

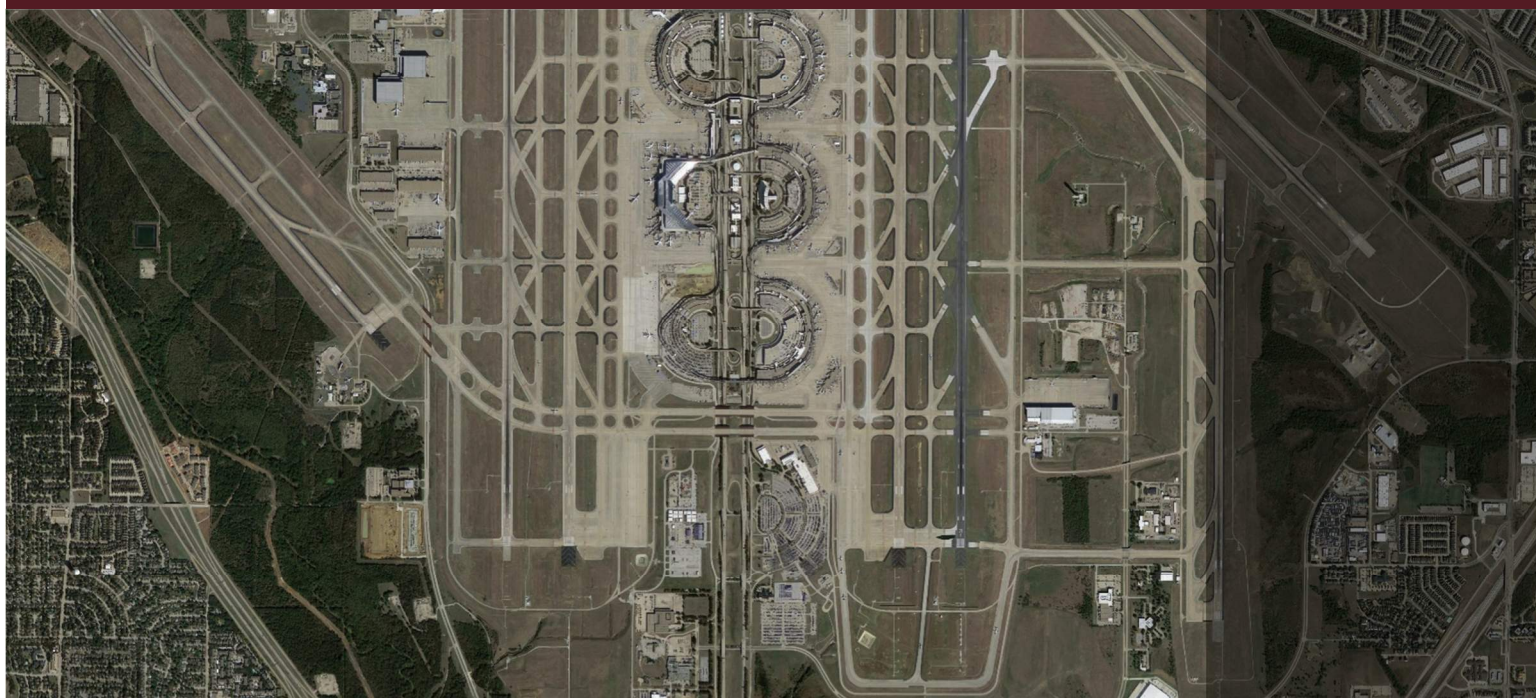
14.E – Emissions Inventory



ARFF Station Consolidation & New Fumigation Facility

Construction Emissions Inventory Report

DFW



Prepared For:

Dallas / Fort Worth International Airport

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ARFF Station Consolidation & New Fumigation Facility

Construction Emissions Inventory



Prepared by:



14160 N. Dallas Parkway, Suite 850
Dallas, Texas 75254

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Garver Project No.: 17081223

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1.0 Introduction

1.1 Proposed Action

The DFW Emergency Services Master Plan (ESMP) recommends the consolidation of the four (4) existing fire stations into two (2) new ARFF facilities that consolidate the functionality of these existing facilities into state-of-the art ARFF facilities (Proposed Action). At the request of Dallas Fort Worth International Airport (DFW) and in support of Environmental Affairs Department's (EAD) submittal of the Environmental Assessment (EA), Garver conducted a construction emissions inventory for the demolition of the four (4) existing ARFF facilities and construction of two (2) consolidated ARFF facilities located on the east and west side of the airport. In addition, a new building will be constructed to replace the existing Fumigation building that will be demolished with the construction of the new West ARFF facility.

There would be no change to operational emissions as a result of the Proposed Action since there is no change to the capacity at DFW of the existing ARFF capabilities. The Proposed Action would generate short-term air emissions resulting from construction activities. The study specifically addresses the following major elements of the Proposed Action:

- Site Demolition
 - Existing ARFF Stations 1, 2, 3, and 4
 - Existing Fumigation Building
- West ARFF Station
 - New 40,000 gsf ARFF facility with ten (10) vehicle apparatus bays located off West Airfield Drive
 - 40 vehicle parking spaces
 - Approximately 2,000 linear feet of new AOA fencing
 - Construction of a new above-ground stormwater detention system along West Airfield Drive
 - Emergency Access Road Bridge over West Airfield Drive
 - Installation of above-ground fuel storage tanks
- East ARFF Station
 - New 40,000 gsf ARFF facility with ten (10) vehicle apparatus bays located off East 23rd Street
 - 60 vehicle parking spaces
 - New emergency access road connections to Taxiways EL, P, and Q.
 - Installation of above-ground fuel storage tanks
- Fumigation Building
 - 2,600 gsf fumigation building located off West 23rd Street.



Figure 1: Proposed Airport Fire Station Locations

(Source: Technical Memorandum Emergency Services Master Plan Implementation Fire Station Site Selection)

1.2 Existing Conditions

The United States Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS), which includes standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), Ozone (O₃), particulate matter (PM), and sulfur dioxide (SO₂). Effective September 23, 2019, the EPA designated the DFW Metroplex (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Tarrant, and Wise counties) as a serious nonattainment area for the 2008 eight-hour Ozone (O₃) NAAQS (84 FR 44238). The current de minimus level for the DFW area is 50 tons per year each for VOC or NOx.

2.0 Approach

The Proposed Action was evaluated based on the impacts to Air Quality according the to the following guidelines:

- *FAA's Aviation Emissions and Air Quality Handbook Version 3 Update 1*
- *FAA Order 5050.4B National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*
- *FAA Order 1050.1F, Environmental Impacts: Policies and Procedures*

The air quality analysis was performed based on the information provided in the following:

- *Project Definition Document (PDD) for the ARFF Station Consolidation & New Fumigation Facility*
 - *Program Schedule provided within the PDD established the analysis period for each scenario*
- *Design Criteria Package 50% deliverable provided by Gensler on June 15, 2020.*
- *Airport Construction Emissions Inventory Tool (ACEIT) was used to estimate the construction equipment, horsepower, load factor, and operating hours for each project sequence.*
- *EPAMOVES 2014.b was used to determine emissions factors.*

The emissions were calculated on an annual basis for all project sequences based on the schedule provided in the PDD. The No Action alternative would not involve any construction activities; therefore no construction emissions would be analyzed for this action.

2.1 Proposed Action Alternative

The construction sequencing provided in the PDD follows the following critical path for each site:

- The proposed West ARFF station site is sited in the existing fumigation facility footprint. The new fumigation facility shall be constructed before construction may begin for the West ARFF station.
- The West ARFF Station shall be fully operational before demolition of ARFF stations 2 and 4 may begin.
- The East ARFF Station can begin construction as early as possible.
- The East ARFF Station shall be fully operational before demolition of ARFF stations 1 and 3 may begin.

These critical path milestones were further segmented based on the items of work, time of year, and construction season. The ACEIT program establishes two construction seasons within the program as Winter (October – March) and Summer (April – September). ACEIT also requires the input for the Average Daily Temperature (°F), Maximum Daily Temperature change (°F), and Minimum Daily Temperature change (°F). The values associated with these items were based on the climate history of DFW Airport, provided by NOAA, as shown in Table 1 on the following page.

Table 1: ACEIT Climate Values used for Evaluation

Season	Average Daily Temp (°F)	Max Daily Temp Change (°F)	Min Daily Temp Change (°F)
Summer	> 80 °F	20°F <= Change in Temp	20°F <= Change in Temp
Winter	30°F < Temp <= 50°F	20°F <= Change in Temp	10°F <= Change in Temp < 20°F

Due to the variance in temperatures between the construction seasons, several items of construction were subdivided between scenarios to account for the effects of the seasons on emission calculations. The sequencing used to evaluate the construction emissions within ACEIT is shown in Table 2 and Table 3 below.

Table 2: ACEIT Project Setup for West ARFF

Sequence #	Site Location	Calendar Year	Start Month	End Month	Season	Major Items of Work
1	New FUM	2022	March	August	Summer	New Building Site Construction
2	FUM Demo	2022	September	September	Summer	Building Demo
3	FUM Demo	2022	October	October	Winter	Site clearing
4	West ARFF	2022	October	December	Winter	Site Utilities, Drainage, Grading
5	West ARFF	2023	January	March	Winter	Bridge Construction, Grading, Pavement,
6	West ARFF	2023	April	September	Summer	Building Foundation, Major Building Structure, Fuel Tanks
7	West ARFF	2023	October	November	Winter	Building Finishout, Landscape
8	ARFF 2 & 4 Demo	2024	January	February	Winter	Building Demo, Site Clearing

Note: FUM – Fumigation Building, 30,000SF structure was modeled for Project Type due to the size of the proposed Fire Stations,, Parking Structure was modeled for “Project” within ACEIT to access similar construction activities for the new bridge over West Airfield Drive

Table 3: ACEIT Project Setup for East ARFF

Sequence #	Site Location	Calendar Year	Start Month	End Month	Season	Major Items of Work
1	East ARFF	2022	March	September	Summer	Site Grading, Utilities, Pavement, Foundation
2	East ARFF	2022	October	December	Winter	Major Building Structure, Fuel Tanks
3	East ARFF	2023	January	March	Winter	Building Finishout, Landscape
4	ARFF 1 & 3 Demo	2023	April	May	Summer	Building Demo, Site Clearing

2.2 Emission Factors

Emission factors for non-road and on-road construction were developed using USEPA NONROAD2008a and USEPA MOVES 2014b, respectively. For on-road emission factors, the employee vehicle trips were modeled using a combination of gasoline and diesel power trucks. All material delivery and off-site haul vehicle trips were assumed to be diesel. In deriving emissions factors from NONROAD, the horsepower for each equipment represents the most popular in each equipment category. The on-road emissions factors for each modeled vehicle from MOVES represent averages over the driving cycles, the roadway type, and daily temperature variations. The average distance employees would travel round-trip was assumed to be 30 miles. The average on-road material delivery round-trip distances was assumed to be 40 miles per day per vehicle. The NONROAD model calculates equipment age distributions for the base year (as given in the equipment population input file) based on estimated engine populations for that year combined with the scrappage function and growth inputs. NONROAD equipment models were assumed to be 2010 and newer. The model calculates age distributions for future years by stepping through each year between the base and future years. The emissions factors used to calculate the emissions for non-road and on-road equipment are shown within their respective columns within Tables 4, 5, 6, and 7.

2.3 Emissions Inventories Methodology

Potential non-road and on-road construction emissions were calculated following the guidance of FAA Aviation Emissions and Air Quality Handbook Version 3 Update 1. The emissions calculations for non-road and on-road are shown in Tables 4, 5, 6, and 7, respectively within the following pages. Emissions inventory for a potential concrete batch plant has been included at the end of each respective table for their each ARFF station. Hauling equipment to deliver on-site batched concrete to the project site is contained within the respective concrete items for each item of work.

Table 4: Non-Road Sources Emissions Inventory (West ARFF)

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	New Fumigation Building	Concrete Foundations	Backhoe	Diesel	100	0.21	320	0.025	0.024	0.000	0.003	0.003	0.004	5.144
			Concrete Foundations	Concrete Ready Mix Trucks	Diesel	600	0.59	60	0.004	0.023	0.000	0.000	0.000	0.003	12.559
			Concrete Foundations	Fork Truck	Diesel	100	0.59	320	0.009	0.067	0.000	0.000	0.000	0.003	12.398
			Concrete Foundations	Tool Truck	Diesel	600	0.59	80	0.005	0.031	0.000	0.001	0.000	0.004	16.745
			Concrete Foundations	Tractor Trailer-Material Delivery	Diesel	600	0.59	16	0.001	0.006	0.000	0.000	0.000	0.001	3.349
			Construction Mob & Layout	Survey Crew Trucks	Diesel	600	0.59	10	0.001	0.004	0.000	0.000	0.000	0.001	2.093
			Construction Mob & Layout	Tractor Trailers Temp Fac.	Diesel	600	0.59	4	0.000	0.002	0.000	0.000	0.000	0.000	0.837
			Exterior Wall Framing	Fork Truck	Diesel	100	0.59	240	0.007	0.050	0.000	0.000	0.000	0.002	9.299
			Exterior Wall Framing	Man Lift	Diesel	75	0.21	240	0.014	0.018	0.000	0.002	0.002	0.003	2.892
			Exterior Wall Framing	Tool Truck	Diesel	600	0.59	60	0.004	0.023	0.000	0.000	0.000	0.003	12.559
			Exterior Wall Framing	Tractor Trailer-Material Delivery	Diesel	600	0.59	24	0.002	0.009	0.000	0.000	0.000	0.001	5.024
			Interior Build-Out/ Finishes	Fork Truck	Diesel	100	0.59	960	0.026	0.201	0.000	0.001	0.001	0.009	37.195

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	New Fumigation Building	Interior Build- Out/ Finishes	Man Lift	Diesel	75	0.21	960	0.057	0.074	0.000	0.007	0.007	0.011	11.567
			Interior Build- Out/ Finishes	Tool Truck	Diesel	600	0.59	120	0.008	0.047	0.000	0.001	0.001	0.007	25.118
			Interior Build- Out/ Finishes	Tractor Trailer- Material Delivery	Diesel	600	0.59	120	0.008	0.047	0.000	0.001	0.001	0.007	25.118
			Roofing	High Lift	Diesel	100	0.59	120	0.003	0.025	0.000	0.000	0.000	0.001	4.649
			Roofing	Man Lift (Fascia Construction)	Diesel	75	0.21	120	0.007	0.009	0.000	0.001	0.001	0.001	1.446
			Roofing	Material Deliveries	Diesel	600	0.59	8	0.001	0.003	0.000	0.000	0.000	0.000	1.675
			Roofing	Tractor Trailer- Material Delivery	Diesel	600	0.59	12	0.001	0.005	0.000	0.000	0.000	0.001	2.512
			Security & Safety Systems	High Lift	Diesel	100	0.59	320	0.009	0.067	0.000	0.000	0.000	0.003	12.398
			Security & Safety Systems	Tool Truck	Diesel	600	0.59	80	0.005	0.031	0.000	0.001	0.000	0.004	16.745
			Structural Steel Erection	40 Ton Crane	Diesel	300	0.43	240	0.006	0.097	0.000	0.001	0.001	0.005	18.108
			Structural Steel Erection	Fork Truck	Diesel	100	0.59	120	0.003	0.025	0.000	0.000	0.000	0.001	4.649
			Structural Steel Erection	Tool Truck	Diesel	600	0.59	60	0.004	0.023	0.000	0.000	0.000	0.003	12.559
1	Summer 2022	New Fumigation Building	Structural Steel Erection	Tractor Trailer- Steel Deliveries	Diesel	600	0.59	16	0.001	0.006	0.000	0.000	0.000	0.001	3.349

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
		New Fumigation Site	Construction Mob & Layout	Survey Crew Trucks	Diesel	600	0.59	10	0.001	0.004	0.000	0.000	0.000	0.001	2.093
			Construction Mob & Layout	Tractor Trailers Temp Fac.	Diesel	600	0.59	4	0.000	0.002	0.000	0.000	0.000	0.000	0.837
			Site Clearing	Bulldozer	Diesel	175	0.59	40	0.001	0.008	0.000	0.000	0.000	0.001	2.442
			Site Clearing	Flat Bed or Dump Trucks	Diesel	600	0.59	80	0.005	0.031	0.000	0.001	0.000	0.004	16.745
			Site Clearing	Front Loader	Diesel	100	0.21	40	0.003	0.002	0.000	0.000	0.000	0.000	0.643
			Site Clearing	Ten Wheelers	Diesel	600	0.59	40	0.003	0.016	0.000	0.000	0.000	0.002	8.373
			Site Clearing	Tractor	Diesel	100	0.21	80	0.006	0.005	0.000	0.001	0.001	0.001	1.286
			Site Restoration- Landscape	Compacting Equipment	Diesel	6	0.43	24	0.000	0.000	0.000	0.000	0.000	0.000	0.040
			Site Restoration- Landscape	Small Dozer	Diesel	175	0.59	24	0.001	0.005	0.000	0.000	0.000	0.000	1.465
			Site Restoration- Landscape	Forktruck (Hoist)	Diesel	100	0.59	80	0.002	0.017	0.000	0.000	0.000	0.001	3.100
			Site Restoration- Landscape	Roller	Diesel	100	0.59	40	0.002	0.002	0.000	0.000	0.000	0.000	1.550
			Site Restoration- Landscape	Seed Truck Spreader	Diesel	600	0.59	16	0.001	0.006	0.000	0.000	0.000	0.001	3.349
1	Summer 2022	New Fumigation Site	Site Restoration- Landscape	Tractor Trailer- Material Delivery	Diesel	600	0.59	80	0.005	0.031	0.000	0.001	0.000	0.004	16.745

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Underground Services to 5 ft. of Building	Backhoe	Diesel	100	0.21	120	0.009	0.007	0.000	0.001	0.001	0.001	1.929
			Underground Services to 5 ft. of Building	Fork Truck	Diesel	100	0.59	60	0.002	0.013	0.000	0.000	0.000	0.001	2.325
			Underground Services to 5 ft. of Building	Tractor Trailer-Material Delivery	Diesel	600	0.59	30	0.002	0.012	0.000	0.000	0.000	0.002	6.279
2	Summer 2022	Existing Fumigation	Building Demolition	Bob Cat	Diesel	75	0.21	155	0.010	0.012	0.000	0.001	0.001	0.002	1.867
			Building Demolition	Dump Truck	Diesel	600	0.59	155	0.010	0.060	0.000	0.001	0.001	0.008	32.444
			Building Demolition	Excavator with Bucket	Diesel	175	0.59	155	0.004	0.015	0.000	0.001	0.000	0.003	9.463
			Building Demolition	Generator Sets	Diesel	40	0.43	155	0.003	0.011	0.000	0.001	0.000	0.001	1.733
			Building Demolition	Pickup Truck	Gas	600	0.59	155	0.010	0.060	0.000	0.001	0.001	0.008	32.444
3	Winter 2022	Existing Fumigation	Concrete Demolition	Excavator with Bucket	Diesel	175	0.59	65	0.002	0.006	0.000	0.000	0.000	0.001	3.968
			Concrete Demolition	Excavator with Hoe Ram	Diesel	175	0.59	65	0.002	0.006	0.000	0.000	0.000	0.001	3.968
			Concrete Demolition	Pickup Truck	Gas	600	0.59	65	0.004	0.025	0.000	0.000	0.000	0.004	13.606
4	Winter 2022	West ARFF Airside	Dust Control	Water Truck	Diesel	600	0.59	720	0.049	0.281	0.001	0.005	0.004	0.039	150.708
4	Winter 2022	West ARFF Airside	Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	14.453	0.000	0.001	0.000	0.000	0.000	0.000	0.882

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	38.5413 3333	0.003	0.015	0.000	0.000	0.000	0.002	8.067
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	11.5624	0.000	0.001	0.000	0.000	0.000	0.000	0.706
			Excavation (Cut to Fill)	Pickup Truck	Diesel	600	0.59	11.5624	0.001	0.005	0.000	0.000	0.000	0.001	2.420
			Excavation (Cut to Fill)	Roller	Diesel	100	0.59	11.5624	0.001	0.001	0.000	0.000	0.000	0.000	0.448
			Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	14.453	0.002	0.006	0.000	0.000	0.000	0.001	3.025
			Excavation (Topsoil Stripping)	Dozer	Diesel	175	0.59	5.44125 4902	0.000	0.001	0.000	0.000	0.000	0.000	0.332
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.158
			Soil Erosion/Sedi ment Control	Pickup Truck	Diesel	600	0.59	7.2	0.000	0.003	0.000	0.000	0.000	0.000	1.507
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.011
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.058
		West ARFF Detention Basin	Drainage	Dozer	Diesel	175	0.59	37.504	0.001	0.004	0.000	0.000	0.000	0.001	2.290
			Drainage	Dump Truck	Diesel	600	0.59	37.504	0.003	0.015	0.000	0.000	0.000	0.002	7.850
4	Winter 2022	West ARFF Detention Basin	Drainage	Loader	Diesel	175	0.59	37.504	0.001	0.003	0.000	0.000	0.000	0.001	2.289
			Drainage	Other General Equipment	Diesel	175	0.43	37.504	0.001	0.003	0.000	0.000	0.000	0.000	1.651

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Drainage	Pickup Truck	Diesel	600	0.59	37.504	0.003	0.015	0.000	0.000	0.000	0.002	7.850
			Drainage	Roller	Diesel	100	0.59	37.504	0.002	0.002	0.000	0.000	0.000	0.000	1.453
			Dust Control	Water Truck	Diesel	600	0.59	720	0.049	0.281	0.001	0.005	0.004	0.039	150.708
			Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	170.496	0.005	0.017	0.000	0.001	0.001	0.003	10.409
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	454.656	0.031	0.177	0.000	0.003	0.003	0.025	95.167
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	136.396 8	0.003	0.013	0.000	0.000	0.000	0.002	8.327
			Excavation (Cut to Fill)	Pickup Truck	Diesel	600	0.59	136.396 8	0.009	0.053	0.000	0.001	0.001	0.007	28.550
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	136.396 8	0.009	0.053	0.000	0.001	0.001	0.007	28.550
			Excavation (Cut to Fill)	Roller	Diesel	100	0.59	136.396 8	0.008	0.008	0.000	0.001	0.001	0.001	5.284
			Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	170.496	0.026	0.066	0.000	0.004	0.003	0.010	35.686
			Excavation (Topsoil Stripping)	Dozer	Diesel	175	0.59	10.0291 7647	0.000	0.001	0.000	0.000	0.000	0.000	0.612
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	6	0.000	0.000	0.000	0.000	0.000	0.000	0.264
4	Winter 2022	West ARFF Detention Basin	Soil Erosion/Sedi ment Control	Pickup Truck	Diesel	600	0.59	12	0.001	0.005	0.000	0.000	0.000	0.001	2.512
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	12	0.001	0.005	0.000	0.000	0.000	0.001	2.512

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	6	0.000	0.000	0.000	0.000	0.000	0.000	0.018
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	6	0.000	0.000	0.000	0.000	0.000	0.000	0.096
		West ARFF Drainage System	Drainage Pipe	Dozer	Diesel	175	0.59	57.3529 4118	0.002	0.006	0.000	0.000	0.000	0.001	3.501
			Drainage Pipe	Dump Truck	Diesel	600	0.59	57.3529 4118	0.004	0.022	0.000	0.000	0.000	0.003	12.005
			Drainage Pipe	Excavator	Diesel	175	0.59	57.3529 4118	0.001	0.006	0.000	0.000	0.000	0.001	3.501
			Drainage Pipe	Loader	Diesel	175	0.59	57.3529 4118	0.002	0.005	0.000	0.000	0.000	0.001	3.501
			Drainage Pipe	Other General Equipment	Diesel	175	0.43	57.3529 4118	0.001	0.005	0.000	0.000	0.000	0.001	2.524
			Drainage Pipe	Pickup Truck	Diesel	600	0.59	57.3529 4118	0.004	0.022	0.000	0.000	0.000	0.003	12.005
			Drainage Pipe	Pickup Truck	Gas	600	0.59	57.3529 4118	0.004	0.022	0.000	0.000	0.000	0.003	12.005
			Drainage Pipe	Roller	Diesel	100	0.59	57.3529 4118	0.003	0.003	0.000	0.000	0.000	0.001	2.222
			Drainage Structures	Dump Truck	Diesel	600	0.59	8	0.001	0.003	0.000	0.000	0.000	0.000	1.675
4	Winter 2022	West ARFF Drainage System	Drainage Structures	Excavator	Diesel	175	0.59	8	0.000	0.001	0.000	0.000	0.000	0.000	0.488
			Drainage Structures	Other General Equipment	Diesel	175	0.43	16	0.000	0.001	0.000	0.000	0.000	0.000	0.704
			Drainage Structures	Pickup Truck	Diesel	600	0.59	16	0.001	0.006	0.000	0.000	0.000	0.001	3.349

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Drainage Structures	Pickup Truck	Gas	600	0.59	16	0.001	0.006	0.000	0.000	0.000	0.001	3.349
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.123
			Soil Erosion/Sedi ment Control	Pickup Truck	Diesel	600	0.59	5.6	0.000	0.002	0.000	0.000	0.000	0.000	1.172
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	5.6	0.000	0.002	0.000	0.000	0.000	0.000	1.172
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.009
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.045
		West ARFF Landside	Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	14.43	0.000	0.001	0.000	0.000	0.000	0.000	0.881
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	38.48	0.003	0.015	0.000	0.000	0.000	0.002	8.054
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	11.544	0.000	0.001	0.000	0.000	0.000	0.000	0.705
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	11.544	0.001	0.005	0.000	0.000	0.000	0.001	2.416
4	Winter 2022	West ARFF Landside	Excavation (Cut to Fill)	Roller	Diesel	100	0.59	11.544	0.001	0.001	0.000	0.000	0.000	0.000	0.447
			Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	14.43	0.002	0.006	0.000	0.000	0.000	0.001	3.020
			Excavation (Topsoil Stripping)	Dozer	Diesel	175	0.59	5.43247 0588	0.000	0.001	0.000	0.000	0.000	0.000	0.332

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.158
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	7.2	0.000	0.003	0.000	0.000	0.000	0.000	1.507
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.011
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.058
5	Winter 2023	West ARFF Airside	Concrete Placement	Air Compressor	Diesel	100	0.43	11.6	0.000	0.001	0.000	0.000	0.000	0.000	0.323
			Concrete Placement	Concrete Saws	Diesel	40	0.59	11.6	0.000	0.001	0.000	0.000	0.000	0.000	0.179
			Concrete Placement	Concrete Truck	Diesel	600	0.59	48.2	0.003	0.023	0.000	0.000	0.000	0.003	10.084
			Concrete Placement	Other General Equipment	Diesel	175	0.43	23.1	0.000	0.002	0.000	0.000	0.000	0.000	1.018
			Concrete Placement	Pickup Truck	Gas	600	0.59	34.7	0.002	0.016	0.000	0.000	0.000	0.002	7.261
			Concrete Placement	Rubber Tired Loader	Diesel	175	0.59	24.0	0.001	0.002	0.000	0.000	0.000	0.000	1.465
5	Winter 2023	West ARFF Airside	Concrete Placement	Slip Form Paver	Diesel	175	0.59	24.0	0.001	0.008	0.000	0.000	0.000	0.000	1.465
			Concrete Placement	Surfacing Equipment (Grooving)	Diesel	25	0.59	24.0	0.001	0.002	0.000	0.000	0.000	0.000	0.232
			Dust Control	Water Truck	Diesel	600	0.59	720.0	0.042	0.337	0.001	0.003	0.003	0.039	150.708

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Markings	Flatbed Truck	Diesel	600	0.59	71.4	0.004	0.033	0.000	0.000	0.000	0.004	14.951
			Markings	Other General Equipment	Diesel	175	0.43	71.4	0.001	0.005	0.000	0.000	0.000	0.001	3.144
			Markings	Pickup Truck	Gas	600	0.59	71.4	0.004	0.033	0.000	0.000	0.000	0.004	14.951
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.158
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	7.2	0.000	0.003	0.000	0.000	0.000	0.000	1.507
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.011
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.058
			Subbase Placement	Dozer	Diesel	175	0.59	7.3	0.000	0.001	0.000	0.000	0.000	0.000	0.446
			Subbase Placement	Dump Truck (12 cy)	Diesel	600	0.59	51.4	0.003	0.024	0.000	0.000	0.000	0.003	10.757
			Subbase Placement	Pickup Truck	Gas	600	0.59	7.3	0.000	0.003	0.000	0.000	0.000	0.000	1.529
5	Winter 2023	West ARFF Airside	Subbase Placement	Roller	Diesel	100	0.59	7.1	0.000	0.000	0.000	0.000	0.000	0.000	0.276
		West ARFF Station	Concrete Foundations	Backhoe	Diesel	100	0.21	320.1	0.023	0.017	0.000	0.003	0.003	0.003	5.147
			Concrete Foundations	Concrete Ready Mix Trucks	Diesel	600	0.59	60.0	0.004	0.028	0.000	0.000	0.000	0.003	12.559

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Concrete Foundations	Fork Truck	Diesel	100	0.59	320.1	0.008	0.006	0.000	0.000	0.000	0.003	12.402
			Concrete Foundations	Tool Truck	Diesel	600	0.59	80.1	0.005	0.038	0.000	0.000	0.000	0.004	16.766
			Concrete Foundations	Tractor Trailer-Material Delivery	Diesel	600	0.59	15.9	0.001	0.007	0.000	0.000	0.000	0.001	3.328
			Construction Mob & Layout	Survey Crew Trucks	Gas	600	0.59	9.9	0.001	0.005	0.000	0.000	0.000	0.001	2.072
			Construction Mob & Layout	Tractor Trailers Temp Fac.	Diesel	600	0.59	3.9	0.000	0.002	0.000	0.000	0.000	0.000	0.816
		West ARFF Landside	Concrete Placement	Air Compressor	Diesel	100	0.43	11.5	0.000	0.001	0.000	0.000	0.000	0.000	0.323
			Concrete Placement	Concrete Saws	Diesel	40	0.59	11.5	0.000	0.001	0.000	0.000	0.000	0.000	0.179
			Concrete Placement	Concrete Truck	Diesel	600	0.59	48.1	0.003	0.023	0.000	0.000	0.000	0.003	10.068
			Concrete Placement	Other General Equipment	Diesel	175	0.43	23.1	0.000	0.002	0.000	0.000	0.000	0.000	1.016
			Concrete Placement	Rubber Tired Loader	Diesel	175	0.59	11.5	0.000	0.001	0.000	0.000	0.000	0.000	0.705
5	Winter 2023	West ARFF Landside	Concrete Placement	Slip Form Paver	Diesel	175	0.59	11.5	0.000	0.004	0.000	0.000	0.000	0.000	0.705
			Concrete Placement	Surfacing Equipment (Grooving)	Diesel	25	0.59	11.5	0.000	0.001	0.000	0.000	0.000	0.000	0.112
			Grading	Dozer	Diesel	175	0.59	4.1	0.000	0.001	0.000	0.000	0.000	0.000	0.251
			Grading	Grader	Diesel	300	0.59	4.1	0.000	0.000	0.000	0.000	0.000	0.000	0.431

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Grading	Roller	Diesel	100	0.59	4.1	0.000	0.000	0.000	0.000	0.000	0.000	0.160
			Markings	Flatbed Truck	Diesel	600	0.59	2.7	0.000	0.001	0.000	0.000	0.000	0.000	0.555
			Markings	Other General Equipment	Diesel	175	0.43	2.7	0.000	0.000	0.000	0.000	0.000	0.000	0.117
			Markings	Pickup Truck	Gas	600	0.59	2.7	0.000	0.001	0.000	0.000	0.000	0.000	0.555
			Sidewalks	Concrete Truck	Diesel	600	0.59	20.8	0.001	0.010	0.000	0.000	0.000	0.001	4.354
			Sidewalks	Dump Truck	Diesel	600	0.59	20.8	0.001	0.010	0.000	0.000	0.000	0.001	4.354
			Sidewalks	Pickup Truck	Gas	600	0.59	20.8	0.001	0.010	0.000	0.000	0.000	0.001	4.354
			Sidewalks	Tractors/Loa der/Backhoe	Diesel	100	0.21	20.8	0.001	0.001	0.000	0.000	0.000	0.000	0.334
			Sidewalks	Vibratory Compactor	Diesel	6	0.43	20.8	0.000	0.000	0.000	0.000	0.000	0.000	0.035
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.158
5	Winter 2023	West ARFF Landside	Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	7.2	0.000	0.003	0.000	0.000	0.000	0.000	1.507
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.011
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	3.6	0.000	0.000	0.000	0.000	0.000	0.000	0.058
			Street Lighting	Dump Truck	Diesel	600	0.59	2.1	0.000	0.001	0.000	0.000	0.000	0.000	0.447
			Street Lighting	Loader	Diesel	175	0.59	2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.130

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Street Lighting	Other General Equipment	Diesel	175	0.43	2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.094
			Street Lighting	Pickup Truck	Gas	600	0.59	2.1	0.000	0.001	0.000	0.000	0.000	0.000	0.447
			Street Lighting	Skid Steer Loader	Diesel	75	0.21	2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.026
			Street Lighting	Tractors/Loa der/Backhoe	Diesel	100	0.21	2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.034
			Subbase Placement	Dozer	Diesel	175	0.59	7.3	0.000	0.001	0.000	0.000	0.000	0.000	0.445
			Subbase Placement	Dump Truck (12 cy)	Diesel	600	0.59	51.3	0.003	0.024	0.000	0.000	0.000	0.003	10.739
			Subbase Placement	Pickup Truck	Gas	600	0.59	7.3	0.000	0.003	0.000	0.000	0.000	0.000	1.526
			Subbase Placement	Roller	Diesel	100	0.59	7.1	0.000	0.000	0.000	0.000	0.000	0.000	0.275
		West ARFF Bridge	Concrete Foundations	Backhoe	Diesel	100	0.21	320.0	0.023	0.017	0.000	0.003	0.003	0.003	5.146
5	Winter 2023	West ARFF Bridge	Concrete Foundations	Concrete Pump	Diesel	11	0.43	240.0	0.006	0.006	0.000	0.000	0.000	0.001	0.736
			Concrete Foundations	Concrete Ready Mix Trucks	Diesel	600	0.59	240.0	0.014	0.112	0.000	0.001	0.001	0.013	50.236
			Concrete Foundations	Excavator	Diesel	175	0.59	160.0	0.003	0.006	0.000	0.000	0.000	0.003	9.768
			Concrete Foundations	Fork Truck	Diesel	100	0.59	320.0	0.008	0.006	0.000	0.000	0.000	0.003	12.398
			Concrete Foundations	Front Loader	Diesel	100	0.21	160.0	0.011	0.008	0.000	0.001	0.001	0.002	2.573
			Concrete Foundations	Tool Truck	Diesel	600	0.59	80.0	0.005	0.037	0.000	0.000	0.000	0.004	16.745

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Concrete Foundations	Tractor Trailer-Material Delivery	Diesel	600	0.59	160.0	0.009	0.075	0.000	0.001	0.001	0.009	33.491
			Concrete Foundations	Tractor Trailer-Stone Delivery	Diesel	600	0.59	160.0	0.009	0.075	0.000	0.001	0.001	0.009	33.491
			Concrete Foundations	Trencher for U/G Piping	Diesel	75	0.59	160.0	0.008	0.024	0.000	0.001	0.001	0.001	4.649
			Construction Mob & Layout	Survey Crew Trucks	Gas	600	0.59	10.0	0.001	0.005	0.000	0.000	0.000	0.001	2.093
			Construction Mob & Layout	Tractor Trailers Temp Fac.	Diesel	600	0.59	4.0	0.000	0.002	0.000	0.000	0.000	0.000	0.837
			Horizontal Deck Pours	40 Ton Rough Terrain Crane	Diesel	300	0.43	64.0	0.001	0.005	0.000	0.000	0.000	0.001	4.829
5	Winter 2023	West ARFF Bridge	Horizontal Deck Pours	Concrete Pump	Diesel	11	0.43	90.0	0.002	0.002	0.000	0.000	0.000	0.000	0.276
			Horizontal Deck Pours	Concrete Truck	Diesel	600	0.59	60.0	0.004	0.028	0.000	0.000	0.000	0.003	12.559
			Horizontal Deck Pours	Fork Truck	Diesel	100	0.59	64.0	0.002	0.001	0.000	0.000	0.000	0.001	2.480
			Horizontal Deck Pours	Tool Truck	Diesel	600	0.59	60.0	0.004	0.028	0.000	0.000	0.000	0.003	12.559
			Horizontal Deck Pours	Tractor Trailer-Material Delivery	Diesel	600	0.59	20.0	0.001	0.009	0.000	0.000	0.000	0.001	4.186
			Horizontal Deck Pours	Trowel Machines (2) machines	Diesel	600	0.59	32.0	0.009	0.021	0.000	0.001	0.001	0.002	6.697

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
6	Summer 2023	West ARFF Airside	Dust Control	Water Truck	Diesel	600	0.59	1680.0	0.098	0.219	0.002	0.008	0.007	0.091	351.653
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	8.0	0.000	0.001	0.000	0.000	0.000	0.000	0.352
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	1.675
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.025
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	8.0	0.001	0.000	0.000	0.000	0.000	0.000	0.129
			Topsoil Placement	Dozer	Diesel	175	0.59	10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.611
			Topsoil Placement	Dump Truck	Diesel	600	0.59	10.0	0.001	0.001	0.000	0.000	0.000	0.001	2.093
6	Summer 2023	West ARFF Airside	Topsoil Placement	Pickup Truck	Gas	600	0.59	10.0	0.001	0.001	0.000	0.000	0.000	0.001	2.093
		West ARFF Station	Exterior Wall Framing	Fork Truck	Diesel	100	0.59	600.0	0.015	0.011	0.000	0.000	0.000	0.005	23.247
			Exterior Wall Framing	Generator	Diesel	40	0.43	300.0	0.005	0.021	0.000	0.001	0.001	0.001	3.354
			Exterior Wall Framing	Man Lift	Diesel	75	0.21	600.0	0.033	0.044	0.000	0.004	0.004	0.006	7.231
			Exterior Wall Framing	Tool Truck	Diesel	600	0.59	150.0	0.009	0.020	0.000	0.001	0.001	0.008	31.398
			Exterior Wall Framing	Tractor Trailer- Material Delivery	Diesel	600	0.59	150.0	0.009	0.020	0.000	0.001	0.001	0.008	31.398
			Roofing	High Lift	Diesel	100	0.59	120.0	0.003	0.002	0.000	0.000	0.000	0.001	4.649

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Roofing	Man Lift (Fascia Construction)	Diesel	75	0.21	24.0	0.001	0.002	0.000	0.000	0.000	0.000	0.289
			Roofing	Material Deliveries	Diesel	600	0.59	60.0	0.004	0.008	0.000	0.000	0.000	0.003	12.559
			Roofing	Tractor Trailer-Material Delivery	Diesel	600	0.59	60.0	0.004	0.008	0.000	0.000	0.000	0.003	12.559
6	Summer 2023	West ARFF Station	Security & Safety Systems	High Lift	Diesel	100	0.59	800.1	0.021	0.015	0.000	0.001	0.000	0.007	31.000
			Security & Safety Systems	Tool Truck	Diesel	600	0.59	200.1	0.012	0.026	0.000	0.001	0.001	0.011	41.884
			Structural Steel Frame	90 Ton Crane	Diesel	300	0.43	320.1	0.006	0.027	0.000	0.001	0.001	0.007	24.152
6	Summer 2023	West ARFF Station	Structural Steel Frame	Concrete Pump	Diesel	11	0.43	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.037
			Structural Steel Frame	Concrete Truck	Diesel	600	0.59	24.0	0.001	0.003	0.000	0.000	0.000	0.001	5.024
			Structural Steel Frame	Fork Truck	Diesel	100	0.59	80.1	0.002	0.001	0.000	0.000	0.000	0.001	3.103
			Structural Steel Frame	Tool Truck	Diesel	600	0.59	12.0	0.001	0.002	0.000	0.000	0.000	0.001	2.512
			Structural Steel Frame	Tractor Trailer- Steel Deliveries	Diesel	600	0.59	39.9	0.002	0.005	0.000	0.000	0.000	0.002	8.352
			Structural Steel Frame	Trowel Machine	Diesel	600	0.59	12.0	0.003	0.008	0.000	0.000	0.000	0.001	2.511
		West ARFF Fuel Tanks	Construction/ Erect Tanks	Crane	Diesel	300	0.43	8.0	0.000	0.001	0.000	0.000	0.000	0.000	0.604

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Construction/Erect Tanks	Other General Equipment	Diesel	175	0.43	16.0	0.000	0.001	0.000	0.000	0.000	0.000	0.704
			Construction/Erect Tanks	Pickup Truck	Gas	600	0.59	16.0	0.001	0.002	0.000	0.000	0.000	0.001	3.349
			Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.488
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	1.675
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.488
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	1.675
			Excavation (Cut to Fill)	Roller	Diesel	100	0.59	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.310
6	Summer 2023	West ARFF Fuel Tanks	Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	8.0	0.001	0.003	0.000	0.000	0.000	0.000	1.674
		West ARFF Landside	Soil Erosion/Sediment Control	Other General Equipment	Diesel	175	0.43	8.0	0.000	0.001	0.000	0.000	0.000	0.000	0.352
			Soil Erosion/Sediment Control	Pickup Truck	Gas	600	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	1.675
			Soil Erosion/Sediment Control	Pumps	Diesel	11	0.43	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.025
			Soil Erosion/Sediment Control	Tractors/Loader/Backhoe	Diesel	100	0.21	8.0	0.001	0.000	0.000	0.000	0.000	0.000	0.129
			Topsoil Placement	Dozer	Diesel	175	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	0.352

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Topsoil Placement	Dump Truck	Diesel	600	0.59	8.0	0.000	0.001	0.000	0.000	0.000	0.000	1.675
			Topsoil Placement	Pickup Truck	Gas	600	0.59	8.0	0.000	0.000	0.000	0.000	0.000	0.000	0.025
7	Winter 2023	West ARFF Station	Interior Build-Out/ Finishes	Fork Truck	Diesel	100	0.59	8.0	0.001	0.000	0.000	0.000	0.000	0.000	0.129
			Interior Build-Out/ Finishes	Man Lift	Diesel	75	0.21	10.0	0.000	0.000	0.000	0.000	0.000	0.000	0.611
			Interior Build-Out/ Finishes	Tool Truck	Diesel	600	0.59	10.0	0.001	0.001	0.000	0.000	0.000	0.001	2.093
			Interior Build-Out/ Finishes	Tractor Trailer-Material Delivery	Diesel	600	0.59	10.0	0.001	0.001	0.000	0.000	0.000	0.001	2.093
		Landscape	Sodding	Flatbed Truck	Diesel	600	0.59	2400.0	0.062	0.044	0.000	0.002	0.001	0.022	92.987
7	Winter 2023	Landscape	Sodding	Other General Equipment	Diesel	175	0.43	2400.0	0.131	0.178	0.000	0.017	0.015	0.025	28.925
			Sodding	Pickup Truck	Gas	600	0.59	300.0	0.018	0.140	0.000	0.001	0.001	0.016	62.795
			Sodding	Skid Steer Loader	Diesel	75	0.21	600.0	0.035	0.281	0.001	0.003	0.003	0.033	125.590
			Topsoil Placement	Dozer	Diesel	175	0.59	58.8	0.003	0.028	0.000	0.000	0.000	0.003	12.313
			Topsoil Placement	Dump Truck	Diesel	600	0.59	58.8	0.001	0.004	0.000	0.000	0.000	0.001	2.589
			Topsoil Placement	Pickup Truck	Gas	600	0.59	58.8	0.003	0.028	0.000	0.000	0.000	0.003	12.313
			Tree Planting	Flatbed Truck	Diesel	600	0.59	58.8	0.003	0.004	0.000	0.000	0.000	0.001	0.709

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Tree Planting	Other General Equipment	Diesel	175	0.43	34.2	0.001	0.007	0.000	0.000	0.000	0.001	2.087
			Tree Planting	Pickup Truck	Gas	600	0.59	34.2	0.002	0.016	0.000	0.000	0.000	0.002	7.156
			Tree Planting	Tractors/Loa der/Backhoe	Diesel	100	0.21	34.2	0.002	0.016	0.000	0.000	0.000	0.002	7.156
8	Winter 2024	Existing Stations 2 & 4	Building Demolition	Bob Cat	Diesel	75	0.21	6.4	0.000	0.003	0.000	0.000	0.000	0.000	1.340
			Building Demolition	Dump Truck	Diesel	600	0.59	6.4	0.000	0.000	0.000	0.000	0.000	0.000	0.282
			Building Demolition	Excavator with Bucket	Diesel	175	0.59	6.4	0.000	0.003	0.000	0.000	0.000	0.000	1.340
			Building Demolition	Generator Sets	Diesel	40	0.43	6.4	0.000	0.000	0.000	0.000	0.000	0.000	0.103
8	Winter 2024	Existing Stations 2 & 4	Building Demolition	Pickup Truck	Gas	600	0.59	840.0	0.047	0.060	0.000	0.006	0.006	0.009	10.124
			Concrete Demolition	Excavator with Bucket	Diesel	175	0.59	840.0	0.049	0.393	0.001	0.004	0.004	0.046	175.827
			Concrete Demolition	Excavator with Hoe Ram	Diesel	175	0.59	420.0	0.007	0.038	0.000	0.001	0.001	0.007	25.641
			Concrete Demolition	Pickup Truck	Gas	600	0.59	420.0	0.006	0.029	0.000	0.001	0.001	0.002	4.696
N/A	2023	West ARFF	Concrete Batch Plant	Crawler Tractor/ Dozers	Diesel	150	0.64	2400.0	0.076	0.229	0.000	0.025	0.025	0.000	136.130
				Excavators	Diesel	175	0.59	2400.0	0.082	0.219	0.000	0.027	0.027	0.000	146.411
N/A	2023	West ARFF	Concrete Batch Plant	Graders	Diesel	300	0.59	2400.0	0.211	0.281	0.000	0.047	0.047	0.000	250.990
				Off-Road Truck	Diesel	300	0.59	9000.0	0.860	0.527	0.018	0.000	0.000	0.000	941.211

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
				Sweepers/Scrubbers	Diesel	100	0.43	1200.0	0.017	0.097	0.000	0.006	0.006	0.006	30.487
				Tractors/Loader/Backhoe	Diesel	100	0.21	1200.0	0.008	0.092	0.000	0.014	0.014	0.017	14.889
				Trenchers	Diesel	60	0.6	16.0	0.001	0.002	0.000	0.000	0.000	0.000	0.340

Delivery of on-site concrete material from the batch plant to the site is contained within each major item of work associated with concrete

Table 5: Non-Road Sources Emissions Inventory (East ARFF)

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	East ARFF Airside	Concrete Placement	Air Compressor	Gas	6	0.56	87.4	0.076	0.001	0.000	0.000	0.000	0.002	0.397
			Concrete Placement	Concrete Saws	Gas	11	0.78	87.4	0.261	0.005	0.000	0.000	0.000	0.004	0.863
			Concrete Placement	Concrete Truck	Diesel	600	0.59	364.2	0.025	0.142	0.000	0.002	0.002	0.021	76.237
			Concrete Placement	Other General Equipment	Diesel	175	0.43	174.8	0.004	0.015	0.000	0.001	0.001	0.002	7.694
			Concrete Placement	Pickup Truck	Gas	600	0.59	262.2	0.018	0.102	0.000	0.002	0.002	0.015	54.891
			Concrete Placement	Rubber Tired Loader	Diesel	175	0.59	87.4	0.003	0.007	0.000	0.001	0.001	0.002	5.336
			Concrete Placement	Slip Form Paver	Diesel	175	0.59	87.4	0.003	0.007	0.000	0.001	0.000	0.001	5.336
1	Summer 2022	East ARFF Airside	Concrete Placement	Surfacing Equipment (Grooving)	Diesel	25	0.59	87.4	0.003	0.006	0.000	0.001	0.000	0.001	0.845

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Drainage Pipe	Dozer	Diesel	175	0.59	151.5	0.004	0.031	0.000	0.001	0.001	0.003	9.250
			Drainage Pipe	Dump Truck	Diesel	600	0.59	151.5	0.010	0.059	0.000	0.001	0.001	0.009	31.716
			Drainage Pipe	Excavator	Diesel	175	0.59	151.5	0.004	0.015	0.000	0.000	0.000	0.002	9.250
			Drainage Pipe	Loader	Diesel	175	0.59	151.5	0.006	0.013	0.000	0.001	0.001	0.003	9.250
			Drainage Pipe	Other General Equipment	Diesel	175	0.43	151.5	0.003	0.013	0.000	0.001	0.001	0.002	6.668
			Drainage Pipe	Pickup Truck	Gas	600	0.59	151.5	0.010	0.059	0.000	0.001	0.001	0.009	31.716
			Drainage Pipe	Roller	Diesel	100	0.59	151.5	0.009	0.009	0.000	0.001	0.001	0.002	5.870
			Dust Control	Water Truck	Diesel	600	0.59	1680.0	0.113	0.656	0.002	0.011	0.010	0.098	351.652
			Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	109.3	0.003	0.022	0.000	0.001	0.000	0.002	6.671
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	291.4	0.020	0.114	0.000	0.002	0.002	0.017	60.990
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	87.4	0.002	0.008	0.000	0.000	0.000	0.001	5.337
			Excavation (Cut to Fill)	Pickup Truck	Diesel	600	0.59	87.4	0.006	0.034	0.000	0.001	0.001	0.005	18.297
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	87.4	0.006	0.034	0.000	0.001	0.001	0.005	18.297
			1	Summer 2022	East ARFF Airside	Excavation (Cut to Fill)	Roller	Diesel	100	0.59	87.4	0.005	0.005	0.000	0.001
Excavation (Cut to Fill)	Scraper	Diesel				600	0.59	109.3	0.016	0.042	0.000	0.002	0.002	0.006	22.870
Excavation (Topsoil Stripping)	Dozer	Diesel				175	0.59	41.1	0.001	0.008	0.000	0.000	0.000	0.001	2.511
Grading	Dozer	Diesel				175	0.59	31.5	0.001	0.006	0.000	0.000	0.000	0.001	1.925
Grading	Grader	Diesel				300	0.59	31.5	0.001	0.003	0.000	0.000	0.000	0.001	3.300

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Grading	Roller	Diesel	100	0.59	31.5	0.002	0.002	0.000	0.000	0.000	0.000	1.222
			Hydroseeding	Hydroseeder	Diesel	600	0.59	28.4	0.002	0.011	0.000	0.000	0.000	0.002	5.947
			Hydroseeding	Off-Road Truck	Diesel	600	0.59	28.4	0.002	0.011	0.000	0.000	0.000	0.002	5.947
			Markings	Flatbed Truck	Diesel	600	0.59	540.0	0.036	0.211	0.001	0.003	0.003	0.032	113.031
			Markings	Other General Equipment	Diesel	175	0.43	540.0	0.012	0.045	0.000	0.003	0.003	0.007	23.765
			Markings	Pickup Truck	Gas	600	0.59	540.0	0.036	0.211	0.001	0.003	0.003	0.032	113.031
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	26.0	0.001	0.002	0.000	0.000	0.000	0.000	1.144
			Soil Erosion/Sedi ment Control	Pickup Truck	Gas	600	0.59	52.0	0.004	0.020	0.000	0.000	0.000	0.003	10.884
1	Summer 2022	East ARFF Airside	Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	26.0	0.001	0.001	0.000	0.000	0.000	0.000	0.080
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	26.0	0.002	0.002	0.000	0.000	0.000	0.000	0.418
			Subbase Placement	Dozer	Diesel	175	0.59	55.2	0.002	0.011	0.000	0.000	0.000	0.001	3.370
			Subbase Placement	Dump Truck (12 cy)	Diesel	600	0.59	388.5	0.026	0.152	0.000	0.002	0.002	0.023	81.320
			Subbase Placement	Pickup Truck	Gas	600	0.59	55.2	0.004	0.022	0.000	0.000	0.000	0.003	11.556
			Subbase Placement	Roller	Diesel	100	0.59	53.8	0.003	0.003	0.000	0.000	0.000	0.001	2.084

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
		East ARFF Station	Concrete Foundations	Backhoe	Diesel	100	0.21	320.1	0.025	0.019	0.000	0.003	0.003	0.004	5.146
			Concrete Foundations	Concrete Ready Mix Trucks	Diesel	600	0.59	60.0	0.004	0.023	0.000	0.000	0.000	0.004	12.559
			Concrete Foundations	Fork Truck	Diesel	100	0.59	320.1	0.009	0.067	0.000	0.000	0.000	0.003	12.402
			Concrete Foundations	Tool Truck	Diesel	600	0.59	80.1	0.005	0.031	0.000	0.001	0.000	0.005	16.766
			Concrete Foundations	Tractor Trailer-Material Delivery	Diesel	600	0.59	15.9	0.001	0.006	0.000	0.000	0.000	0.001	3.328
			Construction Mob & Layout	Survey Crew Trucks	Diesel	600	0.59	9.9	0.001	0.004	0.000	0.000	0.000	0.001	2.072
			Construction Mob & Layout	Survey Crew Trucks	Gas	600	0.59	9.9	0.001	0.004	0.000	0.000	0.000	0.001	2.072
1	Summer 2022	East ARFF Landside	Concrete Placement	Air Compressor	Diesel	100	0.43	9.1	0.000	0.002	0.000	0.000	0.000	0.000	0.254
			Concrete Placement	Concrete Saws	Diesel	40	0.59	9.1	0.000	0.001	0.000	0.000	0.000	0.000	0.141
			Concrete Placement	Concrete Truck	Diesel	600	0.59	37.9	0.003	0.015	0.000	0.000	0.000	0.002	7.939
			Concrete Placement	Other General Equipment	Diesel	175	0.43	18.2	0.000	0.002	0.000	0.000	0.000	0.000	0.801
			Concrete Placement	Pickup Truck	Gas	600	0.59	27.3	0.002	0.011	0.000	0.000	0.000	0.002	5.716
			Concrete Placement	Rubber Tired Loader	Diesel	175	0.59	9.1	0.000	0.001	0.000	0.000	0.000	0.000	0.556
			Concrete Placement	Slip Form Paver	Diesel	175	0.59	9.1	0.000	0.001	0.000	0.000	0.000	0.000	0.556

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Concrete Placement	Surfacing Equipment (Grooving)	Diesel	25	0.59	9.1	0.000	0.001	0.000	0.000	0.000	0.000	0.088
			Drainage - 24 inch SICPP	Dozer	Diesel	175	0.59	13.4	0.000	0.003	0.000	0.000	0.000	0.000	0.820
			Drainage - 24 inch SICPP	Dump Truck	Diesel	600	0.59	13.4	0.001	0.005	0.000	0.000	0.000	0.001	2.813
			Drainage - 24 inch SICPP	Excavator	Diesel	175	0.59	13.4	0.000	0.001	0.000	0.000	0.000	0.000	0.821
			Drainage - 24 inch SICPP	Loader	Diesel	175	0.59	13.4	0.000	0.001	0.000	0.000	0.000	0.000	0.820
			Drainage - 24 inch SICPP	Other General Equipment	Diesel	175	0.43	13.4	0.000	0.001	0.000	0.000	0.000	0.000	0.591
			Drainage - 24 inch SICPP	Pickup Truck	Gas	600	0.59	13.4	0.001	0.005	0.000	0.000	0.000	0.001	2.813
1	Summer 2022	East ARFF Landside	Drainage - 24 inch SICPP	Roller	Diesel	100	0.59	13.4	0.001	0.001	0.000	0.000	0.000	0.000	0.521
			Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	11.4	0.000	0.002	0.000	0.000	0.000	0.000	0.695
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	30.3	0.002	0.012	0.000	0.000	0.000	0.002	6.351
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	9.1	0.000	0.001	0.000	0.000	0.000	0.000	0.556
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	9.1	0.001	0.004	0.000	0.000	0.000	0.001	1.905
			Excavation (Cut to Fill)	Roller	Diesel	100	0.59	9.1	0.001	0.001	0.000	0.000	0.000	0.000	0.353
			Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	11.4	0.002	0.004	0.000	0.000	0.000	0.001	2.381

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	East ARFF Landside	Excavation (Topsoil Stripping)	Dozer	Diesel	175	0.59	4.3	0.000	0.001	0.000	0.000	0.000	0.000	0.261
			Fencing	Concrete Truck	Diesel	600	0.59	4.6	0.000	0.002	0.000	0.000	0.000	0.000	0.954
			Fencing	Dump Truck	Diesel	600	0.59	18.2	0.001	0.007	0.000	0.000	0.000	0.001	3.814
			Fencing	Other General Equipment	Diesel	175	0.43	18.2	0.000	0.002	0.000	0.000	0.000	0.000	0.802
			Fencing	Pickup Truck	Gas	600	0.59	18.2	0.001	0.007	0.000	0.000	0.000	0.001	3.814
			Fencing	Skid Steer Loader	Diesel	75	0.21	18.2	0.001	0.001	0.000	0.000	0.000	0.000	0.220
			Fencing	Tractors/Loader/Backhoe	Diesel	100	0.21	18.2	0.001	0.001	0.000	0.000	0.000	0.000	0.293
		East ARFF Landside	Grading	Dozer	Diesel	175	0.59	3.3	0.000	0.001	0.000	0.000	0.000	0.000	0.199
			Grading	Grader	Diesel	300	0.59	3.3	0.000	0.000	0.000	0.000	0.000	0.000	0.341
			Grading	Roller	Diesel	100	0.59	3.3	0.000	0.000	0.000	0.000	0.000	0.000	0.126
			Markings	Flatbed Truck	Diesel	600	0.59	2.1	0.000	0.001	0.000	0.000	0.000	0.000	0.450
			Markings	Other General Equipment	Diesel	175	0.43	2.1	0.000	0.000	0.000	0.000	0.000	0.000	0.095
			Sidewalks	Concrete Truck	Diesel	600	0.59	16.4	0.001	0.006	0.000	0.000	0.000	0.001	3.433
			Sidewalks	Dump Truck	Diesel	600	0.59	16.4	0.001	0.006	0.000	0.000	0.000	0.001	3.433
			Sidewalks	Pickup Truck	Gas	600	0.59	16.4	0.001	0.006	0.000	0.000	0.000	0.001	3.433
			Sidewalks	Tractors/Loader/Backhoe	Diesel	100	0.21	16.4	0.001	0.001	0.000	0.000	0.000	0.000	0.264
			Sidewalks	Vibratory Compactor	Diesel	6	0.43	16.4	0.000	0.000	0.000	0.000	0.000	0.000	0.027

Seque nce #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Soil Erosion/Sedi ment Control	Other General Equipment	Diesel	175	0.43	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.123
			Soil Erosion/Sedi ment Control	Pumps	Diesel	11	0.43	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.009
			Soil Erosion/Sedi ment Control	Tractors/Loa der/Backhoe	Diesel	100	0.21	2.8	0.000	0.000	0.000	0.000	0.000	0.000	0.045
			Street Lighting	Dump Truck	Diesel	600	0.59	32.0	0.002	0.012	0.000	0.000	0.000	0.002	6.698
1	Summer 2022	East ARFF Landside	Street Lighting	Loader	Diesel	175	0.59	32.0	0.001	0.003	0.000	0.000	0.000	0.001	1.953
			Street Lighting	Other General Equipment	Diesel	175	0.43	32.0	0.001	0.003	0.000	0.000	0.000	0.000	1.408
			Street Lighting	Pickup Truck	Gas	600	0.59	32.0	0.002	0.012	0.000	0.000	0.000	0.002	6.698
			Street Lighting	Skid Steer Loader	Diesel	75	0.21	32.0	0.002	0.002	0.000	0.000	0.000	0.000	0.385
			Street Lighting	Tractors/Loa der/Backhoe	Diesel	100	0.21	32.0	0.003	0.002	0.000	0.000	0.000	0.000	0.514
			Subbase Placement	Dozer	Diesel	175	0.59	5.7	0.000	0.001	0.000	0.000	0.000	0.000	0.351
			Subbase Placement	Dump Truck (12 cy)	Diesel	600	0.59	40.5	0.003	0.016	0.000	0.000	0.000	0.002	8.467
			Subbase Placement	Pickup Truck	Gas	600	0.59	5.7	0.000	0.002	0.000	0.000	0.000	0.000	1.203
			Subbase Placement	Roller	Diesel	100	0.59	5.6	0.000	0.000	0.000	0.000	0.000	0.000	0.217
2	Winter 2022	East ARFF Station	Concrete Foundations	Backhoe	Diesel	100	0.21	320.1	0.025	0.019	0.000	0.003	0.003	0.004	5.146

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Concrete Foundations	Concrete Ready Mix Trucks	Diesel	600	0.59	60.0	0.004	0.023	0.000	0.000	0.000	0.003	12.559
			Concrete Foundations	Fork Truck	Diesel	100	0.59	320.1	0.009	0.067	0.000	0.000	0.000	0.003	12.402
			Concrete Foundations	Tool Truck	Diesel	600	0.59	80.1	0.005	0.031	0.000	0.001	0.000	0.004	16.766
			Concrete Foundations	Tractor Trailer-Material Delivery	Diesel	600	0.59	15.9	0.001	0.006	0.000	0.000	0.000	0.001	3.328
2	Winter 2022	East ARFF Station	Construction Mob & Layout	Survey Crew Trucks	Gas	600	0.59	9.9	0.001	0.004	0.000	0.000	0.000	0.001	2.072
			Construction Mob & Layout	Tractor Trailers Temp Fac.	Diesel	600	0.59	3.9	0.000	0.002	0.000	0.000	0.000	0.000	0.816
			Exterior Wall Framing	Fork Truck	Diesel	100	0.59	600.0	0.016	0.126	0.000	0.001	0.001	0.005	23.247
			Exterior Wall Framing	Generator	Diesel	40	0.43	300.0	0.005	0.022	0.000	0.001	0.001	0.002	3.353
			Exterior Wall Framing	Man Lift	Diesel	75	0.21	600.0	0.036	0.046	0.000	0.005	0.004	0.007	7.229
			Exterior Wall Framing	Tool Truck	Diesel	600	0.59	150.0	0.010	0.059	0.000	0.001	0.001	0.008	31.397
			Exterior Wall Framing	Tractor Trailer-Material Delivery	Diesel	600	0.59	150.0	0.010	0.059	0.000	0.001	0.001	0.008	31.397
			Roofing	High Lift	Diesel	100	0.59	120.0	0.003	0.025	0.000	0.000	0.000	0.001	4.649
			Roofing	Man Lift (Fascia Construction)	Diesel	75	0.21	24.0	0.001	0.002	0.000	0.000	0.000	0.000	0.289

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year							
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂	
			Roofing	Material Deliveries	Diesel	600	0.59	60.0	0.004	0.023	0.000	0.000	0.000	0.003	12.559	
			Roofing	Tractor Trailer-Material Delivery	Diesel	600	0.59	60.0	0.004	0.023	0.000	0.000	0.000	0.003	12.559	
			Security & Safety Systems	High Lift	Diesel	100	0.59	800.1	0.022	0.168	0.000	0.001	0.001	0.007	31.000	
2	Winter 2022	East ARFF Station	Security & Safety Systems	Tool Truck	Diesel	600	0.59	200.1	0.014	0.078	0.000	0.001	0.001	0.011	41.884	
			Structural Steel Frame	90 Ton Crane	Diesel	300	0.43	320.1	0.008	0.130	0.000	0.001	0.001	0.007	24.151	
			Structural Steel Frame	Concrete Pump	Diesel	11	0.43	12.0	0.000	0.000	0.000	0.000	0.000	0.000	0.037	
			Structural Steel Frame	Concrete Truck	Diesel	600	0.59	24.0	0.002	0.009	0.000	0.000	0.000	0.001	5.024	
			Structural Steel Frame	Fork Truck	Diesel	100	0.59	80.1	0.002	0.017	0.000	0.000	0.000	0.001	3.103	
			Structural Steel Frame	Tool Truck	Diesel	600	0.59	12.0	0.001	0.005	0.000	0.000	0.000	0.001	2.512	
			Structural Steel Frame	Tractor Trailer- Steel Deliveries	Diesel	600	0.59	39.9	0.003	0.016	0.000	0.000	0.000	0.002	8.352	
			Structural Steel Frame	Trowel Machine	Gas	175	0.48	12.0	0.034	0.003	0.000	0.000	0.000	0.001	0.794	
		Fuel Tanks	Concrete Placement	Air Compressor	Gas	6	0.56	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
			Concrete Placement	Concrete Saws	Gas	11	0.78	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Concrete Placement	Concrete Truck	Diesel	600	0.59	0.2	0.000	0.000	0.000	0.000	0.000	0.000	0.047
			Concrete Placement	Other General Equipment	Diesel	175	0.43	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.005
			Concrete Placement	Rubber Tired Loader	Diesel	175	0.59	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.003
			Concrete Placement	Slip Form Paver	Diesel	175	0.59	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.003
2	Winter 2022	Fuel Tanks	Concrete Placement	Surfacing Equipment (Grooving)	Diesel	25	0.59	0.1	0.000	0.000	0.000	0.000	0.000	0.000	0.001
			Construction/ Erect Tanks	Crane	Diesel	300	0.43	6.0	0.000	0.001	0.000	0.000	0.000	0.000	0.453
			Construction/ Erect Tanks	Other General Equipment	Diesel	175	0.43	16.0	0.000	0.001	0.000	0.000	0.000	0.000	0.704
			Construction/ Erect Tanks	Pickup Truck	Gas	600	0.59	16.0	0.001	0.006	0.000	0.000	0.000	0.001	3.349
			Dust Control	Water Truck	Diesel	600	0.59	720.0	0.049	0.281	0.001	0.005	0.004	0.039	150.708
			Excavation (Cut to Fill)	Dozer	Diesel	175	0.59	0.6	0.000	0.000	0.000	0.000	0.000	0.000	0.039
			Excavation (Cut to Fill)	Dump Truck (12 cy)	Diesel	600	0.59	1.7	0.000	0.001	0.000	0.000	0.000	0.000	0.357
			Excavation (Cut to Fill)	Excavator	Diesel	175	0.59	0.5	0.000	0.000	0.000	0.000	0.000	0.000	0.031
			Excavation (Cut to Fill)	Pickup Truck	Gas	600	0.59	0.5	0.000	0.000	0.000	0.000	0.000	0.000	0.107
			Excavation (Cut to Fill)	Roller	Diesel	100	0.59	0.5	0.000	0.000	0.000	0.000	0.000	0.000	0.020

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Excavation (Cut to Fill)	Scraper	Diesel	600	0.59	0.6	0.000	0.000	0.000	0.000	0.000	0.000	0.134
3	Winter 2023	East ARFF Station	Interior Build-Out/ Finishes	Fork Truck	Diesel	100	0.59	2400.0	0.062	0.044	0.000	0.002	0.001	0.022	92.987
			Interior Build-Out/ Finishes	Man Lift	Diesel	75	0.21	2400.0	0.131	0.178	0.000	0.017	0.015	0.025	28.925
			Interior Build-Out/ Finishes	Tool Truck	Diesel	600	0.59	300.0	0.018	0.176	0.000	0.001	0.001	0.016	62.795
3	Winter 2023	East ARFF Station	Interior Build-Out/ Finishes	Tractor Trailer-Material Delivery	Diesel	600	0.59	600.0	0.035	0.351	0.001	0.003	0.003	0.033	125.590
		Landscape	Hydroseeding	Hydroseeder	Diesel	600	0.59	6.2	0.000	0.004	0.000	0.000	0.000	0.000	1.300
			Hydroseeding	Off-Road Truck	Diesel	600	0.59	6.2	0.000	0.004	0.000	0.000	0.000	0.000	1.300
			Sodding	Flatbed Truck	Diesel	600	0.59	24.1	0.001	0.014	0.000	0.000	0.000	0.001	5.048
			Sodding	Other General Equipment	Diesel	175	0.43	24.1	0.000	0.002	0.000	0.000	0.000	0.000	1.061
			Sodding	Pickup Truck	Diesel	600	0.59	24.1	0.001	0.011	0.000	0.000	0.000	0.001	5.048
			Sodding	Skid Steer Loader	Diesel	75	0.21	24.1	0.001	0.002	0.000	0.000	0.000	0.000	0.291
			Topsoil Placement	Dozer	Diesel	175	0.59	15.3	0.000	0.003	0.000	0.000	0.000	0.000	0.935
			Topsoil Placement	Dump Truck	Diesel	600	0.59	15.3	0.001	0.009	0.000	0.000	0.000	0.001	3.207
			Topsoil Placement	Pickup Truck	Gas	600	0.59	15.3	0.001	0.007	0.000	0.000	0.000	0.001	3.207

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Tree Planting	Flatbed Truck	Diesel	600	0.59	8.0	0.000	0.005	0.000	0.000	0.000	0.000	1.675
			Tree Planting	Other General Equipment	Diesel	175	0.43	8.0	0.000	0.001	0.000	0.000	0.000	0.000	0.352
			Tree Planting	Pickup Truck	Gas	600	0.59	8.0	0.000	0.004	0.000	0.000	0.000	0.000	1.675
			Tree Planting	Tractors/Loader/Backhoe	Diesel	100	0.21	8.0	0.001	0.000	0.000	0.000	0.000	0.000	0.129
4	Winter 2023	Existing Stations 1 & 3	Building Demolition	Bob Cat	Diesel	75	0.21	1800.0	0.106	0.132	0.000	0.015	0.014	0.020	21.691
			Building Demolition	Dump Truck	Diesel	600	0.59	1800.0	0.105	0.234	0.002	0.008	0.008	0.098	376.771
			Building Demolition	Excavator with Bucket	Diesel	175	0.59	900.0	0.016	0.553	0.000	0.002	0.002	0.014	54.946
			Building Demolition	Generator Sets	Diesel	40	0.43	900.0	0.014	0.063	0.000	0.003	0.002	0.004	10.061
			Building Demolition	Pickup Truck	Diesel	600	0.59	1050.0	0.061	0.137	0.001	0.005	0.005	0.057	219.783
			Concrete Demolition	Excavator with Bucket	Diesel	175	0.59	628.3	0.011	0.386	0.000	0.001	0.001	0.010	38.360
			Concrete Demolition	Excavator with Hoe Ram	Diesel	175	0.59	628.3	0.011	0.386	0.000	0.001	0.001	0.010	38.360
			Concrete Demolition	Pickup Truck	Diesel	600	0.59	1256.7	0.073	0.164	0.001	0.006	0.005	0.068	263.042
N/A	2022	East ARFF	Concrete Batch Plant	Crawler Tractor/ Dozers	Diesel	150	0.64	2400.0	0.076	0.229	0.000	0.025	0.025	0.000	136.130
				Excavators	Diesel	175	0.59	2400.0	0.082	0.219	0.000	0.027	0.027	0.000	146.411
				Graders	Diesel	300	0.59	2400.0	0.211	0.281	0.000	0.047	0.047	0.000	250.990

Sequence #	Season & Calendar Year	Project Type	Construction Activity	Equipment	Fuel Type	HP Avg	Load Factor	Hours of Activity	Tons per Year						
									CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
				Off-Road Truck	Diesel	300	0.59	9000.0	0.860	0.527	0.018	0.000	0.000	0.000	941.211
				Sweepers/Scrubbers	Diesel	100	0.43	1200.0	0.017	0.097	0.000	0.006	0.006	0.006	30.487
				Tractors/Loader/Backhoe	Diesel	100	0.21	1200.0	0.008	0.092	0.000	0.014	0.014	0.017	14.889
				Trenchers	Diesel	60	0.6	16.0	0.001	0.002	0.000	0.000	0.000	0.000	0.340

Delivery of on-site concrete material from the batch plant to the site is contained within each major item of work associated with concrete

Table 6: On-Road Emissions Calculations (West ARFF)

Seque nce #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	New Fumigation Building	Cement Mixer	Material Delivery	Diesel	2313	0.003	0.011	0.000	0.000	0.000	0.000	3.511
			Dump Truck Subbase Material	Material Delivery	Diesel	1233	0.002	0.006	0.000	0.000	0.000	0.000	1.872
			Passenger Car	Employee Commute	Gas	53213	0.208	0.020	0.000	0.001	0.009	0.003	21.651
1	Summer 2022	New Fumigation Building	Tractor Trailer	Material Delivery	Diesel	160	0.000	0.001	0.000	0.000	0.000	0.000	0.443
		New Fumigation Site	Dump Truck Subbase Material	Material Delivery	Diesel	1233	0.002	0.006	0.000	0.000	0.000	0.000	1.872
			Passenger Car	Employee Commute	Gas	21285	0.083	0.008	0.000	0.000	0.004	0.001	8.660
			Tractor Trailer	Material Delivery	Diesel	800	0.001	0.004	0.000	0.000	0.000	0.000	2.215
2			Dump Truck	Material Delivery	Diesel	2407	0.003	0.011	0.000	0.000	0.000	0.001	3.653

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
	Summer 2022	Fumigation Demolition	Passenger Car	Employee Commute	Gas	2178	0.009	0.001	0.000	0.000	0.000	0.000	0.886
3	Winter 2022	Fumigation Demolition	Dump Truck	Material Delivery	Diesel	1080	0.002	0.005	0.000	0.000	0.000	0.000	1.487
			Passenger Car	Employee Commute	Gas	1980	0.008	0.001	0.000	0.000	0.000	0.000	0.739
4	Winter 2022	West ARFF Airside	Cement Mixer	Material Delivery	Diesel	7227	0.010	0.034	0.000	0.002	0.002	0.001	9.952
			Dump Truck Subbase Material	Material Delivery	Diesel	3854	0.006	0.018	0.000	0.001	0.001	0.001	5.307
			Passenger Car	Employee Commute	Gas	23400	0.090	0.008	0.000	0.000	0.000	0.001	8.733
			Cement Truck for Fencing	Material Delivery	Diesel	100594	0.144	0.470	0.002	0.022	0.022	0.016	138.519
			Passenger Car	Employee Commute	Gas	35100	0.135	0.012	0.000	0.000	0.000	0.002	13.099
			Passenger Car	Employee Commute	Gas	29250	0.113	0.010	0.000	0.000	0.000	0.002	10.916
4	Winter 2022	West ARFF Landside	Cement Mixer	Material Delivery	Diesel	7215	0.010	0.034	0.000	0.002	0.002	0.001	9.935
			Dump Truck Subbase Material	Material Delivery	Diesel	3848	0.006	0.018	0.000	0.001	0.001	0.001	5.299
			Passenger Car	Employee Commute	Gas	21450	0.083	0.007	0.000	0.000	0.000	0.001	8.005
5	Winter 2023	West ARFF Airside	Cement Mixer	Material Delivery	Diesel	7227	0.010	0.034	0.000	0.002	0.002	0.001	9.952
			Dump Truck Subbase Material	Material Delivery	Diesel	3854	0.006	0.018	0.000	0.001	0.001	0.000	5.307
			Passenger Car	Employee Commute	Gas	39000	0.150	0.013	0.000	0.001	0.001	0.002	13.532
			Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.001	9.554

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
		West ARFF Station	Dump Truck Subbase Material	Material Delivery	Diesel	3700	0.005	0.017	0.000	0.001	0.001	0.000	5.095
			Passenger Car	Employee Commute	Gas	321750	1.241	0.106	0.002	0.005	0.004	0.017	111.638
			Tractor Trailer	Material Delivery	Diesel	159	0.000	0.001	0.000	0.000	0.000	0.000	0.408
		West ARFF Landside	Cement Mixer	Material Delivery	Diesel	7215	0.010	0.034	0.000	0.002	0.002	0.001	9.935
			Dump Truck Subbase Material	Material Delivery	Diesel	3848	0.006	0.018	0.000	0.001	0.001	0.000	5.299
			Passenger Car	Employee Commute	Gas	62400	0.241	0.021	0.000	0.001	0.001	0.003	21.651
		West ARFF Bridge	Cement Mixer	Material Delivery	Diesel	37000	0.053	0.173	0.001	0.008	0.008	0.003	50.949
5	Winter 2023	West ARFF Bridge	Dump Truck Subbase Material	Material Delivery	Diesel	19733	0.028	0.092	0.000	0.004	0.004	0.001	27.173
			Passenger Car	Employee Commute	Gas	42900	0.166	0.014	0.000	0.001	0.001	0.002	14.885
			Tractor Trailer	Material Delivery	Diesel	1600	0.002	0.007	0.000	0.000	0.000	0.000	4.107
6	Summer 2023	West ARFF Airside	Cement Mixer	Material Delivery	Diesel	7227	0.010	0.034	0.000	0.002	0.002	0.001	10.968
			Dump Truck Subbase Material	Material Delivery	Diesel	3854	0.006	0.018	0.000	0.001	0.001	0.000	5.849
			Passenger Car	Employee Commute	Gas	36000	0.139	0.012	0.000	0.000	0.000	0.002	13.616
		West ARFF Station	Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.001	10.530
			Dump Truck Subbase Material	Material Delivery	Diesel	3700	0.005	0.017	0.000	0.001	0.001	0.000	5.616

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
			Passenger Car	Employee Commute	Gas	742500	2.865	0.246	0.004	0.004	0.003	0.041	280.834
			Tractor Trailer	Material Delivery	Diesel	1500	0.002	0.007	0.000	0.000	0.000	0.000	4.153
6	Summer 2023	Fuel Tanks	Cement Mixer	Material Delivery	Diesel	33	0.000	0.000	0.000	0.000	0.000	0.000	0.050
			Dump Truck Subbase Material	Material Delivery	Diesel	18	0.000	0.000	0.000	0.000	0.000	0.000	0.027
			Passenger Car	Employee Commute	Gas	90000	0.347	0.030	0.000	0.000	0.000	0.005	34.040
		West ARFF Landside	Cement Mixer	Material Delivery	Diesel	7215	0.010	0.034	0.000	0.002	0.002	0.001	10.950
6	Summer 2023	West ARFF Landside	Dump Truck Subbase Material	Material Delivery	Diesel	3848	0.006	0.018	0.000	0.001	0.001	0.000	5.840
			Passenger Car	Employee Commute	Gas	31500	0.122	0.010	0.000	0.000	0.000	0.002	11.914
7	Winter 2023	West ARFF Station	Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.001	9.554
			Dump Truck Subbase Material	Material Delivery	Diesel	3700	0.005	0.017	0.000	0.001	0.001	0.000	5.095
			Passenger Car	Employee Commute	Gas	212850	0.821	0.070	0.001	0.003	0.003	0.011	73.853
			Tractor Trailer	Material Delivery	Diesel	6000	0.009	0.028	0.000	0.001	0.001	0.001	15.402
		Landscape	Flatbed Truck	Material Delivery	Diesel	32	0.000	0.000	0.000	0.000	0.000	0.000	0.082
			Passenger Car	Employee Commute	Gas	14190	0.055	0.005	0.000	0.000	0.000	0.001	4.924
8	Winter 2024	Existing Stations 2 & 4	Dump Truck	Material Delivery	Diesel	32407	0.046	0.151	0.001	0.007	0.007	0.004	44.625
			Passenger Car	Employee Commute	Gas	3630	0.014	0.001	0.000	0.000	0.000	0.000	1.324
			Dump Truck	Material Delivery	Diesel	26852	0.038	0.126	0.001	0.006	0.006	0.003	36.975

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
		Existing Stations 2 & 4	Passenger Car	Employee Commute	Gas	1980	0.008	0.001	0.000	0.000	0.000	0.000	0.722
3	Summer 2023	Concrete Batch Plant	Tractor Trailer	Material Delivery	Diesel	45000	0.064	0.210	0.001	0.008	0.008	0.012	68.206

Table 7: On-Road Emission Calculations (East ARFF)

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1	Summer 2022	East ARFF Airside	Cement Mixer	Material Delivery	Diesel	54633	0.078	0.255	0.001	0.012	0.012	0.018	82.916
			Dump Truck Subbase Material	Material Delivery	Diesel	29138	0.042	0.136	0.001	0.006	0.006	0.010	44.222
			Passenger Car	Employee Commute	Gas	198000	0.764	0.065	0.001	0.003	0.003	0.022	80.551
		East ARFF Station	Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.002	10.530
			Dump Truck Subbase Material	Material Delivery	Diesel	8500	0.012	0.040	0.000	0.002	0.002	0.003	12.900
			Passenger Car	Employee Commute	Gas	990000	3.820	0.327	0.006	0.014	0.013	0.109	402.756
			Tractor Trailer	Material Delivery	Diesel	159	0.000	0.001	0.000	0.000	0.000	0.000	0.440
		East ARFF Landside	Cement Mixer	Material Delivery	Diesel	5689	0.008	0.027	0.000	0.001	0.001	0.002	8.634
			Dump Truck Subbase Material	Material Delivery	Diesel	3034	0.004	0.014	0.000	0.001	0.001	0.001	4.605
			Passenger Car	Employee Commute	Gas	229500	0.885	0.076	0.001	0.003	0.003	0.025	93.366
2			Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.002	9.554

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
	Winter 2022	East ARFF Station	Dump Truck Subbase Material	Material Delivery	Diesel	3700	0.005	0.017	0.000	0.001	0.001	0.001	5.095
			Passenger Car	Employee Commute	Gas	429000	1.655	0.142	0.003	0.006	0.006	0.047	160.103
2	Winter 2022	East ARFF Station	Tractor Trailer	Material Delivery	Diesel	159	0.000	0.001	0.000	0.000	0.000	0.000	0.408
		Fuel Tanks	Cement Mixer	Material Delivery	Diesel	33	0.000	0.000	0.000	0.000	0.000	0.000	0.045
			Dump Truck Subbase Material	Material Delivery	Diesel	240	0.000	0.001	0.000	0.000	0.000	0.000	0.330
			Passenger Car	Employee Commute	Gas	33150	0.128	0.011	0.000	0.000	0.000	0.004	12.372
3	Winter 2023	East ARFF Station	Cement Mixer	Material Delivery	Diesel	6938	0.010	0.032	0.000	0.002	0.002	0.002	9.554
			Dump Truck Subbase Material	Material Delivery	Diesel	3700	0.005	0.017	0.000	0.001	0.001	0.000	5.095
			Passenger Car	Employee Commute	Gas	429000	1.655	0.142	0.003	0.006	0.006	0.142	148.850
			Tractor Trailer	Material Delivery	Diesel	6000	0.009	0.028	0.000	0.001	0.001	0.002	15.402
		Landscape	Flatbed Truck	Material Delivery	Diesel	40	0.000	0.000	0.000	0.000	0.000	0.000	0.103
			Passenger Car	Employee Commute	Gas	25350	0.098	0.008	0.000	0.000	0.000	0.008	8.796
4	Winter 2024	Existing Station 1 & 3	Dump Truck	Material Delivery	Diesel	69444	0.100	0.325	0.002	0.015	0.015	0.008	105.395
			Passenger Car	Employee Commute	Gas	3630	0.014	0.001	0.000	0.000	0.000	0.001	1.373
			Dump Truck	Material Delivery	Diesel	29090	0.042	0.136	0.001	0.006	0.006	0.003	44.150
			Passenger Car	Employee Commute	Gas	2178	0.008	0.001	0.000	0.000	0.000	0.000	0.824

Sequence #	Season & Calendar Year	Project Type	Equipment	On-Road Activity	Fuel Type	VMT	Tons per Year						
							CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}	VOC	CO ₂
1 / 2	Summer 2022	Concrete Batch Plant	Tractor Trailer	Material Delivery	Diesel	45000	0.064	0.210	0.001	0.008	0.008	0.015	68.206

3.0 Summary of Findings

Based on the calculations and analysis from the air quality assessment of the construction emissions because of the Proposed Action, none of the thresholds established by the EPA and TCEQ were equaled or exceeded. Therefore, the Proposed Action conforms to the State Implemental Program (SIP) and no further analysis is to be required under NEPA.

Table 8: Total Emissions by Year

Year	CO	NO _x	SO ₂	PM10	PM2.5	VOC	CO ₂
2022	11.297	9.672	0.051	1.035	0.344	1.103	5563.082
2023	11.009	8.788	0.050	1.034	0.324	1.103	5595.093
2024	0.331	1.281	0.004	0.200	0.033	0.179	716.126

Units for Non-Greenhouse Gases Emission: Short Ton
Units for Greenhouse Gases (CO₂) Emission: Metric Ton

Table 9: Total Emissions by Source Category (2022)

Year	Emission Source	CO	NO _x	SO ₂	PM10	PM2.5	VOC	CO ₂
2022	NonRoad	2.891	7.601	0.032	0.254	0.243	0.809	4309.295
2022	OnRoad	8.405	2.071	0.019	0.092	0.101	0.294	1253.787
2022	Fugitive	0.000	0.000	0.000	0.689	0.000	0.000	0.000
2022	TOTAL	11.297	9.672	0.051	1.035	0.344	1.103	5563.082

Units for Non-Greenhouse Gases Emission: Short Ton
Units for Greenhouse Gases (CO₂) Emission: Metric Ton

Table 10: Total Emissions by Source Categories (2023)

Year	Emission Source	CO	NO _x	SO ₂	PM10	PM2.5	VOC	CO ₂
2023	NonRoad	2.653	6.695	0.032	0.251	0.240	0.827	4394.563
2023	OnRoad	8.355	2.093	0.018	0.086	0.084	0.277	1200.530
2023	Fugitive	0.000	0.000	0.000	0.697	0.000	0.000	0.000
2023	TOTAL	11.009	8.788	0.050	1.034	0.324	1.103	5595.093

Units for Non-Greenhouse Gases Emission: Short Ton
Units for Greenhouse Gases (CO₂) Emission: Metric Ton

Table 11: Total Emissions by Source Categories (2024)

Year	Emission Source	CO	NO _x	SO ₂	PM10	PM2.5	VOC	CO ₂
2024	NonRoad	0.225	1.002	0.003	0.021	0.020	0.171	632.480
2024	OnRoad	0.107	0.279	0.001	0.013	0.013	0.008	83.646
2024	Fugitive	0.000	0.000	0.000	0.165	0.000	0.000	0.000
2024	TOTAL	0.331	1.281	0.004	0.200	0.033	0.179	716.126

Units for Non-Greenhouse Gases Emission: Short Ton

Units for Greenhouse Gases (CO₂) Emission: Metric Ton