.0000e-005	0.0262	2.7700e-003	3.0000e-005	2.8000e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.4100e-003	1.0100e-003	0.0102	3.0000e-005	0.1184	2.0000e-005	0.1184	0.0124	2.0000e-005	0.0124	0.0000	2.8511	2.8511	8.0000e-005	0.0000	2.8532
Total	**1.8200e-003**	**0.0146**	**0.0138**	**7.0000e-005**	**0.1445**	**5.0000e-005**	**0.1446**	**0.0151**	**5.0000e-005**	**0.0152**	**0.0000**	**6.3021**	**6.3021**	**3.4000e-004**	**0.0000**	**6.3106**

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	2.8300e-003	0.0328	0.0439	7.0000e-005		1.2900e-003	1.2900e-003		1.2000e-003	1.2000e-003	0.0000	5.8326	5.8326	1.7800e-003	0.0000	5.8770
Total	**2.8300e-003**	**0.0328**	**0.0439**	**7.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2000e-003**	**1.2000e-003**	**0.0000**	**5.8326**	**5.8326**	**1.7800e-003**	**0.0000**	**5.8770**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0185	3.0000e-005	0.0186	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.4100e-003	1.0100e-003	0.0102	3.0000e-005	0.0839	2.0000e-005	0.0839	8.9000e-003	2.0000e-005	8.9200e-003	0.0000	2.8511	2.8511	8.0000e-005	0.0000	2.8532
Total	**1.8200e-003**	**0.0146**	**0.0138**	**7.0000e-005**	**0.1024**	**5.0000e-005**	**0.1024**	**0.0109**	**5.0000e-005**	**0.0110**	**0.0000**	**6.3021**	**6.3021**	**3.4000e-004**	**0.0000**	**6.3106**

3.11 P3 Building Construction 1 (mo. 2-4) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.1140	0.1480	2.1000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	18.7123	18.7123	6.0500e-003	0.0000	18.8636
Total	**0.0101**	**0.1140**	**0.1480**	**2.1000e-004**		**5.6600e-003**	**5.6600e-003**		**5.2100e-003**	**5.2100e-003**	**0.0000**	**18.7123**	**18.7123**	**6.0500e-003**	**0.0000**	**18.8636**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2100e-003	0.0401	0.0107	1.0000e-004	0.0772	8.0000e-005	0.0773	8.1800e-003	8.0000e-005	8.2700e-003	0.0000	10.1962	10.1962	7.6000e-004	0.0000	10.2151
Worker	4.7400e-003	3.3900e-003	0.0341	1.1000e-004	0.3971	8.0000e-005	0.3972	0.0414	7.0000e-005	0.0415	0.0000	9.5621	9.5621	2.7000e-004	0.0000	9.5690
Total	**5.9500e-003**	**0.0435**	**0.0448**	**2.1000e-004**	**0.4743**	**1.6000e-004**	**0.4744**	**0.0496**	**1.5000e-004**	**0.0498**	**0.0000**	**19.7583**	**19.7583**	**1.0300e-003**	**0.0000**	**19.7841**

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	0.0101	0.1140	0.1480	2.1000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	18.7123	18.7123	6.0500e-003	0.0000	18.8636
Total	**0.0101**	**0.1140**	**0.1480**	**2.1000e-004**		**5.6600e-003**	**5.6600e-003**		**5.2100e-003**	**5.2100e-003**	**0.0000**	**18.7123**	**18.7123**	**6.0500e-003**	**0.0000**	**18.8636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2100e-003	0.0401	0.0107	1.0000e-004	0.0548	8.0000e-005	0.0549	5.9500e-003	8.0000e-005	6.0300e-003	0.0000	10.1962	10.1962	7.6000e-004	0.0000	10.2151
Worker	4.7400e-003	3.3900e-003	0.0341	1.1000e-004	0.2812	8.0000e-005	0.2813	0.0299	7.0000e-005	0.0299	0.0000	9.5621	9.5621	2.7000e-004	0.0000	9.5690
Total	**5.9500e-003**	**0.0435**	**0.0448**	**2.1000e-004**	**0.3360**	**1.6000e-004**	**0.3362**	**0.0358**	**1.5000e-004**	**0.0360**	**0.0000**	**19.7583**	**19.7583**	**1.0300e-003**	**0.0000**	**19.7841**

3.12 P3 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2988					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.0896	0.1066	1.7000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	14.9791	14.9791	1.0300e-003	0.0000	15.0048
Total	**1.3116**	**0.0896**	**0.1066**	**1.7000e-004**		**5.5200e-003**	**5.5200e-003**		**5.5200e-003**	**5.5200e-003**	**0.0000**	**14.9791**	**14.9791**	**1.0300e-003**	**0.0000**	**15.0048**

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	2.7000e-004	9.0400e-003	2.4100e-003	2.0000e-005	0.0174	2.0000e-005	0.0174	1.8500e-003	2.0000e-005	1.8600e-003	0.0000	2.3007	2.3007	1.7000e-004	0.0000	2.3049
Worker	6.1000e-004	4.4000e-004	4.4000e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.2329	1.2329	4.0000e-005	0.0000	1.2338
Total	**8.8000e-004**	**9.4800e-003**	**6.8100e-003**	**3.0000e-005**	**0.0686**	**3.0000e-005**	**0.0686**	**7.1900e-003**	**3.0000e-005**	**7.2100e-003**	**0.0000**	**3.5336**	**3.5336**	**2.1000e-004**	**0.0000**	**3.5387**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2988					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0128	0.0896	0.1066	1.7000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	14.9791	14.9791	1.0300e-003	0.0000	15.0048
Total	**1.3116**	**0.0896**	**0.1066**	**1.7000e-004**		**5.5200e-003**	**5.5200e-003**		**5.5200e-003**	**5.5200e-003**	**0.0000**	**14.9791**	**14.9791**	**1.0300e-003**	**0.0000**	**15.0048**

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	2.7000e-004	9.0400e-003	2.4100e-003	2.0000e-005	0.0124	2.0000e-005	0.0124	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	2.3007	2.3007	1.7000e-004	0.0000	2.3049
Worker	6.1000e-004	4.4000e-004	4.4000e-003	1.0000e-005	0.0363	1.0000e-005	0.0363	3.8500e-003	1.0000e-005	3.8600e-003	0.0000	1.2329	1.2329	4.0000e-005	0.0000	1.2338
Total	**8.8000e-004**	**9.4800e-003**	**6.8100e-003**	**3.0000e-005**	**0.0486**	**3.0000e-005**	**0.0487**	**5.1900e-003**	**3.0000e-005**	**5.2200e-003**	**0.0000**	**3.5336**	**3.5336**	**2.1000e-004**	**0.0000**	**3.5387**

3.13 P4 Site Preparation (mo. 1) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1542	0.1079	2.1000e-004		7.4300e-003	7.4300e-003		7.0000e-003	7.0000e-003	0.0000	18.3849	18.3849	4.1600e-003	0.0000	18.4890
Total	**0.0149**	**0.1542**	**0.1079**	**2.1000e-004**	**5.3000e-003**	**7.4300e-003**	**0.0127**	**5.7000e-004**	**7.0000e-003**	**7.5700e-003**	**0.0000**	**18.3849**	**18.3849**	**4.1600e-003**	**0.0000**	**18.4890**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0261	3.0000e-005	0.0262	2.7700e-003	3.0000e-005	2.8000e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.5300e-003	1.0900e-003	0.0110	3.0000e-005	0.1280	2.0000e-005	0.1280	0.0134	2.0000e-005	0.0134	0.0000	3.0823	3.0823	9.0000e-005	0.0000	3.0845
Total	**1.9400e-003**	**0.0147**	**0.0146**	**7.0000e-005**	**0.1541**	**5.0000e-005**	**0.1542**	**0.0161**	**5.0000e-005**	**0.0162**	**0.0000**	**6.5333**	**6.5333**	**3.5000e-004**	**0.0000**	**6.5419**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0149	0.1542	0.1079	2.1000e-004		7.4300e-003	7.4300e-003		7.0000e-003	7.0000e-003	0.0000	18.3849	18.3849	4.1600e-003	0.0000	18.4890
Total	**0.0149**	**0.1542**	**0.1079**	**2.1000e-004**	**2.0700e-003**	**7.4300e-003**	**9.5000e-003**	**2.2000e-004**	**7.0000e-003**	**7.2200e-003**	**0.0000**	**18.3849**	**18.3849**	**4.1600e-003**	**0.0000**	**18.4890**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0185	3.0000e-005	0.0186	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.5300e-003	1.0900e-003	0.0110	3.0000e-005	0.0907	2.0000e-005	0.0907	9.6200e-003	2.0000e-005	9.6400e-003	0.0000	3.0823	3.0823	9.0000e-005	0.0000	3.0845
Total	**1.9400e-003**	**0.0147**	**0.0146**	**7.0000e-005**	**0.1092**	**5.0000e-005**	**0.1092**	**0.0116**	**5.0000e-005**	**0.0117**	**0.0000**	**6.5333**	**6.5333**	**3.5000e-004**	**0.0000**	**6.5419**

3.14 P3 Building Construction 2 (mo. 5) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8300e-003	0.0328	0.0439	7.0000e-005		1.2900e-003	1.2900e-003		1.2000e-003	1.2000e-003	0.0000	5.8326	5.8326	1.7800e-003	0.0000	5.8770
Total	**2.8300e-003**	**0.0328**	**0.0439**	**7.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2000e-003**	**1.2000e-003**	**0.0000**	**5.8326**	**5.8326**	**1.7800e-003**	**0.0000**	**5.8770**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0261	3.0000e-005	0.0262	2.7700e-003	3.0000e-005	2.8000e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.6100e-003	1.1500e-003	0.0115	4.0000e-005	0.1344	3.0000e-005	0.1344	0.0140	2.0000e-005	0.0140	0.0000	3.2364	3.2364	9.0000e-005	0.0000	3.2387
Total	**2.0200e-003**	**0.0147**	**0.0152**	**8.0000e-005**	**0.1605**	**6.0000e-005**	**0.1606**	**0.0168**	**5.0000e-005**	**0.0168**	**0.0000**	**6.6874**	**6.6874**	**3.5000e-004**	**0.0000**	**6.6961**

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	2.8300e-003	0.0328	0.0439	7.0000e-005		1.2900e-003	1.2900e-003		1.2000e-003	1.2000e-003	0.0000	5.8326	5.8326	1.7800e-003	0.0000	5.8770
Total	**2.8300e-003**	**0.0328**	**0.0439**	**7.0000e-005**		**1.2900e-003**	**1.2900e-003**		**1.2000e-003**	**1.2000e-003**	**0.0000**	**5.8326**	**5.8326**	**1.7800e-003**	**0.0000**	**5.8770**

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	4.1000e-004	0.0136	3.6200e-003	4.0000e-005	0.0185	3.0000e-005	0.0186	2.0100e-003	3.0000e-005	2.0400e-003	0.0000	3.4510	3.4510	2.6000e-004	0.0000	3.4574
Worker	1.6100e-003	1.1500e-003	0.0115	4.0000e-005	0.0952	3.0000e-005	0.0952	0.0101	2.0000e-005	0.0101	0.0000	3.2364	3.2364	9.0000e-005	0.0000	3.2387
Total	**2.0200e-003**	**0.0147**	**0.0152**	**8.0000e-005**	**0.1137**	**6.0000e-005**	**0.1138**	**0.0121**	**5.0000e-005**	**0.0122**	**0.0000**	**6.6874**	**6.6874**	**3.5000e-004**	**0.0000**	**6.6961**

3.15 P4 Building Construction 1 (mo. 2-4) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0101	0.1140	0.1480	2.1000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	18.7123	18.7123	6.0500e-003	0.0000	18.8636
Total	**0.0101**	**0.1140**	**0.1480**	**2.1000e-004**		**5.6600e-003**	**5.6600e-003**		**5.2100e-003**	**5.2100e-003**	**0.0000**	**18.7123**	**18.7123**	**6.0500e-003**	**0.0000**	**18.8636**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2100e-003	0.0401	0.0107	1.0000e-004	0.0772	8.0000e-005	0.0773	8.1800e-003	8.0000e-005	8.2700e-003	0.0000	10.1962	10.1962	7.6000e-004	0.0000	10.2151
Worker	4.5200e-003	3.2200e-003	0.0325	1.0000e-004	0.3782	7.0000e-005	0.3783	0.0394	7.0000e-005	0.0395	0.0000	9.1068	9.1068	2.6000e-004	0.0000	9.1133
Total	**5.7300e-003**	**0.0433**	**0.0432**	**2.0000e-004**	**0.4554**	**1.5000e-004**	**0.4555**	**0.0476**	**1.5000e-004**	**0.0478**	**0.0000**	**19.3030**	**19.3030**	**1.0200e-003**	**0.0000**	**19.3284**

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	0.0101	0.1140	0.1480	2.1000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	18.7123	18.7123	6.0500e-003	0.0000	18.8636
Total	**0.0101**	**0.1140**	**0.1480**	**2.1000e-004**		**5.6600e-003**	**5.6600e-003**		**5.2100e-003**	**5.2100e-003**	**0.0000**	**18.7123**	**18.7123**	**6.0500e-003**	**0.0000**	**18.8636**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2100e-003	0.0401	0.0107	1.0000e-004	0.0548	8.0000e-005	0.0549	5.9500e-003	8.0000e-005	6.0300e-003	0.0000	10.1962	10.1962	7.6000e-004	0.0000	10.2151
Worker	4.5200e-003	3.2200e-003	0.0325	1.0000e-004	0.2678	7.0000e-005	0.2679	0.0284	7.0000e-005	0.0285	0.0000	9.1068	9.1068	2.6000e-004	0.0000	9.1133
Total	**5.7300e-003**	**0.0433**	**0.0432**	**2.0000e-004**	**0.3226**	**1.5000e-004**	**0.3228**	**0.0344**	**1.5000e-004**	**0.0345**	**0.0000**	**19.3030**	**19.3030**	**1.0200e-003**	**0.0000**	**19.3284**

3.16 P4 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0916	0.1091	1.8000e-004		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	15.3195	15.3195	1.0500e-003	0.0000	15.3458
Total	**1.2672**	**0.0916**	**0.1091**	**1.8000e-004**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**1.0500e-003**	**0.0000**	**15.3458**

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	2.8000e-004	9.2500e-003	2.4700e-003	2.0000e-005	0.0178	2.0000e-005	0.0178	1.8900e-003	2.0000e-005	1.9100e-003	0.0000	2.3530	2.3530	1.7000e-004	0.0000	2.3573
Worker	6.3000e-004	4.5000e-004	4.5000e-003	1.0000e-005	0.0524	1.0000e-005	0.0524	5.4600e-003	1.0000e-005	5.4700e-003	0.0000	1.2609	1.2609	4.0000e-005	0.0000	1.2618
Total	**9.1000e-004**	**9.7000e-003**	**6.9700e-003**	**3.0000e-005**	**0.0702**	**3.0000e-005**	**0.0702**	**7.3500e-003**	**3.0000e-005**	**7.3800e-003**	**0.0000**	**3.6139**	**3.6139**	**2.1000e-004**	**0.0000**	**3.6192**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0131	0.0916	0.1091	1.8000e-004		5.6500e-003	5.6500e-003		5.6500e-003	5.6500e-003	0.0000	15.3195	15.3195	1.0500e-003	0.0000	15.3458
Total	**1.2672**	**0.0916**	**0.1091**	**1.8000e-004**		**5.6500e-003**	**5.6500e-003**		**5.6500e-003**	**5.6500e-003**	**0.0000**	**15.3195**	**15.3195**	**1.0500e-003**	**0.0000**	**15.3458**

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	2.8000e-004	9.2500e-003	2.4700e-003	2.0000e-005	0.0126	2.0000e-005	0.0127	1.3700e-003	2.0000e-005	1.3900e-003	0.0000	2.3530	2.3530	1.7000e-004	0.0000	2.3573
Worker	6.3000e-004	4.5000e-004	4.5000e-003	1.0000e-005	0.0371	1.0000e-005	0.0371	3.9400e-003	1.0000e-005	3.9500e-003	0.0000	1.2609	1.2609	4.0000e-005	0.0000	1.2618
Total	**9.1000e-004**	**9.7000e-003**	**6.9700e-003**	**3.0000e-005**	**0.0497**	**3.0000e-005**	**0.0498**	**5.3100e-003**	**3.0000e-005**	**5.3400e-003**	**0.0000**	**3.6139**	**3.6139**	**2.1000e-004**	**0.0000**	**3.6192**

3.17 P5 Site Preparation (mo. 1) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5700e-003	0.0000	5.5700e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1612	0.1128	2.2000e-004		7.7700e-003	7.7700e-003		7.3200e-003	7.3200e-003	0.0000	19.2206	19.2206	4.3500e-003	0.0000	19.3294
Total	**0.0155**	**0.1612**	**0.1128**	**2.2000e-004**	**5.5700e-003**	**7.7700e-003**	**0.0133**	**6.0000e-004**	**7.3200e-003**	**7.9200e-003**	**0.0000**	**19.2206**	**19.2206**	**4.3500e-003**	**0.0000**	**19.3294**

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	4.3000e-004	0.0142	3.7800e-003	4.0000e-005	0.0273	3.0000e-005	0.0273	2.9000e-003	3.0000e-005	2.9200e-003	0.0000	3.6079	3.6079	2.7000e-004	0.0000	3.6146
Worker	1.6000e-003	1.1400e-003	0.0115	4.0000e-005	0.1338	3.0000e-005	0.1339	0.0140	2.0000e-005	0.0140	0.0000	3.2224	3.2224	9.0000e-005	0.0000	3.2247
Total	**2.0300e-003**	**0.0153**	**0.0153**	**8.0000e-005**	**0.1611**	**6.0000e-005**	**0.1612**	**0.0169**	**5.0000e-005**	**0.0169**	**0.0000**	**6.8303**	**6.8303**	**3.6000e-004**	**0.0000**	**6.8393**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.1612	0.1128	2.2000e-004		7.7700e-003	7.7700e-003		7.3200e-003	7.3200e-003	0.0000	19.2206	19.2206	4.3500e-003	0.0000	19.3294
Total	**0.0155**	**0.1612**	**0.1128**	**2.2000e-004**	**2.1700e-003**	**7.7700e-003**	**9.9400e-003**	**2.3000e-004**	**7.3200e-003**	**7.5500e-003**	**0.0000**	**19.2206**	**19.2206**	**4.3500e-003**	**0.0000**	**19.3294**

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	4.3000e-004	0.0142	3.7800e-003	4.0000e-005	0.0194	3.0000e-005	0.0194	2.1100e-003	3.0000e-005	2.1300e-003	0.0000	3.6079	3.6079	2.7000e-004	0.0000	3.6146
Worker	1.6000e-003	1.1400e-003	0.0115	4.0000e-005	0.0948	3.0000e-005	0.0948	0.0101	2.0000e-005	0.0101	0.0000	3.2224	3.2224	9.0000e-005	0.0000	3.2247
Total	**2.0300e-003**	**0.0153**	**0.0153**	**8.0000e-005**	**0.1142**	**6.0000e-005**	**0.1142**	**0.0122**	**5.0000e-005**	**0.0122**	**0.0000**	**6.8303**	**6.8303**	**3.6000e-004**	**0.0000**	**6.8393**

3.18 P4 Building Construction 2 (mo. 5) - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.9600e-003	0.0343	0.0459	7.0000e-005		1.3500e-003	1.3500e-003		1.2600e-003	1.2600e-003	0.0000	6.0977	6.0977	1.8600e-003	0.0000	6.1441
Total	**2.9600e-003**	**0.0343**	**0.0459**	**7.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.2600e-003**	**1.2600e-003**	**0.0000**	**6.0977**	**6.0977**	**1.8600e-003**	**0.0000**	**6.1441**

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	4.3000e-004	0.0142	3.7800e-003	4.0000e-005	0.0273	3.0000e-005	0.0273	2.9000e-003	3.0000e-005	2.9200e-003	0.0000	3.6079	3.6079	2.7000e-004	0.0000	3.6146
Worker	1.6000e-003	1.1400e-003	0.0115	4.0000e-005	0.1338	3.0000e-005	0.1339	0.0140	2.0000e-005	0.0140	0.0000	3.2224	3.2224	9.0000e-005	0.0000	3.2247
Total	**2.0300e-003**	**0.0153**	**0.0153**	**8.0000e-005**	**0.1611**	**6.0000e-005**	**0.1612**	**0.0169**	**5.0000e-005**	**0.0169**	**0.0000**	**6.8303**	**6.8303**	**3.6000e-004**	**0.0000**	**6.8393**

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	2.9600e-003	0.0343	0.0459	7.0000e-005		1.3500e-003	1.3500e-003		1.2600e-003	1.2600e-003	0.0000	6.0977	6.0977	1.8600e-003	0.0000	6.1441
Total	**2.9600e-003**	**0.0343**	**0.0459**	**7.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.2600e-003**	**1.2600e-003**	**0.0000**	**6.0977**	**6.0977**	**1.8600e-003**	**0.0000**	**6.1441**

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	4.3000e-004	0.0142	3.7800e-003	4.0000e-005	0.0194	3.0000e-005	0.0194	2.1100e-003	3.0000e-005	2.1300e-003	0.0000	3.6079	3.6079	2.7000e-004	0.0000	3.6146
Worker	1.6000e-003	1.1400e-003	0.0115	4.0000e-005	0.0948	3.0000e-005	0.0948	0.0101	2.0000e-005	0.0101	0.0000	3.2224	3.2224	9.0000e-005	0.0000	3.2247
Total	**2.0300e-003**	**0.0153**	**0.0153**	**8.0000e-005**	**0.1142**	**6.0000e-005**	**0.1142**	**0.0122**	**5.0000e-005**	**0.0122**	**0.0000**	**6.8303**	**6.8303**	**3.6000e-004**	**0.0000**	**6.8393**

3.19 P5 Building Construction 1 (mo. 2-4) - 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	8.8500e-003	0.1010	0.1448	2.1000e-004		4.5400e-003	4.5400e-003		4.1700e-003	4.1700e-003	0.0000	18.4338	18.4338	5.9600e-003	0.0000	18.5829
Total	**8.8500e-003**	**0.1010**	**0.1448**	**2.1000e-004**		**4.5400e-003**	**4.5400e-003**		**4.1700e-003**	**4.1700e-003**	**0.0000**	**18.4338**	**18.4338**	**5.9600e-003**	**0.0000**	**18.5829**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-003	0.0373	9.9600e-003	1.0000e-004	0.0760	7.0000e-005	0.0761	8.0600e-003	7.0000e-005	8.1300e-003	0.0000	9.9442	9.9442	7.2000e-004	0.0000	9.9623
Worker	4.2100e-003	2.8900e-003	0.0297	1.0000e-004	0.3724	7.0000e-005	0.3725	0.0388	7.0000e-005	0.0389	0.0000	8.6380	8.6380	2.4000e-004	0.0000	8.6439
Total	**5.3100e-003**	**0.0402**	**0.0397**	**2.0000e-004**	**0.4484**	**1.4000e-004**	**0.4485**	**0.0469**	**1.4000e-004**	**0.0470**	**0.0000**	**18.5822**	**18.5822**	**9.6000e-004**	**0.0000**	**18.6062**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.8500e-003	0.1010	0.1448	2.1000e-004		4.5400e-003	4.5400e-003		4.1700e-003	4.1700e-003	0.0000	18.4338	18.4338	5.9600e-003	0.0000	18.5828
Total	**8.8500e-003**	**0.1010**	**0.1448**	**2.1000e-004**		**4.5400e-003**	**4.5400e-003**		**4.1700e-003**	**4.1700e-003**	**0.0000**	**18.4338**	**18.4338**	**5.9600e-003**	**0.0000**	**18.5828**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-003	0.0373	9.9600e-003	1.0000e-004	0.0539	7.0000e-005	0.0540	5.8600e-003	7.0000e-005	5.9300e-003	0.0000	9.9442	9.9442	7.2000e-004	0.0000	9.9623
Worker	4.2100e-003	2.8900e-003	0.0297	1.0000e-004	0.2637	7.0000e-005	0.2638	0.0280	7.0000e-005	0.0281	0.0000	8.6380	8.6380	2.4000e-004	0.0000	8.6439
Total	**5.3100e-003**	**0.0402**	**0.0397**	**2.0000e-004**	**0.3176**	**1.4000e-004**	**0.3178**	**0.0339**	**1.4000e-004**	**0.0340**	**0.0000**	**18.5822**	**18.5822**	**9.6000e-004**	**0.0000**	**18.6062**

3.20 P5 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2660**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0174	2.0000e-005	0.0174	1.8500e-003	2.0000e-005	1.8600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0686**	**3.0000e-005**	**0.0686**	**7.1900e-003**	**3.0000e-005**	**7.2100e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2660**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0124	2.0000e-005	0.0124	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0363	1.0000e-005	0.0363	3.8500e-003	1.0000e-005	3.8600e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0486**	**3.0000e-005**	**0.0487**	**5.1900e-003**	**3.0000e-005**	**5.2200e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

3.21 P6 Site Preparation (mo. 1) - 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					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1355	0.1024	2.0000e-004		6.4200e-003	6.4200e-003		6.0500e-003	6.0500e-003	0.0000	17.5475	17.5475	3.9500e-003	0.0000	17.6463
Total	**0.0132**	**0.1355**	**0.1024**	**2.0000e-004**	**5.8300e-003**	**6.4200e-003**	**0.0123**	**6.3000e-004**	**6.0500e-003**	**6.6800e-003**	**0.0000**	**17.5475**	**17.5475**	**3.9500e-003**	**0.0000**	**17.6463**

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	3.6000e-004	0.0122	3.2700e-003	3.0000e-005	0.0249	2.0000e-005	0.0250	2.6400e-003	2.0000e-005	2.6700e-003	0.0000	3.2630	3.2630	2.4000e-004	0.0000	3.2689
Worker	1.4200e-003	9.7000e-004	9.9900e-003	3.0000e-005	0.1252	2.0000e-005	0.1253	0.0131	2.0000e-005	0.0131	0.0000	2.9052	2.9052	8.0000e-005	0.0000	2.9072
Total	**1.7800e-003**	**0.0132**	**0.0133**	**6.0000e-005**	**0.1502**	**4.0000e-005**	**0.1502**	**0.0157**	**4.0000e-005**	**0.0158**	**0.0000**	**6.1682**	**6.1682**	**3.2000e-004**	**0.0000**	**6.1761**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0132	0.1355	0.1024	2.0000e-004		6.4200e-003	6.4200e-003		6.0500e-003	6.0500e-003	0.0000	17.5475	17.5475	3.9500e-003	0.0000	17.6463
Total	**0.0132**	**0.1355**	**0.1024**	**2.0000e-004**	**2.2700e-003**	**6.4200e-003**	**8.6900e-003**	**2.5000e-004**	**6.0500e-003**	**6.3000e-003**	**0.0000**	**17.5475**	**17.5475**	**3.9500e-003**	**0.0000**	**17.6463**

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	3.6000e-004	0.0122	3.2700e-003	3.0000e-005	0.0177	2.0000e-005	0.0177	1.9200e-003	2.0000e-005	1.9400e-003	0.0000	3.2630	3.2630	2.4000e-004	0.0000	3.2689
Worker	1.4200e-003	9.7000e-004	9.9900e-003	3.0000e-005	0.0887	2.0000e-005	0.0887	9.4100e-003	2.0000e-005	9.4400e-003	0.0000	2.9052	2.9052	8.0000e-005	0.0000	2.9072
Total	**1.7800e-003**	**0.0132**	**0.0133**	**6.0000e-005**	**0.1064**	**4.0000e-005**	**0.1064**	**0.0113**	**4.0000e-005**	**0.0114**	**0.0000**	**6.1682**	**6.1682**	**3.2000e-004**	**0.0000**	**6.1761**

3.22 P5 Building Construction 2 (mo. 5) - 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	2.5200e-003	0.0292	0.0418	7.0000e-005		1.0500e-003	1.0500e-003		9.8000e-004	9.8000e-004	0.0000	5.5692	5.5692	1.7000e-003	0.0000	5.6116
Total	**2.5200e-003**	**0.0292**	**0.0418**	**7.0000e-005**		**1.0500e-003**	**1.0500e-003**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**5.5692**	**5.5692**	**1.7000e-003**	**0.0000**	**5.6116**

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	3.6000e-004	0.0122	3.2700e-003	3.0000e-005	0.0249	2.0000e-005	0.0250	2.6400e-003	2.0000e-005	2.6700e-003	0.0000	3.2630	3.2630	2.4000e-004	0.0000	3.2689
Worker	1.3800e-003	9.5000e-004	9.7400e-003	3.0000e-005	0.1222	2.0000e-005	0.1222	0.0127	2.0000e-005	0.0128	0.0000	2.8343	2.8343	8.0000e-005	0.0000	2.8363
Total	**1.7400e-003**	**0.0132**	**0.0130**	**6.0000e-005**	**0.1471**	**4.0000e-005**	**0.1472**	**0.0154**	**4.0000e-005**	**0.0154**	**0.0000**	**6.0973**	**6.0973**	**3.2000e-004**	**0.0000**	**6.1051**

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	2.5200e-003	0.0292	0.0418	7.0000e-005		1.0500e-003	1.0500e-003		9.8000e-004	9.8000e-004	0.0000	5.5692	5.5692	1.7000e-003	0.0000	5.6115
Total	**2.5200e-003**	**0.0292**	**0.0418**	**7.0000e-005**		**1.0500e-003**	**1.0500e-003**		**9.8000e-004**	**9.8000e-004**	**0.0000**	**5.5692**	**5.5692**	**1.7000e-003**	**0.0000**	**5.6115**

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	3.6000e-004	0.0122	3.2700e-003	3.0000e-005	0.0177	2.0000e-005	0.0177	1.9200e-003	2.0000e-005	1.9400e-003	0.0000	3.2630	3.2630	2.4000e-004	0.0000	3.2689
Worker	1.3800e-003	9.5000e-004	9.7400e-003	3.0000e-005	0.0865	2.0000e-005	0.0866	9.1800e-003	2.0000e-005	9.2100e-003	0.0000	2.8343	2.8343	8.0000e-005	0.0000	2.8363
Total	**1.7400e-003**	**0.0132**	**0.0130**	**6.0000e-005**	**0.1042**	**4.0000e-005**	**0.1043**	**0.0111**	**4.0000e-005**	**0.0112**	**0.0000**	**6.0973**	**6.0973**	**3.2000e-004**	**0.0000**	**6.1051**

3.23 P6 Building Construction 1 (mo. 2-4) - 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	0.0155	0.1712	0.1480	4.2000e-004		5.9200e-003	5.9200e-003		5.4500e-003	5.4500e-003	0.0000	36.8536	36.8536	0.0119	0.0000	37.1515
Total	**0.0155**	**0.1712**	**0.1480**	**4.2000e-004**		**5.9200e-003**	**5.9200e-003**		**5.4500e-003**	**5.4500e-003**	**0.0000**	**36.8536**	**36.8536**	**0.0119**	**0.0000**	**37.1515**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1200e-003	0.0379	0.0101	1.0000e-004	0.0772	7.0000e-005	0.0772	8.1800e-003	7.0000e-005	8.2500e-003	0.0000	10.0996	10.0996	7.3000e-004	0.0000	10.1179
Worker	4.3800e-003	3.0100e-003	0.0309	1.0000e-004	0.3877	7.0000e-005	0.3877	0.0404	7.0000e-005	0.0405	0.0000	8.9923	8.9923	2.5000e-004	0.0000	8.9984
Total	**5.5000e-003**	**0.0409**	**0.0410**	**2.0000e-004**	**0.4648**	**1.4000e-004**	**0.4650**	**0.0486**	**1.4000e-004**	**0.0488**	**0.0000**	**19.0919**	**19.0919**	**9.8000e-004**	**0.0000**	**19.1163**

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	0.0155	0.1712	0.1480	4.2000e-004		5.9200e-003	5.9200e-003		5.4500e-003	5.4500e-003	0.0000	36.8535	36.8535	0.0119	0.0000	37.1515
Total	**0.0155**	**0.1712**	**0.1480**	**4.2000e-004**		**5.9200e-003**	**5.9200e-003**		**5.4500e-003**	**5.4500e-003**	**0.0000**	**36.8535**	**36.8535**	**0.0119**	**0.0000**	**37.1515**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1200e-003	0.0379	0.0101	1.0000e-004	0.0548	7.0000e-005	0.0549	5.9500e-003	7.0000e-005	6.0200e-003	0.0000	10.0996	10.0996	7.3000e-004	0.0000	10.1179
Worker	4.3800e-003	3.0100e-003	0.0309	1.0000e-004	0.2745	7.0000e-005	0.2746	0.0291	7.0000e-005	0.0292	0.0000	8.9923	8.9923	2.5000e-004	0.0000	8.9984
Total	**5.5000e-003**	**0.0409**	**0.0410**	**2.0000e-004**	**0.3293**	**1.4000e-004**	**0.3294**	**0.0351**	**1.4000e-004**	**0.0352**	**0.0000**	**19.0919**	**19.0919**	**9.8000e-004**	**0.0000**	**19.1163**

3.24 P6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2652					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2772**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0174	2.0000e-005	0.0174	1.8500e-003	2.0000e-005	1.8600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0686**	**3.0000e-005**	**0.0686**	**7.1900e-003**	**3.0000e-005**	**7.2100e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2652					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2772**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0124	2.0000e-005	0.0124	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0363	1.0000e-005	0.0363	3.8500e-003	1.0000e-005	3.8600e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0486**	**3.0000e-005**	**0.0487**	**5.1900e-003**	**3.0000e-005**	**5.2200e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

3.25 P6 Building Construction 2 (mo. 5) - 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
Vendor					0.0225	0.0000	0.0225	2.3300e-003	0.0000	2.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0933	0.0000	0.0933	9.6300e-003	0.0000	9.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.1159**	**0.0000**	**0.1159**	**0.0120**	**0.0000**	**0.0120**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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
Vendor					0.0159	0.0000	0.0159	1.6700e-003	0.0000	1.6700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					0.0660	0.0000	0.0660	6.9000e-003	0.0000	6.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**0.0819**	**0.0000**	**0.0819**	**8.5700e-003**	**0.0000**	**8.5700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

CalEEMod Version: CalEEMod.2016.3.1

Date: 8/22/2017 9:47 AM

Central Village Residential P1-P6

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
P1 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P2 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P3 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P4 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P5 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P6 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 4 Interim	0	12	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 4 Interim	0	11	No Change	0.00
Graders	Diesel	Tier 4 Interim	0	6	No Change	0.00
Pumps	Diesel	Tier 4 Interim	0	6	No Change	0.00
Rough Terrain Forklifts	Diesel	Tier 4 Interim	0	11	No Change	0.00
Skid Steer Loaders	Diesel	Tier 4 Interim	0	11	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	0	6	No Change	0.00
Trenchers	Diesel	Tier 4 Interim	0	6	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	7.73200E-002	5.36840E-001	6.44970E-001	1.05000E-003	3.29100E-002	3.29100E-002	0.00000E+000	9.05554E+001	9.05554E+001	6.24000E-003	0.00000E+000	9.07114E+001
Cement and Mortar Mixers	7.14000E-003	4.47300E-002	3.74700E-002	9.00000E-005	1.74000E-003	1.74000E-003	0.00000E+000	5.56806E+000	5.56806E+000	5.80000E-004	0.00000E+000	5.58251E+000
Graders	3.00000E-002	3.92840E-001	1.17200E-001	4.40000E-004	1.24900E-002	1.14900E-002	0.00000E+000	3.84371E+001	3.84371E+001	1.24300E-002	0.00000E+000	3.87479E+001
Pumps	2.57500E-002	2.16350E-001	2.47270E-001	4.30000E-004	1.21400E-002	1.21400E-002	0.00000E+000	3.73037E+001	3.73037E+001	2.08000E-003	0.00000E+000	3.73557E+001
Rough Terrain Forklifts	3.03400E-002	3.97540E-001	5.72080E-001	8.60000E-004	1.52100E-002	1.39900E-002	0.00000E+000	7.55417E+001	7.55417E+001	2.44300E-002	0.00000E+000	7.61525E+001
Skid Steer Loaders	9.20000E-003	1.22330E-001	1.68820E-001	2.50000E-004	5.00000E-003	4.60000E-003	0.00000E+000	2.20692E+001	2.20692E+001	7.14000E-003	0.00000E+000	2.22477E+001
Tractors/Loaders/Backhoes	4.20900E-002	4.28970E-001	4.38580E-001	8.10000E-004	2.23000E-002	2.05100E-002	0.00000E+000	7.11042E+001	7.11042E+001	2.30000E-002	0.00000E+000	7.16791E+001
Trenchers	2.58700E-002	2.36670E-001	1.72600E-001	2.20000E-004	1.73100E-002	1.59300E-002	0.00000E+000	1.95723E+001	1.95723E+001	6.33000E-003	0.00000E+000	1.97305E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	7.73200E-002	5.36840E-001	6.44970E-001	1.05000E-003	3.29100E-002	3.29100E-002	0.00000E+000	9.05553E+001	9.05553E+001	6.24000E-003	0.00000E+000	9.07113E+001
Cement and Mortar Mixers	7.14000E-003	4.47300E-002	3.74700E-002	9.00000E-005	1.74000E-003	1.74000E-003	0.00000E+000	5.56805E+000	5.56805E+000	5.80000E-004	0.00000E+000	5.58250E+000
Graders	3.00000E-002	3.92840E-001	1.17200E-001	4.40000E-004	1.24900E-002	1.14900E-002	0.00000E+000	3.84371E+001	3.84371E+001	1.24300E-002	0.00000E+000	3.87478E+001
Pumps	2.57500E-002	2.16350E-001	2.47270E-001	4.30000E-004	1.21400E-002	1.21400E-002	0.00000E+000	3.73037E+001	3.73037E+001	2.08000E-003	0.00000E+000	3.73557E+001
Rough Terrain Forklifts	3.03400E-002	3.97540E-001	5.72080E-001	8.60000E-004	1.52100E-002	1.39900E-002	0.00000E+000	7.55416E+001	7.55416E+001	2.44300E-002	0.00000E+000	7.61524E+001
Skid Steer Loaders	9.20000E-003	1.22330E-001	1.68820E-001	2.50000E-004	5.00000E-003	4.60000E-003	0.00000E+000	2.20692E+001	2.20692E+001	7.14000E-003	0.00000E+000	2.22476E+001
Tractors/Loaders/Backhoes	4.20900E-002	4.28970E-001	4.38580E-001	8.10000E-004	2.23000E-002	2.05100E-002	0.00000E+000	7.11041E+001	7.11041E+001	2.30000E-002	0.00000E+000	7.16791E+001
Trenchers	2.58700E-002	2.36670E-001	1.72600E-001	2.20000E-004	1.73100E-002	1.59300E-002	0.00000E+000	1.95723E+001	1.95723E+001	6.33000E-003	0.00000E+000	1.97305E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21473E-006	1.21473E-006	0.00000E+000	0.00000E+000	1.21264E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.79596E-006	1.79596E-006	0.00000E+000	0.00000E+000	1.79131E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.30083E-006	1.30083E-006	0.00000E+000	0.00000E+000	1.29039E-006
Pumps	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.34035E-006	1.34035E-006	0.00000E+000	0.00000E+000	1.33848E-006
Rough Terrain Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.19140E-006	1.19140E-006	0.00000E+000	0.00000E+000	1.18184E-006
Skid Steer Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.35936E-006	1.35936E-006	0.00000E+000	0.00000E+000	1.34846E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.26575E-006	1.26575E-006	0.00000E+000	0.00000E+000	1.11608E-006
Trenchers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.02185E-006	1.02185E-006	0.00000E+000	0.00000E+000	1.52049E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	40.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
P1 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P1 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 1 (mo. 2-4)	Roads	0.43	0.04	0.30	0.03	0.29	0.28
P1 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P1 Building Construction 2 (mo. 5)	Roads	0.15	0.02	0.11	0.01	0.29	0.28
P1 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P1 Site Preparation (mo. 1)	Roads	0.14	0.01	0.10	0.01	0.29	0.28
P2 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P2 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 1 (mo. 2-4)	Roads	0.42	0.04	0.30	0.03	0.29	0.28
P2 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P2 Building Construction 2 (mo. 5)	Roads	0.14	0.02	0.10	0.01	0.29	0.28
P2 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P2 Site Preparation (mo. 1)	Roads	0.15	0.02	0.11	0.01	0.29	0.28
P3 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P3 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 1 (mo. 2-4)	Roads	0.47	0.05	0.34	0.04	0.29	0.28
P3 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P3 Building Construction 2 (mo. 5)	Roads	0.16	0.02	0.11	0.01	0.29	0.28
P3 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P3 Site Preparation (mo. 1)	Roads	0.16	0.02	0.11	0.01	0.29	0.28
P4 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P4 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 1 (mo. 2-4)	Roads	0.46	0.05	0.32	0.03	0.29	0.28
P4 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P4 Building Construction 2 (mo. 5)	Roads	0.16	0.02	0.11	0.01	0.29	0.28
P4 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P4 Site Preparation (mo. 1)	Roads	0.15	0.02	0.11	0.01	0.29	0.28

P5 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P5 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 1 (mo. 2-4)	Roads	0.45	0.05	0.32	0.03	0.29	0.28
P5 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P5 Building Construction 2 (mo. 5)	Roads	0.15	0.02	0.10	0.01	0.29	0.28
P5 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.62
P5 Site Preparation (mo. 1)	Roads	0.16	0.02	0.11	0.01	0.29	0.28
P6 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P6 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 1 (mo. 2-4)	Roads	0.46	0.05	0.33	0.04	0.29	0.28
P6 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P6 Building Construction 2 (mo. 5)	Roads	0.12	0.01	0.08	0.01	0.29	0.28
P6 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P6 Site Preparation (mo. 1)	Roads	0.15	0.02	0.11	0.01	0.29	0.28

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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

Water Mitigation Measures

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

Solid Waste Mitigation

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

CalEEMod Input Matrix
Project Characteristics

Table 1: Project Detail			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Project Name	Central Village Residential P1-P6	--	Project Description
Project Location	San Diego County	--	--
Wind speed (m/s)	default		
Precipitation Frequency (days)	default		
CEC Climate Forecasting Zone	13	--	CalEEMod Appendix E
Land Use Setting	Urban	based on availability of uses	--
Start of Construction	08/01/20	Central Village Schedule	Proctor Valley EIR Assumptions
Operational Year	--	Central Village Schedule	Proctor Valley EIR Assumptions

Table 2: Utility Information			
Project Characteristic (unit)	**Analyst Input**	**Notes**	**Source**
Select Utility Company	San Diego Gas and Electric	project location	CEC, 2014
CO2 Intensity Factor (lb./Mwh)	--	Adjusted for RPS	
CH4 Intensity Factor (lb./Mwh)	default		
N20 Intensity Factor (lb./Mwh)	default		

CalEEMod Input Matrix
Project Characteristics

Table 3: Pollutants			
Pollutant Selection	**Pollutant Full Name**	**Notes**	**Source**
checked	ROG	--	--
checked	NOx	--	--
checked	CO	--	--
checked	SO2	--	--
checked	PM 10	--	--
checked	PM 2.5	--	--
checked	Fugitive PM 10	--	--
checked	Fugitive PM 2.5	--	--
checked	Biogenic CO2	--	--
checked	Non-biogenic CO2	--	--
checked	CO2	--	--
checked	CH4	--	--
checked	N20	--	--
checked	CO2e	--	--

Table 4 pertains to operational emissions and is therefore omitted

CalEEMod Input Matrix
Construction Phase

Table 5: Construction Phase					
Phase Name	**Phase Type**	**Start Date**	**End Date**	**Days/Week**	**Total Days**
P1 Site Preparation (mo. 1)	Site Preparation	2020/08/01	2020/08/31	5	21
P1 Building Construction 1 (mo. 2-4)	Building Construction	2020/09/01	2020/11/30	5	65
P1 Architectural Coating	Architectural Coating	2020/11/01	2020/12/31	5	44
P1 Building Construction 2 (mo. 5)	Building Construction	2020/12/01	2020/12/31	5	23
P2 Site Preparation (mo. 1)	Site Preparation	2020/12/01	2020/12/31	5	23
P2 Building Construction 1 (mo. 2-4)	Building Construction	2021/01/01	2021/03/31	5	64
P2 Architectural Coating	Architectural Coating	2021/03/01	2021/04/30	5	45
P2 Building Construction 2 (mo. 5)	Building Construction	2021/04/01	2021/04/30	5	22
P3 Site Preparation (mo. 1)	Site Preparation	2021/04/01	2021/04/30	5	22
P3 Building Construction 1 (mo. 2-4)	Building Construction	2021/05/01	2021/07/31	5	65
P3 Architectural Coating	Architectural Coating	2021/07/01	2021/08/31	5	44
P4 Site Preparation (mo. 1)	Site Preparation	2021/08/01	2021/08/31	5	22
P3 Building Construction 2 (mo. 5)	Building Construction	2021/08/01	2021/08/31	5	22
P4 Building Construction 1 (mo. 2-4)	Building Construction	2021/09/01	2021/11/30	5	65
P4 Architectural Coating	Architectural Coating	2021/11/01	2021/12/31	5	45
P4 Building Construction 2 (mo. 5)	Building Construction	2021/12/01	2021/12/31	5	23
P5 Site Preparation (mo. 1)	Site Preparation	2021/12/01	2021/12/31	5	23
P5 Building Construction 1 (mo. 2-4)	Building Construction	2022/01/01	2022/03/31	5	64
P5 Architectural Coating	Architectural Coating	2022/03/01	2022/04/30	5	44
P5 Building Construction 2 (mo. 5)	Building Construction	2022/04/01	2022/04/30	5	21
P6 Site Preparation (mo. 1)	Site Preparation	2022/04/01	2022/04/30	5	21
P6 Building Construction 1 (mo. 2-4)	Building Construction	2022/05/01	2022/07/31	5	65
P6 Architectural Coating	Architectural Coating	2022/07/01	2022/08/31	5	44
P6 Building Construction 2 (mo. 5)	Building Construction	2022/08/01	2022/08/31	5	23

CalEEMod Input Matrix
Construction Phase

Table 6: Off-Road Equipment					
Phase Name	**Equipment Type**	**Unit Amount**	**Hours/Day**	**Horsepower (hp)**	**Load Factor**
All Phases Site Preparation (mo.	Grader	1		default	
	Skid Steer	1			
	Trencher	1			
	Pump	1			
	Cement Mixer	1			
All Phases Building Construction	Rough Terrain Forklift	1			
	Backhoe	1			
All Phases Building Construction	Rough Terrain Forklift	1			
	Skid Steer	2			
	Cement Mixer	1			
All Phases Architectural Coating	Air Compressor	2			

Table 7: Dust from Material Movement							
Phase Name	**Material Imported**	**Material Exported**	**Material Import/Export Phased?**	**Mean Vehicle Speed (mph)**	**Total Acres Graded**	**Material Moisture Content (%)**	**Material Silt Content**
Site Prep	default						
Grading							

Table 8: Demolition		
Phase Name	**Size Metric**	**Unit Amount**
default		

CalEEMod Input Matrix
Construction Phase

Table 9: Construction Trips and VMT									
Phase Name	**# Trips Worker (/day)**	**# Trips Vendor (/day)**	**Total # Trips Hauling**	**Trip Length Worker (miles)**	**Trip Length Worker (miles)**	**Trip Length Hauling (miles)**	**Vehicle Class Worker**	**Vehicle Class Vendor**	**Vehicle Class Hauling**
All Phases Site Preparation (mo. 1)	Refer to Construction VMT worksheet								
All Phases Building Construction 1 (mo. 2-4)									
All Phases Building Construction 2 (mo. 5)									
All Phases Architectural Coating									

Table 10: On-Road Fugitive Dust								
Phase Name	**% Pave Worker**	**% Pave Vendor**	**% Pave Hauling**	**Road Silt Loading (g/m2)**	**Material Silt Content (%)**	**Material Moisture Content (%)**	**Average Vehicle Weight (tons)**	**Mean Vehicle Speed (mph)**
All Phases Site Preparation (mo. 1)	98		default					
All Phases Building Construction 1 (mo. 2-4)								
All Phases Building Construction 2 (mo. 5)								
All Phases Paving								
All Phases Architectural Coating								

Table 11: Architectural Coating										
Phase Name	**Residential Interior VOC (g/L)**	**Residential Interior Area (sqft)**	**Residential Exterior VOC (g/L)**	**Residential Exterior Area (sqft)**	**Non-Residential Interior VOC (g/L)**	**Non-Residential Interior Area (sqft)**	**Non-Residential Exterior VOC (g/L)**	**Non-Residential Exterior Area (sqft)**	**VOC for Parking Lot Paint (g/L)**	**Parking Area (sqft)**
P1 Architectural Coating	50	602,948	100	200,983	N/A	0	N/A	0	N/A	default
P2 Architectural Coating	50	602,948	100	200,983	N/A	0	N/A	0	N/A	
P3 Architectural Coating	50	672,519	100	224,173	N/A	0	N/A	0	N/A	
P4 Architectural Coating	50	649,328	100	216,443	N/A	0	N/A	0	N/A	
P5 Architectural Coating	50	649,328	100	216,443	N/A	0	N/A	0	N/A	
P6 Architectural Coating	50	655,126	100	218,375	N/A	0	N/A	0	N/A	

CalEEMod Input Matrix
Construction Mobile

Table 12: Vehicle Trips	
Land Use Subtype	**Size Metric**
Refer to VMT Worksheet	

Table 13: Vehicle Emissions
default

CalEEMod Input Matrix
Construction Mobile

Table 14: Fleet Mix

Land Use Subtype	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	default												

Table 15: Paved Road Dust

% Pave	default
Road Silt Loading (g/m2)	
Weight (tons)	

Table 16: Paved Road Dust

Material Silt Content (%)	default
Material Moisture Content (%)	
Mean Vechile Speed (mph)	
CARB Unmitigated Unpaved Road Statewide Emissions Inventory Method	

Tables 12 through 31 pertain to operational emissions and are therefore omitted

CalEEMod Input Sheet
Construction Mitigation

Table 32: Off-Road Equipment						
Equipment Type	Fuel Type	Engine Tier	Number of Equipments Mitigated	Total Number of Off-road Equipments	DPF Level	Using Oxidation Catalyst (% Reduction)
--						

Table 33: Fugitive Dust	
Soil Stabilizer for Unpaved Roads	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Replace Ground Cover of Area Disturbed	
PM 10 (% Reduction)	--
PM 2.5 (% Reduction)	--
Water Exposed Area	
Frequency (per day)	3
PM 10 (% Reduction)	default
PM 2.5 (% Reduction)	
Unpaved Road Mitigation	
Moisture Content (%)	--
Vehicle Speed (mph)	15
Clean Paved Road	
% PM Reduction	--

CalEEMod Version: CalEEMod.2016.3.1

Date: 8/22/2017 10:34 AM

Central Village Residential P7-P11

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Residential	1.00	Dwelling Unit	0.00	675,668.00	3

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Refer to CalEEMod Input Matrix Table 1

Construction Phase - Refer to CalEEMod Input Matrix Table 5

Off-road Equipment - Refer to CalEEMod Input Matrix Table 6

Trips and VMT - Refer to CalEEMod Input Matrix Table 9

On-road Fugitive Dust - Refer to CalEEMod Input Matrix Table 10

Architectural Coating - Refer to CalEEMod Input Matrix Table 11

Construction Off-road Equipment Mitigation - Refer to CalEEMod Input Matrix Table 32 and 33

Woodstoves - Operational Emissions Modeled Separately

Consumer Products - Operational Emissions Modeled Separately

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	56,043.23
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	44,448.08
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	69,570.90
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	216,442.80
tblArchitecturalCoating	ConstArea_Residential_Exterior	0.00	69,570.90
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	168,129.68
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	133,344.23
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	208,712.70
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	649,328.40
tblArchitecturalCoating	ConstArea_Residential_Interior	0.00	208,712.70
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Parking	250.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
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tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
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tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	2.14E-05	1E-10
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-17
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-18
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	11.50	11.00
tblGrading	AcresOfGrading	10.50	10.00
tblGrading	AcresOfGrading	11.00	10.50
tblGrading	AcresOfGrading	11.50	10.00
tblLandUse	BuildingSpaceSquareFeet	0.00	675,668.00
tblLandUse	LandUseSquareFeet	0.00	675,668.00
tblOffRoadEquipment	HorsePower	97.00	221.00
tblOffRoadEquipment	HorsePower	97.00	221.00
tblOffRoadEquipment	LoadFactor	0.37	0.50
tblOffRoadEquipment	LoadFactor	0.37	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		P7 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P7 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P7 Building Construction 1 (mo. 2-4)
tblOffRoadEquipment	PhaseName		P7 Site Preparation (mo. 1)
tblOffRoadEquipment	PhaseName		P7 Site Preparation (mo. 1)
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
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tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00

tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	VendorPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
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tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblOnRoadDust	WorkerPercentPave	100.00	98.00
tblProjectCharacteristics	OperationalYear	2018	2025

tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
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tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
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tblTripsAndVMT	VendorTripNumber	0.00	4.00
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tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
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tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	10.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	1.00	40.00
tblTripsAndVMT	WorkerTripNumber	1.00	13.00
tblTripsAndVMT	WorkerTripNumber	13.00	8.00
tblTripsAndVMT	WorkerTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	1.00	13.00
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	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	1.3166	0.5886	0.5959	1.2900e-003	0.9044	0.0246	0.9290	0.0946	0.0233	0.1179	0.0000	114.7205	114.7205	0.0192	0.0000	115.2013
2023	1.1858	1.1359	1.2623	2.6800e-003	0.7551	0.0473	0.8024	0.0791	0.0449	0.1240	0.0000	235.5180	235.5180	0.0497	0.0000	236.7598
2024	0.3440	0.1718	0.2526	4.5000e-004	0.1473	6.6200e-003	0.1539	0.0154	6.3800e-003	0.0218	0.0000	39.8390	39.8390	6.9300e-003	0.0000	40.0121
Maximum	**1.3166**	**1.1359**	**1.2623**	**2.6800e-003**	**0.9044**	**0.0473**	**0.9290**	**0.0946**	**0.0449**	**0.1240**	**0.0000**	**235.5180**	**235.5180**	**0.0497**	**0.0000**	**236.7598**

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	1.3166	0.5886	0.5959	1.2900e-003	0.6370	0.0246	0.6616	0.0679	0.0233	0.0912	0.0000	114.7204	114.7204	0.0192	0.0000	115.2012
2023	1.1858	1.1359	1.2623	2.6800e-003	0.5298	0.0473	0.5771	0.0565	0.0449	0.1014	0.0000	235.5178	235.5178	0.0497	0.0000	236.7596
2024	0.3440	0.1718	0.2526	4.5000e-004	0.1044	6.6200e-003	0.1110	0.0112	6.3800e-003	0.0175	0.0000	39.8389	39.8389	6.9300e-003	0.0000	40.0121
Maximum	**1.3166**	**1.1359**	**1.2623**	**2.6800e-003**	**0.6370**	**0.0473**	**0.6616**	**0.0679**	**0.0449**	**0.1014**	**0.0000**	**235.5178**	**235.5178**	**0.0497**	**0.0000**	**236.7596**

	ROG	**NOx**	**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**	**29.64**	**0.00**	**28.41**	**28.33**	**0.00**	**20.32**	**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)
9	8-1-2022	10-31-2022	0.2779	0.2779
10	11-1-2022	1-31-2023	1.6674	1.6674
11	2-1-2023	4-30-2023	0.7939	0.7939
12	5-1-2023	7-31-2023	0.6490	0.6490
13	8-1-2023	10-31-2023	0.3680	0.3680
14	11-1-2023	1-31-2024	0.4982	0.4982
15	2-1-2024	4-30-2024	0.4868	0.4868
		Highest	1.6674	1.6674

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	2.4000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.4000e-004**	**9.0000e-005**	**7.4200e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

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	2.4000e-004	9.0000e-005	7.4200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0121	0.0121	1.0000e-005	0.0000	0.0124
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	**2.4000e-004**	**9.0000e-005**	**7.4200e-003**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0121**	**0.0121**	**1.0000e-005**	**0.0000**	**0.0124**

	ROG	**NOx**	**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	P7 Site Preparation (mo. 1)	Site Preparation	8/1/2022	8/31/2022	5	23	
2	P7 Building Construction 1 (mo. 2-4)	Building Construction	9/1/2022	11/30/2022	5	65	
3	P7 Architectural Coating	Architectural Coating	11/1/2022	12/31/2022	5	44	
4	P8 Site Preparation (mo. 1)	Site Preparation	12/1/2022	12/31/2022	5	22	
5	P7 Building Construction 2 (mo. 5)	Building Construction	12/1/2022	12/31/2022	5	22	
6	P8 Building Construction 1 (mo. 2-4)	Building Construction	1/1/2023	3/1/2023	5	43	
7	P9 Site Preparation (mo. 1)	Site Preparation	3/1/2023	3/31/2023	5	23	
8	P8 Architectural Coating	Architectural Coating	3/1/2023	4/30/2023	5	43	
9	P8 Building Construction 2 (mo. 5)	Building Construction	4/1/2023	4/30/2023	5	20	
10	P9 Building Construction 1 (mo. 2-4)	Building Construction	4/1/2023	6/30/2023	5	65	
11	P9 Architectural Coating	Architectural Coating	6/1/2023	7/31/2023	5	43	
12	P10 Site Preparation (mo. 1)	Site Preparation	7/1/2023	7/31/2023	5	21	
13	P9 Building Construction 2 (mo. 5)	Building Construction	7/1/2023	7/31/2023	5	21	
14	P10 Building Construction 1 (mo. 2-4)	Building Construction	8/1/2023	10/31/2023	5	66	
15	P10 Architectural Coating	Architectural Coating	10/1/2023	11/30/2023	5	44	
16	P11 Site Preparation (mo. 1)	Site Preparation	11/1/2023	11/30/2023	5	22	
17	P10 Building Construction 2 (mo. 5)	Building Construction	11/1/2023	11/30/2023	5	22	
18	P11 Building Construction 1 (mo. 2-4)	Building Construction	12/1/2023	2/28/2024	5	64	
19	P11 Architectural Coating	Architectural Coating	2/1/2024	3/31/2024	5	42	
20	P11 Building Construction 2 (mo. 5)	Building Construction	3/1/2024	3/31/2024	5	21	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 649,328; Residential Outdoor: 216,443; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
P7 Architectural Coating	Air Compressors	2	8.00	78	0.48
P7 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P7 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P7 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P7 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P7 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P7 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P7 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P7 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P7 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P7 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P8 Architectural Coating	Air Compressors	2	8.00	78	0.48
P8 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P8 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	221	0.50
P8 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P8 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P8 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P8 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P8 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P8 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P8 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P8 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P9 Architectural Coating	Air Compressors	2	8.00	78	0.48
P9 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P9 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	221	0.50
P9 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P9 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40

P9 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P9 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P9 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P9 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P9 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P9 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P10 Architectural Coating	Air Compressors	2	8.00	78	0.48
P10 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P10 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P10 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P10 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P10 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P10 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P10 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P10 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P10 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P10 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50
P11 Architectural Coating	Air Compressors	2	8.00	78	0.48
P11 Building Construction 1 (mo. 2-4)	Rough Terrain Forklifts	1	8.00	100	0.40
P11 Building Construction 1 (mo. 2-4)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
P11 Building Construction 2 (mo. 5)	Cement and Mortar Mixers	1	8.00	9	0.56
P11 Building Construction 2 (mo. 5)	Rough Terrain Forklifts	1	8.00	100	0.40
P11 Building Construction 2 (mo. 5)	Skid Steer Loaders	1	8.00	65	0.37
P11 Site Preparation (mo. 1)	Cement and Mortar Mixers	1	8.00	9	0.56
P11 Site Preparation (mo. 1)	Graders	1	8.00	187	0.41
P11 Site Preparation (mo. 1)	Pumps	1	8.00	84	0.74
P11 Site Preparation (mo. 1)	Skid Steer Loaders	1	8.00	65	0.37
P11 Site Preparation (mo. 1)	Trenchers	1	8.00	78	0.50

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
P7 Site Preparation (mo. 1)	5	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Building Construction 1 (mo. 2-	2	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Building Construction 2 (mo. 5)	3	40.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P7 Architectural Coating	2	8.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P8 Site Preparation (mo. 1)	5	14.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P8 Building Construction 1 (mo. 2-	2	13.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P8 Building Construction 2 (mo. 5)	3	13.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P8 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P9 Site Preparation (mo. 1)	5	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P9 Building Construction 1 (mo. 2-	2	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P9 Building Construction 2 (mo. 5)	3	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P9 Architectural Coating	2	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P10 Site Preparation (mo. 1)	5	14.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P10 Building Construction 1 (mo. 2-	2	13.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P10 Building Construction 2 (mo. 5)	3	13.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P10 Architectural Coating	2	4.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P11 Site Preparation (mo. 1)	5	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P11 Building Construction 1 (mo. 2-	2	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P11 Building Construction 2 (mo. 5)	3	10.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
P11 Architectural Coating	2	2.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 P7 Site Preparation (mo. 1) - 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					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.1484	0.1121	2.2000e-004		7.0300e-003	7.0300e-003		6.6200e-003	6.6200e-003	0.0000	19.2187	19.2187	4.3300e-003	0.0000	19.3269
Total	**0.0145**	**0.1484**	**0.1121**	**2.2000e-004**	**5.8300e-003**	**7.0300e-003**	**0.0129**	**6.3000e-004**	**6.6200e-003**	**7.2500e-003**	**0.0000**	**19.2187**	**19.2187**	**4.3300e-003**	**0.0000**	**19.3269**

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	4.0000e-004	0.0134	3.5800e-003	4.0000e-005	0.0273	3.0000e-005	0.0273	2.9000e-003	2.0000e-005	2.9200e-003	0.0000	3.5737	3.5737	2.6000e-004	0.0000	3.5802
Worker	1.5100e-003	1.0400e-003	0.0107	3.0000e-005	0.1338	3.0000e-005	0.1339	0.0140	2.0000e-005	0.0140	0.0000	3.1043	3.1043	8.0000e-005	0.0000	3.1064
Total	**1.9100e-003**	**0.0144**	**0.0143**	**7.0000e-005**	**0.1611**	**6.0000e-005**	**0.1612**	**0.0169**	**4.0000e-005**	**0.0169**	**0.0000**	**6.6780**	**6.6780**	**3.4000e-004**	**0.0000**	**6.6866**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.1484	0.1121	2.2000e-004		7.0300e-003	7.0300e-003		6.6200e-003	6.6200e-003	0.0000	19.2187	19.2187	4.3300e-003	0.0000	19.3269
Total	**0.0145**	**0.1484**	**0.1121**	**2.2000e-004**	**2.2700e-003**	**7.0300e-003**	**9.3000e-003**	**2.5000e-004**	**6.6200e-003**	**6.8700e-003**	**0.0000**	**19.2187**	**19.2187**	**4.3300e-003**	**0.0000**	**19.3269**

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	4.0000e-004	0.0134	3.5800e-003	4.0000e-005	0.0194	3.0000e-005	0.0194	2.1100e-003	2.0000e-005	2.1300e-003	0.0000	3.5737	3.5737	2.6000e-004	0.0000	3.5802
Worker	1.5100e-003	1.0400e-003	0.0107	3.0000e-005	0.0948	3.0000e-005	0.0948	0.0101	2.0000e-005	0.0101	0.0000	3.1043	3.1043	8.0000e-005	0.0000	3.1064
Total	**1.9100e-003**	**0.0144**	**0.0143**	**7.0000e-005**	**0.1142**	**6.0000e-005**	**0.1142**	**0.0122**	**4.0000e-005**	**0.0122**	**0.0000**	**6.6780**	**6.6780**	**3.4000e-004**	**0.0000**	**6.6866**

3.3 P7 Building Construction 1 (mo. 2-4) - 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	8.9900e-003	0.1026	0.1471	2.1000e-004		4.6100e-003	4.6100e-003		4.2400e-003	4.2400e-003	0.0000	18.7218	18.7218	6.0600e-003	0.0000	18.8732
Total	**8.9900e-003**	**0.1026**	**0.1471**	**2.1000e-004**		**4.6100e-003**	**4.6100e-003**		**4.2400e-003**	**4.2400e-003**	**0.0000**	**18.7218**	**18.7218**	**6.0600e-003**	**0.0000**	**18.8732**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1200e-003	0.0379	0.0101	1.0000e-004	0.0772	7.0000e-005	0.0772	8.1800e-003	7.0000e-005	8.2500e-003	0.0000	10.0996	10.0996	7.3000e-004	0.0000	10.1179
Worker	4.2800e-003	2.9400e-003	0.0302	1.0000e-004	0.3782	7.0000e-005	0.3783	0.0394	7.0000e-005	0.0395	0.0000	8.7730	8.7730	2.4000e-004	0.0000	8.7789
Total	**5.4000e-003**	**0.0408**	**0.0403**	**2.0000e-004**	**0.4554**	**1.4000e-004**	**0.4555**	**0.0476**	**1.4000e-004**	**0.0478**	**0.0000**	**18.8726**	**18.8726**	**9.7000e-004**	**0.0000**	**18.8969**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.9900e-003	0.1026	0.1471	2.1000e-004		4.6100e-003	4.6100e-003		4.2400e-003	4.2400e-003	0.0000	18.7218	18.7218	6.0600e-003	0.0000	18.8732
Total	**8.9900e-003**	**0.1026**	**0.1471**	**2.1000e-004**		**4.6100e-003**	**4.6100e-003**		**4.2400e-003**	**4.2400e-003**	**0.0000**	**18.7218**	**18.7218**	**6.0600e-003**	**0.0000**	**18.8732**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1200e-003	0.0379	0.0101	1.0000e-004	0.0548	7.0000e-005	0.0549	5.9500e-003	7.0000e-005	6.0200e-003	0.0000	10.0996	10.0996	7.3000e-004	0.0000	10.1179
Worker	4.2800e-003	2.9400e-003	0.0302	1.0000e-004	0.2678	7.0000e-005	0.2679	0.0284	7.0000e-005	0.0285	0.0000	8.7730	8.7730	2.4000e-004	0.0000	8.7789
Total	**5.4000e-003**	**0.0408**	**0.0403**	**2.0000e-004**	**0.3226**	**1.4000e-004**	**0.3227**	**0.0344**	**1.4000e-004**	**0.0345**	**0.0000**	**18.8726**	**18.8726**	**9.7000e-004**	**0.0000**	**18.8969**

3.4 P7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2660**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0174	2.0000e-005	0.0174	1.8500e-003	2.0000e-005	1.8600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0512	1.0000e-005	0.0512	5.3400e-003	1.0000e-005	5.3500e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0686**	**3.0000e-005**	**0.0686**	**7.1900e-003**	**3.0000e-005**	**7.2100e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.2540					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0826	0.1064	1.7000e-004		4.7900e-003	4.7900e-003		4.7900e-003	4.7900e-003	0.0000	14.9791	14.9791	9.8000e-004	0.0000	15.0035
Total	**1.2660**	**0.0826**	**0.1064**	**1.7000e-004**		**4.7900e-003**	**4.7900e-003**		**4.7900e-003**	**4.7900e-003**	**0.0000**	**14.9791**	**14.9791**	**9.8000e-004**	**0.0000**	**15.0035**

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	2.5000e-004	8.5400e-003	2.2800e-003	2.0000e-005	0.0124	2.0000e-005	0.0124	1.3400e-003	2.0000e-005	1.3600e-003	0.0000	2.2789	2.2789	1.7000e-004	0.0000	2.2830
Worker	5.8000e-004	4.0000e-004	4.0800e-003	1.0000e-005	0.0363	1.0000e-005	0.0363	3.8500e-003	1.0000e-005	3.8600e-003	0.0000	1.1877	1.1877	3.0000e-005	0.0000	1.1885
Total	**8.3000e-004**	**8.9400e-003**	**6.3600e-003**	**3.0000e-005**	**0.0486**	**3.0000e-005**	**0.0487**	**5.1900e-003**	**3.0000e-005**	**5.2200e-003**	**0.0000**	**3.4666**	**3.4666**	**2.0000e-004**	**0.0000**	**3.4716**

3.5 P8 Site Preparation (mo. 1) - 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					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0139	0.1419	0.1072	2.1000e-004		6.7200e-003	6.7200e-003		6.3300e-003	6.3300e-003	0.0000	18.3831	18.3831	4.1400e-003	0.0000	18.4866
Total	**0.0139**	**0.1419**	**0.1072**	**2.1000e-004**	**5.8300e-003**	**6.7200e-003**	**0.0126**	**6.3000e-004**	**6.3300e-003**	**6.9600e-003**	**0.0000**	**18.3831**	**18.3831**	**4.1400e-003**	**0.0000**	**18.4866**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.2700e-003	1.1400e-003	1.0000e-005	8.7100e-003	1.0000e-005	8.7100e-003	9.2000e-004	1.0000e-005	9.3000e-004	0.0000	1.1394	1.1394	8.0000e-005	0.0000	1.1415
Worker	5.1000e-004	3.5000e-004	3.5700e-003	1.0000e-005	0.0448	1.0000e-005	0.0448	4.6700e-003	1.0000e-005	4.6800e-003	0.0000	1.0393	1.0393	3.0000e-005	0.0000	1.0400
Total	**6.4000e-004**	**4.6200e-003**	**4.7100e-003**	**2.0000e-005**	**0.0535**	**2.0000e-005**	**0.0535**	**5.5900e-003**	**2.0000e-005**	**5.6100e-003**	**0.0000**	**2.1787**	**2.1787**	**1.1000e-004**	**0.0000**	**2.1815**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.2700e-003	0.0000	2.2700e-003	2.5000e-004	0.0000	2.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0139	0.1419	0.1072	2.1000e-004		6.7200e-003	6.7200e-003		6.3300e-003	6.3300e-003	0.0000	18.3831	18.3831	4.1400e-003	0.0000	18.4866
Total	**0.0139**	**0.1419**	**0.1072**	**2.1000e-004**	**2.2700e-003**	**6.7200e-003**	**8.9900e-003**	**2.5000e-004**	**6.3300e-003**	**6.5800e-003**	**0.0000**	**18.3831**	**18.3831**	**4.1400e-003**	**0.0000**	**18.4866**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.2700e-003	1.1400e-003	1.0000e-005	6.1800e-003	1.0000e-005	6.1900e-003	6.7000e-004	1.0000e-005	6.8000e-004	0.0000	1.1394	1.1394	8.0000e-005	0.0000	1.1415
Worker	5.1000e-004	3.5000e-004	3.5700e-003	1.0000e-005	0.0317	1.0000e-005	0.0317	3.3700e-003	1.0000e-005	3.3800e-003	0.0000	1.0393	1.0393	3.0000e-005	0.0000	1.0400
Total	**6.4000e-004**	**4.6200e-003**	**4.7100e-003**	**2.0000e-005**	**0.0379**	**2.0000e-005**	**0.0379**	**4.0400e-003**	**2.0000e-005**	**4.0600e-003**	**0.0000**	**2.1787**	**2.1787**	**1.1000e-004**	**0.0000**	**2.1815**

3.6 P7 Building Construction 2 (mo. 5) - 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	2.6400e-003	0.0306	0.0438	7.0000e-005		1.1000e-003	1.1000e-003		1.0300e-003	1.0300e-003	0.0000	5.8344	5.8344	1.7800e-003	0.0000	5.8788
Total	**2.6400e-003**	**0.0306**	**0.0438**	**7.0000e-005**		**1.1000e-003**	**1.1000e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**5.8344**	**5.8344**	**1.7800e-003**	**0.0000**	**5.8788**

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	3.8000e-004	0.0128	3.4200e-003	3.0000e-005	0.0261	2.0000e-005	0.0261	2.7700e-003	2.0000e-005	2.7900e-003	0.0000	3.4183	3.4183	2.5000e-004	0.0000	3.4245
Worker	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	0.1280	2.0000e-005	0.1280	0.0134	2.0000e-005	0.0134	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713
Total	**1.8300e-003**	**0.0138**	**0.0136**	**6.0000e-005**	**0.1541**	**4.0000e-005**	**0.1542**	**0.0161**	**4.0000e-005**	**0.0162**	**0.0000**	**6.3876**	**6.3876**	**3.3000e-004**	**0.0000**	**6.3959**

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	2.6400e-003	0.0306	0.0438	7.0000e-005		1.1000e-003	1.1000e-003		1.0300e-003	1.0300e-003	0.0000	5.8344	5.8344	1.7800e-003	0.0000	5.8788
Total	**2.6400e-003**	**0.0306**	**0.0438**	**7.0000e-005**		**1.1000e-003**	**1.1000e-003**		**1.0300e-003**	**1.0300e-003**	**0.0000**	**5.8344**	**5.8344**	**1.7800e-003**	**0.0000**	**5.8788**

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	3.8000e-004	0.0128	3.4200e-003	3.0000e-005	0.0185	2.0000e-005	0.0186	2.0100e-003	2.0000e-005	2.0400e-003	0.0000	3.4183	3.4183	2.5000e-004	0.0000	3.4245
Worker	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	0.0907	2.0000e-005	0.0907	9.6200e-003	2.0000e-005	9.6400e-003	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713
Total	**1.8300e-003**	**0.0138**	**0.0136**	**6.0000e-005**	**0.1092**	**4.0000e-005**	**0.1092**	**0.0116**	**4.0000e-005**	**0.0117**	**0.0000**	**6.3876**	**6.3876**	**3.3000e-004**	**0.0000**	**6.3959**

3.7 P8 Building Construction 1 (mo. 2-4) - 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	9.3600e-003	0.0966	0.0973	2.8000e-004		3.3800e-003	3.3800e-003		3.1100e-003	3.1100e-003	0.0000	24.3669	24.3669	7.8800e-003	0.0000	24.5639
Total	**9.3600e-003**	**0.0966**	**0.0973**	**2.8000e-004**		**3.3800e-003**	**3.3800e-003**		**3.1100e-003**	**3.1100e-003**	**0.0000**	**24.3669**	**24.3669**	**7.8800e-003**	**0.0000**	**24.5639**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	8.7000e-004	5.8000e-004	6.0100e-003	2.0000e-005	0.0813	2.0000e-005	0.0813	8.4800e-003	1.0000e-005	8.4900e-003	0.0000	1.8141	1.8141	5.0000e-005	0.0000	1.8153
Total	**1.0600e-003**	**7.1400e-003**	**8.0400e-003**	**4.0000e-005**	**0.0983**	**3.0000e-005**	**0.0984**	**0.0103**	**2.0000e-005**	**0.0103**	**0.0000**	**3.9852**	**3.9852**	**2.0000e-004**	**0.0000**	**3.9900**

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	9.3600e-003	0.0966	0.0973	2.8000e-004		3.3800e-003	3.3800e-003		3.1100e-003	3.1100e-003	0.0000	24.3668	24.3668	7.8800e-003	0.0000	24.5639
Total	**9.3600e-003**	**0.0966**	**0.0973**	**2.8000e-004**		**3.3800e-003**	**3.3800e-003**		**3.1100e-003**	**3.1100e-003**	**0.0000**	**24.3668**	**24.3668**	**7.8800e-003**	**0.0000**	**24.5639**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0121	1.0000e-005	0.0121	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	8.7000e-004	5.8000e-004	6.0100e-003	2.0000e-005	0.0576	2.0000e-005	0.0576	6.1100e-003	1.0000e-005	6.1300e-003	0.0000	1.8141	1.8141	5.0000e-005	0.0000	1.8153
Total	**1.0600e-003**	**7.1400e-003**	**8.0400e-003**	**4.0000e-005**	**0.0697**	**3.0000e-005**	**0.0697**	**7.4200e-003**	**2.0000e-005**	**7.4500e-003**	**0.0000**	**3.9852**	**3.9852**	**2.0000e-004**	**0.0000**	**3.9900**

3.8 P9 Site Preparation (mo. 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1365	0.1116	2.2000e-004		6.3600e-003	6.3600e-003		5.9900e-003	5.9900e-003	0.0000	19.2179	19.2179	4.2900e-003	0.0000	19.3252
Total	**0.0136**	**0.1365**	**0.1116**	**2.2000e-004**	**5.3000e-003**	**6.3600e-003**	**0.0117**	**5.7000e-004**	**5.9900e-003**	**6.5600e-003**	**0.0000**	**19.2179**	**19.2179**	**4.2900e-003**	**0.0000**	**19.3252**

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	5.0000e-005	1.7500e-003	5.4000e-004	1.0000e-005	4.5500e-003	0.0000	4.5500e-003	4.8000e-004	0.0000	4.8000e-004	0.0000	0.5806	0.5806	4.0000e-005	0.0000	0.5816
Worker	2.9000e-004	1.9000e-004	1.9800e-003	1.0000e-005	0.0268	1.0000e-005	0.0268	2.7900e-003	0.0000	2.8000e-003	0.0000	0.5971	0.5971	2.0000e-005	0.0000	0.5975
Total	**3.4000e-004**	**1.9400e-003**	**2.5200e-003**	**2.0000e-005**	**0.0313**	**1.0000e-005**	**0.0313**	**3.2700e-003**	**0.0000**	**3.2800e-003**	**0.0000**	**1.1778**	**1.1778**	**6.0000e-005**	**0.0000**	**1.1791**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0136	0.1365	0.1116	2.2000e-004		6.3600e-003	6.3600e-003		5.9900e-003	5.9900e-003	0.0000	19.2178	19.2178	4.2900e-003	0.0000	19.3252
Total	**0.0136**	**0.1365**	**0.1116**	**2.2000e-004**	**2.0700e-003**	**6.3600e-003**	**8.4300e-003**	**2.2000e-004**	**5.9900e-003**	**6.2100e-003**	**0.0000**	**19.2178**	**19.2178**	**4.2900e-003**	**0.0000**	**19.3252**

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	5.0000e-005	1.7500e-003	5.4000e-004	1.0000e-005	3.2300e-003	0.0000	3.2300e-003	3.5000e-004	0.0000	3.5000e-004	0.0000	0.5806	0.5806	4.0000e-005	0.0000	0.5816
Worker	2.9000e-004	1.9000e-004	1.9800e-003	1.0000e-005	0.0190	1.0000e-005	0.0190	2.0100e-003	0.0000	2.0200e-003	0.0000	0.5971	0.5971	2.0000e-005	0.0000	0.5975
Total	**3.4000e-004**	**1.9400e-003**	**2.5200e-003**	**2.0000e-005**	**0.0222**	**1.0000e-005**	**0.0222**	**2.3600e-003**	**0.0000**	**2.3700e-003**	**0.0000**	**1.1778**	**1.1778**	**6.0000e-005**	**0.0000**	**1.1791**

3.9 P8 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6387	14.6387	8.8000e-004	0.0000	14.6606
Total	**0.4141**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6387**	**14.6387**	**8.8000e-004**	**0.0000**	**14.6606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	2.7000e-004	1.8000e-004	1.8500e-003	1.0000e-005	0.0250	0.0000	0.0250	2.6100e-003	0.0000	2.6100e-003	0.0000	0.5582	0.5582	1.0000e-005	0.0000	0.5586
Total	**4.6000e-004**	**6.7400e-003**	**3.8800e-003**	**3.0000e-005**	**0.0420**	**1.0000e-005**	**0.0420**	**4.4100e-003**	**1.0000e-005**	**4.4200e-003**	**0.0000**	**2.7292**	**2.7292**	**1.6000e-004**	**0.0000**	**2.7333**

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	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6386	14.6386	8.8000e-004	0.0000	14.6605
Total	**0.4141**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6386**	**14.6386**	**8.8000e-004**	**0.0000**	**14.6605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0121	1.0000e-005	0.0121	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	2.7000e-004	1.8000e-004	1.8500e-003	1.0000e-005	0.0177	0.0000	0.0177	1.8800e-003	0.0000	1.8800e-003	0.0000	0.5582	0.5582	1.0000e-005	0.0000	0.5586
Total	**4.6000e-004**	**6.7400e-003**	**3.8800e-003**	**3.0000e-005**	**0.0298**	**1.0000e-005**	**0.0298**	**3.1900e-003**	**1.0000e-005**	**3.2000e-003**	**0.0000**	**2.7292**	**2.7292**	**1.6000e-004**	**0.0000**	**2.7333**

3.10 P8 Building Construction 2 (mo. 5) - 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	2.3000e-003	0.0263	0.0398	6.0000e-005		8.9000e-004	8.9000e-004		8.3000e-004	8.3000e-004	0.0000	5.3053	5.3053	1.6200e-003	0.0000	5.3457
Total	**2.3000e-003**	**0.0263**	**0.0398**	**6.0000e-005**		**8.9000e-004**	**8.9000e-004**		**8.3000e-004**	**8.3000e-004**	**0.0000**	**5.3053**	**5.3053**	**1.6200e-003**	**0.0000**	**5.3457**

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	9.0000e-005	3.0500e-003	9.5000e-004	1.0000e-005	7.9100e-003	0.0000	7.9200e-003	8.4000e-004	0.0000	8.4000e-004	0.0000	1.0098	1.0098	7.0000e-005	0.0000	1.0115
Worker	4.1000e-004	2.7000e-004	2.8000e-003	1.0000e-005	0.0378	1.0000e-005	0.0378	3.9400e-003	1.0000e-005	3.9500e-003	0.0000	0.8438	0.8438	2.0000e-005	0.0000	0.8443
Total	**5.0000e-004**	**3.3200e-003**	**3.7500e-003**	**2.0000e-005**	**0.0457**	**1.0000e-005**	**0.0458**	**4.7800e-003**	**1.0000e-005**	**4.7900e-003**	**0.0000**	**1.8536**	**1.8536**	**9.0000e-005**	**0.0000**	**1.8558**

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	2.3000e-003	0.0263	0.0398	6.0000e-005		8.9000e-004	8.9000e-004		8.3000e-004	8.3000e-004	0.0000	5.3053	5.3053	1.6200e-003	0.0000	5.3456
Total	**2.3000e-003**	**0.0263**	**0.0398**	**6.0000e-005**		**8.9000e-004**	**8.9000e-004**		**8.3000e-004**	**8.3000e-004**	**0.0000**	**5.3053**	**5.3053**	**1.6200e-003**	**0.0000**	**5.3456**

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	9.0000e-005	3.0500e-003	9.5000e-004	1.0000e-005	5.6200e-003	0.0000	5.6200e-003	6.1000e-004	0.0000	6.1000e-004	0.0000	1.0098	1.0098	7.0000e-005	0.0000	1.0115
Worker	4.1000e-004	2.7000e-004	2.8000e-003	1.0000e-005	0.0268	1.0000e-005	0.0268	2.8400e-003	1.0000e-005	2.8500e-003	0.0000	0.8438	0.8438	2.0000e-005	0.0000	0.8443
Total	**5.0000e-004**	**3.3200e-003**	**3.7500e-003**	**2.0000e-005**	**0.0324**	**1.0000e-005**	**0.0324**	**3.4500e-003**	**1.0000e-005**	**3.4600e-003**	**0.0000**	**1.8536**	**1.8536**	**9.0000e-005**	**0.0000**	**1.8558**

3.11 P9 Building Construction 1 (mo. 2-4) - 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	0.0142	0.1460	0.1471	4.2000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	36.8336	36.8336	0.0119	0.0000	37.1315
Total	**0.0142**	**0.1460**	**0.1471**	**4.2000e-004**		**5.1100e-003**	**5.1100e-003**		**4.7000e-003**	**4.7000e-003**	**0.0000**	**36.8336**	**36.8336**	**0.0119**	**0.0000**	**37.1315**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.9600e-003	1.5400e-003	2.0000e-005	0.0129	1.0000e-005	0.0129	1.3600e-003	1.0000e-005	1.3700e-003	0.0000	1.6409	1.6409	1.1000e-004	0.0000	1.6437
Worker	8.1000e-004	5.4000e-004	5.5900e-003	2.0000e-005	0.0756	1.0000e-005	0.0757	7.8900e-003	1.0000e-005	7.9000e-003	0.0000	1.6876	1.6876	4.0000e-005	0.0000	1.6887
Total	**9.5000e-004**	**5.5000e-003**	**7.1300e-003**	**4.0000e-005**	**0.0885**	**2.0000e-005**	**0.0885**	**9.2500e-003**	**2.0000e-005**	**9.2700e-003**	**0.0000**	**3.3285**	**3.3285**	**1.5000e-004**	**0.0000**	**3.3323**

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	0.0142	0.1460	0.1471	4.2000e-004		5.1100e-003	5.1100e-003		4.7000e-003	4.7000e-003	0.0000	36.8336	36.8336	0.0119	0.0000	37.1314
Total	**0.0142**	**0.1460**	**0.1471**	**4.2000e-004**		**5.1100e-003**	**5.1100e-003**		**4.7000e-003**	**4.7000e-003**	**0.0000**	**36.8336**	**36.8336**	**0.0119**	**0.0000**	**37.1314**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.9600e-003	1.5400e-003	2.0000e-005	9.1300e-003	1.0000e-005	9.1400e-003	9.9000e-004	1.0000e-005	1.0000e-003	0.0000	1.6409	1.6409	1.1000e-004	0.0000	1.6437
Worker	8.1000e-004	5.4000e-004	5.5900e-003	2.0000e-005	0.0536	1.0000e-005	0.0536	5.6900e-003	1.0000e-005	5.7000e-003	0.0000	1.6876	1.6876	4.0000e-005	0.0000	1.6887
Total	**9.5000e-004**	**5.5000e-003**	**7.1300e-003**	**4.0000e-005**	**0.0627**	**2.0000e-005**	**0.0627**	**6.6800e-003**	**2.0000e-005**	**6.7000e-003**	**0.0000**	**3.3285**	**3.3285**	**1.5000e-004**	**0.0000**	**3.3323**

3.12 P9 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2575					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6387	14.6387	8.8000e-004	0.0000	14.6606
Total	**0.2685**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6387**	**14.6387**	**8.8000e-004**	**0.0000**	**14.6606**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	0.0125	0.0000	0.0125	1.3000e-003	0.0000	1.3100e-003	0.0000	0.2791	0.2791	1.0000e-005	0.0000	0.2793
Total	**3.2000e-004**	**6.6500e-003**	**2.9500e-003**	**2.0000e-005**	**0.0295**	**1.0000e-005**	**0.0295**	**3.1000e-003**	**1.0000e-005**	**3.1200e-003**	**0.0000**	**2.4501**	**2.4501**	**1.6000e-004**	**0.0000**	**2.4540**

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	0.2575					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.0747	0.1038	1.7000e-004		4.0600e-003	4.0600e-003		4.0600e-003	4.0600e-003	0.0000	14.6386	14.6386	8.8000e-004	0.0000	14.6605
Total	**0.2685**	**0.0747**	**0.1038**	**1.7000e-004**		**4.0600e-003**	**4.0600e-003**		**4.0600e-003**	**4.0600e-003**	**0.0000**	**14.6386**	**14.6386**	**8.8000e-004**	**0.0000**	**14.6605**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9000e-004	6.5600e-003	2.0300e-003	2.0000e-005	0.0121	1.0000e-005	0.0121	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	2.1710	2.1710	1.5000e-004	0.0000	2.1747
Worker	1.3000e-004	9.0000e-005	9.2000e-004	0.0000	8.8600e-003	0.0000	8.8600e-003	9.4000e-004	0.0000	9.4000e-004	0.0000	0.2791	0.2791	1.0000e-005	0.0000	0.2793
Total	**3.2000e-004**	**6.6500e-003**	**2.9500e-003**	**2.0000e-005**	**0.0209**	**1.0000e-005**	**0.0210**	**2.2500e-003**	**1.0000e-005**	**2.2600e-003**	**0.0000**	**2.4501**	**2.4501**	**1.6000e-004**	**0.0000**	**2.4540**

3.13 P10 Site Preparation (mo. 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-003	0.0000	5.3000e-003	5.7000e-004	0.0000	5.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1247	0.1019	2.0000e-004		5.8100e-003	5.8100e-003		5.4700e-003	5.4700e-003	0.0000	17.5467	17.5467	3.9200e-003	0.0000	17.6448
Total	**0.0124**	**0.1247**	**0.1019**	**2.0000e-004**	**5.3000e-003**	**5.8100e-003**	**0.0111**	**5.7000e-004**	**5.4700e-003**	**6.0400e-003**	**0.0000**	**17.5467**	**17.5467**	**3.9200e-003**	**0.0000**	**17.6448**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.9000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	4.6000e-004	3.0000e-004	3.1600e-003	1.0000e-005	0.0428	1.0000e-005	0.0428	4.4600e-003	1.0000e-005	4.4700e-003	0.0000	0.9541	0.9541	2.0000e-005	0.0000	0.9547
Total	**5.5000e-004**	**3.5000e-003**	**4.1500e-003**	**2.0000e-005**	**0.0511**	**1.0000e-005**	**0.0511**	**5.3400e-003**	**1.0000e-005**	**5.3600e-003**	**0.0000**	**2.0144**	**2.0144**	**9.0000e-005**	**0.0000**	**2.0168**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0700e-003	0.0000	2.0700e-003	2.2000e-004	0.0000	2.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1247	0.1019	2.0000e-004		5.8100e-003	5.8100e-003		5.4700e-003	5.4700e-003	0.0000	17.5467	17.5467	3.9200e-003	0.0000	17.6448
Total	**0.0124**	**0.1247**	**0.1019**	**2.0000e-004**	**2.0700e-003**	**5.8100e-003**	**7.8800e-003**	**2.2000e-004**	**5.4700e-003**	**5.6900e-003**	**0.0000**	**17.5467**	**17.5467**	**3.9200e-003**	**0.0000**	**17.6448**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	5.9000e-003	0.0000	5.9000e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	4.6000e-004	3.0000e-004	3.1600e-003	1.0000e-005	0.0303	1.0000e-005	0.0303	3.2100e-003	1.0000e-005	3.2200e-003	0.0000	0.9541	0.9541	2.0000e-005	0.0000	0.9547
Total	**5.5000e-004**	**3.5000e-003**	**4.1500e-003**	**2.0000e-005**	**0.0362**	**1.0000e-005**	**0.0362**	**3.8500e-003**	**1.0000e-005**	**3.8600e-003**	**0.0000**	**2.0144**	**2.0144**	**9.0000e-005**	**0.0000**	**2.0168**

3.14 P9 Building Construction 2 (mo. 5) - 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	2.4100e-003	0.0276	0.0418	7.0000e-005		9.3000e-004	9.3000e-004		8.7000e-004	8.7000e-004	0.0000	5.5705	5.5705	1.7000e-003	0.0000	5.6129
Total	**2.4100e-003**	**0.0276**	**0.0418**	**7.0000e-005**		**9.3000e-004**	**9.3000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**5.5705**	**5.5705**	**1.7000e-003**	**0.0000**	**5.6129**

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	5.0000e-005	1.6000e-003	5.0000e-004	1.0000e-005	4.1600e-003	0.0000	4.1600e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.5301	0.5301	4.0000e-005	0.0000	0.5310
Worker	2.6000e-004	1.7000e-004	1.8100e-003	1.0000e-005	0.0244	0.0000	0.0244	2.5500e-003	0.0000	2.5500e-003	0.0000	0.5452	0.5452	1.0000e-005	0.0000	0.5456
Total	**3.1000e-004**	**1.7700e-003**	**2.3100e-003**	**2.0000e-005**	**0.0286**	**0.0000**	**0.0286**	**2.9900e-003**	**0.0000**	**2.9900e-003**	**0.0000**	**1.0753**	**1.0753**	**5.0000e-005**	**0.0000**	**1.0766**

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	2.4100e-003	0.0276	0.0418	7.0000e-005		9.3000e-004	9.3000e-004		8.7000e-004	8.7000e-004	0.0000	5.5705	5.5705	1.7000e-003	0.0000	5.6129
Total	**2.4100e-003**	**0.0276**	**0.0418**	**7.0000e-005**		**9.3000e-004**	**9.3000e-004**		**8.7000e-004**	**8.7000e-004**	**0.0000**	**5.5705**	**5.5705**	**1.7000e-003**	**0.0000**	**5.6129**

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	5.0000e-005	1.6000e-003	5.0000e-004	1.0000e-005	2.9500e-003	0.0000	2.9500e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.5301	0.5301	4.0000e-005	0.0000	0.5310
Worker	2.6000e-004	1.7000e-004	1.8100e-003	1.0000e-005	0.0173	0.0000	0.0173	1.8400e-003	0.0000	1.8400e-003	0.0000	0.5452	0.5452	1.0000e-005	0.0000	0.5456
Total	**3.1000e-004**	**1.7700e-003**	**2.3100e-003**	**2.0000e-005**	**0.0203**	**0.0000**	**0.0203**	**2.1600e-003**	**0.0000**	**2.1600e-003**	**0.0000**	**1.0753**	**1.0753**	**5.0000e-005**	**0.0000**	**1.0766**

3.15 P10 Building Construction 1 (mo. 2-4) - 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	8.4900e-003	0.0969	0.1491	2.2000e-004		3.9900e-003	3.9900e-003		3.6700e-003	3.6700e-003	0.0000	19.0214	19.0214	6.1500e-003	0.0000	19.1752
Total	**8.4900e-003**	**0.0969**	**0.1491**	**2.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**19.0214**	**19.0214**	**6.1500e-003**	**0.0000**	**19.1752**

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	2.9000e-004	0.0101	3.1200e-003	3.0000e-005	0.0261	1.0000e-005	0.0261	2.7700e-003	1.0000e-005	2.7800e-003	0.0000	3.3323	3.3323	2.3000e-004	0.0000	3.3379
Worker	1.3400e-003	8.9000e-004	9.2300e-003	3.0000e-005	0.1248	2.0000e-005	0.1248	0.0130	2.0000e-005	0.0130	0.0000	2.7845	2.7845	7.0000e-005	0.0000	2.7863
Total	**1.6300e-003**	**0.0110**	**0.0124**	**6.0000e-005**	**0.1509**	**3.0000e-005**	**0.1510**	**0.0158**	**3.0000e-005**	**0.0158**	**0.0000**	**6.1168**	**6.1168**	**3.0000e-004**	**0.0000**	**6.1242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.4900e-003	0.0969	0.1491	2.2000e-004		3.9900e-003	3.9900e-003		3.6700e-003	3.6700e-003	0.0000	19.0214	19.0214	6.1500e-003	0.0000	19.1752
Total	**8.4900e-003**	**0.0969**	**0.1491**	**2.2000e-004**		**3.9900e-003**	**3.9900e-003**		**3.6700e-003**	**3.6700e-003**	**0.0000**	**19.0214**	**19.0214**	**6.1500e-003**	**0.0000**	**19.1752**

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	2.9000e-004	0.0101	3.1200e-003	3.0000e-005	0.0185	1.0000e-005	0.0186	2.0100e-003	1.0000e-005	2.0300e-003	0.0000	3.3323	3.3323	2.3000e-004	0.0000	3.3379
Worker	1.3400e-003	8.9000e-004	9.2300e-003	3.0000e-005	0.0884	2.0000e-005	0.0884	9.3800e-003	2.0000e-005	9.4000e-003	0.0000	2.7845	2.7845	7.0000e-005	0.0000	2.7863
Total	**1.6300e-003**	**0.0110**	**0.0124**	**6.0000e-005**	**0.1069**	**3.0000e-005**	**0.1070**	**0.0114**	**3.0000e-005**	**0.0114**	**0.0000**	**6.1168**	**6.1168**	**3.0000e-004**	**0.0000**	**6.1242**

3.16 P10 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0764	0.1063	1.7000e-004		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	14.9791	14.9791	9.0000e-004	0.0000	15.0015
Total	**0.4143**	**0.0764**	**0.1063**	**1.7000e-004**		**4.1500e-003**	**4.1500e-003**		**4.1500e-003**	**4.1500e-003**	**0.0000**	**14.9791**	**14.9791**	**9.0000e-004**	**0.0000**	**15.0015**

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	2.0000e-004	6.7100e-003	2.0800e-003	2.0000e-005	0.0174	1.0000e-005	0.0174	1.8500e-003	1.0000e-005	1.8500e-003	0.0000	2.2215	2.2215	1.5000e-004	0.0000	2.2253
Worker	2.7000e-004	1.8000e-004	1.8900e-003	1.0000e-005	0.0256	0.0000	0.0256	2.6700e-003	0.0000	2.6700e-003	0.0000	0.5712	0.5712	1.0000e-005	0.0000	0.5716
Total	**4.7000e-004**	**6.8900e-003**	**3.9700e-003**	**3.0000e-005**	**0.0430**	**1.0000e-005**	**0.0430**	**4.5200e-003**	**1.0000e-005**	**4.5200e-003**	**0.0000**	**2.7927**	**2.7927**	**1.6000e-004**	**0.0000**	**2.7968**

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	0.4031					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0112	0.0764	0.1063	1.7000e-004		4.1500e-003	4.1500e-003		4.1500e-003	4.1500e-003	0.0000	14.9791	14.9791	9.0000e-004	0.0000	15.0015
Total	**0.4143**	**0.0764**	**0.1063**	**1.7000e-004**		**4.1500e-003**	**4.1500e-003**		**4.1500e-003**	**4.1500e-003**	**0.0000**	**14.9791**	**14.9791**	**9.0000e-004**	**0.0000**	**15.0015**

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	2.0000e-004	6.7100e-003	2.0800e-003	2.0000e-005	0.0124	1.0000e-005	0.0124	1.3400e-003	1.0000e-005	1.3500e-003	0.0000	2.2215	2.2215	1.5000e-004	0.0000	2.2253
Worker	2.7000e-004	1.8000e-004	1.8900e-003	1.0000e-005	0.0181	0.0000	0.0181	1.9200e-003	0.0000	1.9300e-003	0.0000	0.5712	0.5712	1.0000e-005	0.0000	0.5716
Total	**4.7000e-004**	**6.8900e-003**	**3.9700e-003**	**3.0000e-005**	**0.0305**	**1.0000e-005**	**0.0305**	**3.2600e-003**	**1.0000e-005**	**3.2800e-003**	**0.0000**	**2.7927**	**2.7927**	**1.6000e-004**	**0.0000**	**2.7968**

3.17 P11 Site Preparation (mo. 1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.5700e-003	0.0000	5.5700e-003	6.0000e-004	0.0000	6.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0130	0.1306	0.1067	2.1000e-004		6.0900e-003	6.0900e-003		5.7300e-003	5.7300e-003	0.0000	18.3823	18.3823	4.1100e-003	0.0000	18.4850
Total	**0.0130**	**0.1306**	**0.1067**	**2.1000e-004**	**5.5700e-003**	**6.0900e-003**	**0.0117**	**6.0000e-004**	**5.7300e-003**	**6.3300e-003**	**0.0000**	**18.3823**	**18.3823**	**4.1100e-003**	**0.0000**	**18.4850**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.3500e-003	1.0400e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1108	1.1108	8.0000e-005	0.0000	1.1127
Worker	3.4000e-004	2.3000e-004	2.3700e-003	1.0000e-005	0.0320	1.0000e-005	0.0320	3.3400e-003	1.0000e-005	3.3400e-003	0.0000	0.7140	0.7140	2.0000e-005	0.0000	0.7144
Total	**4.4000e-004**	**3.5800e-003**	**3.4100e-003**	**2.0000e-005**	**0.0407**	**1.0000e-005**	**0.0407**	**4.2600e-003**	**1.0000e-005**	**4.2700e-003**	**0.0000**	**1.8247**	**1.8247**	**1.0000e-004**	**0.0000**	**1.8271**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1700e-003	0.0000	2.1700e-003	2.3000e-004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0130	0.1306	0.1067	2.1000e-004		6.0900e-003	6.0900e-003		5.7300e-003	5.7300e-003	0.0000	18.3823	18.3823	4.1100e-003	0.0000	18.4850
Total	**0.0130**	**0.1306**	**0.1067**	**2.1000e-004**	**2.1700e-003**	**6.0900e-003**	**8.2600e-003**	**2.3000e-004**	**5.7300e-003**	**5.9600e-003**	**0.0000**	**18.3823**	**18.3823**	**4.1100e-003**	**0.0000**	**18.4850**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.3500e-003	1.0400e-003	1.0000e-005	6.1800e-003	0.0000	6.1800e-003	6.7000e-004	0.0000	6.8000e-004	0.0000	1.1108	1.1108	8.0000e-005	0.0000	1.1127
Worker	3.4000e-004	2.3000e-004	2.3700e-003	1.0000e-005	0.0227	1.0000e-005	0.0227	2.4100e-003	1.0000e-005	2.4100e-003	0.0000	0.7140	0.7140	2.0000e-005	0.0000	0.7144
Total	**4.4000e-004**	**3.5800e-003**	**3.4100e-003**	**2.0000e-005**	**0.0288**	**1.0000e-005**	**0.0289**	**3.0800e-003**	**1.0000e-005**	**3.0900e-003**	**0.0000**	**1.8247**	**1.8247**	**1.0000e-004**	**0.0000**	**1.8271**

3.18 P10 Building Construction 2 (mo. 5) - 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	2.5300e-003	0.0290	0.0438	7.0000e-005		9.7000e-004	9.7000e-004		9.1000e-004	9.1000e-004	0.0000	5.8358	5.8358	1.7800e-003	0.0000	5.8802
Total	**2.5300e-003**	**0.0290**	**0.0438**	**7.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**5.8358**	**5.8358**	**1.7800e-003**	**0.0000**	**5.8802**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.3500e-003	1.0400e-003	1.0000e-005	8.7100e-003	0.0000	8.7100e-003	9.2000e-004	0.0000	9.3000e-004	0.0000	1.1108	1.1108	8.0000e-005	0.0000	1.1127
Worker	4.5000e-004	3.0000e-004	3.0800e-003	1.0000e-005	0.0416	1.0000e-005	0.0416	4.3400e-003	1.0000e-005	4.3500e-003	0.0000	0.9282	0.9282	2.0000e-005	0.0000	0.9288
Total	**5.5000e-004**	**3.6500e-003**	**4.1200e-003**	**2.0000e-005**	**0.0503**	**1.0000e-005**	**0.0503**	**5.2600e-003**	**1.0000e-005**	**5.2800e-003**	**0.0000**	**2.0389**	**2.0389**	**1.0000e-004**	**0.0000**	**2.0414**

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	2.5300e-003	0.0290	0.0438	7.0000e-005		9.7000e-004	9.7000e-004		9.1000e-004	9.1000e-004	0.0000	5.8358	5.8358	1.7800e-003	0.0000	5.8802
Total	**2.5300e-003**	**0.0290**	**0.0438**	**7.0000e-005**		**9.7000e-004**	**9.7000e-004**		**9.1000e-004**	**9.1000e-004**	**0.0000**	**5.8358**	**5.8358**	**1.7800e-003**	**0.0000**	**5.8802**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.3500e-003	1.0400e-003	1.0000e-005	6.1800e-003	0.0000	6.1800e-003	6.7000e-004	0.0000	6.8000e-004	0.0000	1.1108	1.1108	8.0000e-005	0.0000	1.1127
Worker	4.5000e-004	3.0000e-004	3.0800e-003	1.0000e-005	0.0295	1.0000e-005	0.0295	3.1300e-003	1.0000e-005	3.1300e-003	0.0000	0.9282	0.9282	2.0000e-005	0.0000	0.9288
Total	**5.5000e-004**	**3.6500e-003**	**4.1200e-003**	**2.0000e-005**	**0.0356**	**1.0000e-005**	**0.0357**	**3.8000e-003**	**1.0000e-005**	**3.8100e-003**	**0.0000**	**2.0389**	**2.0389**	**1.0000e-004**	**0.0000**	**2.0414**

3.19 P11 Building Construction 1 (mo. 2-4) - 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	2.7000e-003	0.0308	0.0475	7.0000e-005		1.2700e-003	1.2700e-003		1.1700e-003	1.1700e-003	0.0000	6.0523	6.0523	1.9600e-003	0.0000	6.1012
Total	**2.7000e-003**	**0.0308**	**0.0475**	**7.0000e-005**		**1.2700e-003**	**1.2700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**6.0523**	**6.0523**	**1.9600e-003**	**0.0000**	**6.1012**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.9000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	3.3000e-004	2.2000e-004	2.2600e-003	1.0000e-005	0.0306	1.0000e-005	0.0306	3.1900e-003	1.0000e-005	3.1900e-003	0.0000	0.6815	0.6815	2.0000e-005	0.0000	0.6820
Total	**4.2000e-004**	**3.4200e-003**	**3.2500e-003**	**2.0000e-005**	**0.0389**	**1.0000e-005**	**0.0389**	**4.0700e-003**	**1.0000e-005**	**4.0800e-003**	**0.0000**	**1.7418**	**1.7418**	**9.0000e-005**	**0.0000**	**1.7440**

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	2.7000e-003	0.0308	0.0475	7.0000e-005		1.2700e-003	1.2700e-003		1.1700e-003	1.1700e-003	0.0000	6.0523	6.0523	1.9600e-003	0.0000	6.1012
Total	**2.7000e-003**	**0.0308**	**0.0475**	**7.0000e-005**		**1.2700e-003**	**1.2700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**6.0523**	**6.0523**	**1.9600e-003**	**0.0000**	**6.1012**

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	9.0000e-005	3.2000e-003	9.9000e-004	1.0000e-005	5.9000e-003	0.0000	5.9000e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	1.0603	1.0603	7.0000e-005	0.0000	1.0621
Worker	3.3000e-004	2.2000e-004	2.2600e-003	1.0000e-005	0.0216	1.0000e-005	0.0216	2.3000e-003	1.0000e-005	2.3000e-003	0.0000	0.6815	0.6815	2.0000e-005	0.0000	0.6820
Total	**4.2000e-004**	**3.4200e-003**	**3.2500e-003**	**2.0000e-005**	**0.0275**	**1.0000e-005**	**0.0275**	**2.9400e-003**	**1.0000e-005**	**2.9400e-003**	**0.0000**	**1.7418**	**1.7418**	**9.0000e-005**	**0.0000**	**1.7440**

3.19 P11 Building Construction 1 (mo. 2-4) - 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	5.3000e-003	0.0602	0.0973	1.4000e-004		2.3100e-003	2.3100e-003		2.1300e-003	2.1300e-003	0.0000	12.3952	12.3952	4.0100e-003	0.0000	12.4954
Total	**5.3000e-003**	**0.0602**	**0.0973**	**1.4000e-004**		**2.3100e-003**	**2.3100e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**12.3952**	**12.3952**	**4.0100e-003**	**0.0000**	**12.4954**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	0.0170	1.0000e-005	0.0170	1.8000e-003	1.0000e-005	1.8100e-003	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	6.4000e-004	4.1000e-004	4.3200e-003	1.0000e-005	0.0626	1.0000e-005	0.0626	6.5200e-003	1.0000e-005	6.5300e-003	0.0000	1.3406	1.3406	3.0000e-005	0.0000	1.3414
Total	**8.2000e-004**	**6.8700e-003**	**6.2900e-003**	**3.0000e-005**	**0.0796**	**2.0000e-005**	**0.0796**	**8.3200e-003**	**2.0000e-005**	**8.3400e-003**	**0.0000**	**3.4978**	**3.4978**	**1.8000e-004**	**0.0000**	**3.5023**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3000e-003	0.0602	0.0973	1.4000e-004		2.3100e-003	2.3100e-003		2.1300e-003	2.1300e-003	0.0000	12.3951	12.3951	4.0100e-003	0.0000	12.4954
Total	**5.3000e-003**	**0.0602**	**0.0973**	**1.4000e-004**		**2.3100e-003**	**2.3100e-003**		**2.1300e-003**	**2.1300e-003**	**0.0000**	**12.3951**	**12.3951**	**4.0100e-003**	**0.0000**	**12.4954**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.4600e-003	1.9700e-003	2.0000e-005	0.0121	1.0000e-005	0.0121	1.3100e-003	1.0000e-005	1.3200e-003	0.0000	2.1572	2.1572	1.5000e-004	0.0000	2.1609
Worker	6.4000e-004	4.1000e-004	4.3200e-003	1.0000e-005	0.0443	1.0000e-005	0.0443	4.7000e-003	1.0000e-005	4.7100e-003	0.0000	1.3406	1.3406	3.0000e-005	0.0000	1.3414
Total	**8.2000e-004**	**6.8700e-003**	**6.2900e-003**	**3.0000e-005**	**0.0564**	**2.0000e-005**	**0.0564**	**6.0100e-003**	**2.0000e-005**	**6.0300e-003**	**0.0000**	**3.4978**	**3.4978**	**1.8000e-004**	**0.0000**	**3.5023**

3.20 P11 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	0.3247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.0683	0.1014	1.7000e-004		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	14.2982	14.2982	8.1000e-004	0.0000	14.3184
Total	**0.3348**	**0.0683**	**0.1014**	**1.7000e-004**		**3.4100e-003**	**3.4100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**14.2982**	**14.2982**	**8.1000e-004**	**0.0000**	**14.3184**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3100e-003	1.9200e-003	2.0000e-005	0.0166	1.0000e-005	0.0166	1.7600e-003	1.0000e-005	1.7700e-003	0.0000	2.1071	2.1071	1.4000e-004	0.0000	2.1106
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	0.0122	0.0000	0.0122	1.2700e-003	0.0000	1.2800e-003	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.0000e-004**	**6.3900e-003**	**2.7600e-003**	**2.0000e-005**	**0.0288**	**1.0000e-005**	**0.0289**	**3.0300e-003**	**1.0000e-005**	**3.0500e-003**	**0.0000**	**2.3689**	**2.3689**	**1.5000e-004**	**0.0000**	**2.3727**

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	0.3247					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0101	0.0683	0.1014	1.7000e-004		3.4100e-003	3.4100e-003		3.4100e-003	3.4100e-003	0.0000	14.2982	14.2982	8.1000e-004	0.0000	14.3183
Total	**0.3348**	**0.0683**	**0.1014**	**1.7000e-004**		**3.4100e-003**	**3.4100e-003**		**3.4100e-003**	**3.4100e-003**	**0.0000**	**14.2982**	**14.2982**	**8.1000e-004**	**0.0000**	**14.3183**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8000e-004	6.3100e-003	1.9200e-003	2.0000e-005	0.0118	1.0000e-005	0.0118	1.2800e-003	1.0000e-005	1.2900e-003	0.0000	2.1071	2.1071	1.4000e-004	0.0000	2.1106
Worker	1.2000e-004	8.0000e-005	8.4000e-004	0.0000	8.6500e-003	0.0000	8.6500e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.2619	0.2619	1.0000e-005	0.0000	0.2620
Total	**3.0000e-004**	**6.3900e-003**	**2.7600e-003**	**2.0000e-005**	**0.0205**	**1.0000e-005**	**0.0205**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**0.0000**	**2.3689**	**2.3689**	**1.5000e-004**	**0.0000**	**2.3727**

3.21 P11 Building Construction 2 (mo. 5) - 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	2.3500e-003	0.0267	0.0418	7.0000e-005		8.6000e-004	8.6000e-004		8.0000e-004	8.0000e-004	0.0000	5.5707	5.5707	1.7000e-003	0.0000	5.6131
Total	**2.3500e-003**	**0.0267**	**0.0418**	**7.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**5.5707**	**5.5707**	**1.7000e-003**	**0.0000**	**5.6131**

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	9.0000e-005	3.1600e-003	9.6000e-004	1.0000e-005	8.3100e-003	0.0000	8.3100e-003	8.8000e-004	0.0000	8.8000e-004	0.0000	1.0535	1.0535	7.0000e-005	0.0000	1.0553
Worker	3.1000e-004	2.0000e-004	2.1100e-003	1.0000e-005	0.0306	1.0000e-005	0.0306	3.1900e-003	1.0000e-005	3.1900e-003	0.0000	0.6547	0.6547	2.0000e-005	0.0000	0.6551
Total	**4.0000e-004**	**3.3600e-003**	**3.0700e-003**	**2.0000e-005**	**0.0389**	**1.0000e-005**	**0.0389**	**4.0700e-003**	**1.0000e-005**	**4.0700e-003**	**0.0000**	**1.7082**	**1.7082**	**9.0000e-005**	**0.0000**	**1.7104**

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	2.3500e-003	0.0267	0.0418	7.0000e-005		8.6000e-004	8.6000e-004		8.0000e-004	8.0000e-004	0.0000	5.5707	5.5707	1.7000e-003	0.0000	5.6131
Total	**2.3500e-003**	**0.0267**	**0.0418**	**7.0000e-005**		**8.6000e-004**	**8.6000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**5.5707**	**5.5707**	**1.7000e-003**	**0.0000**	**5.6131**

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	9.0000e-005	3.1600e-003	9.6000e-004	1.0000e-005	5.9000e-003	0.0000	5.9000e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	1.0535	1.0535	7.0000e-005	0.0000	1.0553
Worker	3.1000e-004	2.0000e-004	2.1100e-003	1.0000e-005	0.0216	1.0000e-005	0.0216	2.3000e-003	1.0000e-005	2.3000e-003	0.0000	0.6547	0.6547	2.0000e-005	0.0000	0.6551
Total	**4.0000e-004**	**3.3600e-003**	**3.0700e-003**	**2.0000e-005**	**0.0275**	**1.0000e-005**	**0.0275**	**2.9400e-003**	**1.0000e-005**	**2.9400e-003**	**0.0000**	**1.7082**	**1.7082**	**9.0000e-005**	**0.0000**	**1.7104**

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Date: 8/22/2017 10:36 AM

Central Village Residential P7-P11

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
P10 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P10 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P10 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P10 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P11 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P11 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P11 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P11 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P7 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P8 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P8 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P8 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P8 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P9 Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P9 Building Construction 1 (mo. 2-4)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P9 Building Construction 2 (mo. 5)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P9 Site Preparation (mo. 1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 4 Interim	0	10	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 4 Interim	0	10	No Change	0.00
Graders	Diesel	Tier 4 Interim	0	5	No Change	0.00
Pumps	Diesel	Tier 4 Interim	0	5	No Change	0.00
Rough Terrain Forklifts	Diesel	Tier 4 Interim	0	10	No Change	0.00
Skid Steer Loaders	Diesel	Tier 4 Interim	0	10	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	0	5	No Change	0.00
Trenchers	Diesel	Tier 4 Interim	0	5	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	5.53400E-002	3.76740E-001	5.21690E-001	8.60000E-004	2.04800E-002	2.04800E-002	0.00000E+000	7.35337E+001	7.35337E+001	4.43000E-003	0.00000E+000	7.36444E+001
Cement and Mortar Mixers	6.38000E-003	3.99500E-002	3.34600E-002	8.00000E-005	1.55000E-003	1.55000E-003	0.00000E+000	4.97230E+000	4.97230E+000	5.20000E-004	0.00000E+000	4.98520E+000
Graders	2.19900E-002	2.71850E-001	9.46000E-002	3.70000E-004	8.74000E-003	8.04000E-003	0.00000E+000	3.22749E+001	3.22749E+001	1.04400E-002	0.00000E+000	3.25359E+001
Pumps	1.87400E-002	1.57640E-001	2.06900E-001	3.70000E-004	7.95000E-003	7.95000E-003	0.00000E+000	3.13690E+001	3.13690E+001	1.50000E-003	0.00000E+000	3.14066E+001
Rough Terrain Forklifts	2.17900E-002	2.88120E-001	4.67850E-001	7.10000E-004	9.36000E-003	8.61000E-003	0.00000E+000	6.19231E+001	6.19231E+001	2.00300E-002	0.00000E+000	6.24238E+001
Skid Steer Loaders	7.18000E-003	9.55600E-002	1.50370E-001	2.20000E-004	3.32000E-003	3.06000E-003	0.00000E+000	1.97317E+001	1.97317E+001	6.38000E-003	0.00000E+000	1.98912E+001
Tractors/Loaders/Backhoes	3.28200E-002	3.19480E-001	3.38690E-001	8.10000E-004	1.37200E-002	1.26200E-002	0.00000E+000	7.15165E+001	7.15165E+001	2.31300E-002	0.00000E+000	7.20947E+001
Trenchers	1.96300E-002	1.82740E-001	1.44020E-001	1.90000E-004	1.27900E-002	1.17700E-002	0.00000E+000	1.64690E+001	1.64690E+001	5.33000E-003	0.00000E+000	1.66022E+001

Central Village Residential P7-P11 - Mitigation Report

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	5.53400E-002	3.76740E-001	5.21690E-001	8.60000E-004	2.04800E-002	2.04800E-002	0.00000E+000	7.35336E+001	7.35336E+001	4.43000E-003	0.00000E+000	7.36443E+001
Cement and Mortar Mixers	6.38000E-003	3.99500E-002	3.34600E-002	8.00000E-005	1.55000E-003	1.55000E-003	0.00000E+000	4.97229E+000	4.97229E+000	5.20000E-004	0.00000E+000	4.98520E+000
Graders	2.19900E-002	2.71850E-001	9.46000E-002	3.70000E-004	8.74000E-003	8.04000E-003	0.00000E+000	3.22749E+001	3.22749E+001	1.04400E-002	0.00000E+000	3.25358E+001
Pumps	1.87400E-002	1.57640E-001	2.06900E-001	3.70000E-004	7.95000E-003	7.95000E-003	0.00000E+000	3.13690E+001	3.13690E+001	1.50000E-003	0.00000E+000	3.14065E+001
Rough Terrain Forklifts	2.17900E-002	2.88120E-001	4.67850E-001	7.10000E-004	9.36000E-003	8.61000E-003	0.00000E+000	6.19230E+001	6.19230E+001	2.00300E-002	0.00000E+000	6.24237E+001
Skid Steer Loaders	7.18000E-003	9.55600E-002	1.50370E-001	2.20000E-004	3.32000E-003	3.06000E-003	0.00000E+000	1.97316E+001	1.97316E+001	6.38000E-003	0.00000E+000	1.98912E+001
Tractors/Loaders/Backhoes	3.28200E-002	3.19480E-001	3.38690E-001	8.10000E-004	1.37200E-002	1.26200E-002	0.00000E+000	7.15164E+001	7.15164E+001	2.31300E-002	0.00000E+000	7.20947E+001
Trenchers	1.96300E-002	1.82740E-001	1.44020E-001	1.90000E-004	1.27900E-002	1.17700E-002	0.00000E+000	1.64690E+001	1.64690E+001	5.33000E-003	0.00000E+000	1.66021E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.22393E-006	1.22393E-006	0.00000E+000	0.00000E+000	1.22209E-006
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.01114E-006	2.01114E-006	0.00000E+000	0.00000E+000	0.00000E+000
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.23935E-006	1.23935E-006	0.00000E+000	0.00000E+000	1.22941E-006
Pumps	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.56358E-007	9.56358E-007	0.00000E+000	0.00000E+000	1.27362E-006
Rough Terrain Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13043E-006	1.13043E-006	0.00000E+000	0.00000E+000	1.12137E-006
Skid Steer Loaders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.01360E-006	1.01360E-006	0.00000E+000	0.00000E+000	1.00547E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11862E-006	1.11862E-006	0.00000E+000	0.00000E+000	1.24836E-006
Trenchers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21440E-006	1.21440E-006	0.00000E+000	0.00000E+000	1.20466E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	30.00	PM2.5 Reduction	30.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.50	Vehicle Speed (mph)	40.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
P10 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P10 Architectural Coating	Roads	0.04	0.00	0.03	0.00	0.29	0.28
P10 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P10 Building Construction 1 (mo. 2-4)	Roads	0.15	0.02	0.11	0.01	0.29	0.28
P10 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P10 Building Construction 2 (mo. 5)	Roads	0.05	0.01	0.04	0.00	0.29	0.28
P10 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P10 Site Preparation (mo. 1)	Roads	0.05	0.01	0.04	0.00	0.29	0.28
P11 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P11 Architectural Coating	Roads	0.03	0.00	0.02	0.00	0.29	0.27
P11 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P11 Building Construction 1 (mo. 2-4)	Roads	0.12	0.01	0.08	0.01	0.29	0.28
P11 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P11 Building Construction 2 (mo. 5)	Roads	0.04	0.00	0.03	0.00	0.29	0.28
P11 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.62
P11 Site Preparation (mo. 1)	Roads	0.04	0.00	0.03	0.00	0.29	0.28
P7 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Architectural Coating	Roads	0.07	0.01	0.05	0.01	0.29	0.28
P7 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 1 (mo. 2-4)	Roads	0.46	0.05	0.32	0.03	0.29	0.28
P7 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P7 Building Construction 2 (mo. 5)	Roads	0.15	0.02	0.11	0.01	0.29	0.28
P7 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P7 Site Preparation (mo. 1)	Roads	0.16	0.02	0.11	0.01	0.29	0.28
P8 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P8 Architectural Coating	Roads	0.04	0.00	0.03	0.00	0.29	0.28
P8 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P8 Building Construction 1 (mo. 2-4)	Roads	0.10	0.01	0.07	0.01	0.29	0.28

P8 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P8 Building Construction 2 (mo. 5)	Roads	0.05	0.00	0.03	0.00	0.29	0.28
P8 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.60
P8 Site Preparation (mo. 1)	Roads	0.05	0.01	0.04	0.00	0.29	0.28
P9 Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P9 Architectural Coating	Roads	0.03	0.00	0.02	0.00	0.29	0.27
P9 Building Construction 1 (mo. 2-4)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P9 Building Construction 1 (mo. 2-4)	Roads	0.09	0.01	0.06	0.01	0.29	0.28
P9 Building Construction 2 (mo. 5)	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
P9 Building Construction 2 (mo. 5)	Roads	0.03	0.00	0.02	0.00	0.29	0.28
P9 Site Preparation (mo. 1)	Fugitive Dust	0.01	0.00	0.00	0.00	0.61	0.61
P9 Site Preparation (mo. 1)	Roads	0.03	0.00	0.02	0.00	0.29	0.28

Operational Percent Reduction Summary

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

Operational Mobile Mitigation

Project Setting:

Mitigation Selected	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

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

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