Appendix A
Air Quality Modeling Files

Bay Area Air Quality Management District

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

• County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.

• Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.

• Side of the Roadway: Identify on which side of the roadway the project is located.

• Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.

• Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.

Notes and References listed below the Search Boxes

Search Parameters

County		
Roadway Direction		
Side of the Roadway		
Distance from Roadway	55	feet
Annual Average Daily Traffic (ADT)	41,500	

Results

Santa Clara County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

0.421 ($\mu g/m^3$)

Cancer Risk

16.61 (per million)

Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

FID	OBJECTID	FACID	Name	Address	City	St	Zip	County	Cancer	Hazard	PM_25	Type	Latitude	Longitude	x	y	UTM X	UTM Y
1034	1,034	10004	Technibuil	1049 Felip	San Jose	CA	95122	Santa Clar	1.16	0	0	Contact B/	37.335	-121.85	-1.4E+07	4485952	601873.7	4132656
3942	3,942	18942	Verizon W	912 Olinde	San Jose	CA	95122	Santa Clar	1.15	0	0	Generator	37.336	-121.853	-1.4E+07	4486008	601606.5	4132764
8356	8,356	111958	76 Station	1299 Story	San Jose	CA	95122	Santa Clar	18.34	0.08	0	Gas Dispe	37.334	-121.852	-1.4E+07	4485789	601697.8	4132543

New FS-32 Project (1138 Olinder Ct) CEQA Data Tracking

(Updated December 8, 2021)

Data	Responsible Party	Estimated Submittal Date	Status
Preliminary Site Plan	Public Works		Received, 8/20/21
Architectural Plan Set	SKA	end of October	Received Jan 2022
Preliminary building height (maximum)	SKA	mid September	24 ft received Jan 2022
Operational Details: • Shift start and end times • Number of employees per shift • **Estimated number of fire/emergency/medical calls per hour and per day** • Estimated specifications for on-site generator	SJFD	mid September	SEE PD 8am to 8am (48 hr shift)/ 8 per shift/calls TBD/2000 gallons to 2400 gallon tank combined/regular monthly testing
Geotech Report	ENGEO	mid October	Received, 11/1/21
Phase I/II	Cornerstone	mid September	Cornerstone info provided.
Construction Detail (for AQ/Noise)	Public Works		Received, 12/3/21
Cumulative Projects List	Planning		Ask planning if there are any nearby projects we should be aware of.
Bicycle Parking Spaces			

Complete

Action/Confirmation Required

New FS-32 Project (1138 Olinder Ct) - Data Request for AQ/HRA

Operation

1. **Please provide the number and size of generators.**
2. **Please provide known or expected sustainability features of the project - LEED certification, photovoltaic panels, low-e glass for windows, stormwater management to reduce outdoor water use, etc.**

Construction

Please enter data only in highlighted cells. Please confirm values in green cells.

Data available. Please confirm. | Data Needed | ESA to calculate

Proposed Land Uses	Area	Units	
Fire Station	7,827	sqft	
Parking	17	spaces	

Project Site Area	1.10 acres	acres	48,305 sq. ft.
Area to be demolished	36,600	sqft	
Total Demo Volume (off-haul)	0	tons	
Total Proposed total building area	7,827	sqft	
Volume of infill to be brought in	100	cubic yards	
Volume of material to be exported	975	cubic yards	

The disturbance area for the project site includes approximately 0.87 acres (38,106 square feet).

From PD

1.12 acre

Vehicle Parking	17 stalls	17 stalls

0.97

Construction schedule	Ph. 1: Soil Remediation	Ph. 2: Building Const.
Start date of construction	6/1/2022	3/1/2023
First year of operation	6/1/2024	3/1/2024

Construction Phase	From	To	# of days	
Demolition (part of Ph.1)	6/1/2022	8/1/2022	44	44
Site Preparation/Grading	3/1/2023	4/30/2023	43	43
Building Construction	4/1/2023	4/1/2024	261	261
Paving (1)	11/1/2023	12/1/2023		23
Architectural Coating (1)	11/1/2023	12/1/2023		23

(1): within time frame of Bldg. Const. (there should not be any added days) 348

Dates above are best estimate to date.

Construction Equipment

Please list the types of construction equipment that would be used for each phase by selecting from the drop down menu in each cell

Demolition (part of Ph.1)

Equipment	Number	No. of Days used	Hrs/day used
Concrete/Industrial Saws	1		
Rubber Tired Dozers	1		
Tractors/Loaders/Backhoes	2		

Site Preparation/Grading

Equipment	Number	No. of Days used	Hrs/day used
Graders	1		
Tractors/Loaders/Backhoes	1		

Building Construction

Equipment	Number	No. of Days used	Hrs/day used
Cranes	1		
Forklifts	2		
Tractors/Loaders/Backhoes	2		

Paving (1)

Equipment	Number	No. of Days used	Hrs/day used
Cement and Mortar Mixers	4		
Pavers	1		
Tractors/Loaders/Backhoes	2		

Architectural Coating (1)

Equipment	Number	No. of Days used	Hrs/day used
Air Compressors	1		

Construction Vehicle Trips

Please provide the number **trips (2-way)** associated with workers, material delivery and hauling during each construction phase

Construction Phase	worker trips/day	Vendor Truck Trips/day	Hauling Truck trips/day
Demolition (part of Ph.1)			
Site Preparation/Grading			
Building Construction			
Paving (1)			
Architectural Coating (1)			

Entrained Dust Calculation
FS-8 Relocation
Santa Clara County

Road Dust Equation

E [lb/VMT] = k*(sL)^0.91 * (W)^1.02 * (1-P/4N)

Where:
E = the particulate emission factor in units of pounds of particulate matter per VMT
k = the U.S. EPA AP-42 particle size multiplier (PM_{10} = 0.0022 lb/VMT),[1]
sL = the roadway-specific silt loading in grams/square meter (g/m^2),[2,3,4,5]
W = the average weight of vehicles traveling the road (California statewide default = 2.4 tons),[5]
P = number of "wet" days, when at least one site per county received at least 0.01 inch of precipitation during the annual averaging period,[9] and
N = the number of days in the annual averaging period (default = 365)

Source: California Air Resources Board (CARB), Miscellaneous Process Methodology 7.9 — Entrained Road Travel, Paved Road Dust. Revised and updated March 2018, https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-9_2018.pdf.

Silt Loading Factor

Source: CARB, 2018.

Table 3: California Default Statewide and Local Silt Loading Values

Silt Loadings (g/m2)			
Freeway	**Major**	**Collector**	**Local**
0.015	0.032	0.032	0.32

2008 HPMS Travel Fractions			
0.434	0.449	0.054	0.064

Re-entrained PAVED Road Dust Emission Factors

Methodology

Calculation Methodology: USEPA AP-42, Paved Roads, Section 13.2.1, Revised January 2011:
http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf

K-value from CARB, 2018.

Pollutant	Variables					E_{ext} (g/mi)
	k	sL	W	P	N	
PM10	1.00	0.043086	2.4	64	365	**0.13353**
PM2.5	0.15	0.043086	2.4	64	365	**0.02003**

From TABLE 7

E_{ext} (lb/10^6 VMT)
112.2
16.83

Where:	**Source**
E = particulate emission factor (grams of particulate matter/VMT)	*calculation*
	Table 13.2.1-1 Particle Size Multipliers for Paved Road Equation of USEPA, 2011.
k = particle size multiplier (g/VMT)	
sL = local roadway silt loading (g/m2)	*CARB, 2018.*
W = average weight of vehicles on the road (tons)	*CARB, 2018.*
P = number of wet days with at least 0.254mm of precipitation	*Table 8 of CARB, 2018.*
N = number of days in the averaging period	annual days (365)

Source: EMFAC2021 (v1.0.1) Emission Rates
Region Type: County
Region: Santa Clara
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar	Vehicle C	Model Yr	Speed	Fuel	Populatio	Total VM	CVMT	EVMT	Trips	RUNEX gram/mi NOx_RUI	IDLEX gram/tri NOx_IDL	STREX gram/tri NOx_STR	RUNEX gram/mi PM2.5_R	IDLEX gram/tri PM2.5_I	STREX gram/tri PM2.5_S	PMTW gram/mi PM2.5_P	PMBW gram/mi PM2.5_P	RUNEX gram/mi PM10_R	IDLEX gram/tri PM10_ID	STREX gram/tri PM10_ST	PMTW gram/mi PM10_PI	PMBW gram/mi PM10_PI
Santa Cla	2024	HHDT	Aggregat	Aggregat	Gasoline	2.58871	115.153	115.153	0	51.7949	7.01372	0	1.69563	0.00361	0	0.00143	0.005	0.03384	0.00393	0	0.00156	0.02	0.09669
Santa Cla	2024	HHDT	Aggregat	Aggregat	Diesel	8486.69	1001095	1001095	0	124748	1.89457	62.8837	2.89887	0.02567	0.03017	0	0.00877	0.02745	0.02683	0.03153	0	0.03508	0.07844
Santa Cla	2024	HHDT	Aggregat	Aggregat	Electricit	28.3304	2794.26	0	2794.26	378.795	0	0	0	0	0	0	0.00859	0.01406	0	0	0	0.03434	0.04016
Santa Cla	2024	HHDT	Aggregat	Aggregat	Natural G	794.401	54591.3	54591.3	0	7249.72	1.12825	13.5551	0	0.00172	0.02478	0	0.009	0.04752	0.00187	0.02695	0	0.036	0.13578

Fuel	RUNEX gram/mi CO2_RUI	IDLEX gram/tri CO2_IDL	STREX gram/tri CO2_STR	RUNEX gram/mi CH4_RUN	IDLEX gram/tri CH4_IDLE	STREX gram/tri CH4_STR	RUNEX gram/mi N2O_RU	IDLEX gram/tri N2O_IDL	STREX gram/tri N2O_STR	RUNEX gram/mi ROG_RU	IDLEX gram/tri ROG_IDL	STREX gram/tri ROG_STF	HOTSOAK gram/tri ROG_HO	RUNLOSS gram/mi ROG_RU	DIURN gram/tri ROG_DIU
Gasoline	2166.16	0	50.0442	0.24601	0	0.00021	0.19293	0	0.0498	1.47824	0	0.00112	0.14902	1.34233	10.0255
Diesel	1634.1	11997	0	0.00078	0.23663	0	0.25745	1.89013	0	0.01673	5.09458	0	0	0	0
Electricit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural G	1387.53	10583.6	0	2.34474	36.3028	0	0.28286	2.15754	0	0.05083	0.5507	0	0	0	0

Fuel	RUNEX gram/mi TOG_RU	IDLEX gram/tri TOG_IDL	STREX gram/tri TOG_STR	HOTSOAK gram/tri TOG_HO	RUNLOSS gram/mi TOG_RU	DIURN gram/tri TOG_DIU	RUNEX gram/mi NH3_RUN	RUNEX gram/mi CO_RUNI	IDLEX gram/tri CO_IDLE	STREX gram/tri CO_STRE	RUNEX gram/mi SOx_RUN	IDLEX gram/tri SOx_IDLE	STREX gram/trip SOx_STREX
Gasoline	2.15705	0	0.00122	0.14902	1.34233	10.0255	0.04274	52.519	0	1.60109	0.02141	0	0.00049
Diesel	0.01905	5.7998	0	0	0	0	0.21508	0.08252	74.1058	0	0.01547	0.1136	0
Electricit	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural G	2.41273	37.0861	0	0	0	0	0.85184	13.402	74.4313	0	0	0	0

Region	Calendar	Vehicle C	lookup	NOx gram/mi NOx_RUI	NOx gram/tri NOx_IDL	NOx gram/tri NOx_STR	PM2.5 gram/mi PM2.5_R	PM2.5 gram/tri PM2.5_I	PM2.5 gram/tri PM2.5_S	PM2.5 fu gram/mi PM2.5_P	PM2.5 fu gram/mi PM2.5_P	PM10 gram/mi PM10_R	PM10 gram/tri PM10_ID	PM10 gram/tri PM10_ST	PM10 fu gram/mi PM10_PI	PM10 fu gram/mi PM10_PI
Santa Cla	2024	HHDT	2024_HHDT	1.8506	59.9787	2.73141	0.02437	0.02978	5.6E-07	0.00878	0.02845	0.02547	0.03118	6.1E-07	0.03513	0.0813

lookup	CO2 gram/mi CO2_RUI	CO2 gram/tri CO2_IDL	CO2 gram/tri CO2_STR	CH4 gram/mi CH4_RUN	CH4 gram/tri CH4_IDLE	CH4 gram/tri CH4_STR	N2O gram/mi N2O_RU	N2O gram/tri N2O_IDL	N2O gram/tri N2O_STR	ROG gram/mi ROG_RU	ROG gram/tri ROG_IDL	ROG gram/tri ROG_STF	ROG gram/tri ROG_HO	ROG gram/mi ROG_RU	ROG gram/tri ROG_DIU
2024_HHDT	1617.13	11880.6	0.01957	0.12168	2.21028	8E-08	0.25808	1.89863	1.9E-05	0.01861	4.82927	4.4E-07	5.8E-05	0.00015	0.00392

lookup	TOG gram/mi TOG_RU	TOG gram/tri TOG_IDL	TOG gram/tri TOG_STR	TOG gram/tri TOG_HO	TOG gram/mi TOG_RU	TOG gram/tri TOG_DIU	NH3 gram/mi NH3_RUN	CO gram/mi CO_RUNI	CO gram/tri CO_IDLE	CO gram/tri CO_STRE	SOx gram/mi SOx_RUN	SOx gram/tri SOx_IDLE	SOx gram/trip SOx_STREX
2024_HHDT	0.14267	7.49369	4.8E-07	5.8E-05	0.00015	0.00392	0.24734	0.77489	73.8826	0.00063	0.01464	0.10702	1.9E-07

ROG gram/mi	NOX gram/mi	PM10 gram/mi	PM2.5 gram/mile
0.01875	1.8506	0.15901	0.0444

ROG gram/tri	NOX gram/tri	PM10 gram/tri	PM2.5 gram/trip
4.83325	62.7102	0.03118	0.02978

RUNEX	gram/mile
IDLEX	gram/trip
STREX	gram/trip
PMTW	gram/mile
PMBW	gram/mile
HOTSOAI	gram/trip
RUNLOSS	gram/mile
DIURN	gram/trip

EMFAC2017 Acronyms For Each Vehicle Emission Type	EMFAC2017 Description of Each Vehicle Emission Type	EMFAC2017 Emission Rate Unit	CalEEMod Emission Factor Unit
RUNEX	Running Exhaust	grams/mile	grams/mile
PMBW	PM Brakewear	grams/mile	grams/mile
PMTW	PM Tirewear	grams/mile	grams/mile
STREX	Start Exhaust	grams/trip	grams/trip
HTSK	Hot Soak Evaporative	grams/trip	grams/trip
RUNLS	Running Loss Evaporative	grams/trip	grams/mile
IDLEX	Idle Exhaust	grams/vehicle/day	grams/trip
RESTL	Resting Loss Evaporative	grams/vehicle/day	grams/trip
DIURN	Diurnal Loss Evaporative	grams/vehicle/day	grams/trip
VMT	Vehicle Miles Traveled	miles/day	miles (per day, per season, or per year)
Trip	Total trips per day of a vehicle class	trips/day	trips (per day, per season, or per year)
Population	Vehicle Population	vehicle	vehicle

FS-32 - 1138 Olinder Ct - Santa Clara County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

FS-32 - 1138 Olinder Ct

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	7.83	1000sqft	0.97	7,827.00	8
Parking Lot	17.00	Space	0.15	6,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Lot acreage = 1.12 from PD, 8 dorms

Construction Phase - from data request response

Off-road Equipment -

Off-road Equipment - from data request response

Off-road Equipment - from data request response

Off-road Equipment - from data request response

Off-road Equipment - from data request response

Demolition -

Grading - The disturbance area for the project site includes approximately 0.87 acres (38,106 square feet).

Construction Off-road Equipment Mitigation - Tier 4 MM

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Stationary Sources - Emergency Generators and Fire Pumps - 125 KW EDG

Stationary Sources - Emergency Generators and Fire Pumps EF -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	7.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	200.00	261.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	23.00
tblConstructionPhase	NumDays	2.00	43.00
tblGrading	AcresOfGrading	21.50	0.87
tblGrading	MaterialExported	0.00	975.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	MaterialImported	0.00	100.00
tblLandUse	LandUseSquareFeet	7,830.00	7,827.00
tblLandUse	LotAcreage	0.18	0.97
tblLandUse	Population	0.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0345	0.3436	0.2662	5.3000e-004	0.0212	0.0166	0.0378	3.5800e-003	0.0155	0.0191	0.0000	46.9625	46.9625	0.0101	8.7000e-004	47.4734
2023	0.1285	0.8755	0.8430	1.6200e-003	9.3900e-003	0.0403	0.0497	2.4600e-003	0.0371	0.0396	0.0000	142.3390	142.3390	0.0411	1.3400e-003	143.7669
2024	0.0205	0.2054	0.2153	4.0000e-004	1.7400e-003	9.4500e-003	0.0112	4.7000e-004	8.6900e-003	9.1700e-003	0.0000	35.0225	35.0225	0.0106	2.2000e-004	35.3528
Maximum	**0.1285**	**0.8755**	**0.8430**	**1.6200e-003**	**0.0212**	**0.0403**	**0.0497**	**3.5800e-003**	**0.0371**	**0.0396**	**0.0000**	**142.3390**	**142.3390**	**0.0411**	**1.3400e-003**	**143.7669**

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	6.3300e-003	0.0380	0.2806	5.3000e-004	0.0212	8.5000e-004	0.0220	3.5800e-003	8.5000e-004	4.4200e-003	0.0000	46.9624	46.9624	0.0101	8.7000e-004	47.4734
2023	0.0626	0.0962	0.9455	1.6200e-003	9.3900e-003	2.5300e-003	0.0119	2.4600e-003	2.5200e-003	4.9800e-003	0.0000	142.3389	142.3389	0.0411	1.3400e-003	143.7668
2024	5.0200e-003	0.0230	0.2421	4.0000e-004	1.7400e-003	6.3000e-004	2.3800e-003	4.7000e-004	6.3000e-004	1.1000e-003	0.0000	35.0225	35.0225	0.0106	2.2000e-004	35.3528
Maximum	**0.0626**	**0.0962**	**0.9455**	**1.6200e-003**	**0.0212**	**2.5300e-003**	**0.0220**	**3.5800e-003**	**2.5200e-003**	**4.9800e-003**	**0.0000**	**142.3389**	**142.3389**	**0.0411**	**1.3400e-003**	**143.7668**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	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	**59.70**	**88.97**	**-10.85**	**0.00**	**0.00**	**93.95**	**63.16**	**0.00**	**93.48**	**84.53**	**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	**6-1-2022**	**8-31-2022**	0.3801	0.0441
4	**3-1-2023**	**5-31-2023**	0.3114	0.0413
5	**6-1-2023**	**8-31-2023**	0.2418	0.0278
6	**9-1-2023**	**11-30-2023**	0.3623	0.0767
7	**12-1-2023**	**2-29-2024**	0.2323	0.0294
8	**3-1-2024**	**5-31-2024**	0.0782	0.0097
		Highest	0.3801	0.0767

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0353	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004
Energy	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	19.4208	19.4208	2.1800e-003	3.7000e-004	19.5862
Mobile	0.0437	0.0433	0.3787	7.3000e-004	0.0801	5.4000e-004	0.0806	0.0214	5.0000e-004	0.0219	0.0000	68.5226	68.5226	4.9500e-003	3.4600e-003	69.6773
Stationary	6.8900e-003	0.0193	0.0250	3.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	3.1987	3.1987	4.5000e-004	0.0000	3.2099
Waste						0.0000	0.0000		0.0000	0.0000	1.4778	0.0000	1.4778	0.0873	0.0000	3.6611
Water						0.0000	0.0000		0.0000	0.0000	0.4935	1.0875	1.5810	0.0509	1.2200e-003	3.2155
Total	**0.0866**	**0.0688**	**0.4091**	**8.0000e-004**	**0.0801**	**2.0200e-003**	**0.0821**	**0.0214**	**1.9800e-003**	**0.0234**	**1.9713**	**92.2301**	**94.2013**	**0.1458**	**5.0500e-003**	**99.3505**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0353	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004
Energy	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	19.4208	19.4208	2.1800e-003	3.7000e-004	19.5862
Mobile	0.0437	0.0433	0.3787	7.3000e-004	0.0801	5.4000e-004	0.0806	0.0214	5.0000e-004	0.0219	0.0000	68.5226	68.5226	4.9500e-003	3.4600e-003	69.6773
Stationary	6.8900e-003	0.0193	0.0250	3.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	3.1987	3.1987	4.5000e-004	0.0000	3.2099
Waste						0.0000	0.0000		0.0000	0.0000	1.4778	0.0000	1.4778	0.0873	0.0000	3.6611
Water						0.0000	0.0000		0.0000	0.0000	0.4935	1.0875	1.5810	0.0509	1.2200e-003	3.2155
Total	**0.0866**	**0.0688**	**0.4091**	**8.0000e-004**	**0.0801**	**2.0200e-003**	**0.0821**	**0.0214**	**1.9800e-003**	**0.0234**	**1.9713**	**92.2301**	**94.2013**	**0.1458**	**5.0500e-003**	**99.3505**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2022	8/1/2022	5	44	
2	Site Preparation	Site Preparation	3/1/2023	4/28/2023	5	43	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Building Construction	Building Construction	4/1/2023	4/1/2024	5	261	
4	Paving	Paving	11/1/2023	12/1/2023	5	23	
5	Architectural Coating	Architectural Coating	11/1/2023	12/1/2023	5	23	

Acres of Grading (Site Preparation Phase): 0.87

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.15

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,741; Non-Residential Outdoor: 3,914; Striped Parking Area: 408 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	0	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	166.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	134.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	5.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0180	0.0000	0.0180	2.7300e-003	0.0000	2.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.3288	0.2579	4.6000e-004		0.0165	0.0165		0.0154	0.0154	0.0000	40.3588	40.3588	9.8700e-003	0.0000	40.6056
Total	**0.0335**	**0.3288**	**0.2579**	**4.6000e-004**	**0.0180**	**0.0165**	**0.0345**	**2.7300e-003**	**0.0154**	**0.0181**	**0.0000**	**40.3588**	**40.3588**	**9.8700e-003**	**0.0000**	**40.6056**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0144	3.0200e-003	5.0000e-005	1.4100e-003	1.3000e-004	1.5400e-003	3.9000e-004	1.2000e-004	5.1000e-004	0.0000	5.2240	5.2240	1.8000e-004	8.3000e-004	5.4752
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.3000e-004	5.3100e-003	1.0000e-005	1.7400e-003	1.0000e-005	1.7500e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3797	1.3797	4.0000e-005	4.0000e-005	1.3926
Total	**9.8000e-004**	**0.0148**	**8.3300e-003**	**6.0000e-005**	**3.1500e-003**	**1.4000e-004**	**3.2900e-003**	**8.5000e-004**	**1.3000e-004**	**9.8000e-004**	**0.0000**	**6.6037**	**6.6037**	**2.2000e-004**	**8.7000e-004**	**6.8679**

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					0.0180	0.0000	0.0180	2.7300e-003	0.0000	2.7300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.3500e-003	0.0232	0.2723	4.6000e-004		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	40.3587	40.3587	9.8700e-003	0.0000	40.6055
Total	**5.3500e-003**	**0.0232**	**0.2723**	**4.6000e-004**	**0.0180**	**7.1000e-004**	**0.0187**	**2.7300e-003**	**7.1000e-004**	**3.4400e-003**	**0.0000**	**40.3587**	**40.3587**	**9.8700e-003**	**0.0000**	**40.6055**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.9000e-004	0.0144	3.0200e-003	5.0000e-005	1.4100e-003	1.3000e-004	1.5400e-003	3.9000e-004	1.2000e-004	5.1000e-004	0.0000	5.2240	5.2240	1.8000e-004	8.3000e-004	5.4752
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.3000e-004	5.3100e-003	1.0000e-005	1.7400e-003	1.0000e-005	1.7500e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.3797	1.3797	4.0000e-005	4.0000e-005	1.3926
Total	**9.8000e-004**	**0.0148**	**8.3300e-003**	**6.0000e-005**	**3.1500e-003**	**1.4000e-004**	**3.2900e-003**	**8.5000e-004**	**1.3000e-004**	**9.8000e-004**	**0.0000**	**6.6037**	**6.6037**	**2.2000e-004**	**8.7000e-004**	**6.8679**

3.3 Site Preparation - 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					5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.1331	0.0844	2.1000e-004		4.8700e-003	4.8700e-003		4.4800e-003	4.4800e-003	0.0000	18.3816	18.3816	5.9400e-003	0.0000	18.5303
Total	**0.0115**	**0.1331**	**0.0844**	**2.1000e-004**	**5.2000e-004**	**4.8700e-003**	**5.3900e-003**	**6.0000e-005**	**4.4800e-003**	**4.5400e-003**	**0.0000**	**18.3816**	**18.3816**	**5.9400e-003**	**0.0000**	**18.5303**

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3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	9.1100e-003	2.1100e-003	4.0000e-005	1.1400e-003	7.0000e-005	1.2100e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	4.0123	4.0123	1.4000e-004	6.4000e-004	4.2053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.9000e-004	2.4100e-003	1.0000e-005	8.5000e-004	0.0000	8.6000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6572	0.6572	2.0000e-005	2.0000e-005	0.6631
Total	**4.1000e-004**	**9.3000e-003**	**4.5200e-003**	**5.0000e-005**	**1.9900e-003**	**7.0000e-005**	**2.0700e-003**	**5.4000e-004**	**7.0000e-005**	**6.1000e-004**	**0.0000**	**4.6695**	**4.6695**	**1.6000e-004**	**6.6000e-004**	**4.8684**

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					5.2000e-004	0.0000	5.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5600e-003	0.0111	0.1143	2.1000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	18.3816	18.3816	5.9400e-003	0.0000	18.5302
Total	**2.5600e-003**	**0.0111**	**0.1143**	**2.1000e-004**	**5.2000e-004**	**3.4000e-004**	**8.6000e-004**	**6.0000e-005**	**3.4000e-004**	**4.0000e-004**	**0.0000**	**18.3816**	**18.3816**	**5.9400e-003**	**0.0000**	**18.5302**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.4000e-004	9.1100e-003	2.1100e-003	4.0000e-005	1.1400e-003	7.0000e-005	1.2100e-003	3.1000e-004	7.0000e-005	3.8000e-004	0.0000	4.0123	4.0123	1.4000e-004	6.4000e-004	4.2053
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	1.9000e-004	2.4100e-003	1.0000e-005	8.5000e-004	0.0000	8.6000e-004	2.3000e-004	0.0000	2.3000e-004	0.0000	0.6572	0.6572	2.0000e-005	2.0000e-005	0.6631
Total	**4.1000e-004**	**9.3000e-003**	**4.5200e-003**	**5.0000e-005**	**1.9900e-003**	**7.0000e-005**	**2.0700e-003**	**5.4000e-004**	**7.0000e-005**	**6.1000e-004**	**0.0000**	**4.6695**	**4.6695**	**1.6000e-004**	**6.6000e-004**	**4.8684**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0628	0.6440	0.6279	1.1000e-003		0.0314	0.0314		0.0289	0.0289	0.0000	96.7229	96.7229	0.0313	0.0000	97.5049
Total	**0.0628**	**0.6440**	**0.6279**	**1.1000e-003**		**0.0314**	**0.0314**		**0.0289**	**0.0289**	**0.0000**	**96.7229**	**96.7229**	**0.0313**	**0.0000**	**97.5049**

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3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.6900e-003	2.7400e-003	4.0000e-005	1.2800e-003	5.0000e-005	1.3300e-003	3.7000e-004	5.0000e-005	4.2000e-004	0.0000	3.8772	3.8772	8.0000e-005	5.7000e-004	4.0490
Worker	1.2200e-003	8.5000e-004	0.0109	3.0000e-005	3.8700e-003	2.0000e-005	3.8900e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.9804	2.9804	8.0000e-005	8.0000e-005	3.0069
Total	**1.4300e-003**	**9.5400e-003**	**0.0137**	**7.0000e-005**	**5.1500e-003**	**7.0000e-005**	**5.2200e-003**	**1.4000e-003**	**7.0000e-005**	**1.4700e-003**	**0.0000**	**6.8576**	**6.8576**	**1.6000e-004**	**6.5000e-004**	**7.0559**

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	0.0135	0.0585	0.7025	1.1000e-003		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	96.7228	96.7228	0.0313	0.0000	97.5048
Total	**0.0135**	**0.0585**	**0.7025**	**1.1000e-003**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**96.7228**	**96.7228**	**0.0313**	**0.0000**	**97.5048**

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.6900e-003	2.7400e-003	4.0000e-005	1.2800e-003	5.0000e-005	1.3300e-003	3.7000e-004	5.0000e-005	4.2000e-004	0.0000	3.8772	3.8772	8.0000e-005	5.7000e-004	4.0490
Worker	1.2200e-003	8.5000e-004	0.0109	3.0000e-005	3.8700e-003	2.0000e-005	3.8900e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	2.9804	2.9804	8.0000e-005	8.0000e-005	3.0069
Total	**1.4300e-003**	**9.5400e-003**	**0.0137**	**7.0000e-005**	**5.1500e-003**	**7.0000e-005**	**5.2200e-003**	**1.4000e-003**	**7.0000e-005**	**1.4700e-003**	**0.0000**	**6.8576**	**6.8576**	**1.6000e-004**	**6.5000e-004**	**7.0559**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0200	0.2022	0.2110	3.7000e-004		9.4200e-003	9.4200e-003		8.6700e-003	8.6700e-003	0.0000	32.7453	32.7453	0.0106	0.0000	33.0100
Total	**0.0200**	**0.2022**	**0.2110**	**3.7000e-004**		**9.4200e-003**	**9.4200e-003**		**8.6700e-003**	**8.6700e-003**	**0.0000**	**32.7453**	**32.7453**	**0.0106**	**0.0000**	**33.0100**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.9400e-003	9.1000e-004	1.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.2930	1.2930	3.0000e-005	1.9000e-004	1.3502
Worker	3.9000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.3100e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	0.9843	0.9843	3.0000e-005	3.0000e-005	0.9926
Total	**4.6000e-004**	**3.2000e-003**	**4.3600e-003**	**2.0000e-005**	**1.7400e-003**	**3.0000e-005**	**1.7600e-003**	**4.8000e-004**	**3.0000e-005**	**4.9000e-004**	**0.0000**	**2.2772**	**2.2772**	**6.0000e-005**	**2.2000e-004**	**2.3428**

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	4.5700e-003	0.0198	0.2378	3.7000e-004		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	32.7452	32.7452	0.0106	0.0000	33.0100
Total	**4.5700e-003**	**0.0198**	**0.2378**	**3.7000e-004**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**32.7452**	**32.7452**	**0.0106**	**0.0000**	**33.0100**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.9400e-003	9.1000e-004	1.0000e-005	4.3000e-004	2.0000e-005	4.5000e-004	1.3000e-004	2.0000e-005	1.4000e-004	0.0000	1.2930	1.2930	3.0000e-005	1.9000e-004	1.3502
Worker	3.9000e-004	2.6000e-004	3.4500e-003	1.0000e-005	1.3100e-003	1.0000e-005	1.3100e-003	3.5000e-004	1.0000e-005	3.5000e-004	0.0000	0.9843	0.9843	3.0000e-005	3.0000e-005	0.9926
Total	**4.6000e-004**	**3.2000e-003**	**4.3600e-003**	**2.0000e-005**	**1.7400e-003**	**3.0000e-005**	**1.7600e-003**	**4.8000e-004**	**3.0000e-005**	**4.9000e-004**	**0.0000**	**2.2772**	**2.2772**	**6.0000e-005**	**2.2000e-004**	**2.3428**

3.5 Paving - 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	7.1600e-003	0.0643	0.0868	1.4000e-004		3.0000e-003	3.0000e-003		2.8000e-003	2.8000e-003	0.0000	11.4354	11.4354	3.3500e-003	0.0000	11.5191
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**7.3600e-003**	**0.0643**	**0.0868**	**1.4000e-004**		**3.0000e-003**	**3.0000e-003**		**2.8000e-003**	**2.8000e-003**	**0.0000**	**11.4354**	**11.4354**	**3.3500e-003**	**0.0000**	**11.5191**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.6000e-004	4.6300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2655	1.2655	4.0000e-005	3.0000e-005	1.2768
Total	**5.2000e-004**	**3.6000e-004**	**4.6300e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.2655**	**1.2655**	**4.0000e-005**	**3.0000e-005**	**1.2768**

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	1.3700e-003	5.9400e-003	0.0846	1.4000e-004		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	11.4353	11.4353	3.3500e-003	0.0000	11.5191
Paving	2.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.5700e-003**	**5.9400e-003**	**0.0846**	**1.4000e-004**		**1.8000e-004**	**1.8000e-004**		**1.8000e-004**	**1.8000e-004**	**0.0000**	**11.4353**	**11.4353**	**3.3500e-003**	**0.0000**	**11.5191**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.6000e-004	4.6300e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.2655	1.2655	4.0000e-005	3.0000e-005	1.2768
Total	**5.2000e-004**	**3.6000e-004**	**4.6300e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.4000e-004**	**0.0000**	**1.2655**	**1.2655**	**4.0000e-005**	**3.0000e-005**	**1.2768**

3.6 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	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e-003	0.0150	0.0208	3.0000e-005		8.1000e-004	8.1000e-004		8.1000e-004	8.1000e-004	0.0000	2.9362	2.9362	1.8000e-004	0.0000	2.9406
Total	**0.0444**	**0.0150**	**0.0208**	**3.0000e-005**		**8.1000e-004**	**8.1000e-004**		**8.1000e-004**	**8.1000e-004**	**0.0000**	**2.9362**	**2.9362**	**1.8000e-004**	**0.0000**	**2.9406**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0703	0.0703	0.0000	0.0000	0.0709
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0703**	**0.0703**	**0.0000**	**0.0000**	**0.0709**

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	0.0422					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4000e-004	1.4800e-003	0.0211	3.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	2.9362	2.9362	1.8000e-004	0.0000	2.9406
Total	**0.0426**	**1.4800e-003**	**0.0211**	**3.0000e-005**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**2.9362**	**2.9362**	**1.8000e-004**	**0.0000**	**2.9406**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.6000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0703	0.0703	0.0000	0.0000	0.0709
Total	**3.0000e-005**	**2.0000e-005**	**2.6000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0703**	**0.0703**	**0.0000**	**0.0000**	**0.0709**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0437	0.0433	0.3787	7.3000e-004	0.0801	5.4000e-004	0.0806	0.0214	5.0000e-004	0.0219	0.0000	68.5226	68.5226	4.9500e-003	3.4600e-003	69.6773
Unmitigated	0.0437	0.0433	0.3787	7.3000e-004	0.0801	5.4000e-004	0.0806	0.0214	5.0000e-004	0.0219	0.0000	68.5226	68.5226	4.9500e-003	3.4600e-003	69.6773

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	176.88	0.00	0.00	216,663	216,663
Parking Lot	0.00	0.00	0.00		
Total	176.88	0.00	0.00	216,663	216,663

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.572464	0.055653	0.187060	0.115672	0.020329	0.005102	0.007934	0.006404	0.000900	0.000380	0.024412	0.000914	0.002776
Parking Lot	0.572464	0.055653	0.187060	0.115672	0.020329	0.005102	0.007934	0.006404	0.000900	0.000380	0.024412	0.000914	0.002776

5.0 Energy Detail

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	12.6544	12.6544	2.0500e-003	2.5000e-004	12.7796
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	12.6544	12.6544	2.0500e-003	2.5000e-004	12.7796
NaturalGas Mitigated	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7664	6.7664	1.3000e-004	1.2000e-004	6.8066
NaturalGas Unmitigated	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7664	6.7664	1.3000e-004	1.2000e-004	6.8066

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	126797	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7664	6.7664	1.3000e-004	1.2000e-004	6.8066
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.8000e-004**	**6.2200e-003**	**5.2200e-003**	**4.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**6.7664**	**6.7664**	**1.3000e-004**	**1.2000e-004**	**6.8066**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	126797	6.8000e-004	6.2200e-003	5.2200e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7664	6.7664	1.3000e-004	1.2000e-004	6.8066
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.8000e-004**	**6.2200e-003**	**5.2200e-003**	**4.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**6.7664**	**6.7664**	**1.3000e-004**	**1.2000e-004**	**6.8066**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	134390	12.4342	2.0100e-003	2.4000e-004	12.5572
Parking Lot	2380	0.2202	4.0000e-005	0.0000	0.2224
Total		**12.6544**	**2.0500e-003**	**2.4000e-004**	**12.7796**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	134390	12.4342	2.0100e-003	2.4000e-004	12.5572
Parking Lot	2380	0.2202	4.0000e-005	0.0000	0.2224
Total		**12.6544**	**2.0500e-003**	**2.4000e-004**	**12.7796**

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0353	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004
Unmitigated	0.0353	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004
Total	**0.0353**	**0.0000**	**2.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	4.2200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0310					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.4000e-004	4.4000e-004	0.0000	0.0000	4.7000e-004
Total	**0.0353**	**0.0000**	**2.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.5810	0.0509	1.2200e-003	3.2155
Unmitigated	1.5810	0.0509	1.2200e-003	3.2155

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	1.55551 / 0.953374	1.5810	0.0509	1.2200e-003	3.2155
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.5810**	**0.0509**	**1.2200e-003**	**3.2155**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	1.55551 / 0.953374	1.5810	0.0509	1.2200e-003	3.2155
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**1.5810**	**0.0509**	**1.2200e-003**	**3.2155**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.4778	0.0873	0.0000	3.6611
Unmitigated	1.4778	0.0873	0.0000	3.6611

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	7.28	1.4778	0.0873	0.0000	3.6611
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.4778**	**0.0873**	**0.0000**	**3.6611**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	7.28	1.4778	0.0873	0.0000	3.6611
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.4778**	**0.0873**	**0.0000**	**3.6611**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	50	168	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (100 - 175 HP)	6.8900e-003	0.0193	0.0250	3.0000e-005		1.0100e-003	1.0100e-003		1.0100e-003	1.0100e-003	0.0000	3.1987	3.1987	4.5000e-004	0.0000	3.2099
Total	**6.8900e-003**	**0.0193**	**0.0250**	**3.0000e-005**		**1.0100e-003**	**1.0100e-003**		**1.0100e-003**	**1.0100e-003**	**0.0000**	**3.1987**	**3.1987**	**4.5000e-004**	**0.0000**	**3.2099**

11.0 Vegetation

New FS-32 Project (1138 Olinder Ct)

Phase Name	Construction Year	Start Date	End Date	Workdays
FS-32 Construction	2022	6/1/2022	8/1/2022	44
	2023	3/1/2023	12/31/2023	218
	2024	1/1/2024	4/1/2024	66

Workdays	
2022	44
2023	218
2024	66

Unmitigated Construction Results

	Criteria Air Pollutant (ton/year)				Criteria Air Pollutant (ppd)			
Year	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
2022	0.034	0.344	0.017	0.016	1.57	15.62	0.76	0.71
2023	0.128	0.876	0.040	0.037	1.18	8.03	0.37	0.34
2024	0.020	0.205	0.009	0.009	0.62	6.22	0.29	0.26
Max	0.128	0.876	0.040	0.037	1.57	15.62	0.76	0.71

Mitigated Construction Results

	Criteria Air Pollutant (ton/year)				Criteria Air Pollutant (ppd)			
Year	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
2022	0.006	0.038	0.001	0.001	0.29	1.73	0.04	0.04
2023	0.063	0.096	0.003	0.003	0.57	0.88	0.02	0.02
2024	0.005	0.023	0.001	0.001	0.15	0.70	0.02	0.02
Max	0.063	0.096	0.003	0.003	0.57	1.73	0.04	0.04

Operational Fire Truck Results

Assumptions

Design, based on the	4	minute geographic reach
Average Speed	35	mph

Inputs

Net New Calls	35	per day

Calculations

Fire Truck Trips	70	per day
	25550	per year
Fire Truck VMT	163	per day
	59617	per year

Fire Truck Emissions

	Criteria Air Pollutant (ton/year)				Criteria Air Pollutant (ppd)			
Source	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
Mobile	0.00	0.13	0.01	0.00	0.01	0.69	0.06	0.02
Total	0.002	0.126	0.010	0.003	0.009	0.693	0.057	0.016

Operational Results (CalEEMod)

Source	Criteria Air Pollutant (ton/year)				Criteria Air Pollutant (ppd)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	0.04	0.00	0.00	0.00	0.19	0.00	0.00	0.00
Energy	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00
Mobile	0.04	0.04	0.08	0.02	0.24	0.24	0.44	0.12
Stationary	0.01	0.02	0.00	0.00	0.04	0.11	0.01	0.01
Total	0.087	0.069	0.082	0.023	0.474	0.377	0.450	0.128

Operational Results (Total)

Source	Criteria Air Pollutant (ton/year)				Criteria Air Pollutant (ppd)			
	ROG	NO_X	PM_{10}	$PM_{2.5}$	ROG	NO_X	PM_{10}	$PM_{2.5}$
Area	0.035	0.000	0.000	0.000	0.19	0.00	0.00	0.00
Energy	0.001	0.006	0.000	0.000	0.00	0.03	0.00	0.00
Mobile	0.045	0.170	0.091	0.025	0.25	0.93	0.50	0.14
Stationary	0.007	0.019	0.001	0.001	0.04	0.11	0.01	0.01
Total	0.09	0.20	0.09	0.03	0.48	1.07	0.51	0.14

MEIR Receptor - Cumulative Risk

	Unmitigated			Mitigated				
MEIR Type	Cancer Risk (per million)	HI	$PM_{2.5}$ (ug/m^3)	Cancer Risk (per million)	HI	$PM_{2.5}$ (ug/m^3)	UTM X	UTM Y
Construction	19.86	0.04	0.20	1.16	0.00	0.01	601820.00	4132580.00
Operations	0.31	0.00	0.00	NA	NA	NA	601860.00	4132600.00

BAAQMD Nearby Stationary Sources (report pulled 2/9/2022)

FID	FACID	Name	Address	Type	UTM X	UTM Y	Cancer	Hazard	PM_25
1034	10004	Technibuilders Iron	1049 Felipe Avenue	Contact BAAQMD	601873.66	4132656.2	1.16	0	0
3942	18942	Verizon Wireless (HWY (	912 Olinder Court	Generators	601606.54	4132763.9	1.15	0	0
8356	111958	76 Station	1299 Story Rd	Gas Dispensing Facilit	601697.83	4132543.1	18.34	0.08	0

Stationary Source Impacts at MEIR, Construction

FACID	Distance From MEIR (m)	Distance Multiplier	Cancer	Hazard	PM2.5
1034	93.2	0.5	0.57	0.00	0.00
3942	281.7	0.1	0.06	0.00	0.00
8356	127.6	0.1	1.08	0.00	0.00

Stationary Source Impacts at MEIR, Operations

FACID	Distance From MEIR (m)	Distance Multiplier	Cancer	Hazard	PM2.5
1034	57.8	0.6	0.73	0.00	0.00
3942	301.8	0.0	0.06	0.00	0.00
8356	171.9	0.0	0.68	0.00	0.00

BAAQMD Nearby Mobile Sources

Mobie Source Impacts at MEIR, Construction

Roadway Name	Distance From MEIR (m)	Cancer	Hazard	PM2.5
Highway 101	222.6	8.37	0.01	0.04
Story Road	16.8	22.83	NA	0.42

Mobile Source Impacts at MEIR, Operations

Roadway Name	Distance From MEIR (m)	Cancer	Hazard	PM2.5
Highway 101	68.6	12.12	0.01	0.06
Story Road	16.8	22.83	NA	0.42

Adjustment Factor 1.3744 *applied to account for revised 2012 OEHHA Breathing rates*

Total Cumulative Impacts at MEIR

Construction MEIR	Unmitigated			Mitigated		
Source Type	**Cancer Risk (per million)**	**HI**	**$PM_{2.5}$ (ug/m^3)**	**Cancer Risk (per million)**	**HI**	**$PM_{2.5}$ (ug/m^3)**
Project Construction	19.9	0.04	0.20	1.2	0.00	0.01
Project Operations	0.2	NA	NA	0.2	NA	NA
Stationary	1.7	0.00	0.00	1.7	0.00	0.00
Mobile	31.2	0.01	0.46	31.2	0.01	0.46
Total	52.9	0.05	0.66	34.2	0.01	0.47

Operational MEIR	Unmitigated			Mitigated		
Source Type	**Cancer Risk (per million)**	**HI**	**$PM_{2.5}$ (ug/m^3)**	**Cancer Risk (per million)**	**HI**	**$PM_{2.5}$ (ug/m^3)**
Project	0.3	0.00	0.00	0.31	0.00	0.00
Stationary	1.5	0.00	0.00	1.46	0.00	0.00
Mobile	34.9	0.01	0.48	34.95	0.01	0.48
Total	36.7	0.01	0.48	36.7	0.0	0.5

All Receptors - Operational Risk Cancer Risk

				Days				DPM (tons)	$PM_{2.5}$ (tons)
Operation	Generator	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Age 16<30	Annual O&M	Annual O&M
O&M	1	Annual		91	730	5110	5110	1.01E-03	1.01E-03

				DPM (g/s)	$PM_{2.5}$ (g/s)
Construction Year	Phase	Start Date	End Date	Annual O&M	Annual O&M
O&M	1	Annual		2.91E-05	2.91E-05

Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<16	16<30
Daily Breathing Rate (95th %'ile)	DBR	L/kg-day	361	1090	572	261
Fraction Of Time At Home	FAH	unitless	1	1	1	0.73
Exposure Frequency	EF	days/year	0.96	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3	1
Inhalation Absorption Factor	A	unitless	1	1	1	1
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	0.001
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	0.001
Cancer Potency Factor (diesel exhau	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1	1.1
Averaging Time (for residential expo	AT	years	70.00	70.00	70	70

Intake Factor for Inhalation, IF (m^3/kg-day)

	Year	Equation	3rd Trimester	0<2	2<16	16<30
Generator O&M	Annual	DBR*FAH*EF *ED*ASF*A* CF/AT	0.012	0.299	0.329	0.037

Risk Calculation Part 1, R1

Year		3rd Trimester	0<2	2<16	16<30
Annual	IF*CPF*CF	1.36E-05	3.28E-04	3.62E-04	4.02E-05

Risk Factors

	Abbreviation	UOM	
Chronic Inhalation	REL	ug/m^3	5

MAX	Max Risk	UTM X	UTM Y	
Cancer	0.31	601860	4132600	Potential Resident
HI	0.00	601860	4132600	
$PM_{2.5}$	0.00	601860	4132600	

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)

			Annual O&M
Lookup	X (UTM)	Y (UTM	EDG
601660_4132320	601660	4132320	2.22E-05
601680_4132320	601680	4132320	2.43E-05
601700_4132320	601700	4132320	2.65E-05
601720_4132320	601720	4132320	2.94E-05
601740_4132320	601740	4132320	3.29E-05
601760_4132320	601760	4132320	3.69E-05
601620_4132340	601620	4132340	2.02E-05
601640_4132340	601640	4132340	2.19E-05
601660_4132340	601660	4132340	2.37E-05
601680_4132340	601680	4132340	2.62E-05
601700_4132340	601700	4132340	2.89E-05
601720_4132340	601720	4132340	3.27E-05
601740_4132340	601740	4132340	3.66E-05
601760_4132340	601760	4132340	4.11E-05
601780_4132340	601780	4132340	4.63E-05
601800_4132340	601800	4132340	5.24E-05
601820_4132340	601820	4132340	5.97E-05
601620_4132360	601620	4132360	2.16E-05
601640_4132360	601640	4132360	2.35E-05
601660_4132360	601660	4132360	2.58E-05
601680_4132360	601680	4132360	2.89E-05
601700_4132360	601700	4132360	3.25E-05
601720_4132360	601720	4132360	3.61E-05
601740_4132360	601740	4132360	4.11E-05
601820_4132360	601820	4132360	6.59E-05
601840_4132360	601840	4132360	6.95E-05
601860_4132360	601860	4132360	7.25E-05
601880_4132360	601880	4132360	7.74E-05
601640_4132380	601640	4132380	2.52E-05
601660_4132380	601660	4132380	2.81E-05
601680_4132380	601680	4132380	3.17E-05
601700_4132380	601700	4132380	3.59E-05
601720_4132380	601720	4132380	4.05E-05
601840_4132380	601840	4132380	7.59E-05
601860_4132380	601860	4132380	7.82E-05
601880_4132380	601880	4132380	8.65E-05
601900_4132380	601900	4132380	9.61E-05
601660_4132400	601660	4132400	3.08E-05
601680_4132400	601680	4132400	3.49E-05
601700_4132400	601700	4132400	3.97E-05
601720_4132400	601720	4132400	4.52E-05
601840_4132400	601840	4132400	8.23E-05
601860_4132400	601860	4132400	8.72E-05
601880_4132400	601880	4132400	9.70E-05
601900_4132400	601900	4132400	1.07E-04
601920_4132400	601920	4132400	1.18E-04
601680_4132420	601680	4132420	3.87E-05
601700_4132420	601700	4132420	4.46E-05
601720_4132420	601720	4132420	5.14E-05
601740_4132420	601740	4132420	6.04E-05
601800_4132420	601800	4132420	8.62E-05
601820_4132420	601820	4132420	8.77E-05
601840_4132420	601840	4132420	9.01E-05
601860_4132420	601860	4132420	9.80E-05
601880_4132420	601880	4132420	1.09E-04
601900_4132420	601900	4132420	1.21E-04
601920_4132420	601920	4132420	1.34E-04
601940_4132420	601940	4132420	1.45E-04
601960_4132420	601960	4132420	1.52E-04
601700_4132440	601700	4132440	5.01E-05
601720_4132440	601720	4132440	5.87E-05
601740_4132440	601740	4132440	6.95E-05
601780_4132440	601780	4132440	9.20E-05
601800_4132440	601800	4132440	9.55E-05
601820_4132440	601820	4132440	9.60E-05
601840_4132440	601840	4132440	9.97E-05
601860_4132440	601860	4132440	1.11E-04
601880_4132440	601880	4132440	1.25E-04
601900_4132440	601900	4132440	1.40E-04

Risk Calculation Part 2

			∑R1*C_{DPM}				C_{DPM}/REL
3rd Trimester	0<2	2<16	16<30	Total		
3.01E-10	7.28E-09	8.02E-09	8.91E-10	0.02	0.00
3.29E-10	7.97E-09	8.79E-09	9.76E-10	0.02	0.00
3.59E-10	8.69E-09	9.58E-09	1.06E-09	0.02	0.00
3.99E-10	9.66E-09	1.06E-08	1.18E-09	0.02	0.00
4.46E-10	1.08E-08	1.19E-08	1.32E-09	0.02	0.00
5.01E-10	1.21E-08	1.34E-08	1.48E-09	0.03	0.00
2.75E-10	6.65E-09	7.33E-09	8.14E-10	0.02	0.00
2.98E-10	7.21E-09	7.94E-09	8.82E-10	0.02	0.00
3.21E-10	7.78E-09	8.58E-09	9.52E-10	0.02	0.00
3.56E-10	8.62E-09	9.50E-09	1.05E-09	0.02	0.00
3.92E-10	9.49E-09	1.05E-08	1.16E-09	0.02	0.00
4.43E-10	1.07E-08	1.18E-08	1.31E-09	0.02	0.00
4.96E-10	1.20E-08	1.32E-08	1.47E-09	0.03	0.00
5.58E-10	1.35E-08	1.49E-08	1.65E-09	0.03	0.00
6.28E-10	1.52E-08	1.68E-08	1.86E-09	0.03	0.00
7.11E-10	1.72E-08	1.90E-08	2.11E-09	0.04	0.00
8.09E-10	1.96E-08	2.16E-08	2.40E-09	0.04	0.00
2.93E-10	7.09E-09	7.81E-09	8.67E-10	0.02	0.00
3.18E-10	7.71E-09	8.50E-09	9.44E-10	0.02	0.00
3.49E-10	8.46E-09	9.32E-09	1.04E-09	0.02	0.00
3.92E-10	9.49E-09	1.05E-08	1.16E-09	0.02	0.00
4.40E-10	1.07E-08	1.18E-08	1.31E-09	0.02	0.00
4.90E-10	1.19E-08	1.31E-08	1.45E-09	0.03	0.00
5.57E-10	1.35E-08	1.49E-08	1.65E-09	0.03	0.00
8.94E-10	2.17E-08	2.39E-08	2.65E-09	0.05	0.00
9.42E-10	2.28E-08	2.51E-08	2.79E-09	0.05	0.00
9.84E-10	2.38E-08	2.63E-08	2.92E-09	0.05	0.00
1.05E-09	2.54E-08	2.80E-08	3.11E-09	0.06	0.00
3.42E-10	8.27E-09	9.12E-09	1.01E-09	0.02	0.00
3.81E-10	9.23E-09	1.02E-08	1.13E-09	0.02	0.00
4.29E-10	1.04E-08	1.15E-08	1.27E-09	0.02	0.00
4.87E-10	1.18E-08	1.30E-08	1.44E-09	0.03	0.00
5.50E-10	1.33E-08	1.47E-08	1.63E-09	0.03	0.00
1.03E-09	2.49E-08	2.75E-08	3.05E-09	0.06	0.00
1.06E-09	2.57E-08	2.83E-08	3.14E-09	0.06	0.00
1.17E-09	2.84E-08	3.13E-08	3.48E-09	0.06	0.00
1.30E-09	3.16E-08	3.48E-08	3.86E-09	0.07	0.00
4.18E-10	1.01E-08	1.12E-08	1.24E-09	0.02	0.00
4.73E-10	1.15E-08	1.26E-08	1.40E-09	0.03	0.00
5.39E-10	1.31E-08	1.44E-08	1.60E-09	0.03	0.00
6.14E-10	1.49E-08	1.64E-08	1.82E-09	0.03	0.00
1.12E-09	2.70E-08	2.98E-08	3.31E-09	0.06	0.00
1.18E-09	2.87E-08	3.16E-08	3.51E-09	0.06	0.00
1.32E-09	3.19E-08	3.51E-08	3.90E-09	0.07	0.00
1.45E-09	3.52E-08	3.88E-08	4.31E-09	0.08	0.00
1.60E-09	3.89E-08	4.28E-08	4.75E-09	0.09	0.00
5.24E-10	1.27E-08	1.40E-08	1.55E-09	0.03	0.00
6.05E-10	1.47E-08	1.62E-08	1.79E-09	0.03	0.00
6.97E-10	1.69E-08	1.86E-08	2.07E-09	0.04	0.00
8.20E-10	1.99E-08	2.19E-08	2.43E-09	0.04	0.00
1.17E-09	2.83E-08	3.12E-08	3.46E-09	0.06	0.00
1.19E-09	2.88E-08	3.18E-08	3.53E-09	0.07	0.00
1.22E-09	2.96E-08	3.26E-08	3.62E-09	0.07	0.00
1.33E-09	3.22E-08	3.55E-08	3.94E-09	0.07	0.00
1.48E-09	3.58E-08	3.95E-08	4.38E-09	0.08	0.00
1.65E-09	3.99E-08	4.40E-08	4.88E-09	0.09	0.00
1.82E-09	4.40E-08	4.85E-08	5.38E-09	0.10	0.00
1.97E-09	4.76E-08	5.25E-08	5.83E-09	0.11	0.00
2.06E-09	5.00E-08	5.51E-08	6.12E-09	0.11	0.00
6.79E-10	1.64E-08	1.81E-08	2.01E-09	0.04	0.00
7.96E-10	1.93E-08	2.12E-08	2.36E-09	0.04	0.00
9.43E-10	2.28E-08	2.52E-08	2.79E-09	0.05	0.00
1.25E-09	3.02E-08	3.33E-08	3.70E-09	0.07	0.00
1.29E-09	3.14E-08	3.46E-08	3.84E-09	0.07	0.00
1.30E-09	3.15E-08	3.47E-08	3.86E-09	0.07	0.00
1.35E-09	3.27E-08	3.61E-08	4.01E-09	0.07	0.00
1.50E-09	3.64E-08	4.01E-08	4.46E-09	0.08	0.00
1.69E-09	4.09E-08	4.51E-08	5.01E-09	0.09	0.00
1.89E-09	4.58E-08	5.05E-08	5.61E-09	0.10	0.00

HI

PM2.5

Annual O&M	
EDG	
2.22E-05	Potential Resident
2.43E-05	Potential Resident
2.65E-05	Potential Resident
2.94E-05	Potential Resident
3.29E-05	Potential Resident
3.69E-05	Potential Resident
2.02E-05	Potential Resident
2.19E-05	Potential Resident
2.37E-05	Potential Resident
2.62E-05	Potential Resident
2.89E-05	Potential Resident
3.27E-05	Potential Resident
3.66E-05	Potential Resident
4.11E-05	Potential Resident
4.63E-05	Potential Resident
5.24E-05	Potential Resident
5.97E-05	Potential Resident
2.16E-05	Potential Resident
2.35E-05	Potential Resident
2.58E-05	Potential Resident
2.89E-05	Potential Resident
3.25E-05	Potential Resident
3.61E-05	Potential Resident
4.11E-05	Potential Resident
6.59E-05	Potential Resident
6.95E-05	Potential Resident
7.25E-05	Potential Resident
7.74E-05	Potential Resident
2.52E-05	Potential Resident
2.81E-05	Potential Resident
3.17E-05	Potential Resident
3.59E-05	Potential Resident
4.05E-05	Potential Resident
7.59E-05	Potential Resident
7.82E-05	Potential Resident
8.65E-05	Potential Resident
9.61E-05	Potential Resident
3.08E-05	Potential Resident
3.49E-05	Potential Resident
3.97E-05	Potential Resident
4.52E-05	Potential Resident
8.23E-05	Potential Resident
8.72E-05	Potential Resident
9.70E-05	Potential Resident
1.07E-04	Potential Resident
1.18E-04	Potential Resident
3.87E-05	Potential Resident
4.46E-05	Potential Resident
5.14E-05	Potential Resident
6.04E-05	Potential Resident
8.62E-05	Potential Resident
8.77E-05	Potential Resident
9.01E-05	Potential Resident
9.80E-05	Potential Resident
1.09E-04	Potential Resident
1.21E-04	Potential Resident
1.34E-04	Potential Resident
1.45E-04	Potential Resident
1.52E-04	Potential Resident
5.01E-05	Potential Resident
5.87E-05	Potential Resident
6.95E-05	Potential Resident
9.20E-05	Potential Resident
9.55E-05	Potential Resident
9.60E-05	Potential Resident
9.97E-05	Potential Resident
1.11E-04	Potential Resident
1.25E-04	Potential Resident
1.40E-04	Potential Resident

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)				Risk Calculation Part 2					HI	PM2.5	
			Annual O&M	$\sum R1*C_{DPM}$					C_{DPM}/REL	Annual O&M	
Lookup	X (UTM)	Y (UTM	EDG	3rd Trimester	0<2	2<16	16<30	Total		EDG	
601920_4132440	601920	4132440	1.53E-04	2.07E-09	5.02E-08	5.53E-08	6.15E-09	0.11	0.00	1.53E-04	Potential Resident
601940_4132440	601940	4132440	1.63E-04	2.22E-09	5.37E-08	5.92E-08	6.57E-09	0.12	0.00	1.63E-04	Potential Resident
601960_4132440	601960	4132440	1.69E-04	2.29E-09	5.56E-08	6.12E-08	6.80E-09	0.13	0.00	1.69E-04	Potential Resident
601680_4132460	601680	4132460	4.76E-05	6.45E-10	1.56E-08	1.72E-08	1.91E-09	0.04	0.00	4.76E-05	Potential Resident
601700_4132460	601700	4132460	5.67E-05	7.69E-10	1.86E-08	2.05E-08	2.28E-09	0.04	0.00	5.67E-05	Potential Resident
601720_4132460	601720	4132460	6.74E-05	9.14E-10	2.21E-08	2.44E-08	2.71E-09	0.05	0.00	6.74E-05	Potential Resident
601780_4132460	601780	4132460	1.03E-04	1.40E-09	3.39E-08	3.73E-08	4.15E-09	0.08	0.00	1.03E-04	Potential Resident
601800_4132460	601800	4132460	1.04E-04	1.41E-09	3.41E-08	3.76E-08	4.17E-09	0.08	0.00	1.04E-04	Potential Resident
601820_4132460	601820	4132460	1.04E-04	1.41E-09	3.43E-08	3.78E-08	4.19E-09	0.08	0.00	1.04E-04	Potential Resident
601840_4132460	601840	4132460	1.13E-04	1.54E-09	3.72E-08	4.10E-08	4.56E-09	0.08	0.00	1.13E-04	Potential Resident
601860_4132460	601860	4132460	1.28E-04	1.73E-09	4.20E-08	4.63E-08	5.14E-09	0.10	0.00	1.28E-04	Potential Resident
601880_4132460	601880	4132460	1.45E-04	1.97E-09	4.77E-08	5.25E-08	5.83E-09	0.11	0.00	1.45E-04	Potential Resident
601900_4132460	601900	4132460	1.62E-04	2.19E-09	5.31E-08	5.85E-08	6.49E-09	0.12	0.00	1.62E-04	Potential Resident
601920_4132460	601920	4132460	1.75E-04	2.37E-09	5.74E-08	6.33E-08	7.03E-09	0.13	0.00	1.75E-04	Potential Resident
601940_4132460	601940	4132460	1.84E-04	2.50E-09	6.05E-08	6.67E-08	7.41E-09	0.14	0.00	1.84E-04	Potential Resident
601960_4132460	601960	4132460	1.89E-04	2.56E-09	6.21E-08	6.84E-08	7.60E-09	0.14	0.00	1.89E-04	Potential Resident
601980_4132460	601980	4132460	1.91E-04	2.59E-09	6.28E-08	6.92E-08	7.68E-09	0.14	0.00	1.91E-04	Potential Resident
601680_4132480	601680	4132480	5.29E-05	7.18E-10	1.74E-08	1.92E-08	2.13E-09	0.04	0.00	5.29E-05	Potential Resident
601700_4132480	601700	4132480	6.47E-05	8.77E-10	2.13E-08	2.34E-08	2.60E-09	0.05	0.00	6.47E-05	Potential Resident
601720_4132480	601720	4132480	7.84E-05	1.06E-09	2.58E-08	2.84E-08	3.15E-09	0.06	0.00	7.84E-05	Potential Resident
601800_4132480	601800	4132480	1.14E-04	1.55E-09	3.76E-08	4.14E-08	4.60E-09	0.09	0.00	1.14E-04	Potential Resident
601820_4132480	601820	4132480	1.17E-04	1.59E-09	3.84E-08	4.24E-08	4.70E-09	0.09	0.00	1.17E-04	Potential Resident
601840_4132480	601840	4132480	1.32E-04	1.79E-09	4.33E-08	4.77E-08	5.29E-09	0.10	0.00	1.32E-04	Potential Resident
601860_4132480	601860	4132480	1.51E-04	2.05E-09	4.97E-08	5.47E-08	6.08E-09	0.11	0.00	1.51E-04	Potential Resident
601880_4132480	601880	4132480	1.71E-04	2.32E-09	5.63E-08	6.20E-08	6.89E-09	0.13	0.00	1.71E-04	Potential Resident
601900_4132480	601900	4132480	1.88E-04	2.55E-09	6.18E-08	6.82E-08	7.57E-09	0.14	0.00	1.88E-04	Potential Resident
601920_4132480	601920	4132480	2.00E-04	2.71E-09	6.57E-08	7.24E-08	8.04E-09	0.15	0.00	2.00E-04	Potential Resident
601940_4132480	601940	4132480	2.07E-04	2.80E-09	6.79E-08	7.49E-08	8.31E-09	0.15	0.00	2.07E-04	Potential Resident
601960_4132480	601960	4132480	2.09E-04	2.84E-09	6.88E-08	7.58E-08	8.41E-09	0.16	0.00	2.09E-04	Potential Resident
601980_4132480	601980	4132480	2.08E-04	2.83E-09	6.84E-08	7.54E-08	8.37E-09	0.16	0.00	2.08E-04	Potential Resident
602000_4132480	602000	4132480	2.04E-04	2.77E-09	6.71E-08	7.40E-08	8.21E-09	0.15	0.00	2.04E-04	Potential Resident
601700_4132500	601700	4132500	7.37E-05	1.00E-09	2.42E-08	2.67E-08	2.96E-09	0.05	0.00	7.37E-05	Potential Resident
601820_4132500	601820	4132500	1.37E-04	1.86E-09	4.50E-08	4.96E-08	5.50E-09	0.10	0.00	1.37E-04	Potential Resident
601840_4132500	601840	4132500	1.58E-04	2.14E-09	5.19E-08	5.72E-08	6.35E-09	0.12	0.00	1.58E-04	Potential Resident
601860_4132500	601860	4132500	1.82E-04	2.47E-09	5.99E-08	6.60E-08	7.32E-09	0.14	0.00	1.82E-04	Potential Resident
601880_4132500	601880	4132500	2.03E-04	2.76E-09	6.68E-08	7.37E-08	8.18E-09	0.15	0.00	2.03E-04	Potential Resident
601900_4132500	601900	4132500	2.18E-04	2.96E-09	7.17E-08	7.90E-08	8.77E-09	0.16	0.00	2.18E-04	Potential Resident
601920_4132500	601920	4132500	2.27E-04	3.07E-09	7.44E-08	8.20E-08	9.10E-09	0.17	0.00	2.27E-04	Potential Resident
601940_4132500	601940	4132500	2.29E-04	3.11E-09	7.54E-08	8.30E-08	9.22E-09	0.17	0.00	2.29E-04	Potential Resident
601960_4132500	601960	4132500	2.28E-04	3.09E-09	7.48E-08	8.24E-08	9.15E-09	0.17	0.00	2.28E-04	Potential Resident
601980_4132500	601980	4132500	2.23E-04	3.02E-09	7.31E-08	8.06E-08	8.94E-09	0.17	0.00	2.23E-04	Potential Resident
602000_4132500	602000	4132500	2.15E-04	2.91E-09	7.05E-08	7.77E-08	8.63E-09	0.16	0.00	2.15E-04	Potential Resident
602020_4132500	602020	4132500	2.06E-04	2.79E-09	6.76E-08	7.45E-08	8.27E-09	0.15	0.00	2.06E-04	Potential Resident
601800_4132520	601800	4132520	1.44E-04	1.95E-09	4.72E-08	5.20E-08	5.78E-09	0.11	0.00	1.44E-04	Potential Resident
601820_4132520	601820	4132520	1.66E-04	2.26E-09	5.47E-08	6.02E-08	6.69E-09	0.12	0.00	1.66E-04	Potential Resident
601840_4132520	601840	4132520	1.95E-04	2.65E-09	6.41E-08	7.07E-08	7.85E-09	0.15	0.00	1.95E-04	Potential Resident
601860_4132520	601860	4132520	2.22E-04	3.01E-09	7.30E-08	8.04E-08	8.93E-09	0.17	0.00	2.22E-04	Potential Resident
601880_4132520	601880	4132520	2.41E-04	3.27E-09	7.93E-08	8.73E-08	9.70E-09	0.18	0.00	2.41E-04	Potential Resident
601900_4132520	601900	4132520	2.51E-04	3.41E-09	8.26E-08	9.10E-08	1.01E-08	0.19	0.00	2.51E-04	Potential Resident
601920_4132520	601920	4132520	2.54E-04	3.44E-09	8.34E-08	9.19E-08	1.02E-08	0.19	0.00	2.54E-04	Potential Resident
601940_4132520	601940	4132520	2.51E-04	3.40E-09	8.24E-08	9.08E-08	1.01E-08	0.19	0.00	2.51E-04	Potential Resident
601960_4132520	601960	4132520	2.44E-04	3.30E-09	8.00E-08	8.82E-08	9.79E-09	0.18	0.00	2.44E-04	Potential Resident
601980_4132520	601980	4132520	2.34E-04	3.17E-09	7.67E-08	8.45E-08	9.39E-09	0.17	0.00	2.34E-04	Potential Resident
602000_4132520	602000	4132520	2.22E-04	3.01E-09	7.29E-08	8.03E-08	8.92E-09	0.17	0.00	2.22E-04	Potential Resident
602020_4132520	602020	4132520	2.09E-04	2.83E-09	6.87E-08	7.57E-08	8.40E-09	0.16	0.00	2.09E-04	Potential Resident
601780_4132540	601780	4132540	1.57E-04	2.13E-09	5.17E-08	5.70E-08	6.33E-09	0.12	0.00	1.57E-04	Potential Resident
601800_4132540	601800	4132540	1.77E-04	2.40E-09	5.81E-08	6.41E-08	7.11E-09	0.13	0.00	1.77E-04	Potential Resident
601820_4132540	601820	4132540	2.11E-04	2.87E-09	6.94E-08	7.65E-08	8.49E-09	0.16	0.00	2.11E-04	Potential Resident
601840_4132540	601840	4132540	2.46E-04	3.34E-09	8.09E-08	8.92E-08	9.90E-09	0.18	0.00	2.46E-04	Potential Resident
601860_4132540	601860	4132540	2.71E-04	3.68E-09	8.91E-08	9.82E-08	1.09E-08	0.20	0.00	2.71E-04	Potential Resident
601880_4132540	601880	4132540	2.84E-04	3.85E-09	9.32E-08	1.03E-07	1.14E-08	0.21	0.00	2.84E-04	Potential Resident
601900_4132540	601900	4132540	2.86E-04	3.88E-09	9.39E-08	1.03E-07	1.15E-08	0.21	0.00	2.86E-04	Potential Resident
601920_4132540	601920	4132540	2.80E-04	3.80E-09	9.19E-08	1.01E-07	1.13E-08	0.21	0.00	2.80E-04	Potential Resident
601940_4132540	601940	4132540	2.69E-04	3.64E-09	8.83E-08	9.73E-08	1.08E-08	0.20	0.00	2.69E-04	Potential Resident
601960_4132540	601960	4132540	2.54E-04	3.45E-09	8.36E-08	9.21E-08	1.02E-08	0.19	0.00	2.54E-04	Potential Resident
601980_4132540	601980	4132540	2.38E-04	3.23E-09	7.82E-08	8.62E-08	9.57E-09	0.18	0.00	2.38E-04	Potential Resident
602000_4132540	602000	4132540	2.22E-04	3.01E-09	7.28E-08	8.03E-08	8.91E-09	0.17	0.00	2.22E-04	Potential Resident
602020_4132540	602020	4132540	2.05E-04	2.78E-09	6.74E-08	7.43E-08	8.25E-09	0.15	0.00	2.05E-04	Potential Resident
601780_4132560	601780	4132560	1.89E-04	2.57E-09	6.21E-08	6.85E-08	7.60E-09	0.14	0.00	1.89E-04	Potential Resident
601800_4132560	601800	4132560	2.31E-04	3.13E-09	7.58E-08	8.35E-08	9.27E-09	0.17	0.00	2.31E-04	Potential Resident
601820_4132560	601820	4132560	2.77E-04	3.76E-09	9.11E-08	1.00E-07	1.11E-08	0.21	0.00	2.77E-04	Potential Resident
601840_4132560	601840	4132560	3.12E-04	4.23E-09	1.02E-07	1.13E-07	1.25E-08	0.23	0.00	3.12E-04	Potential Resident
601860_4132560	601860	4132560	3.26E-04	4.43E-09	1.07E-07	1.18E-07	1.31E-08	0.24	0.00	3.26E-04	Potential Resident
601880_4132560	601880	4132560	3.26E-04	4.42E-09	1.07E-07	1.18E-07	1.31E-08	0.24	0.00	3.26E-04	Potential Resident
601900_4132560	601900	4132560	3.15E-04	4.27E-09	1.03E-07	1.14E-07	1.27E-08	0.23	0.00	3.15E-04	Potential Resident
601920_4132560	601920	4132560	2.97E-04	4.03E-09	9.77E-08	1.08E-07	1.20E-08	0.22	0.00	2.97E-04	Potential Resident
601940_4132560	601940	4132560	2.77E-04	3.75E-09	9.09E-08	1.00E-07	1.11E-08	0.21	0.00	2.77E-04	Potential Resident
601960_4132560	601960	4132560	2.55E-04	3.46E-09	8.38E-08	9.23E-08	1.03E-08	0.19	0.00	2.55E-04	Potential Resident
601980_4132560	601980	4132560	2.34E-04	3.17E-09	7.68E-08	8.46E-08	9.40E-09	0.17	0.00	2.34E-04	Potential Resident
602000_4132560	602000	4132560	2.14E-04	2.90E-09	7.02E-08	7.74E-08	8.59E-09	0.16	0.00	2.14E-04	Potential Resident
602020_4132560	602020	4132560	1.95E-04	2.65E-09	6.42E-08	7.07E-08	7.85E-09	0.15	0.00	1.95E-04	Potential Resident
602040_4132560	602040	4132560	1.79E-04	2.43E-09	5.88E-08	6.48E-08	7.19E-09	0.13	0.00	1.79E-04	Potential Resident
601820_4132580	601820	4132580	3.65E-04	4.96E-09	1.20E-07	1.32E-07	1.47E-08	0.27	0.00	3.65E-04	Potential Resident
601840_4132580	601840	4132580	3.85E-04	5.22E-09	1.26E-07	1.39E-07	1.55E-08	0.29	0.00	3.85E-04	Potential Resident
601860_4132580	601860	4132580	3.80E-04	5.15E-09	1.25E-07	1.37E-07	1.53E-08	0.28	0.00	3.80E-04	Potential Resident
601880_4132580	601880	4132580	3.59E-04	4.87E-09	1.18E-07	1.30E-07	1.44E-08	0.27	0.00	3.59E-04	Potential Resident
601900_4132580	601900	4132580	3.31E-04	4.49E-09	1.09E-07	1.20E-07	1.33E-08	0.25	0.00	3.31E-04	Potential Resident
601920_4132580	601920	4132580	3.01E-04	4.08E-09	9.88E-08	1.09E-07	1.21E-08	0.22	0.00	3.01E-04	Potential Resident
601940_4132580	601940	4132580	2.72E-04	3.68E-09	8.92E-08	9.83E-08	1.09E-08	0.20	0.00	2.72E-04	Potential Resident
601960_4132580	601960	4132580	2.44E-04	3.31E-09	8.03E-08	8.84E-08	9.82E-09	0.18	0.00	2.44E-04	Potential Resident

All Receptors - Operational Risk Cancer Risk

				Days				DPM (tons)	$PM_{2.5}$ (tons)
Operation	Generator	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Age 16<30	Annual O&M	Annual O&M
O&M	1	Annual		0	151	5110	5110	1.01E-03	1.01E-03

				DPM (g/s)	$PM_{2.5}$ (g/s)
Construction Year	Phase	Start Date	End Date	Annual O&M	Annual O&M
O&M	1	Annual		2.91E-05	2.91E-05

Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	2<16	16<30
Daily Breathing Rate (95th %'ile)	DBR	L/kg-day	361	1090	572	261
Fraction Of Time At Home	FAH	unitless	1	1	1	0.73
Exposure Frequency	EF	days/year	0.96	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3	1
Inhalation Absorption Factor	A	unitless	1	1	1	1
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001	0.001
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001	0.001
Cancer Potency Factor (diesel exhaust)	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1	1.1
Averaging Time (for residential exposure)	AT	years	70.00	70.00	70	70

Intake Factor for Inhalation, IF (m^3/kg-day)

	Year	Equation	3rd Trimester	0<2	2<16	16<30
Generator O&M	Annual	DBR*FAH*EF *ED*ASF*A*C F/AT	0.000	0.062	0.329	0.037

Risk Calculation Part 1, R1

Year		3rd Trimester	0<2	2<16	16<30
Annual	IF*CPF*CF	0.00E+00	6.79E-05	3.62E-04	4.02E-05

Risk Factors

	Abbreviation	UOM	
Chronic Inhalation	REL	ug/m^3	5

MAX	Max Risk	UTM X	UTM Y
Cancer	0.1718	601820	4132580

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)

			Annual O&M
Lookup	X (UTM)	Y (UTM	EDG
601660_4132320	601660	4132320	2.22E-05
601680_4132320	601680	4132320	2.43E-05
601700_4132320	601700	4132320	2.65E-05
601720_4132320	601720	4132320	2.94E-05
601740_4132320	601740	4132320	3.29E-05
601760_4132320	601760	4132320	3.69E-05
601620_4132340	601620	4132340	2.02E-05
601640_4132340	601640	4132340	2.19E-05
601660_4132340	601660	4132340	2.37E-05
601680_4132340	601680	4132340	2.62E-05
601700_4132340	601700	4132340	2.89E-05
601720_4132340	601720	4132340	3.27E-05
601740_4132340	601740	4132340	3.66E-05
601760_4132340	601760	4132340	4.11E-05
601780_4132340	601780	4132340	4.63E-05
601800_4132340	601800	4132340	5.24E-05
601820_4132340	601820	4132340	5.97E-05
601620_4132360	601620	4132360	2.16E-05
601640_4132360	601640	4132360	2.35E-05
601660_4132360	601660	4132360	2.58E-05
601680_4132360	601680	4132360	2.89E-05
601700_4132360	601700	4132360	3.25E-05
601720_4132360	601720	4132360	3.61E-05
601740_4132360	601740	4132360	4.11E-05
601820_4132360	601820	4132360	6.59E-05
601840_4132360	601840	4132360	6.95E-05
601860_4132360	601860	4132360	7.25E-05
601880_4132360	601880	4132360	7.74E-05
601640_4132380	601640	4132380	2.52E-05
601660_4132380	601660	4132380	2.81E-05
601680_4132380	601680	4132380	3.17E-05
601700_4132380	601700	4132380	3.59E-05
601720_4132380	601720	4132380	4.05E-05
601840_4132380	601840	4132380	7.59E-05
601860_4132380	601860	4132380	7.82E-05
601880_4132380	601880	4132380	8.65E-05
601900_4132380	601900	4132380	9.61E-05
601660_4132400	601660	4132400	3.08E-05
601680_4132400	601680	4132400	3.49E-05
601700_4132400	601700	4132400	3.97E-05
601720_4132400	601720	4132400	4.52E-05
601840_4132400	601840	4132400	8.23E-05
601860_4132400	601860	4132400	8.72E-05
601880_4132400	601880	4132400	9.70E-05
601900_4132400	601900	4132400	1.07E-04
601920_4132400	601920	4132400	1.18E-04
601680_4132420	601680	4132420	3.87E-05
601700_4132420	601700	4132420	4.46E-05
601720_4132420	601720	4132420	5.14E-05
601740_4132420	601740	4132420	6.04E-05
601800_4132420	601800	4132420	8.62E-05
601820_4132420	601820	4132420	8.77E-05
601840_4132420	601840	4132420	9.01E-05
601860_4132420	601860	4132420	9.80E-05
601880_4132420	601880	4132420	1.09E-04
601900_4132420	601900	4132420	1.21E-04
601920_4132420	601920	4132420	1.34E-04
601940_4132420	601940	4132420	1.45E-04
601960_4132420	601960	4132420	1.52E-04
601700_4132440	601700	4132440	5.01E-05
601720_4132440	601720	4132440	5.87E-05

Risk Calculation Part 2

	$\sum R1*C_{DPM}$					HI	PM2.5
						C_{DPM}/REL	Annual O&M
3rd Trimester	0<2	2<16	16<30	Total			EDG
0.00E+00	1.51E-09	8.02E-09	8.91E-10	0.01	0.00		2.22E-05
0.00E+00	1.65E-09	8.79E-09	9.76E-10	0.01	0.00		2.43E-05
0.00E+00	1.80E-09	9.58E-09	1.06E-09	0.01	0.00		2.65E-05
0.00E+00	2.00E-09	1.06E-08	1.18E-09	0.01	0.00		2.94E-05
0.00E+00	2.23E-09	1.19E-08	1.32E-09	0.02	0.00		3.29E-05
0.00E+00	2.51E-09	1.34E-08	1.48E-09	0.02	0.00		3.69E-05
0.00E+00	1.38E-09	7.33E-09	8.14E-10	0.01	0.00		2.02E-05
0.00E+00	1.49E-09	7.94E-09	8.82E-10	0.01	0.00		2.19E-05
0.00E+00	1.61E-09	8.58E-09	9.52E-10	0.01	0.00		2.37E-05
0.00E+00	1.78E-09	9.50E-09	1.05E-09	0.01	0.00		2.62E-05
0.00E+00	1.96E-09	1.05E-08	1.16E-09	0.01	0.00		2.89E-05
0.00E+00	2.22E-09	1.18E-08	1.31E-09	0.02	0.00		3.27E-05
0.00E+00	2.49E-09	1.32E-08	1.47E-09	0.02	0.00		3.66E-05
0.00E+00	2.80E-09	1.49E-08	1.65E-09	0.02	0.00		4.11E-05
0.00E+00	3.15E-09	1.68E-08	1.86E-09	0.02	0.00		4.63E-05
0.00E+00	3.56E-09	1.90E-08	2.11E-09	0.02	0.00		5.24E-05
0.00E+00	4.05E-09	2.16E-08	2.40E-09	0.03	0.00		5.97E-05
0.00E+00	1.47E-09	7.81E-09	8.67E-10	0.01	0.00		2.16E-05
0.00E+00	1.60E-09	8.50E-09	9.44E-10	0.01	0.00		2.35E-05
0.00E+00	1.75E-09	9.32E-09	1.04E-09	0.01	0.00		2.58E-05
0.00E+00	1.96E-09	1.05E-08	1.16E-09	0.01	0.00		2.89E-05
0.00E+00	2.21E-09	1.18E-08	1.31E-09	0.02	0.00		3.25E-05
0.00E+00	2.45E-09	1.31E-08	1.45E-09	0.02	0.00		3.61E-05
0.00E+00	2.79E-09	1.49E-08	1.65E-09	0.02	0.00		4.11E-05
0.00E+00	4.48E-09	2.39E-08	2.65E-09	0.03	0.00		6.59E-05
0.00E+00	4.72E-09	2.51E-08	2.79E-09	0.03	0.00		6.95E-05
0.00E+00	4.93E-09	2.63E-08	2.92E-09	0.03	0.00		7.25E-05
0.00E+00	5.26E-09	2.80E-08	3.11E-09	0.04	0.00		7.74E-05
0.00E+00	1.71E-09	9.12E-09	1.01E-09	0.01	0.00		2.52E-05
0.00E+00	1.91E-09	1.02E-08	1.13E-09	0.01	0.00		2.81E-05
0.00E+00	2.15E-09	1.15E-08	1.27E-09	0.01	0.00		3.17E-05
0.00E+00	2.44E-09	1.30E-08	1.44E-09	0.02	0.00		3.59E-05
0.00E+00	2.75E-09	1.47E-08	1.63E-09	0.02	0.00		4.05E-05
0.00E+00	5.16E-09	2.75E-08	3.05E-09	0.04	0.00		7.59E-05
0.00E+00	5.31E-09	2.83E-08	3.14E-09	0.04	0.00		7.82E-05
0.00E+00	5.88E-09	3.13E-08	3.48E-09	0.04	0.00		8.65E-05
0.00E+00	6.53E-09	3.48E-08	3.86E-09	0.05	0.00		9.61E-05
0.00E+00	2.09E-09	1.12E-08	1.24E-09	0.01	0.00		3.08E-05
0.00E+00	2.37E-09	1.26E-08	1.40E-09	0.02	0.00		3.49E-05
0.00E+00	2.70E-09	1.44E-08	1.60E-09	0.02	0.00		3.97E-05
0.00E+00	3.07E-09	1.64E-08	1.82E-09	0.02	0.00		4.52E-05
0.00E+00	5.59E-09	2.98E-08	3.31E-09	0.04	0.00		8.23E-05
0.00E+00	5.93E-09	3.16E-08	3.51E-09	0.04	0.00		8.72E-05
0.00E+00	6.59E-09	3.51E-08	3.90E-09	0.05	0.00		9.70E-05
0.00E+00	7.29E-09	3.88E-08	4.31E-09	0.05	0.00		1.07E-04
0.00E+00	8.04E-09	4.28E-08	4.75E-09	0.06	0.00		1.18E-04
0.00E+00	2.63E-09	1.40E-08	1.55E-09	0.02	0.00		3.87E-05
0.00E+00	3.03E-09	1.62E-08	1.79E-09	0.02	0.00		4.46E-05
0.00E+00	3.49E-09	1.86E-08	2.07E-09	0.02	0.00		5.14E-05
0.00E+00	4.11E-09	2.19E-08	2.43E-09	0.03	0.00		6.04E-05
0.00E+00	5.86E-09	3.12E-08	3.46E-09	0.04	0.00		8.62E-05
0.00E+00	5.96E-09	3.18E-08	3.53E-09	0.04	0.00		8.77E-05
0.00E+00	6.12E-09	3.26E-08	3.62E-09	0.04	0.00		9.01E-05
0.00E+00	6.66E-09	3.55E-08	3.94E-09	0.05	0.00		9.80E-05
0.00E+00	7.41E-09	3.95E-08	4.38E-09	0.05	0.00		1.09E-04
0.00E+00	8.26E-09	4.40E-08	4.88E-09	0.06	0.00		1.21E-04
0.00E+00	9.10E-09	4.85E-08	5.38E-09	0.06	0.00		1.34E-04
0.00E+00	9.85E-09	5.25E-08	5.83E-09	0.07	0.00		1.45E-04
0.00E+00	1.03E-08	5.51E-08	6.12E-09	0.07	0.00		1.52E-04
0.00E+00	3.40E-09	1.81E-08	2.01E-09	0.02	0.00		5.01E-05
0.00E+00	3.99E-09	2.12E-08	2.36E-09	0.03	0.00		5.87E-05

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)				Risk Calculation Part 2					HI	PM2.5
			Annual O&M	$\sum R1*C_{DPM}$					C_{DPM}/REL	Annual O&M
Lookup	X (UTM)	Y (UTM	EDG	3rd Trimester	0<2	2<16	16<30	Total		EDG
601740_4132440	601740	4132440	6.95E-05	0.00E+00	4.72E-09	2.52E-08	2.79E-09	0.03	0.00	6.95E-05
601780_4132440	601780	4132440	9.20E-05	0.00E+00	6.25E-09	3.33E-08	3.70E-09	0.04	0.00	9.20E-05
601800_4132440	601800	4132440	9.55E-05	0.00E+00	6.49E-09	3.46E-08	3.84E-09	0.04	0.00	9.55E-05
601820_4132440	601820	4132440	9.60E-05	0.00E+00	6.52E-09	3.47E-08	3.86E-09	0.05	0.00	9.60E-05
601840_4132440	601840	4132440	9.97E-05	0.00E+00	6.77E-09	3.61E-08	4.01E-09	0.05	0.00	9.97E-05
601860_4132440	601860	4132440	1.11E-04	0.00E+00	7.53E-09	4.01E-08	4.46E-09	0.05	0.00	1.11E-04
601880_4132440	601880	4132440	1.25E-04	0.00E+00	8.47E-09	4.51E-08	5.01E-09	0.06	0.00	1.25E-04
601900_4132440	601900	4132440	1.40E-04	0.00E+00	9.48E-09	5.05E-08	5.61E-09	0.07	0.00	1.40E-04
601920_4132440	601920	4132440	1.53E-04	0.00E+00	1.04E-08	5.53E-08	6.15E-09	0.07	0.00	1.53E-04
601940_4132440	601940	4132440	1.63E-04	0.00E+00	1.11E-08	5.92E-08	6.57E-09	0.08	0.00	1.63E-04
601960_4132440	601960	4132440	1.69E-04	0.00E+00	1.15E-08	6.12E-08	6.80E-09	0.08	0.00	1.69E-04
601680_4132460	601680	4132460	4.76E-05	0.00E+00	3.23E-09	1.72E-08	1.91E-09	0.02	0.00	4.76E-05
601700_4132460	601700	4132460	5.67E-05	0.00E+00	3.85E-09	2.05E-08	2.28E-09	0.03	0.00	5.67E-05
601720_4132460	601720	4132460	6.74E-05	0.00E+00	4.58E-09	2.44E-08	2.71E-09	0.03	0.00	6.74E-05
601780_4132460	601780	4132460	1.03E-04	0.00E+00	7.01E-09	3.73E-08	4.15E-09	0.05	0.00	1.03E-04
601800_4132460	601800	4132460	1.04E-04	0.00E+00	7.05E-09	3.76E-08	4.17E-09	0.05	0.00	1.04E-04
601820_4132460	601820	4132460	1.04E-04	0.00E+00	7.09E-09	3.78E-08	4.19E-09	0.05	0.00	1.04E-04
601840_4132460	601840	4132460	1.13E-04	0.00E+00	7.70E-09	4.10E-08	4.56E-09	0.05	0.00	1.13E-04
601860_4132460	601860	4132460	1.28E-04	0.00E+00	8.68E-09	4.63E-08	5.14E-09	0.06	0.00	1.28E-04
601880_4132460	601880	4132460	1.45E-04	0.00E+00	9.86E-09	5.25E-08	5.83E-09	0.07	0.00	1.45E-04
601900_4132460	601900	4132460	1.62E-04	0.00E+00	1.10E-08	5.85E-08	6.49E-09	0.08	0.00	1.62E-04
601920_4132460	601920	4132460	1.75E-04	0.00E+00	1.19E-08	6.33E-08	7.03E-09	0.08	0.00	1.75E-04
601940_4132460	601940	4132460	1.84E-04	0.00E+00	1.25E-08	6.67E-08	7.41E-09	0.09	0.00	1.84E-04
601960_4132460	601960	4132460	1.89E-04	0.00E+00	1.28E-08	6.84E-08	7.60E-09	0.09	0.00	1.89E-04
601980_4132460	601980	4132460	1.91E-04	0.00E+00	1.30E-08	6.92E-08	7.68E-09	0.09	0.00	1.91E-04
601680_4132480	601680	4132480	5.29E-05	0.00E+00	3.60E-09	1.92E-08	2.13E-09	0.02	0.00	5.29E-05
601700_4132480	601700	4132480	6.47E-05	0.00E+00	4.40E-09	2.34E-08	2.60E-09	0.03	0.00	6.47E-05
601720_4132480	601720	4132480	7.84E-05	0.00E+00	5.33E-09	2.84E-08	3.15E-09	0.04	0.00	7.84E-05
601800_4132480	601800	4132480	1.14E-04	0.00E+00	7.78E-09	4.14E-08	4.60E-09	0.05	0.00	1.14E-04
601820_4132480	601820	4132480	1.17E-04	0.00E+00	7.95E-09	4.24E-08	4.70E-09	0.06	0.00	1.17E-04
601840_4132480	601840	4132480	1.32E-04	0.00E+00	8.95E-09	4.77E-08	5.29E-09	0.06	0.00	1.32E-04
601860_4132480	601860	4132480	1.51E-04	0.00E+00	1.03E-08	5.47E-08	6.08E-09	0.07	0.00	1.51E-04
601880_4132480	601880	4132480	1.71E-04	0.00E+00	1.16E-08	6.20E-08	6.89E-09	0.08	0.00	1.71E-04
601900_4132480	601900	4132480	1.88E-04	0.00E+00	1.28E-08	6.82E-08	7.57E-09	0.09	0.00	1.88E-04
601920_4132480	601920	4132480	2.00E-04	0.00E+00	1.36E-08	7.24E-08	8.04E-09	0.09	0.00	2.00E-04
601940_4132480	601940	4132480	2.07E-04	0.00E+00	1.41E-08	7.49E-08	8.31E-09	0.10	0.00	2.07E-04
601960_4132480	601960	4132480	2.09E-04	0.00E+00	1.42E-08	7.58E-08	8.41E-09	0.10	0.00	2.09E-04
601980_4132480	601980	4132480	2.08E-04	0.00E+00	1.42E-08	7.54E-08	8.37E-09	0.10	0.00	2.08E-04
602000_4132480	602000	4132480	2.04E-04	0.00E+00	1.39E-08	7.40E-08	8.21E-09	0.10	0.00	2.04E-04
601700_4132500	601700	4132500	7.37E-05	0.00E+00	5.01E-09	2.67E-08	2.96E-09	0.03	0.00	7.37E-05
601820_4132500	601820	4132500	1.37E-04	0.00E+00	9.30E-09	4.96E-08	5.50E-09	0.06	0.00	1.37E-04
601840_4132500	601840	4132500	1.58E-04	0.00E+00	1.07E-08	5.72E-08	6.35E-09	0.07	0.00	1.58E-04
601860_4132500	601860	4132500	1.82E-04	0.00E+00	1.24E-08	6.60E-08	7.32E-09	0.09	0.00	1.82E-04
601880_4132500	601880	4132500	2.03E-04	0.00E+00	1.38E-08	7.37E-08	8.18E-09	0.10	0.00	2.03E-04
601900_4132500	601900	4132500	2.18E-04	0.00E+00	1.48E-08	7.90E-08	8.77E-09	0.10	0.00	2.18E-04
601920_4132500	601920	4132500	2.27E-04	0.00E+00	1.54E-08	8.20E-08	9.10E-09	0.11	0.00	2.27E-04
601940_4132500	601940	4132500	2.29E-04	0.00E+00	1.56E-08	8.30E-08	9.22E-09	0.11	0.00	2.29E-04
601960_4132500	601960	4132500	2.28E-04	0.00E+00	1.55E-08	8.24E-08	9.15E-09	0.11	0.00	2.28E-04
601980_4132500	601980	4132500	2.23E-04	0.00E+00	1.51E-08	8.06E-08	8.94E-09	0.10	0.00	2.23E-04
602000_4132500	602000	4132500	2.15E-04	0.00E+00	1.46E-08	7.77E-08	8.63E-09	0.10	0.00	2.15E-04
602020_4132500	602020	4132500	2.06E-04	0.00E+00	1.40E-08	7.45E-08	8.27E-09	0.10	0.00	2.06E-04
601800_4132520	601800	4132520	1.44E-04	0.00E+00	9.77E-09	5.20E-08	5.78E-09	0.07	0.00	1.44E-04
601820_4132520	601820	4132520	1.66E-04	0.00E+00	1.13E-08	6.02E-08	6.69E-09	0.08	0.00	1.66E-04
601840_4132520	601840	4132520	1.95E-04	0.00E+00	1.33E-08	7.07E-08	7.85E-09	0.09	0.00	1.95E-04
601860_4132520	601860	4132520	2.22E-04	0.00E+00	1.51E-08	8.04E-08	8.93E-09	0.10	0.00	2.22E-04
601880_4132520	601880	4132520	2.41E-04	0.00E+00	1.64E-08	8.73E-08	9.70E-09	0.11	0.00	2.41E-04
601900_4132520	601900	4132520	2.51E-04	0.00E+00	1.71E-08	9.10E-08	1.01E-08	0.12	0.00	2.51E-04
601920_4132520	601920	4132520	2.54E-04	0.00E+00	1.73E-08	9.19E-08	1.02E-08	0.12	0.00	2.54E-04
601940_4132520	601940	4132520	2.51E-04	0.00E+00	1.70E-08	9.08E-08	1.01E-08	0.12	0.00	2.51E-04
601960_4132520	601960	4132520	2.44E-04	0.00E+00	1.65E-08	8.82E-08	9.79E-09	0.11	0.00	2.44E-04
601980_4132520	601980	4132520	2.34E-04	0.00E+00	1.59E-08	8.45E-08	9.39E-09	0.11	0.00	2.34E-04
602000_4132520	602000	4132520	2.22E-04	0.00E+00	1.51E-08	8.03E-08	8.92E-09	0.10	0.00	2.22E-04
602020_4132520	602020	4132520	2.09E-04	0.00E+00	1.42E-08	7.57E-08	8.40E-09	0.10	0.00	2.09E-04
601780_4132540	601780	4132540	1.57E-04	0.00E+00	1.07E-08	5.70E-08	6.33E-09	0.07	0.00	1.57E-04
601800_4132540	601800	4132540	1.77E-04	0.00E+00	1.20E-08	6.41E-08	7.11E-09	0.08	0.00	1.77E-04
601820_4132540	601820	4132540	2.11E-04	0.00E+00	1.44E-08	7.65E-08	8.49E-09	0.10	0.00	2.11E-04
601840_4132540	601840	4132540	2.46E-04	0.00E+00	1.67E-08	8.92E-08	9.90E-09	0.12	0.00	2.46E-04
601860_4132540	601860	4132540	2.71E-04	0.00E+00	1.84E-08	9.82E-08	1.09E-08	0.13	0.00	2.71E-04
601880_4132540	601880	4132540	2.84E-04	0.00E+00	1.93E-08	1.03E-07	1.14E-08	0.13	0.00	2.84E-04
601900_4132540	601900	4132540	2.86E-04	0.00E+00	1.94E-08	1.03E-07	1.15E-08	0.13	0.00	2.86E-04
601920_4132540	601920	4132540	2.80E-04	0.00E+00	1.90E-08	1.01E-07	1.13E-08	0.13	0.00	2.80E-04
601940_4132540	601940	4132540	2.69E-04	0.00E+00	1.83E-08	9.73E-08	1.08E-08	0.13	0.00	2.69E-04
601960_4132540	601960	4132540	2.54E-04	0.00E+00	1.73E-08	9.21E-08	1.02E-08	0.12	0.00	2.54E-04
601980_4132540	601980	4132540	2.38E-04	0.00E+00	1.62E-08	8.62E-08	9.57E-09	0.11	0.00	2.38E-04
602000_4132540	602000	4132540	2.22E-04	0.00E+00	1.51E-08	8.03E-08	8.91E-09	0.10	0.00	2.22E-04
602020_4132540	602020	4132540	2.05E-04	0.00E+00	1.39E-08	7.43E-08	8.25E-09	0.10	0.00	2.05E-04
601780_4132560	601780	4132560	1.89E-04	0.00E+00	1.29E-08	6.85E-08	7.60E-09	0.09	0.00	1.89E-04
601800_4132560	601800	4132560	2.31E-04	0.00E+00	1.57E-08	8.35E-08	9.27E-09	0.11	0.00	2.31E-04
601820_4132560	601820	4132560	2.77E-04	0.00E+00	1.88E-08	1.00E-07	1.11E-08	0.13	0.00	2.77E-04
601840_4132560	601840	4132560	3.12E-04	0.00E+00	2.12E-08	1.13E-07	1.25E-08	0.15	0.00	3.12E-04
601860_4132560	601860	4132560	3.26E-04	0.00E+00	2.22E-08	1.18E-07	1.31E-08	0.15	0.00	3.26E-04
601880_4132560	601880	4132560	3.26E-04	0.00E+00	2.22E-08	1.18E-07	1.31E-08	0.15	0.00	3.26E-04
601900_4132560	601900	4132560	3.15E-04	0.00E+00	2.14E-08	1.14E-07	1.27E-08	0.15	0.00	3.15E-04
601920_4132560	601920	4132560	2.97E-04	0.00E+00	2.02E-08	1.08E-07	1.20E-08	0.14	0.00	2.97E-04
601940_4132560	601940	4132560	2.77E-04	0.00E+00	1.88E-08	1.00E-07	1.11E-08	0.13	0.00	2.77E-04
601960_4132560	601960	4132560	2.55E-04	0.00E+00	1.73E-08	9.23E-08	1.03E-08	0.12	0.00	2.55E-04
601980_4132560	601980	4132560	2.34E-04	0.00E+00	1.59E-08	8.46E-08	9.40E-09	0.11	0.00	2.34E-04
602000_4132560	602000	4132560	2.14E-04	0.00E+00	1.45E-08	7.74E-08	8.59E-09	0.10	0.00	2.14E-04
602020_4132560	602020	4132560	1.95E-04	0.00E+00	1.33E-08	7.07E-08	7.85E-09	0.09	0.00	1.95E-04
602040_4132560	602040	4132560	1.79E-04	0.00E+00	1.22E-08	6.48E-08	7.19E-09	0.08	0.00	1.79E-04
601820_4132580	601820	4132580	3.65E-04	0.00E+00	2.48E-08	1.32E-07	1.47E-08	0.17	0.00	3.65E-04
601840_4132580	601840	4132580	3.85E-04	0.00E+00	2.62E-08	1.39E-07	1.55E-08	0.18	0.00	3.85E-04
601860_4132580	601860	4132580	3.80E-04	0.00E+00	2.58E-08	1.37E-07	1.53E-08	0.18	0.00	3.80E-04
601880_4132580	601880	4132580	3.59E-04	0.00E+00	2.44E-08	1.30E-07	1.44E-08	0.17	0.00	3.59E-04
601900_4132580	601900	4132580	3.31E-04	0.00E+00	2.25E-08	1.20E-07	1.33E-08	0.16	0.00	3.31E-04
601920_4132580	601920	4132580	3.01E-04	0.00E+00	2.04E-08	1.09E-07	1.21E-08	0.14	0.00	3.01E-04
601940_4132580	601940	4132580	2.72E-04	0.00E+00	1.84E-08	9.83E-08	1.09E-08	0.13	0.00	2.72E-04
601960_4132580	601960	4132580	2.44E-04	0.00E+00	1.66E-08	8.84E-08	9.82E-09	0.11	0.00	2.44E-04

Residential Receptors - Unmitigated Construction Cancer Risk

				Days					Total Unmitigated DPM (tons)
			Start	6/1/2022	8/31/2022	8/31/2024			
			Stop	44803.00	8/30/2024				
				90	730				
Phase Name	Construction Year	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Exposure Days	Calendar Days	Onsite Offroad
FS-32 Construction	2022	6/1/2022	8/1/2022	62.00	0.00	0	62	62	1.65E-02
	2023	3/1/2023	12/31/2023	0.00	306.00	0	306	306	4.01E-02
	2024	1/1/2024	4/1/2024	0.00	92.00	0	92	92	9.42E-03

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Phase Name	Construction Year	Start Date	End Date	Total Unmitigated DPM (g/s) CSTN
FS-32 Construction	2022	6/1/2022	8/1/2022	2.79E-03
	2023	3/1/2023	12/31/2023	1.38E-03
	2024	1/1/2024	4/1/2024	1.08E-03

Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	Age 2<16
Daily Breathing Rate (95th %'ile)	DBR	L/kg-day	361	1090	572
Fraction Of Time At Home	FAH	unitless	1	1	1
Exposure Frequency	EF	days/year	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3
Inhalation Absorption Factor	A	unitless	1	1	1
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001
Cancer Potency Factor (diesel exhau	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1
Averaging Time (for residential expo	AT	years	70.00	70.00	70.00

Intake Factor for Inhalation, IF (m^3/kg-day)

Phase Name	Construction Year	Equation	3rd Trimester	0<2	2<16
FS-32 Construction	2022	DBR*FAH*EF	0.01	0.00	0.00
	2023	*ED*ASF*A*	0.00	0.13	0.00
	2024	CF/AT	0.00	0.04	0.00

Risk Calculation Part 1, R1

	3rd Trimester	0<2	2<16
IF*CPF*CF	9.24E-06	0.00E+00	0.00E+00
	0.00E+00	1.38E-04	0.00E+00
	0.00E+00	4.14E-05	0.00E+00

REL		
DPM	5	ug/m^3

	MAX	UTM X	UTM Y	
Cancer Risk	19.86	601820	4132580	Potential Residence
Hazard Index	0.04	601820	4132580	

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)

		FS-8 Construction		
X (UTM)	Y (UTM	2022	2023	2024
601660	4132320	0.002	0.001	0.001
601680	4132320	0.002	0.001	0.001
601700	4132320	0.002	0.001	0.001
601720	4132320	0.002	0.001	0.001
601740	4132320	0.003	0.001	0.001
601760	4132320	0.003	0.002	0.001
601620	4132340	0.001	0.001	0.001
601640	4132340	0.002	0.001	0.001
601660	4132340	0.002	0.001	0.001
601680	4132340	0.002	0.001	0.001
601700	4132340	0.002	0.001	0.001
601720	4132340	0.003	0.001	0.001
601740	4132340	0.003	0.002	0.001
601760	4132340	0.004	0.002	0.001
601780	4132340	0.004	0.002	0.002
601800	4132340	0.005	0.003	0.002
601820	4132340	0.007	0.003	0.003
601620	4132360	0.002	0.001	0.001
601640	4132360	0.002	0.001	0.001
601660	4132360	0.002	0.001	0.001
601680	4132360	0.002	0.001	0.001
601700	4132360	0.003	0.001	0.001
601720	4132360	0.003	0.002	0.001
601740	4132360	0.004	0.002	0.001
601820	4132360	0.008	0.004	0.003
601840	4132360	0.010	0.005	0.004
601860	4132360	0.011	0.006	0.004
601880	4132360	0.013	0.007	0.005
601640	4132380	0.002	0.001	0.001
601660	4132380	0.002	0.001	0.001
601680	4132380	0.003	0.001	0.001
601700	4132380	0.003	0.001	0.001
601720	4132380	0.004	0.002	0.001
601840	4132380	0.012	0.006	0.005
601860	4132380	0.014	0.007	0.005
601880	4132380	0.017	0.008	0.006
601900	4132380	0.019	0.009	0.007

Risk Calculation Part 2

	$\sum R1*C_{DPM}$			
	3rd Trimester	0<2	2<16	Total
	1.49E-08	1.35E-07	0.00E+00	0.15
	1.68E-08	1.52E-07	0.00E+00	0.17
	1.90E-08	1.72E-07	0.00E+00	0.19
	2.18E-08	1.98E-07	0.00E+00	0.22
	2.55E-08	2.31E-07	0.00E+00	0.26
	2.99E-08	2.70E-07	0.00E+00	0.30
	1.32E-08	1.19E-07	0.00E+00	0.13
	1.47E-08	1.33E-07	0.00E+00	0.15
	1.65E-08	1.50E-07	0.00E+00	0.17
	1.87E-08	1.70E-07	0.00E+00	0.19
	2.14E-08	1.94E-07	0.00E+00	0.22
	2.48E-08	2.25E-07	0.00E+00	0.25
	2.92E-08	2.65E-07	0.00E+00	0.29
	3.46E-08	3.14E-07	0.00E+00	0.35
	4.15E-08	3.76E-07	0.00E+00	0.42
	5.00E-08	4.53E-07	0.00E+00	0.50
	6.06E-08	5.49E-07	0.00E+00	0.61
	1.45E-08	1.31E-07	0.00E+00	0.15
	1.63E-08	1.48E-07	0.00E+00	0.16
	1.84E-08	1.67E-07	0.00E+00	0.19
	2.10E-08	1.91E-07	0.00E+00	0.21
	2.44E-08	2.21E-07	0.00E+00	0.25
	2.85E-08	2.58E-07	0.00E+00	0.29
	3.38E-08	3.06E-07	0.00E+00	0.34
	7.34E-08	6.65E-07	0.00E+00	0.74
	8.85E-08	8.02E-07	0.00E+00	0.89
	1.05E-07	9.54E-07	0.00E+00	1.06
	1.23E-07	1.12E-06	0.00E+00	1.24
	1.82E-08	1.65E-07	0.00E+00	0.18
	2.07E-08	1.88E-07	0.00E+00	0.21
	2.39E-08	2.17E-07	0.00E+00	0.24
	2.79E-08	2.53E-07	0.00E+00	0.28
	3.31E-08	3.00E-07	0.00E+00	0.33
	1.10E-07	9.97E-07	0.00E+00	1.11
	1.32E-07	1.19E-06	0.00E+00	1.32
	1.54E-07	1.39E-06	0.00E+00	1.55
	1.75E-07	1.58E-06	0.00E+00	1.76

Hazard Index Calculation

C_{DPM}/REL
0.000
0.000
0.000
0.000
0.001
0.001
0.000
0.000
0.000
0.000
0.000
0.001
0.001
0.001
0.001
0.001
0.001
0.000
0.000
0.000
0.000
0.000
0.001
0.001
0.001
0.002
0.002
0.002
0.003
0.000
0.000
0.001
0.001
0.001
0.002
0.003
0.003
0.004

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3)					Risk Calculation Part 2				Hazard Index Calculation
		FS-8 Construction			$\sum R1*C_{DPM}$				C_{DPM}/REL
X (UTM)	Y (UTM	2022	2023	2024	3rd Trimester	0<2	2<16	Total	
601660	4132400	0.003	0.001	0.001	2.35E-08	2.13E-07	0.00E+00	0.24	0.001
601680	4132400	0.003	0.001	0.001	2.74E-08	2.48E-07	0.00E+00	0.28	0.001
601700	4132400	0.004	0.002	0.001	3.24E-08	2.93E-07	0.00E+00	0.33	0.001
601720	4132400	0.004	0.002	0.002	3.89E-08	3.53E-07	0.00E+00	0.39	0.001
601840	4132400	0.015	0.007	0.006	1.40E-07	1.27E-06	0.00E+00	1.41	0.003
601860	4132400	0.018	0.009	0.007	1.67E-07	1.51E-06	0.00E+00	1.68	0.004
601880	4132400	0.021	0.010	0.008	1.93E-07	1.75E-06	0.00E+00	1.94	0.004
601900	4132400	0.023	0.012	0.009	2.16E-07	1.96E-06	0.00E+00	2.18	0.005
601920	4132400	0.026	0.013	0.010	2.36E-07	2.14E-06	0.00E+00	2.38	0.005
601680	4132420	0.003	0.002	0.001	3.17E-08	2.87E-07	0.00E+00	0.32	0.001
601700	4132420	0.004	0.002	0.002	3.80E-08	3.44E-07	0.00E+00	0.38	0.001
601720	4132420	0.005	0.002	0.002	4.64E-08	4.21E-07	0.00E+00	0.47	0.001
601740	4132420	0.006	0.003	0.002	5.80E-08	5.25E-07	0.00E+00	0.58	0.001
601800	4132420	0.013	0.006	0.005	1.19E-07	1.07E-06	0.00E+00	1.19	0.003
601820	4132420	0.016	0.008	0.006	1.48E-07	1.34E-06	0.00E+00	1.49	0.003
601840	4132420	0.020	0.010	0.008	1.80E-07	1.63E-06	0.00E+00	1.82	0.004
601860	4132420	0.023	0.011	0.009	2.14E-07	1.94E-06	0.00E+00	2.15	0.005
601880	4132420	0.026	0.013	0.010	2.44E-07	2.21E-06	0.00E+00	2.45	0.005
601900	4132420	0.029	0.014	0.011	2.70E-07	2.44E-06	0.00E+00	2.71	0.006
601920	4132420	0.031	0.015	0.012	2.91E-07	2.63E-06	0.00E+00	2.92	0.006
601940	4132420	0.033	0.016	0.013	3.06E-07	2.77E-06	0.00E+00	3.08	0.007
601960	4132420	0.034	0.017	0.013	3.13E-07	2.84E-06	0.00E+00	3.15	0.007
601700	4132440	0.005	0.002	0.002	4.52E-08	4.10E-07	0.00E+00	0.45	0.001
601720	4132440	0.006	0.003	0.002	5.64E-08	5.11E-07	0.00E+00	0.57	0.001
601740	4132440	0.008	0.004	0.003	7.19E-08	6.51E-07	0.00E+00	0.72	0.002
601780	4132440	0.013	0.006	0.005	1.21E-07	1.10E-06	0.00E+00	1.22	0.003
601800	4132440	0.017	0.008	0.006	1.55E-07	1.40E-06	0.00E+00	1.56	0.003
601820	4132440	0.021	0.010	0.008	1.94E-07	1.76E-06	0.00E+00	1.95	0.004
601840	4132440	0.026	0.013	0.010	2.37E-07	2.15E-06	0.00E+00	2.39	0.005
601860	4132440	0.030	0.015	0.012	2.77E-07	2.51E-06	0.00E+00	2.78	0.006
601880	4132440	0.034	0.017	0.013	3.11E-07	2.81E-06	0.00E+00	3.13	0.007
601900	4132440	0.037	0.018	0.014	3.38E-07	3.07E-06	0.00E+00	3.40	0.007
601920	4132440	0.039	0.019	0.015	3.58E-07	3.24E-06	0.00E+00	3.60	0.008
601940	4132440	0.040	0.020	0.015	3.69E-07	3.34E-06	0.00E+00	3.71	0.008
601960	4132440	0.040	0.020	0.015	3.69E-07	3.34E-06	0.00E+00	3.71	0.008
601680	4132460	0.005	0.002	0.002	4.43E-08	4.01E-07	0.00E+00	0.45	0.001
601700	4132460	0.006	0.003	0.002	5.48E-08	4.96E-07	0.00E+00	0.55	0.001
601720	4132460	0.008	0.004	0.003	6.99E-08	6.33E-07	0.00E+00	0.70	0.002
601780	4132460	0.017	0.009	0.007	1.60E-07	1.45E-06	0.00E+00	1.61	0.003
601800	4132460	0.023	0.011	0.009	2.08E-07	1.88E-06	0.00E+00	2.09	0.005
601820	4132460	0.028	0.014	0.011	2.63E-07	2.38E-06	0.00E+00	2.64	0.006
601840	4132460	0.034	0.017	0.013	3.16E-07	2.86E-06	0.00E+00	3.18	0.007
601860	4132460	0.039	0.019	0.015	3.61E-07	3.27E-06	0.00E+00	3.63	0.008
601880	4132460	0.043	0.021	0.017	3.99E-07	3.61E-06	0.00E+00	4.01	0.009
601900	4132460	0.046	0.023	0.018	4.25E-07	3.85E-06	0.00E+00	4.27	0.009
601920	4132460	0.047	0.023	0.018	4.38E-07	3.97E-06	0.00E+00	4.41	0.009
601940	4132460	0.048	0.023	0.018	4.40E-07	3.99E-06	0.00E+00	4.43	0.010
601960	4132460	0.047	0.023	0.018	4.31E-07	3.91E-06	0.00E+00	4.34	0.009
601980	4132460	0.045	0.022	0.017	4.16E-07	3.77E-06	0.00E+00	4.19	0.009
601680	4132480	0.006	0.003	0.002	5.35E-08	4.85E-07	0.00E+00	0.54	0.001
601700	4132480	0.007	0.004	0.003	6.76E-08	6.12E-07	0.00E+00	0.68	0.001
601720	4132480	0.010	0.005	0.004	8.88E-08	8.05E-07	0.00E+00	0.89	0.002
601800	4132480	0.031	0.015	0.012	2.90E-07	2.63E-06	0.00E+00	2.92	0.006
601820	4132480	0.039	0.019	0.015	3.63E-07	3.28E-06	0.00E+00	3.65	0.008
601840	4132480	0.046	0.023	0.018	4.26E-07	3.85E-06	0.00E+00	4.28	0.009
601860	4132480	0.052	0.025	0.020	4.77E-07	4.32E-06	0.00E+00	4.80	0.010
601880	4132480	0.056	0.027	0.021	5.13E-07	4.65E-06	0.00E+00	5.16	0.011
601900	4132480	0.057	0.028	0.022	5.31E-07	4.81E-06	0.00E+00	5.34	0.011
601920	4132480	0.057	0.028	0.022	5.31E-07	4.81E-06	0.00E+00	5.34	0.011
601940	4132480	0.056	0.028	0.022	5.18E-07	4.69E-06	0.00E+00	5.21	0.011
601960	4132480	0.054	0.026	0.021	4.95E-07	4.49E-06	0.00E+00	4.98	0.011
601980	4132480	0.050	0.025	0.019	4.66E-07	4.22E-06	0.00E+00	4.69	0.010
602000	4132480	0.047	0.023	0.018	4.33E-07	3.92E-06	0.00E+00	4.36	0.009
601700	4132500	0.009	0.005	0.004	8.57E-08	7.76E-07	0.00E+00	0.86	0.002
601820	4132500	0.055	0.027	0.021	5.08E-07	4.60E-06	0.00E+00	5.11	0.011
601840	4132500	0.063	0.031	0.024	5.81E-07	5.26E-06	0.00E+00	5.84	0.013
601860	4132500	0.068	0.034	0.026	6.32E-07	5.72E-06	0.00E+00	6.35	0.014
601880	4132500	0.071	0.035	0.027	6.55E-07	5.93E-06	0.00E+00	6.59	0.014
601900	4132500	0.071	0.035	0.027	6.52E-07	5.90E-06	0.00E+00	6.56	0.014
601920	4132500	0.068	0.034	0.026	6.30E-07	5.71E-06	0.00E+00	6.34	0.014
601940	4132500	0.064	0.032	0.025	5.95E-07	5.39E-06	0.00E+00	5.99	0.013
601960	4132500	0.060	0.029	0.023	5.53E-07	5.01E-06	0.00E+00	5.56	0.012
601980	4132500	0.055	0.027	0.021	5.07E-07	4.59E-06	0.00E+00	5.10	0.011
602000	4132500	0.050	0.025	0.019	4.60E-07	4.17E-06	0.00E+00	4.63	0.010
602020	4132500	0.045	0.022	0.017	4.16E-07	3.77E-06	0.00E+00	4.18	0.009
601800	4132520	0.067	0.033	0.026	6.16E-07	5.58E-06	0.00E+00	6.19	0.013
601820	4132520	0.079	0.039	0.030	7.25E-07	6.57E-06	0.00E+00	7.30	0.016
601840	4132520	0.086	0.043	0.033	7.98E-07	7.23E-06	0.00E+00	8.03	0.017
601860	4132520	0.090	0.044	0.034	8.29E-07	7.50E-06	0.00E+00	8.33	0.018
601880	4132520	0.089	0.044	0.034	8.20E-07	7.43E-06	0.00E+00	8.25	0.018
601900	4132520	0.085	0.042	0.033	7.82E-07	7.08E-06	0.00E+00	7.86	0.017
601920	4132520	0.079	0.039	0.030	7.26E-07	6.58E-06	0.00E+00	7.30	0.016
601940	4132520	0.072	0.035	0.028	6.63E-07	6.01E-06	0.00E+00	6.67	0.014
601960	4132520	0.065	0.032	0.025	5.98E-07	5.42E-06	0.00E+00	6.01	0.013

Residential Receptors - Mitigated Construction Cancer Risk

				Days					Total Mitigated DPM (tons)
			Start	6/1/2022	8/31/2022	8/31/2024			
			Stop	44803.00	8/30/2024				
				90	730				
Phase Name	Construction Year	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Exposure Days	Calendar Days	Onsite Offroad
FS-32 Construction	2022	6/1/2022	8/1/2022	62.00	0.00	0	62	62	7.10E-04
	2023	3/1/2023	12/31/2023	0.00	306.00	0	306	306	2.37E-03
	2024	1/1/2024	4/1/2024	0.00	92.00	0	92	92	6.10E-04

Phase Name	Construction Year	Start Date	End Date	Total Mitigated DPM (g/s) CSTN
FS-32 Construction	2022	6/1/2022	8/1/2022	1.20E-04
	2023	3/1/2023	12/31/2023	8.13E-05
	2024	1/1/2024	4/1/2024	6.96E-05

Risk Factors

	Abbreviation	UOM	3rd Trimester	0<2	Age 2<16
Daily Breathing Rate (95th %'ile)	DBR	L/kg-day	361	1090	572
Fraction Of Time At Home	FAH	unitless	1	1	1
Exposure Frequency	EF	days/year	0.96	0.96	0.96
Age Sensitivity Factor	ASF	unitless	10	10	3
Inhalation Absorption Factor	A	unitless	1	1	1
Conversion Factor	CF_1	m^3/L	0.001	0.001	0.001
Conversion Factor	CF_2	$\mu g/m^3$	0.001	0.001	0.001
Cancer Potency Factor (diesel exhau	CPF	$mg/kg\text{-}day^{-1}$	1.1	1.1	1.1
Averaging Time (for residential expo	AT	years	70.00	70.00	70.00

Intake Factor for Inhalation, IF (m^3/kg-day)

Phase Name	Construction Year	Equation	3rd Trimester	0<2	2<16
FS-32 Construction	2022	DBR*FAH*EF *ED*ASF*A*C F/AT	0.01	0.00	0.00
	2023		0.00	0.13	0.00
	2024		0.00	0.04	0.00

Risk Calculation Part 1, R1

	3rd Trimester	0<2	2<16
IF*CPF*CF	9.24E-06	0.00E+00	0.00E+00
	0.00E+00	1.38E-04	0.00E+00
	0.00E+00	4.14E-05	0.00E+00

REL		
DPM	5	ug/m^3

	Max	UTM X	UTM Y	
Cancer Risk	1.16	601820	4132580	Potential Residence
Hazard Index	0.00	601820	4132580	

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3) / Risk Calculation Part 2 / Hazard Index Calculation

		FS-8 Construction			∑R1*C_{DPM}				C_{DPM}/REL
X (UTM)	Y (UTM	2022	2023	2024	3rd Trimester	0<2	2<16	Total	
601660	4132320	0.000	0.000	0.000	6.42E-10	8.14E-09	0.00E+00	0.01	0.000
601680	4132320	0.000	0.000	0.000	7.22E-10	9.15E-09	0.00E+00	0.01	0.000
601700	4132320	0.000	0.000	0.000	8.17E-10	1.04E-08	0.00E+00	0.01	0.000
601720	4132320	0.000	0.000	0.000	9.40E-10	1.19E-08	0.00E+00	0.01	0.000
601740	4132320	0.000	0.000	0.000	1.10E-09	1.39E-08	0.00E+00	0.01	0.000
601760	4132320	0.000	0.000	0.000	1.28E-09	1.63E-08	0.00E+00	0.02	0.000
601620	4132340	0.000	0.000	0.000	5.67E-10	7.18E-09	0.00E+00	0.01	0.000
601640	4132340	0.000	0.000	0.000	6.33E-10	8.02E-09	0.00E+00	0.01	0.000
601660	4132340	0.000	0.000	0.000	7.10E-10	9.00E-09	0.00E+00	0.01	0.000
601680	4132340	0.000	0.000	0.000	8.06E-10	1.02E-08	0.00E+00	0.01	0.000
601700	4132340	0.000	0.000	0.000	9.20E-10	1.17E-08	0.00E+00	0.01	0.000
601720	4132340	0.000	0.000	0.000	1.07E-09	1.35E-08	0.00E+00	0.01	0.000
601740	4132340	0.000	0.000	0.000	1.26E-09	1.59E-08	0.00E+00	0.02	0.000
601760	4132340	0.000	0.000	0.000	1.49E-09	1.89E-08	0.00E+00	0.02	0.000
601780	4132340	0.000	0.000	0.000	1.78E-09	2.26E-08	0.00E+00	0.02	0.000
601800	4132340	0.000	0.000	0.000	2.15E-09	2.73E-08	0.00E+00	0.03	0.000
601820	4132340	0.000	0.000	0.000	2.61E-09	3.30E-08	0.00E+00	0.04	0.000
601620	4132360	0.000	0.000	0.000	6.24E-10	7.91E-09	0.00E+00	0.01	0.000
601640	4132360	0.000	0.000	0.000	7.01E-10	8.88E-09	0.00E+00	0.01	0.000
601660	4132360	0.000	0.000	0.000	7.93E-10	1.01E-08	0.00E+00	0.01	0.000
601680	4132360	0.000	0.000	0.000	9.05E-10	1.15E-08	0.00E+00	0.01	0.000
601700	4132360	0.000	0.000	0.000	1.05E-09	1.33E-08	0.00E+00	0.01	0.000
601720	4132360	0.000	0.000	0.000	1.23E-09	1.55E-08	0.00E+00	0.02	0.000
601740	4132360	0.000	0.000	0.000	1.46E-09	1.84E-08	0.00E+00	0.02	0.000
601820	4132360	0.000	0.000	0.000	3.16E-09	4.00E-08	0.00E+00	0.04	0.000
601840	4132360	0.000	0.000	0.000	3.81E-09	4.83E-08	0.00E+00	0.05	0.000
601860	4132360	0.000	0.000	0.000	4.53E-09	5.75E-08	0.00E+00	0.06	0.000
601880	4132360	0.001	0.000	0.000	5.30E-09	6.72E-08	0.00E+00	0.07	0.000
601640	4132380	0.000	0.000	0.000	7.84E-10	9.93E-09	0.00E+00	0.01	0.000
601660	4132380	0.000	0.000	0.000	8.92E-10	1.13E-08	0.00E+00	0.01	0.000
601680	4132380	0.000	0.000	0.000	1.03E-09	1.30E-08	0.00E+00	0.01	0.000
601700	4132380	0.000	0.000	0.000	1.20E-09	1.52E-08	0.00E+00	0.02	0.000
601720	4132380	0.000	0.000	0.000	1.43E-09	1.81E-08	0.00E+00	0.02	0.000
601840	4132380	0.001	0.000	0.000	4.74E-09	6.01E-08	0.00E+00	0.06	0.000
601860	4132380	0.001	0.000	0.000	5.66E-09	7.18E-08	0.00E+00	0.08	0.000
601880	4132380	0.001	0.000	0.000	6.61E-09	8.38E-08	0.00E+00	0.09	0.000
601900	4132380	0.001	0.001	0.000	7.52E-09	9.53E-08	0.00E+00	0.10	0.000
601660	4132400	0.000	0.000	0.000	1.01E-09	1.28E-08	0.00E+00	0.01	0.000
601680	4132400	0.000	0.000	0.000	1.18E-09	1.49E-08	0.00E+00	0.02	0.000

Diesel Particulate Matter concentration, C_{DPM} (ug/m^3) | Risk Calculation Part 2 | Hazard Index Calculation

		FS-8 Construction			∑R1*C_{DPM}				C_{DPM}/REL
X (UTM)	Y (UTM	2022	2023	2024	3rd Trimester	0<2	2<16	Total	
601700	4132400	0.000	0.000	0.000	1.39E-09	1.76E-08	0.00E+00	0.02	0.000
601720	4132400	0.000	0.000	0.000	1.68E-09	2.12E-08	0.00E+00	0.02	0.000
601840	4132400	0.001	0.000	0.000	6.02E-09	7.63E-08	0.00E+00	0.08	0.000
601860	4132400	0.001	0.001	0.000	7.17E-09	9.09E-08	0.00E+00	0.10	0.000
601880	4132400	0.001	0.001	0.001	8.32E-09	1.05E-07	0.00E+00	0.11	0.000
601900	4132400	0.001	0.001	0.001	9.31E-09	1.18E-07	0.00E+00	0.13	0.000
601920	4132400	0.001	0.001	0.001	1.02E-08	1.29E-07	0.00E+00	0.14	0.000
601680	4132420	0.000	0.000	0.000	1.36E-09	1.73E-08	0.00E+00	0.02	0.000
601700	4132420	0.000	0.000	0.000	1.63E-09	2.07E-08	0.00E+00	0.02	0.000
601720	4132420	0.000	0.000	0.000	2.00E-09	2.53E-08	0.00E+00	0.03	0.000
601740	4132420	0.000	0.000	0.000	2.49E-09	3.16E-08	0.00E+00	0.03	0.000
601800	4132420	0.001	0.000	0.000	5.10E-09	6.47E-08	0.00E+00	0.07	0.000
601820	4132420	0.001	0.000	0.000	6.37E-09	8.07E-08	0.00E+00	0.09	0.000
601840	4132420	0.001	0.001	0.000	7.77E-09	9.84E-08	0.00E+00	0.11	0.000
601860	4132420	0.001	0.001	0.001	9.21E-09	1.17E-07	0.00E+00	0.13	0.000
601880	4132420	0.001	0.001	0.001	1.05E-08	1.33E-07	0.00E+00	0.14	0.000
601900	4132420	0.001	0.001	0.001	1.16E-08	1.47E-07	0.00E+00	0.16	0.000
601920	4132420	0.001	0.001	0.001	1.25E-08	1.59E-07	0.00E+00	0.17	0.000
601940	4132420	0.001	0.001	0.001	1.32E-08	1.67E-07	0.00E+00	0.18	0.000
601960	4132420	0.001	0.001	0.001	1.35E-08	1.71E-07	0.00E+00	0.18	0.000
601700	4132440	0.000	0.000	0.000	1.95E-09	2.47E-08	0.00E+00	0.03	0.000
601720	4132440	0.000	0.000	0.000	2.43E-09	3.08E-08	0.00E+00	0.03	0.000
601740	4132440	0.000	0.000	0.000	3.09E-09	3.92E-08	0.00E+00	0.04	0.000
601780	4132440	0.001	0.000	0.000	5.21E-09	6.61E-08	0.00E+00	0.07	0.000
601800	4132440	0.001	0.000	0.000	6.67E-09	8.45E-08	0.00E+00	0.09	0.000
601820	4132440	0.001	0.001	0.001	8.36E-09	1.06E-07	0.00E+00	0.11	0.000
601840	4132440	0.001	0.001	0.001	1.02E-08	1.29E-07	0.00E+00	0.14	0.000
601860	4132440	0.001	0.001	0.001	1.19E-08	1.51E-07	0.00E+00	0.16	0.000
601880	4132440	0.001	0.001	0.001	1.34E-08	1.69E-07	0.00E+00	0.18	0.000
601900	4132440	0.002	0.001	0.001	1.46E-08	1.85E-07	0.00E+00	0.20	0.000
601920	4132440	0.002	0.001	0.001	1.54E-08	1.95E-07	0.00E+00	0.21	0.000
601940	4132440	0.002	0.001	0.001	1.59E-08	2.01E-07	0.00E+00	0.22	0.000
601960	4132440	0.002	0.001	0.001	1.59E-08	2.01E-07	0.00E+00	0.22	0.000
601680	4132460	0.000	0.000	0.000	1.90E-09	2.41E-08	0.00E+00	0.03	0.000
601700	4132460	0.000	0.000	0.000	2.36E-09	2.99E-08	0.00E+00	0.03	0.000
601720	4132460	0.000	0.000	0.000	3.01E-09	3.81E-08	0.00E+00	0.04	0.000
601780	4132460	0.001	0.001	0.000	6.90E-09	8.74E-08	0.00E+00	0.09	0.000
601800	4132460	0.001	0.001	0.001	8.95E-09	1.13E-07	0.00E+00	0.12	0.000
601820	4132460	0.001	0.001	0.001	1.13E-08	1.43E-07	0.00E+00	0.15	0.000
601840	4132460	0.001	0.001	0.001	1.36E-08	1.72E-07	0.00E+00	0.19	0.000
601860	4132460	0.002	0.001	0.001	1.55E-08	1.97E-07	0.00E+00	0.21	0.000
601880	4132460	0.002	0.001	0.001	1.72E-08	2.17E-07	0.00E+00	0.23	0.000
601900	4132460	0.002	0.001	0.001	1.83E-08	2.32E-07	0.00E+00	0.25	0.000
601920	4132460	0.002	0.001	0.001	1.89E-08	2.39E-07	0.00E+00	0.26	0.000
601940	4132460	0.002	0.001	0.001	1.89E-08	2.40E-07	0.00E+00	0.26	0.000
601960	4132460	0.002	0.001	0.001	1.86E-08	2.35E-07	0.00E+00	0.25	0.000
601980	4132460	0.002	0.001	0.001	1.79E-08	2.27E-07	0.00E+00	0.24	0.000
601680	4132480	0.000	0.000	0.000	2.30E-09	2.92E-08	0.00E+00	0.03	0.000
601700	4132480	0.000	0.000	0.000	2.91E-09	3.69E-08	0.00E+00	0.04	0.000
601720	4132480	0.000	0.000	0.000	3.82E-09	4.84E-08	0.00E+00	0.05	0.000
601800	4132480	0.001	0.001	0.001	1.25E-08	1.58E-07	0.00E+00	0.17	0.000
601820	4132480	0.002	0.001	0.001	1.56E-08	1.98E-07	0.00E+00	0.21	0.000
601840	4132480	0.002	0.001	0.001	1.83E-08	2.32E-07	0.00E+00	0.25	0.000
601860	4132480	0.002	0.002	0.001	2.05E-08	2.60E-07	0.00E+00	0.28	0.000
601880	4132480	0.002	0.002	0.001	2.21E-08	2.80E-07	0.00E+00	0.30	0.000
601900	4132480	0.002	0.002	0.001	2.28E-08	2.90E-07	0.00E+00	0.31	0.000
601920	4132480	0.002	0.002	0.001	2.29E-08	2.90E-07	0.00E+00	0.31	0.000
601940	4132480	0.002	0.002	0.001	2.23E-08	2.83E-07	0.00E+00	0.30	0.000
601960	4132480	0.002	0.002	0.001	2.13E-08	2.70E-07	0.00E+00	0.29	0.000
601980	4132480	0.002	0.001	0.001	2.01E-08	2.54E-07	0.00E+00	0.27	0.000
602000	4132480	0.002	0.001	0.001	1.86E-08	2.36E-07	0.00E+00	0.25	0.000
601700	4132500	0.000	0.000	0.000	3.69E-09	4.67E-08	0.00E+00	0.05	0.000
601820	4132500	0.002	0.002	0.001	2.19E-08	2.77E-07	0.00E+00	0.30	0.000
601840	4132500	0.003	0.002	0.002	2.50E-08	3.17E-07	0.00E+00	0.34	0.001
601860	4132500	0.003	0.002	0.002	2.72E-08	3.44E-07	0.00E+00	0.37	0.001
601880	4132500	0.003	0.002	0.002	2.82E-08	3.57E-07	0.00E+00	0.39	0.001
601900	4132500	0.003	0.002	0.002	2.80E-08	3.55E-07	0.00E+00	0.38	0.001
601920	4132500	0.003	0.002	0.002	2.71E-08	3.43E-07	0.00E+00	0.37	0.001
601940	4132500	0.003	0.002	0.002	2.56E-08	3.25E-07	0.00E+00	0.35	0.001
601960	4132500	0.003	0.002	0.001	2.38E-08	3.02E-07	0.00E+00	0.33	0.001
601980	4132500	0.002	0.002	0.001	2.18E-08	2.76E-07	0.00E+00	0.30	0.000
602000	4132500	0.002	0.001	0.001	1.98E-08	2.51E-07	0.00E+00	0.27	0.000
602020	4132500	0.002	0.001	0.001	1.79E-08	2.27E-07	0.00E+00	0.24	0.000
601800	4132520	0.003	0.002	0.002	2.65E-08	3.36E-07	0.00E+00	0.36	0.001
601820	4132520	0.003	0.002	0.002	3.12E-08	3.96E-07	0.00E+00	0.43	0.001
601840	4132520	0.004	0.003	0.002	3.44E-08	4.35E-07	0.00E+00	0.47	0.001
601860	4132520	0.004	0.003	0.002	3.57E-08	4.52E-07	0.00E+00	0.49	0.001
601880	4132520	0.004	0.003	0.002	3.53E-08	4.47E-07	0.00E+00	0.48	0.001
601900	4132520	0.004	0.002	0.002	3.36E-08	4.26E-07	0.00E+00	0.46	0.001
601920	4132520	0.003	0.002	0.002	3.12E-08	3.96E-07	0.00E+00	0.43	0.001
601940	4132520	0.003	0.002	0.002	2.86E-08	3.62E-07	0.00E+00	0.39	0.001
601960	4132520	0.003	0.002	0.002	2.57E-08	3.26E-07	0.00E+00	0.35	0.001
601980	4132520	0.002	0.002	0.001	2.30E-08	2.91E-07	0.00E+00	0.31	0.000
602000	4132520	0.002	0.001	0.001	2.04E-08	2.59E-07	0.00E+00	0.28	0.000
602020	4132520	0.002	0.001	0.001	1.81E-08	2.29E-07	0.00E+00	0.25	0.000

All Receptors - Unmitigated Construction Annual Average $PM_{2.5}$ Concentration

				Days					Total Unmitigated $PM_{2.5}$ (tons)
			Start	6/1/2022	8/31/2022	8/31/2024			
			Stop	44803.00	8/30/2024				
				90	730				
Phase Name	Construction Year	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Exposure Days	Calendar Days	Onsite Offroad
FS-32 Construction	2022	6/1/2022	8/1/2022	62.00	0.00	0	62	62	1.54E-02
	2023	3/1/2023	12/31/2023	0.00	306.00	0	306	306	3.70E-02
	2024	1/1/2024	4/1/2024	0.00	92.00	0	92	92	8.67E-03

Phase Name	Construction Year	Start Date	End Date	Total Unmitigated $PM_{2.5}$ (g/s) CSTN
FS-32 Construction	2022	6/1/2022	8/1/2022	2.61E-03
	2023	3/1/2023	12/31/2023	1.27E-03
	2024	1/1/2024	4/1/2024	9.89E-04

	MAX	UTM X	UTM Y	
Annual Average $PM_{2.5}$ Concentration	0.20	601820	4132580	Potential Residence

Particulate Matter concentration, $C_{PM2.5}$ (ug/m^3)

		FS-8 Construction		
X (UTM)	Y (UTM	2022	2023	2024
601660	4132320	0.002	0.001	0.001
601680	4132320	0.002	0.001	0.001
601700	4132320	0.002	0.001	0.001
601720	4132320	0.002	0.001	0.001
601740	4132320	0.003	0.001	0.001
601760	4132320	0.003	0.001	0.001
601620	4132340	0.001	0.001	0.001
601640	4132340	0.001	0.001	0.001
601660	4132340	0.002	0.001	0.001
601680	4132340	0.002	0.001	0.001
601700	4132340	0.002	0.001	0.001
601720	4132340	0.003	0.001	0.001
601740	4132340	0.003	0.001	0.001
601760	4132340	0.003	0.002	0.001
601780	4132340	0.004	0.002	0.002
601800	4132340	0.005	0.002	0.002
601820	4132340	0.006	0.003	0.002
601620	4132360	0.001	0.001	0.001
601640	4132360	0.002	0.001	0.001
601660	4132360	0.002	0.001	0.001
601680	4132360	0.002	0.001	0.001
601700	4132360	0.002	0.001	0.001
601720	4132360	0.003	0.001	0.001
601740	4132360	0.003	0.002	0.001
601820	4132360	0.007	0.004	0.003
601840	4132360	0.009	0.004	0.003
601860	4132360	0.011	0.005	0.004
601880	4132360	0.012	0.006	0.005
601640	4132380	0.002	0.001	0.001
601660	4132380	0.002	0.001	0.001
601680	4132380	0.002	0.001	0.001
601700	4132380	0.003	0.001	0.001
601720	4132380	0.003	0.002	0.001
601840	4132380	0.011	0.005	0.004
601860	4132380	0.013	0.006	0.005
601880	4132380	0.016	0.008	0.006
601900	4132380	0.018	0.009	0.007
601660	4132400	0.002	0.001	0.001
601680	4132400	0.003	0.001	0.001
601700	4132400	0.003	0.002	0.001
601720	4132400	0.004	0.002	0.001
601840	4132400	0.014	0.007	0.005
601860	4132400	0.017	0.008	0.006
601880	4132400	0.020	0.010	0.007
601900	4132400	0.022	0.011	0.008
601920	4132400	0.024	0.012	0.009
601680	4132420	0.003	0.002	0.001
601700	4132420	0.004	0.002	0.001
601720	4132420	0.005	0.002	0.002
601740	4132420	0.006	0.003	0.002
601800	4132420	0.012	0.006	0.005
601820	4132420	0.015	0.007	0.006
601840	4132420	0.018	0.009	0.007
601860	4132420	0.022	0.011	0.008
601880	4132420	0.025	0.012	0.009
601900	4132420	0.027	0.013	0.010

Annual Average $PM_{2.5}$ Concentration

max	max year
1.51E-03	2022
1.69E-03	2022
1.92E-03	2022
2.21E-03	2022
2.57E-03	2022
3.02E-03	2022
1.33E-03	2022
1.49E-03	2022
1.67E-03	2022
1.89E-03	2022
2.16E-03	2022
2.51E-03	2022
2.95E-03	2022
3.50E-03	2022
4.19E-03	2022
5.05E-03	2022
6.12E-03	2022
1.47E-03	2022
1.65E-03	2022
1.86E-03	2022
2.13E-03	2022
2.46E-03	2022
2.88E-03	2022
3.42E-03	2022
7.41E-03	2022
8.94E-03	2022
1.06E-02	2022
1.24E-02	2022
1.84E-03	2022
2.09E-03	2022
2.41E-03	2022
2.82E-03	2022
3.35E-03	2022
1.11E-02	2022
1.33E-02	2022
1.55E-02	2022
1.77E-02	2022
2.38E-03	2022
2.77E-03	2022
3.27E-03	2022
3.93E-03	2022
1.41E-02	2022
1.68E-02	2022
1.95E-02	2022
2.19E-02	2022
2.39E-02	2022
3.20E-03	2022
3.84E-03	2022
4.69E-03	2022
5.85E-03	2022
1.20E-02	2022
1.49E-02	2022
1.82E-02	2022
2.16E-02	2022
2.46E-02	2022
2.73E-02	2022

Particulate Matter concentration, $C_{PM2.5}$ (ug/m^3)

		FS-8 Construction			Annual Average $PM_{2.5}$ Concentration	
X (UTM)	Y (UTM	2022	2023	2024	max	max year
601920	4132420	0.029	0.014	0.011	2.94E-02	2022
601940	4132420	0.031	0.015	0.012	3.09E-02	2022
601960	4132420	0.032	0.015	0.012	3.16E-02	2022
601700	4132440	0.005	0.002	0.002	4.57E-03	2022
601720	4132440	0.006	0.003	0.002	5.70E-03	2022
601740	4132440	0.007	0.004	0.003	7.26E-03	2022
601780	4132440	0.012	0.006	0.005	1.22E-02	2022
601800	4132440	0.016	0.008	0.006	1.57E-02	2022
601820	4132440	0.020	0.010	0.007	1.96E-02	2022
601840	4132440	0.024	0.012	0.009	2.40E-02	2022
601860	4132440	0.028	0.014	0.011	2.80E-02	2022
601880	4132440	0.031	0.015	0.012	3.14E-02	2022
601900	4132440	0.034	0.017	0.013	3.42E-02	2022
601920	4132440	0.036	0.018	0.014	3.62E-02	2022
601940	4132440	0.037	0.018	0.014	3.72E-02	2022
601960	4132440	0.037	0.018	0.014	3.73E-02	2022
601680	4132460	0.004	0.002	0.002	4.47E-03	2022
601700	4132460	0.006	0.003	0.002	5.53E-03	2022
601720	4132460	0.007	0.003	0.003	7.06E-03	2022
601780	4132460	0.016	0.008	0.006	1.62E-02	2022
601800	4132460	0.021	0.010	0.008	2.10E-02	2022
601820	4132460	0.027	0.013	0.010	2.65E-02	2022
601840	4132460	0.032	0.016	0.012	3.19E-02	2022
601860	4132460	0.036	0.018	0.014	3.65E-02	2022
601880	4132460	0.040	0.020	0.015	4.03E-02	2022
601900	4132460	0.043	0.021	0.016	4.29E-02	2022
601920	4132460	0.044	0.022	0.017	4.43E-02	2022
601940	4132460	0.044	0.022	0.017	4.45E-02	2022
601960	4132460	0.044	0.021	0.017	4.36E-02	2022
601980	4132460	0.042	0.020	0.016	4.21E-02	2022
601680	4132480	0.005	0.003	0.002	5.40E-03	2022
601700	4132480	0.007	0.003	0.003	6.83E-03	2022
601720	4132480	0.009	0.004	0.003	8.97E-03	2022
601800	4132480	0.029	0.014	0.011	2.93E-02	2022
601820	4132480	0.037	0.018	0.014	3.66E-02	2022
601840	4132480	0.043	0.021	0.016	4.30E-02	2022
601860	4132480	0.048	0.023	0.018	4.82E-02	2022
601880	4132480	0.052	0.025	0.020	5.18E-02	2022
601900	4132480	0.054	0.026	0.020	5.36E-02	2022
601920	4132480	0.054	0.026	0.020	5.37E-02	2022
601940	4132480	0.052	0.025	0.020	5.23E-02	2022
601960	4132480	0.050	0.024	0.019	5.00E-02	2022
601980	4132480	0.047	0.023	0.018	4.71E-02	2022
602000	4132480	0.044	0.021	0.017	4.38E-02	2022
601700	4132500	0.009	0.004	0.003	8.66E-03	2022
601820	4132500	0.051	0.025	0.019	5.13E-02	2022
601840	4132500	0.059	0.029	0.022	5.87E-02	2022
601860	4132500	0.064	0.031	0.024	6.38E-02	2022
601880	4132500	0.066	0.032	0.025	6.62E-02	2022
601900	4132500	0.066	0.032	0.025	6.58E-02	2022
601920	4132500	0.064	0.031	0.024	6.36E-02	2022
601940	4132500	0.060	0.029	0.023	6.01E-02	2022
601960	4132500	0.056	0.027	0.021	5.59E-02	2022
601980	4132500	0.051	0.025	0.019	5.12E-02	2022
602000	4132500	0.046	0.023	0.018	4.65E-02	2022
602020	4132500	0.042	0.020	0.016	4.20E-02	2022
601800	4132520	0.062	0.030	0.024	6.22E-02	2022
601820	4132520	0.073	0.036	0.028	7.33E-02	2022
601840	4132520	0.081	0.039	0.031	8.06E-02	2022
601860	4132520	0.084	0.041	0.032	8.37E-02	2022
601880	4132520	0.083	0.040	0.031	8.28E-02	2022
601900	4132520	0.079	0.038	0.030	7.90E-02	2022
601920	4132520	0.073	0.036	0.028	7.34E-02	2022
601940	4132520	0.067	0.033	0.025	6.70E-02	2022
601960	4132520	0.060	0.029	0.023	6.04E-02	2022
601980	4132520	0.054	0.026	0.020	5.40E-02	2022
602000	4132520	0.048	0.023	0.018	4.79E-02	2022
602020	4132520	0.042	0.021	0.016	4.24E-02	2022
601780	4132540	0.076	0.037	0.029	7.65E-02	2022
601800	4132540	0.094	0.046	0.036	9.38E-02	2022
601820	4132540	0.105	0.051	0.040	1.05E-01	2022
601840	4132540	0.109	0.053	0.042	1.09E-01	2022
601860	4132540	0.107	0.052	0.041	1.07E-01	2022
601880	4132540	0.100	0.049	0.038	1.00E-01	2022
601900	4132540	0.092	0.045	0.035	9.15E-02	2022
601920	4132540	0.082	0.040	0.031	8.17E-02	2022
601940	4132540	0.072	0.035	0.027	7.19E-02	2022
601960	4132540	0.063	0.031	0.024	6.28E-02	2022
601980	4132540	0.055	0.027	0.021	5.46E-02	2022
602000	4132540	0.047	0.023	0.018	4.74E-02	2022
602020	4132540	0.041	0.020	0.016	4.11E-02	2022
601780	4132560	0.124	0.061	0.047	1.24E-01	2022
601800	4132560	0.143	0.069	0.054	1.43E-01	2022
601820	4132560	0.148	0.072	0.056	1.48E-01	2022

All Receptors - Mitigated Construction Annual Average $PM_{2.5}$ Concentration

				Days					Total Mitigated $PM_{2.5}$ (tons)
			Start	6/1/2022	8/31/2022	8/31/2024			
			Stop	44803.00	8/30/2024				
				90	730				
Phase Name	Construction Year	Start Date	End Date	3rd Trimester	Age 0<2	Age 2<16	Exposure Days	Calendar Days	Onsite Offroad
FS-32 Construction	2022	6/1/2022	8/1/2022	62.00	0.00	0	62	62	7.10E-04
	2023	3/1/2023	12/31/2023	0.00	306.00	0	306	306	2.37E-03
	2024	1/1/2024	4/1/2024	0.00	92.00	0	92	92	6.10E-04

Phase Name	Construction Year	Start Date	End Date	Total Mitigated $PM_{2.5}$ (g/s) CSTN
FS-32 Construction	2022	6/1/2022	8/1/2022	1.20E-04
	2023	3/1/2023	12/31/2023	8.13E-05
	2024	1/1/2024	4/1/2024	6.96E-05

	MAX	UTM X	UTM Y	
Annual Average $PM_{2.5}$ Concentration	0.01	601820	4132580	Potential Residence

Particulate Matter concentration, $C_{PM2.5}$ (ug/m^3)

		FS-8 Construction		
X (UTM)	Y (UTM	2022	2023	2024
601660	4132320	0.000	0.000	0.000
601680	4132320	0.000	0.000	0.000
601700	4132320	0.000	0.000	0.000
601720	4132320	0.000	0.000	0.000
601740	4132320	0.000	0.000	0.000
601760	4132320	0.000	0.000	0.000
601620	4132340	0.000	0.000	0.000
601640	4132340	0.000	0.000	0.000
601660	4132340	0.000	0.000	0.000
601680	4132340	0.000	0.000	0.000
601700	4132340	0.000	0.000	0.000
601720	4132340	0.000	0.000	0.000
601740	4132340	0.000	0.000	0.000
601760	4132340	0.000	0.000	0.000
601780	4132340	0.000	0.000	0.000
601800	4132340	0.000	0.000	0.000
601820	4132340	0.000	0.000	0.000
601620	4132360	0.000	0.000	0.000
601640	4132360	0.000	0.000	0.000
601660	4132360	0.000	0.000	0.000
601680	4132360	0.000	0.000	0.000
601700	4132360	0.000	0.000	0.000
601720	4132360	0.000	0.000	0.000
601740	4132360	0.000	0.000	0.000
601820	4132360	0.000	0.000	0.000
601840	4132360	0.000	0.000	0.000
601860	4132360	0.000	0.000	0.000
601880	4132360	0.001	0.000	0.000
601640	4132380	0.000	0.000	0.000
601660	4132380	0.000	0.000	0.000
601680	4132380	0.000	0.000	0.000
601700	4132380	0.000	0.000	0.000
601720	4132380	0.000	0.000	0.000
601840	4132380	0.001	0.000	0.000
601860	4132380	0.001	0.000	0.000
601880	4132380	0.001	0.000	0.000
601900	4132380	0.001	0.001	0.000
601660	4132400	0.000	0.000	0.000
601680	4132400	0.000	0.000	0.000
601700	4132400	0.000	0.000	0.000
601720	4132400	0.000	0.000	0.000
601840	4132400	0.001	0.000	0.000
601860	4132400	0.001	0.001	0.000
601880	4132400	0.001	0.001	0.001
601900	4132400	0.001	0.001	0.001
601920	4132400	0.001	0.001	0.001
601680	4132420	0.000	0.000	0.000
601700	4132420	0.000	0.000	0.000
601720	4132420	0.000	0.000	0.000
601740	4132420	0.000	0.000	0.000
601800	4132420	0.001	0.000	0.000
601820	4132420	0.001	0.000	0.000
601840	4132420	0.001	0.001	0.000
601860	4132420	0.001	0.001	0.001
601880	4132420	0.001	0.001	0.001
601900	4132420	0.001	0.001	0.001

Annual Average $PM_{2.5}$ Concentration

max	max year
6.95E-05	2022
7.81E-05	2022
8.84E-05	2022
1.02E-04	2022
1.19E-04	2022
1.39E-04	2022
6.13E-05	2022
6.85E-05	2022
7.69E-05	2022
8.72E-05	2022
9.96E-05	2022
1.16E-04	2022
1.36E-04	2022
1.61E-04	2022
1.93E-04	2022
2.33E-04	2022
2.82E-04	2022
6.76E-05	2022
7.59E-05	2022
8.59E-05	2022
9.80E-05	2022
1.13E-04	2022
1.33E-04	2022
1.57E-04	2022
3.42E-04	2022
4.12E-04	2022
4.91E-04	2022
5.74E-04	2022
8.48E-05	2022
9.65E-05	2022
1.11E-04	2022
1.30E-04	2022
1.54E-04	2022
5.13E-04	2022
6.13E-04	2022
7.16E-04	2022
8.14E-04	2022
1.10E-04	2022
1.28E-04	2022
1.51E-04	2022
1.81E-04	2022
6.52E-04	2022
7.76E-04	2022
9.00E-04	2022
1.01E-03	2022
1.10E-03	2022
1.48E-04	2022
1.77E-04	2022
2.16E-04	2022
2.70E-04	2022
5.52E-04	2022
6.89E-04	2022
8.40E-04	2022
9.96E-04	2022
1.14E-03	2022
1.26E-03	2022

Particulate Matter concentration, $C_{PM2.5}$ (ug/m^3)

		FS-8 Construction		
X (UTM)	Y (UTM	2022	2023	2024
601920	4132420	0.001	0.001	0.001
601940	4132420	0.001	0.001	0.001
601960	4132420	0.001	0.001	0.001
601700	4132440	0.000	0.000	0.000
601720	4132440	0.000	0.000	0.000
601740	4132440	0.000	0.000	0.000
601780	4132440	0.001	0.000	0.000
601800	4132440	0.001	0.000	0.000
601820	4132440	0.001	0.001	0.001
601840	4132440	0.001	0.001	0.001
601860	4132440	0.001	0.001	0.001
601880	4132440	0.001	0.001	0.001
601900	4132440	0.002	0.001	0.001
601920	4132440	0.002	0.001	0.001
601940	4132440	0.002	0.001	0.001
601960	4132440	0.002	0.001	0.001
601680	4132460	0.000	0.000	0.000
601700	4132460	0.000	0.000	0.000
601720	4132460	0.000	0.000	0.000
601780	4132460	0.001	0.001	0.000
601800	4132460	0.001	0.001	0.001
601820	4132460	0.001	0.001	0.001
601840	4132460	0.001	0.001	0.001
601860	4132460	0.002	0.001	0.001
601880	4132460	0.002	0.001	0.001
601900	4132460	0.002	0.001	0.001
601920	4132460	0.002	0.001	0.001
601940	4132460	0.002	0.001	0.001
601960	4132460	0.002	0.001	0.001
601980	4132460	0.002	0.001	0.001
601680	4132480	0.000	0.000	0.000
601700	4132480	0.000	0.000	0.000
601720	4132480	0.000	0.000	0.000
601800	4132480	0.001	0.001	0.001
601820	4132480	0.002	0.001	0.001
601840	4132480	0.002	0.001	0.001
601860	4132480	0.002	0.002	0.001
601880	4132480	0.002	0.002	0.001
601900	4132480	0.002	0.002	0.001
601920	4132480	0.002	0.002	0.001
601940	4132480	0.002	0.002	0.001
601960	4132480	0.002	0.002	0.001
601980	4132480	0.002	0.001	0.001
602000	4132480	0.002	0.001	0.001
601700	4132500	0.000	0.000	0.000
601820	4132500	0.002	0.002	0.001
601840	4132500	0.003	0.002	0.002
601860	4132500	0.003	0.002	0.002
601880	4132500	0.003	0.002	0.002
601900	4132500	0.003	0.002	0.002
601920	4132500	0.003	0.002	0.002
601940	4132500	0.003	0.002	0.002
601960	4132500	0.003	0.002	0.001
601980	4132500	0.002	0.002	0.001
602000	4132500	0.002	0.001	0.001
602020	4132500	0.002	0.001	0.001
601800	4132520	0.003	0.002	0.002
601820	4132520	0.003	0.002	0.002
601840	4132520	0.004	0.003	0.002
601860	4132520	0.004	0.003	0.002
601880	4132520	0.004	0.003	0.002
601900	4132520	0.004	0.002	0.002
601920	4132520	0.003	0.002	0.002
601940	4132520	0.003	0.002	0.002
601960	4132520	0.003	0.002	0.002
601980	4132520	0.002	0.002	0.001
602000	4132520	0.002	0.001	0.001
602020	4132520	0.002	0.001	0.001
601780	4132540	0.004	0.002	0.002
601800	4132540	0.004	0.003	0.003
601820	4132540	0.005	0.003	0.003
601840	4132540	0.005	0.003	0.003
601860	4132540	0.005	0.003	0.003
601880	4132540	0.005	0.003	0.003
601900	4132540	0.004	0.003	0.002
601920	4132540	0.004	0.003	0.002
601940	4132540	0.003	0.002	0.002
601960	4132540	0.003	0.002	0.002
601980	4132540	0.003	0.002	0.001
602000	4132540	0.002	0.001	0.001
602020	4132540	0.002	0.001	0.001
601780	4132560	0.006	0.004	0.003
601800	4132560	0.007	0.004	0.004
601820	4132560	0.007	0.005	0.004

Annual Average $PM_{2.5}$ Concentration

max	max year
1.35E-03	2022
1.42E-03	2022
1.46E-03	2022
2.11E-04	2022
2.63E-04	2022
3.35E-04	2022
5.64E-04	2022
7.22E-04	2022
9.05E-04	2022
1.10E-03	2022
1.29E-03	2022
1.45E-03	2022
1.58E-03	2022
1.67E-03	2022
1.72E-03	2022
1.72E-03	2022
2.06E-04	2022
2.55E-04	2022
3.26E-04	2022
7.47E-04	2022
9.69E-04	2022
1.22E-03	2022
1.47E-03	2022
1.68E-03	2022
1.86E-03	2022
1.98E-03	2022
2.04E-03	2022
2.05E-03	2022
2.01E-03	2022
1.94E-03	2022
2.49E-04	2022
3.15E-04	2022
4.14E-04	2022
1.35E-03	2022
1.69E-03	2022
1.98E-03	2022
2.22E-03	2022
2.39E-03	2022
2.47E-03	2022
2.47E-03	2022
2.41E-03	2022
2.31E-03	2022
2.17E-03	2022
2.02E-03	2022
3.99E-04	2022
2.37E-03	2022
2.71E-03	2022
2.94E-03	2022
3.05E-03	2022
3.04E-03	2022
2.93E-03	2022
2.77E-03	2022
2.58E-03	2022
2.36E-03	2022
2.14E-03	2022
1.94E-03	2022
2.87E-03	2022
3.38E-03	2022
3.72E-03	2022
3.86E-03	2022
3.82E-03	2022
3.64E-03	2022
3.38E-03	2022
3.09E-03	2022
2.78E-03	2022
2.49E-03	2022
2.21E-03	2022
1.95E-03	2022
3.53E-03	2022
4.32E-03	2022
4.85E-03	2022
5.04E-03	2022
4.94E-03	2022
4.63E-03	2022
4.22E-03	2022
3.77E-03	2022
3.32E-03	2022
2.90E-03	2022
2.52E-03	2022
2.18E-03	2022
1.89E-03	2022
5.74E-03	2022
6.57E-03	2022
6.84E-03	2022

601660	4132320	0.57797	31.65	31.65	1.5	PERIOD	CSTN		43824
601680	4132320	0.64989	31.84	31.84	1.5	PERIOD	CSTN		43824
601700	4132320	0.73523	32.32	32.32	1.5	PERIOD	CSTN		43824
601720	4132320	0.84571	32.22	32.22	1.5	PERIOD	CSTN		43824
601740	4132320	0.98732	31.84	31.84	1.5	PERIOD	CSTN		43824
601760	4132320	1.15618	32.25	32.25	1.5	PERIOD	CSTN		43824
601620	4132340	0.50994	31.57	31.57	1.5	PERIOD	CSTN		43824
601640	4132340	0.56995	31.74	31.74	1.5	PERIOD	CSTN		43824
601660	4132340	0.6395	32.07	32.07	1.5	PERIOD	CSTN		43824
601680	4132340	0.7251	32.09	32.09	1.5	PERIOD	CSTN		43824
601700	4132340	0.82803	32.4	32.4	1.5	PERIOD	CSTN		43824
601720	4132340	0.96154	32.29	32.29	1.5	PERIOD	CSTN		43824
601740	4132340	1.13208	32.13	32.13	1.5	PERIOD	CSTN		43824
601760	4132340	1.3412	32.49	32.49	1.5	PERIOD	CSTN		43824
601780	4132340	1.60555	32.7	32.7	1.5	PERIOD	CSTN		43824
601800	4132340	1.93539	32.7	32.7	1.5	PERIOD	CSTN		43824
601820	4132340	2.34696	32.17	32.17	1.5	PERIOD	CSTN		43824
601620	4132360	0.56204	31.86	31.86	1.5	PERIOD	CSTN		43824
601640	4132360	0.63096	32.11	32.11	1.5	PERIOD	CSTN		43824
601660	4132360	0.71405	32.2	32.2	1.5	PERIOD	CSTN		43824
601680	4132360	0.81495	32.3	32.3	1.5	PERIOD	CSTN		43824
601700	4132360	0.94349	32.15	32.15	1.5	PERIOD	CSTN		43824
601720	4132360	1.10271	32.41	32.41	1.5	PERIOD	CSTN		43824
601740	4132360	1.3098	32.53	32.53	1.5	PERIOD	CSTN		43824
601820	4132360	2.84175	32.66	32.66	1.5	PERIOD	CSTN		43824
601840	4132360	3.42809	32.63	32.63	1.5	PERIOD	CSTN		43824
601860	4132360	4.08071	32.53	32.53	1.5	PERIOD	CSTN		43824
601880	4132360	4.77166	32.39	32.39	1.5	PERIOD	CSTN		43824
601640	4132380	0.70534	32.16	32.16	1.5	PERIOD	CSTN		43824
601660	4132380	0.80279	32.35	32.35	1.5	PERIOD	CSTN		43824
601680	4132380	0.92597	32.24	32.24	1.5	PERIOD	CSTN		43824
601700	4132380	1.08207	32.16	32.16	1.5	PERIOD	CSTN		43824
601720	4132380	1.28344	32.18	32.18	1.5	PERIOD	CSTN		43824
601840	4132380	4.26502	32.66	32.66	1.5	PERIOD	CSTN		43824
601860	4132380	5.09761	32.32	32.32	1.5	PERIOD	CSTN		43824
601880	4132380	5.9529	32	32	1.5	PERIOD	CSTN		43824
601900	4132380	6.77112	31.83	31.83	1.5	PERIOD	CSTN		43824
601660	4132400	0.91184	32.31	32.31	1.5	PERIOD	CSTN		43824
601680	4132400	1.06097	32.25	32.25	1.5	PERIOD	CSTN		43824
601700	4132400	1.25334	32.22	32.22	1.5	PERIOD	CSTN		43824
601720	4132400	1.50797	32.2	32.2	1.5	PERIOD	CSTN		43824
601840	4132400	5.42089	32.33	32.33	1.5	PERIOD	CSTN		43824
601860	4132400	6.45575	32.12	32.12	1.5	PERIOD	CSTN		43824
601880	4132400	7.48495	31.85	31.85	1.5	PERIOD	CSTN		43824
601900	4132400	8.38178	32.17	32.17	1.5	PERIOD	CSTN		43824
601920	4132400	9.15923	32.34	32.34	1.5	PERIOD	CSTN		43824
601680	4132420	1.22792	32.29	32.29	1.5	PERIOD	CSTN		43824
601700	4132420	1.47051	32.22	32.22	1.5	PERIOD	CSTN		43824
601720	4132420	1.79799	32.2	32.2	1.5	PERIOD	CSTN		43824
601740	4132420	2.24474	32.18	32.18	1.5	PERIOD	CSTN		43824
601800	4132420	4.59423	32.3	32.3	1.5	PERIOD	CSTN		43824

601820	4132420	5.73023	32.35	32.35	1.5 PERIOD	CSTN	43824
601840	4132420	6.9895	32.22	32.22	1.5 PERIOD	CSTN	43824
601860	4132420	8.28681	31.93	31.93	1.5 PERIOD	CSTN	43824
601880	4132420	9.45054	32.15	32.15	1.5 PERIOD	CSTN	43824
601900	4132420	10.4504	32.38	32.38	1.5 PERIOD	CSTN	43824
601920	4132420	11.26156	32.36	32.36	1.5 PERIOD	CSTN	43824
601940	4132420	11.84965	32.14	32.14	1.5 PERIOD	CSTN	43824
601960	4132420	12.12769	32.52	32.52	1.5 PERIOD	CSTN	43824
601700	4132440	1.75109	32.18	32.18	1.5 PERIOD	CSTN	43824
601720	4132440	2.18426	32.1	32.1	1.5 PERIOD	CSTN	43824
601740	4132440	2.78412	32.15	32.15	1.5 PERIOD	CSTN	43824
601780	4132440	4.69135	32.13	32.13	1.5 PERIOD	CSTN	43824
601800	4132440	6.00236	32.39	32.39	1.5 PERIOD	CSTN	43824
601820	4132440	7.52464	32.42	32.42	1.5 PERIOD	CSTN	43824
601840	4132440	9.18432	32.02	32.02	1.5 PERIOD	CSTN	43824
601860	4132440	10.72027	32.11	32.11	1.5 PERIOD	CSTN	43824
601880	4132440	12.034	32.39	32.39	1.5 PERIOD	CSTN	43824
601900	4132440	13.109	32.34	32.34	1.5 PERIOD	CSTN	43824
601920	4132440	13.86461	32.18	32.18	1.5 PERIOD	CSTN	43824
601940	4132440	14.27649	32.04	32.04	1.5 PERIOD	CSTN	43824
601960	4132440	14.28494	32.66	32.66	1.5 PERIOD	CSTN	43824
601680	4132460	1.71453	32.16	32.16	1.5 PERIOD	CSTN	43824
601700	4132460	2.12082	32.15	32.15	1.5 PERIOD	CSTN	43824
601720	4132460	2.70769	32.05	32.05	1.5 PERIOD	CSTN	43824
601780	4132460	6.20899	32.43	32.43	1.5 PERIOD	CSTN	43824
601800	4132460	8.05867	32.49	32.49	1.5 PERIOD	CSTN	43824
601820	4132460	10.17554	32.1	32.1	1.5 PERIOD	CSTN	43824
601840	4132460	12.22668	32.09	32.09	1.5 PERIOD	CSTN	43824
601860	4132460	13.98982	32.43	32.43	1.5 PERIOD	CSTN	43824
601880	4132460	15.44216	32.39	32.39	1.5 PERIOD	CSTN	43824
601900	4132460	16.45238	32.21	32.21	1.5 PERIOD	CSTN	43824
601920	4132460	16.97468	32.06	32.06	1.5 PERIOD	CSTN	43824
601940	4132460	17.04997	31.96	31.96	1.5 PERIOD	CSTN	43824
601960	4132460	16.71054	32.25	32.25	1.5 PERIOD	CSTN	43824
601980	4132460	16.12357	32.36	32.36	1.5 PERIOD	CSTN	43824
601680	4132480	2.07245	32.21	32.21	1.5 PERIOD	CSTN	43824
601700	4132480	2.61806	32.22	32.22	1.5 PERIOD	CSTN	43824
601720	4132480	3.44047	32.07	32.07	1.5 PERIOD	CSTN	43824
601800	4132480	11.24169	32.16	32.16	1.5 PERIOD	CSTN	43824
601820	4132480	14.04218	31.96	31.96	1.5 PERIOD	CSTN	43824
601840	4132480	16.47988	32.32	32.32	1.5 PERIOD	CSTN	43824
601860	4132480	18.48362	32.35	32.35	1.5 PERIOD	CSTN	43824
601880	4132480	19.86935	32.16	32.16	1.5 PERIOD	CSTN	43824
601900	4132480	20.56364	31.9	31.9	1.5 PERIOD	CSTN	43824
601920	4132480	20.57505	31.87	31.87	1.5 PERIOD	CSTN	43824
601940	4132480	20.06547	31.92	31.92	1.5 PERIOD	CSTN	43824
601960	4132480	19.18104	32.02	32.02	1.5 PERIOD	CSTN	43824
601980	4132480	18.05396	32.15	32.15	1.5 PERIOD	CSTN	43824
602000	4132480	16.78104	32.4	32.4	1.5 PERIOD	CSTN	43824
601700	4132500	3.31922	32.24	32.24	1.5 PERIOD	CSTN	43824
601820	4132500	19.68182	32.15	32.15	1.5 PERIOD	CSTN	43824
601840	4132500	22.49917	32.38	32.38	1.5 PERIOD	CSTN	43824
601860	4132500	24.46009	32.2	32.2	1.5 PERIOD	CSTN	43824
601880	4132500	25.36524	31.98	31.98	1.5 PERIOD	CSTN	43824
601900	4132500	25.24701	32.04	32.04	1.5 PERIOD	CSTN	43824
601920	4132500	24.39548	32.13	32.13	1.5 PERIOD	CSTN	43824
601940	4132500	23.05709	32.17	32.17	1.5 PERIOD	CSTN	43824
601960	4132500	21.41587	32.26	32.26	1.5 PERIOD	CSTN	43824
601980	4132500	19.63429	32.41	32.41	1.5 PERIOD	CSTN	43824

X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM HRS	NET ID
601660	4132320	0.76285	31.65	31.65	1.5	PERIOD	EDG		43824
601680	4132320	0.83553	31.84	31.84	1.5	PERIOD	EDG		43824
601700	4132320	0.9107	32.32	32.32	1.5	PERIOD	EDG		43824
601720	4132320	1.01169	32.22	32.22	1.5	PERIOD	EDG		43824
601740	4132320	1.13157	31.84	31.84	1.5	PERIOD	EDG		43824
601760	4132320	1.27096	32.25	32.25	1.5	PERIOD	EDG		43824
601620	4132340	0.69693	31.57	31.57	1.5	PERIOD	EDG		43824
601640	4132340	0.75528	31.74	31.74	1.5	PERIOD	EDG		43824
601660	4132340	0.81543	32.07	32.07	1.5	PERIOD	EDG		43824
601680	4132340	0.90277	32.09	32.09	1.5	PERIOD	EDG		43824
601700	4132340	0.99406	32.4	32.4	1.5	PERIOD	EDG		43824
601720	4132340	1.12474	32.29	32.29	1.5	PERIOD	EDG		43824
601740	4132340	1.2591	32.13	32.13	1.5	PERIOD	EDG		43824
601760	4132340	1.4163	32.49	32.49	1.5	PERIOD	EDG		43824
601780	4132340	1.59372	32.7	32.7	1.5	PERIOD	EDG		43824
601800	4132340	1.80343	32.7	32.7	1.5	PERIOD	EDG		43824
601820	4132340	2.05392	32.17	32.17	1.5	PERIOD	EDG		43824
601620	4132360	0.74251	31.86	31.86	1.5	PERIOD	EDG		43824
601640	4132360	0.80797	32.11	32.11	1.5	PERIOD	EDG		43824
601660	4132360	0.88659	32.2	32.2	1.5	PERIOD	EDG		43824
601680	4132360	0.99478	32.3	32.3	1.5	PERIOD	EDG		43824
601700	4132360	1.11772	32.15	32.15	1.5	PERIOD	EDG		43824
601720	4132360	1.24276	32.41	32.41	1.5	PERIOD	EDG		43824
601740	4132360	1.41358	32.53	32.53	1.5	PERIOD	EDG		43824
601820	4132360	2.26982	32.66	32.66	1.5	PERIOD	EDG		43824
601840	4132360	2.39076	32.63	32.63	1.5	PERIOD	EDG		43824
601860	4132360	2.49656	32.53	32.53	1.5	PERIOD	EDG		43824
601880	4132360	2.664	32.39	32.39	1.5	PERIOD	EDG		43824
601640	4132380	0.86674	32.16	32.16	1.5	PERIOD	EDG		43824
601660	4132380	0.96718	32.35	32.35	1.5	PERIOD	EDG		43824
601680	4132380	1.08939	32.24	32.24	1.5	PERIOD	EDG		43824
601700	4132380	1.23623	32.16	32.16	1.5	PERIOD	EDG		43824
601720	4132380	1.39462	32.18	32.18	1.5	PERIOD	EDG		43824
601840	4132380	2.61287	32.66	32.66	1.5	PERIOD	EDG		43824
601860	4132380	2.68983	32.32	32.32	1.5	PERIOD	EDG		43824
601880	4132380	2.97823	32	32	1.5	PERIOD	EDG		43824
601900	4132380	3.30756	31.83	31.83	1.5	PERIOD	EDG		43824
601660	4132400	1.06023	32.31	32.31	1.5	PERIOD	EDG		43824
601680	4132400	1.2007	32.25	32.25	1.5	PERIOD	EDG		43824
601700	4132400	1.36739	32.22	32.22	1.5	PERIOD	EDG		43824
601720	4132400	1.55702	32.2	32.2	1.5	PERIOD	EDG		43824
601840	4132400	2.83147	32.33	32.33	1.5	PERIOD	EDG		43824
601860	4132400	3.00244	32.12	32.12	1.5	PERIOD	EDG		43824
601880	4132400	3.33794	31.85	31.85	1.5	PERIOD	EDG		43824
601900	4132400	3.69208	32.17	32.17	1.5	PERIOD	EDG		43824
601920	4132400	4.07112	32.34	32.34	1.5	PERIOD	EDG		43824
601680	4132420	1.33052	32.29	32.29	1.5	PERIOD	EDG		43824
601700	4132420	1.53653	32.22	32.22	1.5	PERIOD	EDG		43824
601720	4132420	1.76943	32.2	32.2	1.5	PERIOD	EDG		43824
601740	4132420	2.08015	32.18	32.18	1.5	PERIOD	EDG		43824
601800	4132420	2.96651	32.3	32.3	1.5	PERIOD	EDG		43824

601820	4132420	3.01975	32.35	32.35	1.5	PERIOD	EDG	43824
601840	4132420	3.10168	32.22	32.22	1.5	PERIOD	EDG	43824
601860	4132420	3.37387	31.93	31.93	1.5	PERIOD	EDG	43824
601880	4132420	3.75094	32.15	32.15	1.5	PERIOD	EDG	43824
601900	4132420	4.18152	32.38	32.38	1.5	PERIOD	EDG	43824
601920	4132420	4.61017	32.36	32.36	1.5	PERIOD	EDG	43824
601940	4132420	4.98987	32.14	32.14	1.5	PERIOD	EDG	43824
601960	4132420	5.23739	32.52	32.52	1.5	PERIOD	EDG	43824
601700	4132440	1.72328	32.18	32.18	1.5	PERIOD	EDG	43824
601720	4132440	2.01892	32.1	32.1	1.5	PERIOD	EDG	43824
601740	4132440	2.39206	32.15	32.15	1.5	PERIOD	EDG	43824
601780	4132440	3.1677	32.13	32.13	1.5	PERIOD	EDG	43824
601800	4132440	3.28584	32.39	32.39	1.5	PERIOD	EDG	43824
601820	4132440	3.30281	32.42	32.42	1.5	PERIOD	EDG	43824
601840	4132440	3.43089	32.02	32.02	1.5	PERIOD	EDG	43824
601860	4132440	3.81612	32.11	32.11	1.5	PERIOD	EDG	43824
601880	4132440	4.28896	32.39	32.39	1.5	PERIOD	EDG	43824
601900	4132440	4.80227	32.34	32.34	1.5	PERIOD	EDG	43824
601920	4132440	5.26248	32.18	32.18	1.5	PERIOD	EDG	43824
601940	4132440	5.62681	32.04	32.04	1.5	PERIOD	EDG	43824
601960	4132440	5.8215	32.66	32.66	1.5	PERIOD	EDG	43824
601680	4132460	1.63721	32.16	32.16	1.5	PERIOD	EDG	43824
601700	4132460	1.95159	32.15	32.15	1.5	PERIOD	EDG	43824
601720	4132460	2.31972	32.05	32.05	1.5	PERIOD	EDG	43824
601780	4132460	3.55106	32.43	32.43	1.5	PERIOD	EDG	43824
601800	4132460	3.57084	32.49	32.49	1.5	PERIOD	EDG	43824
601820	4132460	3.59013	32.1	32.1	1.5	PERIOD	EDG	43824
601840	4132460	3.90185	32.09	32.09	1.5	PERIOD	EDG	43824
601860	4132460	4.39781	32.43	32.43	1.5	PERIOD	EDG	43824
601880	4132460	4.99464	32.39	32.39	1.5	PERIOD	EDG	43824
601900	4132460	5.56111	32.21	32.21	1.5	PERIOD	EDG	43824
601920	4132460	6.01677	32.06	32.06	1.5	PERIOD	EDG	43824
601940	4132460	6.3415	31.96	31.96	1.5	PERIOD	EDG	43824
601960	4132460	6.5048	32.25	32.25	1.5	PERIOD	EDG	43824
601980	4132460	6.57811	32.36	32.36	1.5	PERIOD	EDG	43824
601680	4132480	1.82172	32.21	32.21	1.5	PERIOD	EDG	43824
601700	4132480	2.22688	32.22	32.22	1.5	PERIOD	EDG	43824
601720	4132480	2.6992	32.07	32.07	1.5	PERIOD	EDG	43824
601800	4132480	3.9402	32.16	32.16	1.5	PERIOD	EDG	43824
601820	4132480	4.02763	31.96	31.96	1.5	PERIOD	EDG	43824
601840	4132480	4.53267	32.32	32.32	1.5	PERIOD	EDG	43824
601860	4132480	5.20354	32.35	32.35	1.5	PERIOD	EDG	43824
601880	4132480	5.89721	32.16	32.16	1.5	PERIOD	EDG	43824
601900	4132480	6.48039	31.9	31.9	1.5	PERIOD	EDG	43824
601920	4132480	6.88389	31.87	31.87	1.5	PERIOD	EDG	43824
601940	4132480	7.11798	31.92	31.92	1.5	PERIOD	EDG	43824
601960	4132480	7.20451	32.02	32.02	1.5	PERIOD	EDG	43824
601980	4132480	7.1706	32.15	32.15	1.5	PERIOD	EDG	43824
602000	4132480	7.0332	32.4	32.4	1.5	PERIOD	EDG	43824
601700	4132500	2.53805	32.24	32.24	1.5	PERIOD	EDG	43824
601820	4132500	4.71192	32.15	32.15	1.5	PERIOD	EDG	43824
601840	4132500	5.43471	32.38	32.38	1.5	PERIOD	EDG	43824
601860	4132500	6.27112	32.2	32.2	1.5	PERIOD	EDG	43824
601880	4132500	7.00309	31.98	31.98	1.5	PERIOD	EDG	43824
601900	4132500	7.51042	32.04	32.04	1.5	PERIOD	EDG	43824
601920	4132500	7.79612	32.13	32.13	1.5	PERIOD	EDG	43824
601940	4132500	7.89543	32.17	32.17	1.5	PERIOD	EDG	43824
601960	4132500	7.83774	32.26	32.26	1.5	PERIOD	EDG	43824
601980	4132500	7.65891	32.41	32.41	1.5	PERIOD	EDG	43824

Appendix B
Cultural Resources Technical Memo

ESA

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memorandum

date	July 7, 2022
to	City of San José
cc	
from	Ashleigh Sims, M.A., RPA, ESA Cultural Resources Group
subject	Cultural Resources Memorandum for the Fire Station No. 32 at 1138 Olinder Court, San José

Project Description

This memorandum provides the cultural resources findings of a records search, historic aerial and map review, and geoarchaeological assessment completed for the Fire Station No. 32 at 1138 Olinder Court in the City of San José, Santa Clara County. The City of San José is reviewing the construction of a new fire station building at 1138 Olinder Court. The Project Area is an approximately 1.1-acre site located at the northeast corner of Olinder Court and Felipe Avenue in the Ferrari Pinoche neighborhood of San José (**Figure 1**, **Figure 2**). The proposed improvements consist of the construction of a new fire station building with concrete and asphalt pavement, hardscape areas, and underground utilities to support the fire station. The Project would also result in the removal of an existing building and potentially some of the existing trees that reside on the current site.

Project Area

For this study, the *Project Area* is defined as the maximum extent, both horizontally and vertically, of both direct and indirect potential impacts resulting from the Project. Specifically, the Project Area encompasses the Project footprint, including areas of new construction and operations-related activities (e.g., construction staging areas) associated with the Project. The vertical extent of the Project Area consists of the maximum depth of ground disturbance proposed by the Project and includes the entire 1.1-acre (48,720 square foot) site. The depth of ground disturbance for the fire stations' footings and utility connections are anticipated to be up to 8 feet. The Project Area are depicted in **Figure 3**.

Records Search

ESA conducted a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on February 8, 2022 (File No. 21-1278). The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or adjacent to the Project Area; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the

distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources. The records search consisted of an examination of the following documents:

- NWIC digitized base maps (USGS San Jose East, CA 7.5-minute topographic map), to identify recorded archaeological sites and studies within a 0.25-mile radius of the Project Area.
- NWIC digitized base maps (USGS San Jose East, CA 7.5-minute topographic map), to identify recorded historic-era resources of the built environment (building, structures, and objects) within a 0.25-mile radius of the Project Area.
- Resource Inventories: *California Inventory of Historical Resources, California Historical Landmarks, Built Environment Resource Directory* (BERD) (through March 2020) and *Archaeological Determinations of Eligibility* (as of April 2012) for Santa Clara County.

The NWIC records search results identified one previous cultural resources study that was directly adjacent to the Project Area. The Project Area has not been previously surveyed for cultural resources and is currently completely paved and built over. **Table 1** provides details on this study.

TABLE 1. PREVIOUS CULTURAL RESOURCES STUDY THAT INCLUDES PORTIONS OF THE PROJECT AREA

Study #	Title	Author	Date
S-4273	A Preliminary Archaeological Reconnaissance of the Olinder Redevelopment Project location in San Jose, California	Dietz	1976

SOURCE: NWIC, 2022

Previously Identified Resources

The NWIC records search indicated that no previously recorded cultural resources intersect the Project Area and no cultural resources have been previously recorded within 0.25 mile of the Project Area. There are no previously recorded pre-contact or historic-era archaeological resources recorded within the Project Area or within a 0.25-mile radius. The nearest pre-contact archaeological resource is located 0.9-miles southwest of the Project Area.

NAHC Correspondence

ESA contacted the NAHC on February 7, 2022, to request a search of the NAHC's Sacred Lands File (SLF) and a list of Native American representatives who may have interest in the Project. The NAHC replied to ESA by email on March 27, 2022, with the statement that the result of any SLF check conducted through the Native American Heritage Commission was negative. The City of San José will conduct tribal consultation as part of CEQA compliance.

Map and Historic Aerial Imagery Review

ESA conducted a review of the following sources of historic maps and aerial photography: USGS topographic quadrangles (USGS, 2022), Sanborn Fire Insurance maps (Library of Congress, 2022), and historicaerials.com (NETR, 2022; UCSB, 2022). The review focused on the Project Area and vicinity. The Project Area has historically experienced heavy urban development, including residential and commercial sprawls and infrastructure to accommodate a growing population and escalating settlement patterns. **Table 3** summarizes the results of the historic map and aerial photography review.

TABLE 3. MAP AND HISTORIC AERIAL REVIEW RESULTS

Date	Type	Scale	Name	Features Depicted/General Notes
1876	Thompson & West	1:31,680	Santa Clara Co. 5	Area including Project parcel owned by J. Rich. House located near the southern edge of the project area.
1897	Topo	1:62,500	San Jose, CA	Project parcel is in the rural outskirts of the central city of San José. There are a few scattered buildings identified in the vicinity of the Project parcel.
1905	Topo	1:62,500	San Jose, CA	Same as 1897 topo.
1913	Topo	1:62,500	San Jose, CA	Same as 1897 and 1905 topo.
1926	Topo	1:62,500	San Jose, CA	Same as 1897, 1905 and 1913 topos.
1939	Aerial Photo	n/a	n/a	A large barn/shed is located in the Project parcel with the associated residence located south of the Project parcel. The rest of the Project parcel is orchard or undeveloped.
1939	Topo	1:62,500	San Jose, CA	Same as 1897, 1905, 1913 and 1926 topos.
1943	Topo	1:62,500	San Jose, CA	Road partially following current alignment of Bayshore Road/Highway 101 constructed north of Story Road but does not connect to a road on the north end. Additional houses built in the vicinity of the Project parcel.
1948	Aerial Photo	n/a	n/a	Building located at southwest corner of Project parcel. The rest of the parcel is orchard or undeveloped.
1953	Topo	1:24,000	San Jose West, CA	Bayshore Road constructed. Project parcel is still in undeveloped portion of block, but more roads and buildings have been built in the vicinity of the Project parcel.
1956	Aerial Photo	n/a	n/a	Same as 1948 aerial.
1960	Aerial Photo	n/a	n/a	Same as 1948 and 1956 aerial.
1962	Topo	1:24,000	San Jose West, CA	Project parcel is still in undeveloped portion of block, but more roads and buildings have been built in the vicinity of the Project parcel.
1965	Aerial Photo	n/a	n/a	Same as 1948, 1956, and 1960 aerial.
1968	Aerial Photo	n/a	n/a	All buildings have been removed from Project parcel and vicinity. Alignment of Felipe Avenue matches modern alignment.
1969	Topo	1:24,000	San Jose West, CA	Felipe Avenue is constructed matching the current alignment of the road. One building in the Project parcel is identified in the southwest corner of the parcel.
1980	Aerial Photo	n/a	n/a	Olinder Court alignment matches current alignment of road adjacent to the Project parcel. Sidewalks constructed along western and southern edges of the Project parcel along roads. Project parcel is undeveloped dirt lot.
1982	Aerial Photo	n/a	n/a	Same as 1980 aerial.
1987	Aerial Photo	n/a	n/a	Same as 1980 and 1987 aerial.

Based on the historic maps and aerials, the Project parcel was part of a small rural farm since at least 1876 (**Figure 4**; Thompson and West, 1876). The Project parcel has been largely undeveloped, but a large barn or outbuilding was constructed by 1939 on the parcel (**Figure 5**). Sometime between 1965 and 1968, the barn was demolished, and the alignment of Felipe Avenue was established (**Figure 6**). No permanent buildings have been constructed within the Project parcel since. Between 1969 and 1980, the alignment of Olinder Court was

established and sidewalks around the western and southern edges of the Project parcel were constructed. The parcel was an undeveloped dirt lot between 1980 and 2005. Between 2005 and now the lot has been largely paved and used as a laydown yard and parking lot.

Archaeological Sensitivity Assessment

The underlying geology of the Project Area consists of Quaternary alluvial gravel, sand, and silt which represent undifferentiated stream alluvium in drainages and younger alluvial fan deposits (Diblee and Minch, 2005). Soils in the Project Area are Urban land-Newpark complex and Urban land-Elpaloalto complex soils. Urban land complex soils are disturbed human transported material usually found in dense urban areas where the soils have been greatly disturbed modern development (USDA, 2022). Urban land-Newpark complex and Urban land-Elpaloalto complex soils consist mainly of silty clay loam that can be more than 7 feet deep (USDA, 2022).

Cornerstone Earth Group conducted ten borings up to a depth of 20 feet as part of a soil analysis report (Knoll and Heiny, 2021). The soil analysis borings were located in the south, southwest, and northern parts of the Project Area. And two borings were completed as part of a geotechnical study of the Project Area to a depth of 41.5 feet and 50.5 feet (ENGEO Inc., 2021). The geotech borings were located in the western half of the Project Area. The geotechnical and soil reports found that there were two underground storage tank that was previously removed from the southern corner of the Project Area, close to the corner of Felipe Street and Olinder Court. ENGEO and Cornerstone Earth Group found that the thickness of modern fill throughout the Project Area to vary between 1 and 2 feet thick below 3-5 inches of asphalt or pavement (Knoll and Heiny, 2021:3; ENGEO Inc., 2021:5). ENGEO recommends that all modern fill within the proposed Fire Station building footprint be removed and replaced with engineered fill. The modern fill identified in the geotechnical study is likely the same as the Urban land complex soils identified in the soil map (USDA, 2022). These soils are not sensitive for cultural resources due to their recent age and disturbed context.

Landforms that predate the earliest estimated periods for human occupation of the region are considered to have very low potential for the presence of buried archaeological sites, while those that postdate human occupation are considered to have a higher potential for buried archaeological sites. The degree of buried site potential is inversely related to the estimated date range of a landform. Currently, archaeological research indicates that the earliest evidence for human occupation of California dates to the Late Pleistocene, which ended approximately 11,500 years BP. Therefore, the potential for buried archaeological deposits in landforms from or predating the Late Pleistocene is very low (Rosenthal et al., 2004).

As previously mentioned, the Project Area is situated on a Quaternary-aged landform consisting of alluvial deposits that underlie deep silty clay loams dating to Holocene to the modern era (Diblee and Minch, 2005; USDA, 2022). Based on the age of the soils and underling geology in the Project Area, the potential for buried pre-contact archaeological deposits in undisturbed portions of the Project Area is moderate (Meyer and Rosenthal, 2007). Archaeological sites in this geologic context could be near the surface or buried beneath the more modern soils. The Project Area is within 0.6 mile of Coyote Creek and 2.1 miles of Guadalupe River (although these waterways have since been channelized or moved with modern land reclamation in many places), which does increase the sensitivity of the area for pre-contact archaeological resources. However, the record search did not identify any archaeological resources, pre-contact or historic-era, within a 0.5-mile radius of the Project Area, and the nearest archaeological resource is a pre-contact site 0.9-miles from the Project Area, closer to the Guadalupe River. Therefore, the records search results suggest that the Project Area has a lessened sensitivity for pre-contact archaeological resources. The overlying Urban land complex soils also suggest that the

Project Area is covered by highly disturbed soils that are very deep (at least 7 feet) that have a low potential for pre-contact archaeological resources. Therefore, the landform, proximity to water resources, and proximity to known archaeological resources, suggest that the Project Area has a low potential for the presence of pre-contact archaeological resources in undisturbed areas.

Evidence of historic-era settlement and domestic activities have been documented within the Project Area. A historic aerial and map imagery review identified one building, a barn, that was previously extant on the parcel as early as 1939 (NETR, 2022). It is not likely that buried archaeological features would be associated with a construction of this late date. Therefore, there is a low potential for historic-era archaeological resources or features below the parking lot. Based on this review, the potential for presence of unrecorded, or previously unknown, historic-era archaeological resources is low.

Therefore, this analysis concludes that the Project Area's sensitivity for pre-contact archaeological resources is low and the potential for historic-era archaeological resources is low.

Recommendations

Based on the results of the records search, historic map and aerial research, and geoarchaeological assessment, no cultural resources have been previously identified within the Project Area and there is a low potential to uncover significant buried archaeological resources during ground-disturbing activities.

While unlikely, there is the potential for the discovery of buried archaeological resources during ground-disturbing activities. ESA recommends the following mitigation measure to establish appropriate protocol during Project implementation:

> **Mitigation Measure CUL-1: Cultural Resources Awareness Training.** Prior to issuance of any grading or building permits, a Secretary of the Interior (SOIS)-qualified archaeologist and a Native American representative registered with the Native American Heritage Commission for the City of San José and that is traditionally and culturally affiliated with the geographic area, as described in Public Resources Code Section 21080.3 shall conduct a training program for all construction and field personnel involved in ground disturbance. On-site personnel shall attend a mandatory pre-project training that shall outline the general archaeological sensitivity of the area and the procedures to follow in the event an archaeological resource and/or human remains are inadvertently discovered. A training program shall be established for new project personnel before they begin project work. The project applicant shall submit a copy of the training documents to the Director of Planning Building and Code Enforcement or the Director's designee for review and approval prior to the issuance of any grading or building permits. Documentation confirming the training sessions conducted shall be submitted to the Director of Planning, Building and Code Enforcement or Director's designee prior start of construction activities.

In addition, the City of San José has established Standard Permit Conditions in the event of accidental discovery of cultural materials:

> **Subsurface Cultural Resources.** If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist in consultation with a Native

American representative registered with the Native American Heritage Commissions for the City of San José and that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3 shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

Human Remains. If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of Planning, Building and Code Enforcement or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

a. The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.

b. The MLD identified fails to make a recommendation; or

c. The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

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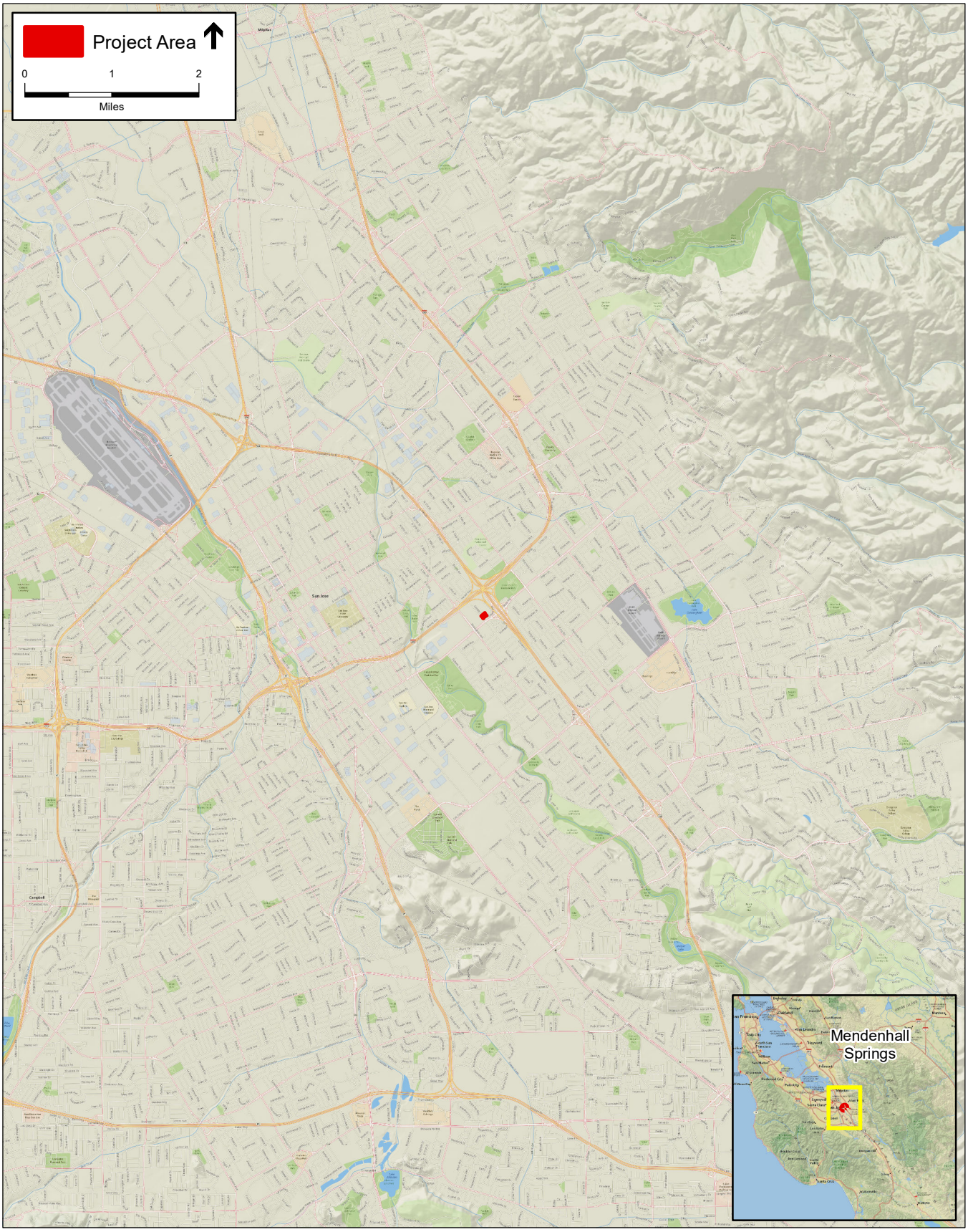
APPENDIX A
Figures

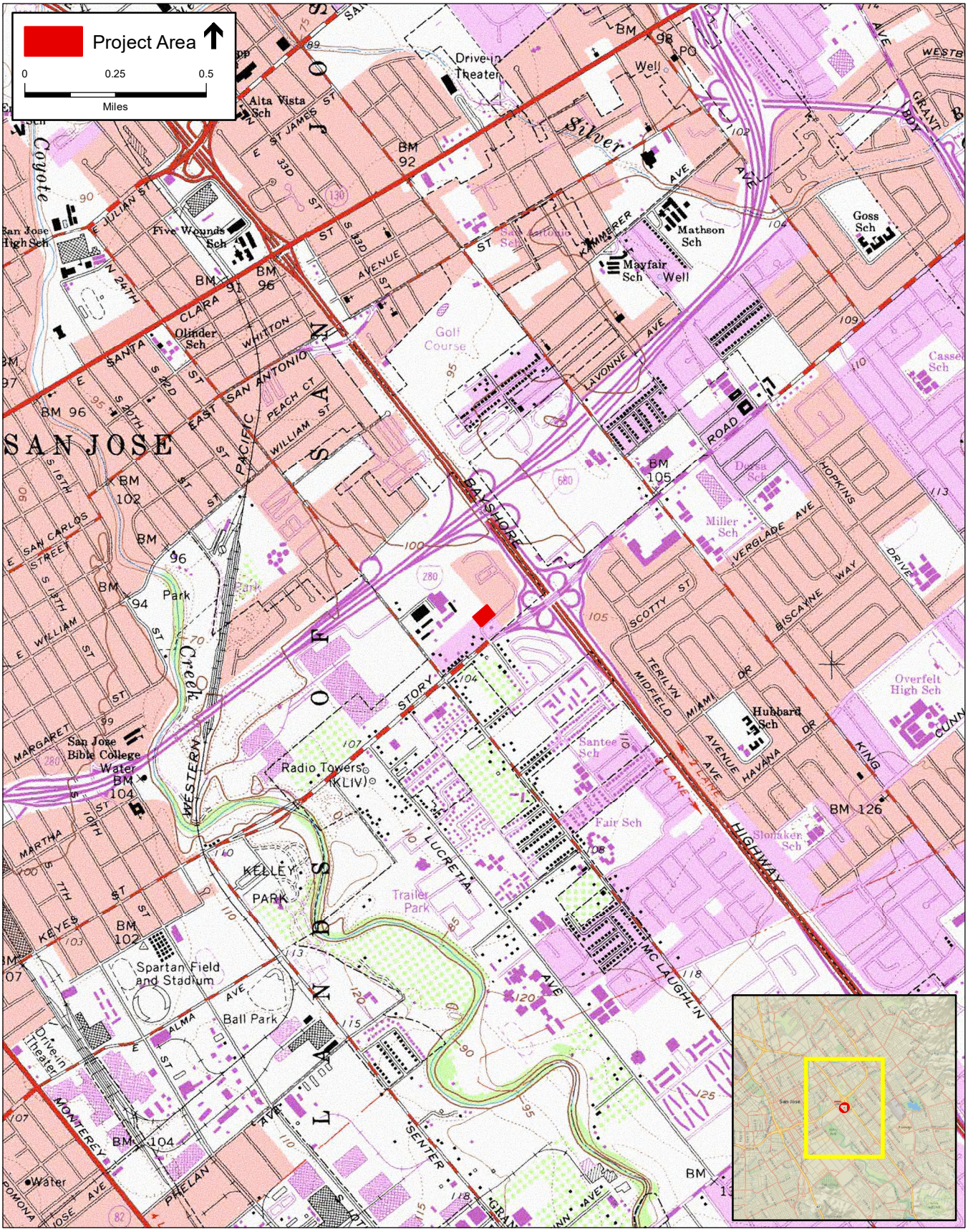


SOURCE: USGS 7.5' Topographic Quadrangle (San Jose East, CA)

San Jose FS-32 CEQA. 201900139.03

Figure 1

Project Vicinity



SOURCE: USGS 7.5' Topographic Quadrangle (San Jose East, CA)

San Jose FS-32 CEQA. 201900139.03

Figure 2

Project Location

SOURCE: ESRI, 2022

San Jose FS-32 CEQA. 201900139.03

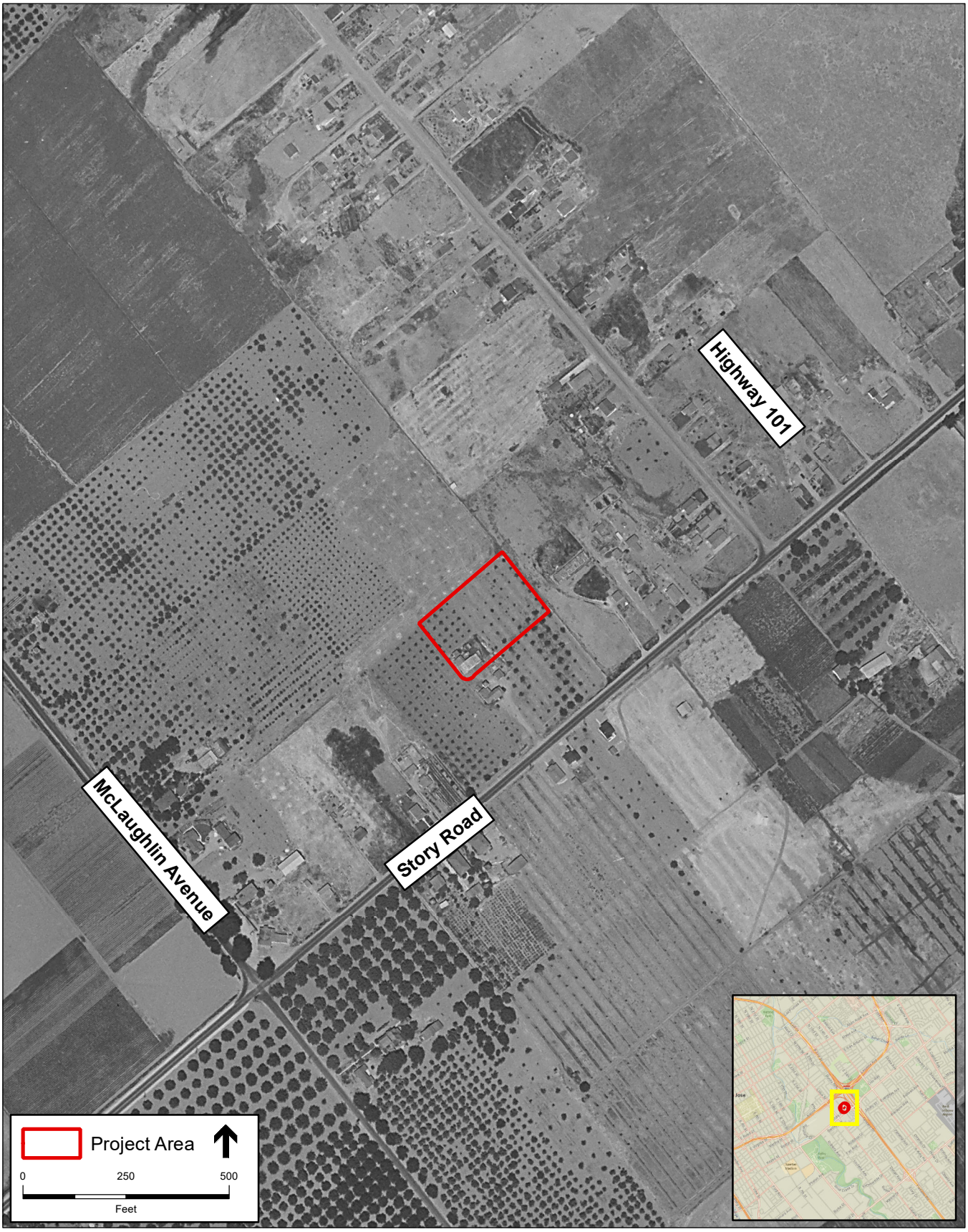
Figure 3
Project Area

SOURCE: ESRI, 2022

San Jose FS-32 CEQA. 201900139.03

Figure 4

1876 Thompson and West



SOURCE: ESRI, 2022

San Jose FS-32 CEQA. 201900139.03

Figure 5
1939 Aerial

SOURCE: ESRI, 2022

San Jose FS-32 CEQA. 201900139.03

Figure 6
1968 Aerial

APPENDIX B

Sacred Lands File Search Response and Native American Contacts List

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

March 27, 2022

Ashleigh Sims
Environmental Science Associates

Via Email to: asims@esassoc.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, New Fire Station No. 32 Project, Santa Clara County

Dear Ms. Sims:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
Santa Clara County
3/27/2022

Amah Mutsun Tribal Band
Valentin Lopez, Chairperson
P.O. Box 5272
Galt, CA, 95632
Phone: (916) 743 - 5833
vlopez@amahmutsun.org
Costanoan
Northern Valley Yokut

Amah MutsunTribal Band of Mission San Juan Bautista
Irene Zwierlein, Chairperson
3030 Soda Bay Road
Lakeport, CA, 95453
Phone: (650) 851 - 7489
Fax: (650) 332-1526
amahmutsuntribal@gmail.com
Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28
Hollister, CA, 95024
Phone: (831) 637 - 4238
ams@indiancanyons.org
Costanoan

Indian Canyon Mutsun Band of Costanoan
Kanyon Sayers-Roods, MLD Contact
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San Jose, CA, 95122
Phone: (408) 673 - 0626
kanyon@kanyonkonsulting.com
Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
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Costanoan

Muwekma Ohlone Indian Tribe of the SF Bay Area
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Costanoan

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Costanoan
Northern Valley Yokut

North Valley Yokuts Tribe
Katherine Perez, Chairperson
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canutes@verizon.net
Costanoan
Northern Valley Yokut

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Fax: (510) 687-9393
chochenyo@AOL.com
Bay Miwok
Ohlone
Patwin
Plains Miwok

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
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kwood8934@aol.com
Foothill Yokut
Mono

Tamien Nation
Quirina Luna Geary, Chairperson
PO Box 8053
San Jose, CA, 95155
Phone: (707) 295 - 4011
qgeary@tamien.org
Costanoan

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed New Fire Station No. 32 Project, Santa Clara County.

Appendix C
Greenhouse Gas Reduction Strategy Compliance Checklist

DEPARTMENT OF PLANNING, BUILDING AND CODE ENFORCEMENT

Purpose of the Compliance Checklist

In 2020, the City adopted a Greenhouse Gas Reduction Strategy (GHGRS) that outlines the actions the City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions for the interim target year 2030. The purpose of the Greenhouse Gas Reduction Strategy Compliance Checklist (Checklist) is to:

- Implement GHG reduction strategies from the 2030 GHGRS to new development projects.
- Provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).

The 2030 GHGRS presents the City's comprehensive path to reduce GHG emissions to achieve the 2030 reduction target, based on SB 32, BAAQMD, and OPR. Additionally, the 2030 GHGRS leverages other important City plans and policies; including the General Plan, Climate Smart San José, and the City Municipal Code in identifying reductions strategies that achieve the City's target. CEQA Guidelines Section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of greenhouse gases. Accordingly, the City of San José's 2030 GHGRS represents San José's qualified climate action plan in compliance with CEQA.

As described in the 2030 GHGRS, these GHG reductions will occur through a combination of City initiatives in various plans and policies and will provide reductions from both existing and new developments. This Compliance Checklist specifically applies to proposed discretionary projects that require environmental review pursuant to CEQA. Therefore, the Checklist is a critical implementation tool in the City's overall strategy to reduce GHG emissions. Implementation of applicable reduction actions in new development projects will help the City achieve incremental reductions toward its target. Per the 2030 GHGRS, the City will monitor strategy implementation and make updates, as necessary, to maintain an appropriate trajectory to the 2030 GHG target.

Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the GHGRS.

Instructions for Compliance Checklist

Applicants shall complete the following sections to demonstrate conformance with the City of San José 2030 Greenhouse Gas Reduction Strategy for the proposed project. All projects must complete Section A. General Plan Policy Conformance and Section B. Greenhouse Gas Reduction Strategies. Projects that propose alternative GHG mitigation measures must also complete Section C. Alternative Project Measures and Additional GHG Reductions.

A. General Plan Policy Compliance

Projects need to demonstrate consistency with the Envision San José 2040 General Plan's relevant policies for Land Use & Design, Transportation, Green Building, and Water Conservation, enumerated in Table A. All applicants shall complete the following steps.

1. Complete Table A, Item #1 to demonstrate the project's consistency with the General Plan Land Use and Circulation Diagram.

2. Complete Table A, Items #2 through #4 to demonstrate the project's consistency with General Plan policies[1] related to green building; pedestrian, bicycle & transit site design; and water conservation and urban forestry, as applicable. For each policy listed, mark the relevant yes/no check boxes to indicate project consistency, and provide a qualitative description of how the policy is implemented in the proposed project or why the policy is not applicable to the proposed project. Qualitative descriptions can be included in Table A or provided as separate attachments. This explanation will provide the basis for analysis in the CEQA document.

B. Greenhouse Gas Reduction Strategies

Table B identifies the GHGRS strategies and recommended consistency options. Projects need to demonstrate consistency with the GHGRS reduction strategies listed in Table B or document why the strategies are not applicable or are infeasible. The corresponding GHGRS strategies are indicated in the table to provide additional context, with the full text of the strategies preceding Table B.

Residential projects must complete Table B, Part 1 and 2; Non-residential projects must complete Table B, Part 2 only. All applicants shall complete the following steps for Table B.

1. Review the project consistency options described in the column titled 'GHGRS Strategy and Consistency Options'.

2. Use the check boxes in the column titled "Project Conformance" to indicate if the strategy is 'Proposed', 'Not Applicable', 'Not Feasible', or if there is an 'Alternative Measure Proposed'.

[1] The lists in items # 2-4 do not represent all General Plan policies but allow projects to demonstrate consistency and achievement of policies that are related to quantified reduction estimates in the 2030 GHGRS.

3. Provide a qualitative analysis of the proposed project's compliance with the GHGRS strategies in the column titled "Description of Project Measure". This will be the basis for CEQA analysis to demonstrate compliance with the 2030 GHGRS and by extension, with SB 32. The qualitative analysis should provide:

    a. A description of which consistency options are included as part of the proposed project, or

    b. A description of why the strategy is not applicable to the proposed project, or

    c. A description of why the consistency options are infeasible. If applicants select 'Not Feasible' or 'Alternative Measure Proposed', they must complete Table C to document what alternative project measures will be implemented to achieve a similar level of greenhouse gas reduction and how those reduction estimates were calculated.

C. Alternative Project Measures and Additional GHG Reductions

Projects that propose alternative GHG mitigation measures to those identified in Table B or propose to include additional GHG mitigation measures beyond those described in Tables A and B, shall provide a summary explanation of the proposed measures and demonstrate efficiency or greenhouse gas reductions achievable though the proposed measures. Documentation for these alternative or additional project measures shall be documented in Table C. Any applicants who select 'Not Feasible' or 'Alternative Measure Proposed' in Table B must complete the following steps for Table C.

1. In the column titled "Description of Proposed Measure" provide a qualitative description of what measure will be implemented, why it is proposed, and how it will reduce GHG emissions.

2. In the column titled "Description of GHG Reduction Estimate" demonstrate how the alternative project measure would achieve the same or greater level of greenhouse gas reductions as the GHGRS strategy it replaces. Documentation or calculation files can be attached separately.

3. In the column titled "Proposed Measure Implementation" identify how the measure will be implemented: incorporated as part of the project design or as an additional measure that is not part of the project (e.g., purchase of carbon offsets).

Compliance Checklist

Evaluation of Project Conformance with the 2030 Greenhouse Gas Reduction Strategy

Table A: General Plan Consistency

Development Type: ☐ Commercial ☐ Residential ☐ Office ☐ Other: Specify

1) Consistency with the Land Use/Transportation Diagram (Land Use and Density)	Yes	No
Is the proposed Project consistent with the Land Use/Transportation Diagram?	☒	☐
If not, and the proposed project includes a General Plan Amendment, does the proposed amendment decrease GHG emissions (in absolute terms or per capita, per employee, per service population) below the level assumed in the GHGRS based on the existing planned land use? (The project could have a higher density, mix of uses, or other features that would reduce GHG emissions compared to the planned land use).[2]	☐	☐
If not, would the proposed project and the General Plan Amendment increase GHG emissions (in absolute terms or per capita, per employee, per service population)? Project is not consistent with GHGRS and further modeling will be required to determine if additional mitigation measures are necessary.	☐	☐

Response documentation: *[Either here or as an attachment]*

The General Plan Land Use designation for the site is Combined Industrial/Commercial (CIC). The proposed project would construct a new building to serve as the new Fire Station No. 38 at 1138 Olinder Court. Per Resolution No. 79873 (Approved 01-26-2021), City services and facilities such as public parks, fire stations, and libraries are allowed on all properties within the City, regardless of General Plan land use designation or zoning district, consistent with General Plan Policy IP-1.11. Thus, the proposed project would be consistent with the Land Use/Transportation Diagram.

[2] For example, a General Plan Amendment to change use from single-family residential to multi-family residential or a General Plan Amendment to change the use from regional-serving commercial to mixed-use urban in a transit-served area might reduce travel demand, and therefore GHG emissions from mobile sources.

2) Implementation of Green Building Measures	Yes	No
***MS-2.2**: Encourage maximized use of on-site generation of renewable energy for all new and existing buildings.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include on-site renewable electric generation via a rooftop approximately 57.1 kW (DC) solar electric photovoltaic (PV) system.		
***MS-2.3**: Encourage consideration of solar orientation, including building placement, landscaping, design and construction techniques for new construction to minimize energy consumption.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include building design measures, including those that would reduce energy consumption, to meet LEED Silver, with a goal of obtaining LEED Gold certification. The proposed project would also include landscaping and trees that would provide shading.		
***MS-2.7**: Encourage the installation of solar panels or other clean energy power generation sources over parking areas.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include on-site renewable electric generation via a rooftop solar PV system. Permeable paving would be used in the proposed parking areas as a stormwater treatment measure on-site consistent with CD-2.5 below.		
***MS-2.11**: Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include building design measures to meet LEED Silver, with a goal of obtaining LEED Gold certification. The proposed project would also include on-site renewable electric generation via a rooftop solar PV system.		

***MS-16.2**: Promote neighborhood-based distributed clean/renewable energy generation to improve local energy security and to reduce the amount of energy wasted in transmitting electricity over long distances.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would also include on-site renewable electric generation via a rooftop solar PV system that would improve local energy security and reduce the amount of energy wasted in transmitting electricity over long distances.		

3) Pedestrian, Bicycle & Transit Site Design Measures	**Yes**	**No**
***CD-2.1**: Promote the Circulation Goals and Policies in the Envision San José 2040 General Plan. Create streets that promote pedestrian and bicycle transportation by following applicable goals and policies in the Circulation section of the Envision San José 2040 General Plan.*		
a) Design the street network for its safe shared use by pedestrians, bicyclists, and vehicles. Include elements that increase driver awareness.	☒	☐
b) Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles.	☒	☐
c) Consider support for reduced parking requirements, alternative parking arrangements, and Transportation Demand Management strategies to reduce area dedicated to parking and increase area dedicated to employment, housing, parks, public art, or other amenities. Encourage de-coupled parking to ensure that the value and cost of parking are considered in real estate and business transactions.	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would not materially affect the design of the existing street network except for adding one new driveway on Olinder Court. The proposed project would include trees and other vegetation adjacent to the sidewalk. The proposed project would contain 17 parking spaces to support fire station operations, which would constitute an over 30% reduction in parking below baseline from Institute of Transportation Engineers (ITE).		

***CD-2.5**: Integrate Green Building Goals and Policies of the Envision San José 2040 General Plan into site design to create healthful environments. Consider factors such as shaded parking areas, pedestrian connections, minimization of impervious surfaces, incorporation of stormwater treatment measures, appropriate building orientations, etc.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include trees adjacent to parking areas. The proposed project would also result in a net increase in pervious surfaces on the project site through proposed bioretention areas that would receive and treat site stormwater runoff, along		

with proposed permeable paving areas in the proposed parking areas and landscaping (approximately 12,522 square feet).

	Yes	No
***CD-2.11**: Within the Downtown and Urban Village Overlay areas, consistent with the minimum density requirements of the pertaining Land Use/Transportation Diagram designation, avoid the construction of surface parking lots except as an interim use, so that long-term development of the site will result in a cohesive urban form. In these areas, whenever possible, use structured parking, rather than surface parking, to fulfill parking requirements. Encourage the incorporation of alternative uses, such as parks, above parking structures.*	☐	☐
Not applicable	☒	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project is not within the Downtown and Urban Village Overlay areas. Therefore, this policy is not applicable.		
***CD-3.2**: Prioritize pedestrian and bicycle connections to transit, community facilities (including schools), commercial areas, and other areas serving daily needs. Ensure that the design of new facilities can accommodate significant anticipated future increases in bicycle and pedestrian activity.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] Bicycle facilities would also we provided on the project site, including long-term bicycle parking spaces for employees and short-term bicycle parking spaces for visitors. The proposed fire station would also include showers and other amenities as part of its dormitories, which would encourage the use of bicycles for commuting purposes.		
***CD-3.4**: Encourage pedestrian cross-access connections between adjacent properties and require pedestrian and bicycle connections to streets and other public spaces, with particular attention and priority given to providing convenient access to transit facilities. Provide pedestrian and vehicular connections with cross-access easements within and between new and existing developments to encourage walking and minimize interruptions by parking areas and curb cuts.*	☐	☐
Not applicable	☒	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] Cross-access easements for fire station access would not be applicable. The proposed project would provide public access to the station via a building entryway off of Olinder Court, and short-term bicycle parking near the visitor parking area.		

***LU-3.5**: Balance the need for parking to support a thriving Downtown with the need to minimize the impacts of parking upon a vibrant pedestrian and transit oriented urban environment. Provide for the needs of bicyclists and pedestrians, including adequate bicycle parking areas and design measures to promote bicyclist and pedestrian safety.*	☐	☐
Not applicable	☒	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project is not within the Downtown area. Therefore, this policy is not applicable. Bicycle facilities would be provided on the project site, including long- and short-term bicycle parking spaces.		

	Yes	**No**
***TR-2.8:** Require new development to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] Bicycle facilities would be provided on the project site, including long- and short-term bicycle parking spaces. The proposed fire station would also include showers and other amenities as part of its dormitories, which would encourage the use of bicycles for commuting purposes.		
***TR-7.1:** Require large employers to develop TDM programs to reduce the vehicle trips and vehicle miles generated by their employees through the use of shuttles, provision for car-sharing, bicycle sharing, carpool, parking strategies, transit incentives and other measures.*	☐	☐
Not applicable	☒	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would not employ a large number of people. Therefore, this policy is not applicable to the proposed project.		
***TR-8.5:** Promote participation in car share programs to minimize the need for parking spaces in new and existing development.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would contain 17 parking spaces to support fire station operations, which would constitute a more than 30% reduction in parking below baseline from ITE. The City is exploring the potential feasibility of participating in car share programs.		

4) Water Conservation and Urban Forestry Measures	Yes	No
***MS-3.1**: Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial and developer-installed residential development unless for recreation needs or other area functions.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] Landscape design plans would use drip and water efficient irrigation, low and moderate water use plant species and a 'smart' weather-based controller. The proposed irrigation would meet local and State water efficiency standards.		

	Yes	No
***MS-3.2**: Promote the use of green building technology or techniques that can help reduce the depletion of the City's potable water supply, as building codes permit. For example, promote the use of captured rainwater, graywater, or recycled water as the preferred source for non-potable water needs such as irrigation and building cooling, consistent with Building Codes or other regulations.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include building design measures to meet LEED Silver, with a goal of obtaining LEED Gold certification. In addition, the proposed project would be required to comply with the 2019 Title 24 Building Energy Efficiency Standards to reduce water consumption. Furthermore, the project would incorporate water efficient landscaping to reduce water use.		
***MS-19.4**: Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would comply with the CalGreen Code, which requires that recycled water be used for landscaping, where feasible.		
***MS-21.3**: Ensure that San José's Community Forest is comprised of species that have low water requirements and are well adapted to its Mediterranean climate. Select and plant diverse species to prevent monocultures that are vulnerable to pest invasions. Furthermore, consider the appropriate placement of tree species and their lifespan to ensure the perpetuation of the Community Forest.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would include low and moderate water use plant. The irrigation system would be designed to establish a deep, strong root system that would eventually sustain the plants without supplemental water, under normal conditions.		

***MS-26.1**: As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would comply with the City's Standard Conditions of Approval which require that any tree removed would be replaced in accordance with the Tree Replacement Ratios. The proposed project would plant approximately 15 new trees on-site.		

	Yes	**No**
***ER-8.7**: Encourage stormwater reuse for beneficial uses in existing infrastructure and future development through the installation of rain barrels, cisterns, or other water storage and reuse facilities.*	☒	☐
Not applicable	☐	☐
Describe how the project is consistent or why the measure is not applicable. [Either here or as an attachment] The proposed project would comply with the CalGreen Code, which requires that recycled water be used for landscaping, where feasible. Bioretention areas are proposed to receive and treat the site stormwater runoff, along with permeable paving areas. The City is exploring the potential feasibility of water storage and reuse facilities onsite.		

GHGRS Strategies

GHGRS #1: The City will implement the San José Clean Energy program to provide residents and businesses access to cleaner energy at competitive rates.

GHGRS #2: The City will implement its building reach code ordinance (adopted September 2019) and its prohibition of natural gas infrastructure ordinance (adopted October 2019) to guide the city's new construction toward zero net carbon (ZNC) buildings.

GHGRS #3: The City will expand development of rooftop solar energy through the provision of technical assistance and supportive financial incentives to make progress toward the Climate Smart San José goal of becoming a one-gigawatt solar city.

GHGRS #4: The City will support a transition to building decarbonization through increased efficiency improvements in the existing building stock and reduced use of natural gas appliances and equipment.

GHGRS #5: As an expansion to Climate Smart San José, the City will update its Zero Waste Strategic Plan and reassess zero waste strategies. Throughout the development of the update, the City will continue to divert 90 percent of waste away from landfills through source reduction, recycling, food recovery and composting, and other strategies.

GHGRS #6: The City will continue to be a partner in the Caltrain Modernization Project to enhance local transit opportunities while simultaneously improving the city's air quality.

GHGRS #7: The City will expand its water conservation efforts to achieve and sustain long-term per capita reductions that ensure a reliable water supply with a changing climate, through regional partnerships, sustainable landscape designs, green infrastructure, and water-efficient technology and systems.

Table B: 2030 Greenhouse Gas Reduction Strategy Compliance

GHGRS Strategy and Consistency Options	Description of Project Measure	Project Conformance
PART 1: RESIDENTIAL PROJECTS ONLY		
Zero Net Carbon Residential Construction 1. Achieve/exceed the City's Reach Code, and 2. Exclude natural gas infrastructure in new construction, or 3. Install on-site renewable energy systems or participate in a community solar program to offset 100% of the project's estimated energy demand, or 4. Participate in San José Clean Energy at the Total Green level (i.e., 100% carbon-free electricity) for electricity accounts associated with the project until which time SJCE achieves 100% carbon-free electricity for all accounts. **Supports Strategies**: GHGRS #1, GHGRS #2, GHGRS #3	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project is not a residential project. Therefore, these strategies are not applicable.	☐ Proposed ☒ Not Applicable ☐ Not Feasible* ☐ Alternative Measure Proposed ** The 2030 GHGRS assumed this strategy would be feasible for 50% of residential units constructed between 2020 and 2030.*
PART 2: RESIDENTIAL AND NON-RESIDENTIAL PROJECTS		
Renewable Energy Development 1. Install solar panels, solar hot water, or other clean energy power generation sources on development sites, or 2. Participate in community solar programs to support development of renewable energy in the community, or	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project would include on-site renewable electric generation via a rooftop solar PV system.	☐ See Part 1 (Residential projects only) ☒ Proposed ☐ Not Applicable ☐ Not Feasible ☐ Alternative Measure Proposed

GHGRS Strategy and Consistency Options	Description of Project Measure	Project Conformance
3. Participate in San José Clean Energy at the Total Green level (i.e., 100% carbon-free electricity) for electricity accounts associated with the project. **Supports Strategies**: GHGRS #1, GHGRS #3		
Building Retrofits – Natural Gas[3] This strategy only applies to projects that include a retrofit of an existing building. If the proposed project does not include a retrofit, select "Not Applicable" in the Project Conformance column. 1. Replace an existing natural gas appliance with an electric alternative (e.g., space heater, water heater, clothes dryer), or 2. Replace an existing natural gas appliance with a high-efficiency model **Supports Strategies:** GHGRS #4	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project does not include a retrofit, and thus this strategy is not applicable. The proposed project would not include natural gas.	☐ Proposed ☒ Not Applicable ☐ Not Feasible ☐ Alternative Measure Proposed
Zero Waste Goal 1. Provide space for organic waste (e.g., food scraps, yard waste) collection containers, and/or 2. Exceed the City's construction & demolition waste diversion requirement. **Supports Strategies:** GHGRS #5	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project would exceed the City's C&D waste diversion requirement by diversion at least 75% of C&D material.	☒ Proposed ☐ Not Applicable ☐ Not Feasible ☐ Alternative Measure Proposed

[3] GHGRS Strategy #4 applies to existing building retrofits and not to new construction; Strategy #2 applies to new construction to reduce natural gas related GHG emissions

GHGRS Strategy and Consistency Options	Description of Project Measure	Project Conformance
Caltrain Modernization 1. For projects located within ½ mile of a Caltrain station, establish a program through which to provide project tenants and/or residents with free or reduced Caltrain passes or 2. Develop a program that provides project tenants and/or residents with options to reduce their vehicle miles traveled (e.g., a TDM program), which could include transit passes, bike lockers and showers, or other strategies to reduce project related VMT. **Supports Strategies:** GHGRS #6	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project is located over 0.5-mile from a Caltrain station. Bicycle facilities would be provided on the project site, including long- and short-term bicycle parking spaces. The proposed fire station would also include showers and other amenities as part of its dormitories, which would encourage the use of bicycles for commuting purposes.	☐ Proposed ☒ Not Applicable ☐ Not Feasible ☐ Alternative Measure Proposed
Water Conservation 1. Install high-efficiency appliances/fixtures to reduce water use, and/or include water-sensitive landscape design, and/or 2. Provide access to reclaimed water for outdoor water use on the project site. **Supports Strategies:** GHGRS #7	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this strategy is not applicable to your project.* *OR,* *Describe why such measures are infeasible.* The proposed project would include building design measures to meet LEED Silver, with a goal of obtaining LEED Gold certification. The project would reduce building water use by a minimum of 20% and appliances would meet LEED efficiency requirements. Furthermore, the project would incorporate water efficient landscaping to reduce water use.	☒ Proposed ☐ Not Applicable ☐ Not Feasible ☐ Alternative Measure Proposed

Table C: Applicant Proposed Greenhouse Gas Reduction Measures

Description of Proposed Measure	Description of GHG Reduction Estimate	Proposed Measure Implementation
[Describe the proposed project measure and why it is proposed] **Supports Strategies/Sectors:** GHGRS #	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation/assumptions.]*	☐ Part of Design ☐ Additional Measure
[Describe the proposed project measure and why it is proposed] **Supports Strategies/Sectors:** GHGRS #	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation/assumptions.]*	☐ Part of Design ☐ Additional Measure
[Describe the proposed project measure and why it is proposed] **Supports Strategies/Sectors:** GHGRS #	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation/assumptions.]*	☐ Part of Design ☐ Additional Measure
[Describe the proposed project measure and why it is proposed] **Supports Strategies/Sectors:** GHGRS #	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation/assumptions.]*	☐ Part of Design ☐ Additional Measure