Appendix C   Construction Health Risk Assessment

Appendices

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1.   Construction Health Risk Assessment

1.1   INTRODUCTION

Riverside Unified School District (District) is proposing to provide a new local neighborhood school at 4341 Victoria Avenue in Riverside County, California (proposed project). The approximately 8.62-acre project site is bounded by residences and two vacant parcels to the north, residences and commercial uses to the south, Victoria Avenue and residential to the east, and a warehouse distribution center and train tracks to the west. The proposed project would construct a Transitional Kindergarten (TK) through 6 school serving up to 800 students and 31 new classroom buildings on the project site. Three options have been selected for evaluation (see Table 3-1, *Summary of Project Options*), but all options would acquire Park Avenue between 13th and 14th Streets as well as structures on parcels Block B and C to construct the local neighborhood school. The worst-case construction phase (Option 3) was modeled to provide a conservative analysis of the proposed project. The proposed project Option 3 would involve building and asphalt demolition, site preparation, grading, trenching, building construction with the largest new square footage of the three options, architectural coating, paving, and finishing/landscaping. The following provides the background methodology used for the construction health risk assessment for the proposed project.

Project construction is dependent on acquisition of properties, which may take several years. However, for this analysis construction is anticipated to take about 31 months from January 2026 through July 2028 (approximately 662 total workdays over the 3-year span). The nearest sensitive receptors to the project site include the single-family residences to the north, east, and south of the project site. Guidance from the California Environmental Protection Agency (Cal/EPA), Office of Environmental Health Hazard Assessment (OEHHA), and California Air Pollution Control Officers Association (CAPCOA) recommend the completion of health risk assessments (HRA) to determine the impacts of hazardous air emissions upon sensitive receptors in the vicinity of the project. As a result, a site-specific construction HRA has been prepared for the proposed project. This HRA considers the health impact to sensitive receptors (adults and children in the nearby residences) of construction emissions at the project site from diesel equipment exhaust (diesel particulate matter or DPM).

1.2   METHODOLOGY AND SIGNIFICANCE THRESHOLDS

For this HRA, the South Coast Air Quality Management District (South Coast AQMD) significance thresholds were deemed to be appropriate and the thresholds that were used for this project are shown below:

- Excess cancer risk of more than 10 in a million
- Non-cancer hazard index (chronic or acute) greater than 1.0

The methodology used in this HRA is consistent with the following OEHHA guidance document:

■ OEHHA. 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments.* February, 2015.

Potential exposures to DPM from project construction was evaluated for off-site sensitive receptors in close proximity to the site. Pollutant concentrations were estimated using an air dispersion model, and excess lifetime cancer risks and chronic non-cancer hazard indexes were calculated. These risks were then compared to the significance thresholds adopted for this HRA.

It should be noted that these health impacts are based on conservative (i.e., health protective) assumptions. The United States Environmental Protection Agency (USEPA, 2005) and the Office of Environmental Health Hazard Assessment (OEHHA, 2015) note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks may not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of exposure and thus risk.

For residential-based receptors, the following conservative assumptions were used:

■ It was assumed that maximum-exposed off-site residential receptors (both children and adults) stood outdoors and are subject to DPM at their residence for 24 hours per day, and approximately 350 days per year. In reality, California residents typically will spend on average 2 hours per day outdoors at their residences (USEPA, 2011). This would result in lower exposures to construction related DPM emissions and lower estimated risk values.

■ The calculated risk for infants from third trimester to age 2 is multiplied by a factor of 10 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA, 2015).

It should be noted that only for Option 2 would a portion of Lincoln Park be part of the project site. Thereby, users of the park could be exposed to DPM emissions while either Option 1 or 3 is constructed. While parks are defined as having sensitive receptors, the exposure duration and frequency are much less than that of a typical residential exposure scenario. As described above, residential exposures to project emissions are assumed to occur 24 hours per day, 350 days per year, whereas park user exposures are typically determined over much lower exposure parameters. An example of a typical park user exposure frequency would be 2 hours per day, 100 days per year (or approximately 2 days per week). Since the project site is located approximately the same distance to nearby residences across 13th Street as to Lincoln Park, the health risks from residential receptors will be higher than those from park uses since the exposure parameters for the residences are much greater than park users. Therefore, the health risks at Lincoln Park were not included for this evaluation.

Lastly, construction of Option 2 could result in higher DPM concentrations at nearby residents along Park Avenue and 12th Street due to the configuration of Option 2 compared to Option 3. However, it is not anticipated to be higher overall DPM concentrations compared to those at the residences across 13th Street from construction of worst-case Option 3 since the residences across 13th Street are only 60 feet away from the project site and Option 3 has the most intensive construction plan. Therefore, the health risks determined for worst-case Option 3 are conservative compared to those for Options 1 and 2.

1.3   CONSTRUCTION EMISSIONS

Construction emissions were calculated as average daily emissions in pounds per day, using the proposed construction schedule and the latest version of California Emissions Estimation Model, known as CalEEMod Version 2020.4 (CAPCOA, 2021). Construction modeling considered years 2026 through 2028. DPM emissions were based on the CalEEMod construction runs, using annual exhaust PM_{10} construction emissions presented in pounds (lbs) per day.

The average daily emission rates from construction equipment used during the proposed project were determined by dividing the annual average emissions for each construction year by the number of construction days per year for each calendar year of construction (i.e., 2026, 2027, and 2028). The off-site hauling emission rates were adjusted to evaluate localized emissions from the 0.44-mile haul route within 1,000 feet of the project site. The CalEEMod construction emissions output and emission rate calculations are provided in Appendix A of the HRA.

1.4   DISPERSION MODELING

Air quality modeling was performed using the AERMOD atmospheric dispersion model to assess the impact of emitted compounds on sensitive receptors near the project. The model is a steady state Gaussian plume model and is an approved model by South Coast AQMD for estimating ground level impacts from point and fugitive sources in simple and complex terrain. The on-site construction emissions for the project were modeled as poly-area sources and the off-site mobile sources were modeled as adjacent line volume sources. The model requires additional input parameters, including chemical emission data and local meteorology. Meteorological data obtained from the South Coast AQMD for the nearest representative meteorological station (Riverside Airport Monitoring Station) with the five latest available years (2012-2016) of record were used to represent local weather conditions and prevailing winds. The prevailing wind direction at the Riverside Airport Monitoring Station is to the south-west, and the wind rose is provided in Appendix A.

The modeling analysis also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. To accommodate the model's Cartesian grid format, direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for each source location. In addition, digital elevation model (DEM) data for the area were obtained and included in the model runs to account for complex terrain. An emission release height of 4.15 meters was used as representative of the stack exhaust height for off-road construction equipment and diesel truck traffic, and an initial vertical dispersion parameter of 1.93 m was used, per California Air Resources Board (CARB) guidance (2000).

To determine contaminant impacts during construction hours, the model's Hour-By-Day-of-Week (HRDOW) scalar option was invoked to predict ground-level concentrations for construction emissions generated between the hours of 7:00 AM and 4:00 PM with a 1-hour lunch break.

A unit emission rate of 1 gram per second was used for all modeling runs. The unit emission rates were proportioned over the poly-area sources for on-site construction emissions and divided between the volume sources for off-site hauling emissions. The maximum modeled concentrations from the output files were then multiplied by the emission rates calculated in Appendix A to obtain the maximum flagpole-level

concentrations at the off-site maximum exposed individual resident (MEIR). The MEIR is the single-family residence northeast of the site across 13th Street, and is shown on Figure 1, *Project Site and Off-site Receptor Locations.*

The air dispersion model output for the emission sources is presented in Appendix B. The DPM concentrations at the MEIR are provided in Appendix C.

1.5   RISK CHARACTERIZATION

1.5.1   Carcinogenic Chemical Risk

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Therefore, any exposure will have some associated risk. The South Coast AQMD has established a maximum incremental cancer risk of 10 in a million (1 x 10^{-5} or 10 x 10^{-6}) for CEQA projects and the OEHHA also sets a typical risk management level as 10 in a million (OEHHA, 2015).

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its cancer potency factor (CPF), a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It is an upper-limit estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter (μg/m^3), averaged over a lifetime of 70 years.

Recent guidance from OEHHA recommends a refinement to the standard point estimate approach with the use of age-specific breathing rates and age sensitivity factors (ASFs) to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day)$^{-1}$ to derive the cancer risk estimate. Therefore, the following dose algorithm was used to accommodate the unique exposures associated with each receptor type.

$$\text{Dose}_{\text{AIR,per age group}} \ = \ (C_{\text{air}} \ \times \ \text{EF} \ \times \ [\frac{\text{BR}}{\text{BW}}] \ \times \ A \ \times \ \text{CF})$$

Where:

Dose$_{\text{AIR}}$	=	dose by inhalation (mg/kg-day), per age group
C$_{\text{air}}$	=	concentration of contaminant in air (μg/m^3)
EF	=	exposure frequency (number of days/365 days)
BR/BW	=	daily breathing rate normalized to body weight (L/kg-day)
A	=	inhalation absorption factor (default = 1)
CF	=	conversion factor (1x10^{-6}, μg to mg, L to m^3)

The inhalation absorption factor (A) is a unitless factor that is only used if the cancer potency factor included a correction for absorption across the lung. The default value of 1 was used for this assessment. For

residential receptors, the exposure frequency (EF) of 0.96 is used to represent 350 days per year to allow for a two-week period away from home each year (OEHHA, 2015).

For construction analysis, the exposure duration spans the length of construction (e.g., 662 total workdays over the 3-year span). In addition, the construction duration each year was considered in the risk calculations to account for the number of days residents are exposed to construction emissions from 2026 through 2028. As the length of construction is longer than 2.25 years, the third trimester, 0-2, and 2-9 age bins apply to the construction analysis for the off-site residential receptors. For residential receptors, the 95th percentile daily breathing rates (BR/BW), exposure duration (ED), age sensitivity factors (ASFs), and fraction of time at home (FAH) for the various age groups are provided herein:

Age Groups	BR/BW (L/kg-day)	ED	ASF	FAH
Third trimester	361	0.25	10	0.85
0-2 age group	1,090	2.0	10	0.85
2-9 age group	861	0.29	3	0.72

To calculate the overall cancer risk, the risk for each appropriate age group is calculated per the following equation:

$$\text{Cancer Risk}_{AIR} = \text{Dose}_{AIR} \times \text{CPF} \times \text{ASF} \times \text{FAH} \times \frac{ED}{AT}$$

Where:

Dose_{AIR}	=	dose by inhalation (mg/kg-day), per age group
CPF	=	cancer potency factor, chemical-specific $(\text{mg/kg-day})^{-1}$
ASF	=	age sensitivity factor, per age group
FAH	=	fraction of time at home, per age group (for residential receptors only)
ED	=	exposure duration (years)
AT	=	averaging time period over which exposure duration is averaged (70 years)

The CPFs used in the assessment were obtained from OEHHA guidance. The excess lifetime cancer risks during the construction period to the maximally exposed resident were calculated based on the factors provided above. The cancer risks for each age group are summed to estimate the total cancer risk for each toxic chemical species. The final step converts the cancer risk in scientific notation to a whole number that expresses the cancer risk in "chances per million" by multiplying the cancer risk by a factor of 1×10^6 (i.e., 1 million).

The calculated results are provided in Appendix C.

1.5.2   Non-Carcinogenic Hazards

An evaluation was also conducted of the potential non-cancer effects of chronic chemical exposures. Adverse health effects are evaluated by comparing the annual receptor level concentration of each chemical compound with the appropriate reference exposure limit (REL). Available RELs promulgated by OEHHA were considered in the assessment.

The hazard index approach was used to quantify non-carcinogenic impacts. The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). Target organs presented in regulatory guidance were used for each discrete chemical exposure. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. This ratio is summed for compounds affecting the same toxicological endpoint. A health hazard is presumed to exist where the total equals or exceeds one.

The chronic hazard analysis for DPM is provided in Appendix C. The calculations contain the relevant exposure concentrations and corresponding reference dose values used in the evaluation of non-carcinogenic exposures.

1.6   CONSTRUCTION HRA RESULTS

The calculated results are provided in Appendix C and the results are summarized in Table 1.

TABLE 1. CONSTRUCTION RISK SUMMARY - UNMITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards
Maximum Exposed Individual Resident (MEIR)	25.7	0.056
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	**Yes**	**No**

Note: Cancer risk calculated using 2015 OEHHA HRA guidance.

Cancer risk for the MEIR from project-related construction activities was calculated to be 25.7 in a million and would exceed the 10 in a million-significance threshold. In accordance with the latest 2015 OEHHA guidance, the calculated total cancer risk conservatively assumes that the risk for the MEIR consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 3-year construction period; therefore, calculated risk values for the first 2.25 years were multiplied by a factor of 10 and the remaining risk values by a factor of 3. In addition, it was conservatively assumed that the residents were outdoors 8 hours a day and exposed to all of the daily construction emissions.

For non-carcinogenic effects, the chronic hazard index identified for each toxicological endpoint totaled less than one for all the off-site sensitive receptors. Therefore, chronic non-carcinogenic hazards are less than significant.

Because cancer risk for the MEIR would exceed South Coast AQMD significance threshold due to construction activities associated with the proposed project, the following mitigation measure is proposed:

Mitigation Measure AQ-1: The proposed project's construction contractors shall use equipment that meets the United States Environmental Protection Agency Tier 4 interim emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Tier 4 interim emissions standard for a similarly sized engine, as defined by the California Air Resources Board's regulations. The requirement to use Tier 4 interim equipment for engines over 50 horsepower shall be identified in construction bids.

- Have engines that meet either US EPA or California Air Resources Board (CARB) Tier 4 Interim emission standards. Ensure that all construction plans clearly show the selected emission reduction strategy for construction equipment over 50 horsepower.

- Maintain a list of all operating equipment in use on the project site for verification by the District. The construction equipment list shall state the makes, models, and number of construction equipment on-site. Ensure that all equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations.

- Communicate with all sub-contractors in contracts and construction documents that all non-essential idling of construction equipment is restricted to 5 minutes or less in compliance with California Air Resources Board Rule 2449 and is responsible for ensuring that this requirement is met.

Mitigation Measure AQ-1 would reduce the project's localized construction emissions, as shown in the following table. The results indicate that, with mitigation, cancer risk would be less than the South Coast AQMD's significance thresholds for residential-based receptors. Therefore, the project would not expose off-site sensitive receptors to substantial concentrations of air pollutant emissions during construction and impacts would be *less than significant* with mitigation.

TABLE 2. CONSTRUCTION RISK SUMMARY - MITIGATED

Receptor	Cancer Risk (per million)	Chronic Hazards
Maximum Exposed Individual Resident (MEIR)	3.0	0.007
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	**No**	**No**

Risks incorporate Mitigation Measure AQ-1, which includes using construction equipment which meets USEPA Tier 4 Interim engine requirements for equipment over 50 horsepower.
Note: Cancer risk calculated using 2015 OEHHA HRA guidance.

Figure 1   **Project Site and Off-Site Receptor Locations**

2.   References

California Air Pollution Control Officers Association (CAPCOA). 2021. California Emissions Estimator Model (CalEEMod). Version 2020.4. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.

California Air Resources Board (CARB). 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.*

Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments.* Dated February 2015.

South Coast Air Quality Management District (South Coast AQMD). 2022, June 16 (accessed). 2012-2016. Meteorological Data Set for Riverside Airport Meteorological Station. http://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod.

United States Environmental Protection Agency (USEPA). 2011. *Exposure Factors Handbook 2011 Edition (Final).* EPA/600/R-09/052F, 2011.

_____. 2005. *Guideline on Air Quality Models* (Revised). EPA-450/2-78-027R.

Appendix A.   Emission Rate Calculations

Phase Name	Start Date	End Date	CalEEMod Days	Total Days
Building and Asphalt Demolition	1/1/2026	4/14/2026	74	**103**
Building and Asphalt Demolition Debris Haul	2/15/2026	4/14/2026	42	**58**
Site Preparation	4/15/2026	5/29/2026	33	**44**
Site Preparation Soil Haul	5/29/2026	5/29/2026	1	**0**
Rough Grading	5/31/2026	7/20/2026	36	**50**
Utility Trenching	7/21/2026	9/20/2026	44	**61**
Fine Grading	9/21/2026	10/20/2026	22	**29**
Building Construction	10/21/2026	6/5/2028	424	**593**
Architectural Coating	2/18/2028	6/5/2028	77	**108**
Asphalt Paving	3/8/2028	6/5/2028	64	**89**
Finishing/Landscaping	6/6/2028	7/15/2028	29	**39**

	Number of Construction Days Per Year				Total Construction Days Per Year		
2026	1/1/2026	12/31/2026	261		1/1/2026	12/31/2026	261
2027	1/1/2027	12/31/2027	261		1/1/2027	12/31/2027	261
2028	1/1/2028	7/15/2028	140		1/1/2028	12/31/2028	260
	CONSTRUCTION DAYS		662			**TOTAL DAYS**	782

Onsite Construction PM10 Exhaust Emissions - Unmitigated Scenario [1]

Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/hr)	Emission Rate (g/s)	# of Total Workdays/ Year	Construction Duration[2]
2026	0.0836	167.28	261	0.64	8.01E-02	1.01E-02	261	1.00
2027	0.0689	137.80	261	0.53	6.60E-02	8.32E-03	261	1.00
2028	0.0461	92.20	140	0.66	8.23E-02	1.04E-02	260	0.54

Offsite Construction PM10 Exhaust Emissions - Unmitigated Scenario [1]

Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Hauling Emissions w/in 1,000 ft (lbs/day) [3]	Emission Rate (lbs/hr)	Emission Rate (g/s)
2026	0.0012	2.34	261	8.97E-03	1.98E-04	2.47E-05	3.11E-06
2027	0.0034	6.70	261	2.57E-02	5.66E-04	7.08E-05	8.92E-06
2028	0.0015	2.92	140	2.09E-02	4.60E-04	5.75E-05	7.25E-06

Note: Emissions evenly distributed over 45 modeled volume sources.

Hauling Length (miles) [3]	20.0	miles
Haul Length within 1,000 ft of Site (mile) [4]	0.44	miles
Hours per work day (7:00 AM to 4:00 PM, 1-hour of breaks) [5]	8	hours

[1] DPM emissions taken as PM$_{10}$ exhaust emissions from CalEEMod average daily emissions.

[2] Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App C - Risk Calculations).

[3] Based on CalEEMod default 20 mile hauling distance.

[4] Emissions from CalEEMod offsite average daily emissions, which is based on proportioned haul truck trip distances , are adjusted to evaluate emissions from the 0.44-mile route within 1,000 of the project site.

[5] Work hours applied in By Hour/Day (HRDOW) variable emissions module in air dispersion model (see App C - Air Dispersion Model Output Files).

Option 3

3.2 Building and Asphalt Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Off-Road	0.08	0.71	0.72	0.00		0.03	0.03		0.03	0.03
Total	0.08	0.71	0.72	0.00		0.03	0.03		0.03	0.03

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Total	0.00	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00

3.3 Building and Asphalt Demolition Debris Haul - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Fugitive Dust					0.03	0.00	0.03	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Hauling	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4 Site Preparation - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.14	0.00	0.14	0.07	0.00	0.07
Off-Road	0.04	0.42	0.30	0.00		0.02	0.02		0.02	0.02
Total	0.04	0.42	0.30	0.00	0.14	0.02	0.16	0.07	0.02	0.09

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5 Site Preparation Soil Haul - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6 Rough Grading - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.05	0.00	0.05	0.03	0.00	0.03
Off-Road	0.03	0.28	0.26	0.00		0.01	0.01		0.01	0.01
Total	0.03	0.28	0.26	0.00	0.05	0.01	0.07	0.03	0.01	0.04

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7 Utility Trenching - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.01	0.06	0.10	0.00		0.00	0.00		0.00	0.00
Total	0.01	0.06	0.10	0.00		0.00	0.00		0.00	0.00

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8 Fine Grading - 2026
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02
Off-Road	0.02	0.17	0.16	0.00		0.01	0.01		0.01	0.01
Total	0.02	0.17	0.16	0.00	0.03	0.01	0.04	0.02	0.01	0.02

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9 Building Construction - 2026

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.04	0.32	0.42	0.00		0.01	0.01		0.01	0.01
Total	0.04	0.32	0.42	0.00		0.01	0.01		0.01	0.01

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.06	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Worker	0.01	0.01	0.11	0.00	0.04	0.00	0.04	0.01	0.00	0.01
Total	0.01	0.07	0.14	0.00	0.05	0.00	0.06	0.01	0.00	0.02

3.9 Building Construction - 2027

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.18	1.63	2.10	0.00		0.07	0.07		0.06	0.06
Total	0.18	1.63	2.10	0.00		0.07	0.07		0.06	0.06

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.29	0.11	0.00	0.05	0.00	0.05	0.01	0.00	0.02
Worker	0.06	0.03	0.53	0.00	0.22	0.00	0.22	0.06	0.00	0.06
Total	0.06	0.32	0.64	0.00	0.27	0.00	0.28	0.07	0.00	0.08

3.9 Building Construction - 2028

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.08	0.69	0.89	0.00		0.03	0.03		0.03	0.03
Total	0.08	0.69	0.89	0.00		0.03	0.03		0.03	0.03

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.12	0.05	0.00	0.02	0.00	0.02	0.01	0.00	0.01
Worker	0.02	0.01	0.21	0.00	0.10	0.00	0.10	0.03	0.00	0.03
Total	0.03	0.13	0.26	0.00	0.12	0.00	0.12	0.03	0.00	0.03

3.10 Architectural Coating - 2028

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Archit. Coating	0.44					0.00	0.00		0.00	0.00
Off-Road	0.01	0.04	0.07	0.00		0.00	0.00		0.00	0.00
Total	0.45	0.04	0.07	0.00		0.00	0.00		0.00	0.00

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Total	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00

3.11 Asphalt Paving - 2028

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.03	0.27	0.47	0.00		0.01	0.01		0.01	0.01
Paving	0.00					0.00	0.00		0.00	0.00
Total	0.03	0.27	0.47	0.00		0.01	0.01		0.01	0.01

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12 Finishing/Landscaping - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Off-Road	0.00	0.03	0.05	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.03	0.05	0.00		0.00	0.00		0.00	0.00

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Onsite Construction PM10 Exhaust Emissions - Mitigated Scenario [1]

Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/hr)	Emission Rate (g/s)	# of Total Workdays/ Year	Construction Duration[2]
2026	0.0070	13.94	261	0.05	6.68E-03	8.41E-04	261	1.00
2027	0.0103	20.60	261	0.08	9.87E-03	1.24E-03	261	1.00
2028	0.0058	11.66	140	0.08	1.04E-02	1.31E-03	260	0.54

Offsite Construction PM10 Exhaust Emissions - Mitigated Scenario 1

Year	Annual PM10 Exhaust Emissions (Tons/Year)	Annual PM10 Exhaust Emissions (lbs/Year)	# of Construction Days/Year	Average Daily Emissions (lbs/day)	Hauling Emissions w/in 1,000 ft (lbs/day)[3]	Emission Rate (lbs/hr)	Emission Rate (g/s)
2026	0.0012	2.34	261	8.97E-03	1.98E-04	2.47E-05	3.11E-06
2027	0.0034	6.70	261	2.57E-02	5.66E-04	7.08E-05	8.92E-06
2028	0.0015	2.92	140	2.09E-02	4.60E-04	5.75E-05	7.25E-06

Note: Emissions evenly distributed over 45 modeled volume sources.

Hauling Length (miles)[3]	20.0	miles
Haul Length within 1,000 ft of Site (mile)[4]	0.44	miles
Hours per work day (7:00 AM to 4:00 PM, 1-hour of breaks)[5]	8	hours

[1] DPM emissions taken as PM_{10} exhaust emissions from CalEEMod average daily emissions.

[2] Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App C - Risk Calculations).

[3] Based on CalEEMod default 20 mile hauling distance.

[4] Emissions from CalEEMod offsite average daily emissions, which is based on proportioned haul truck trip distances , are adjusted to evaluate emissions from the 0.44-mile route within 1,000 of the project site.

[5] Work hours applied in By Hour/Day (HRDOW) variable emissions module in air dispersion model (see App C - Air Dispersion Model Output Files).

Option 3

3.2 Building and Asphalt Demolition - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Off-Road	0.02	0.50	0.91	0.00		0.00	0.00		0.00	0.00
Total	0.02	0.50	0.91	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Total	0.00	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00

3.3 Building and Asphalt Demolition Debris Haul - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Fugitive Dust					0.03	0.00	0.03	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.00	0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Category										
Hauling	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4 Site Preparation - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.14	0.00	0.14	0.07	0.00	0.07
Off-Road	0.01	0.20	0.38	0.00		0.00	0.00		0.00	0.00
Total	0.01	0.20	0.38	0.00	0.14	0.00	0.14	0.07	0.00	0.07

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5 Site Preparation Soil Haul - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.6 Rough Grading - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.05	0.00	0.05	0.03	0.00	0.03
Off-Road	0.01	0.19	0.34	0.00		0.00	0.00		0.00	0.00
Total	0.01	0.19	0.34	0.00	0.05	0.00	0.06	0.03	0.00	0.03

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.7 Utility Trenching - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.00	0.06	0.10	0.00			0.00	0.00		0.00	0.00
Total	0.00	0.06	0.10	0.00			0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8 Fine Grading - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Fugitive Dust					0.03	0.00	0.03	0.02	0.00	0.02
Off-Road	0.01	0.11	0.21	0.00		0.00	0.00		0.00	0.00
Total	0.01	0.11	0.21	0.00	0.03	0.00	0.03	0.02	0.00	0.02

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9 Building Construction - 2026

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.02	0.28	0.47	0.00		0.00	0.00		0.00	0.00
Total	0.02	0.28	0.47	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.06	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Worker	0.01	0.01	0.11	0.00	0.04	0.00	0.04	0.01	0.00	0.01
Total	0.01	0.07	0.14	0.00	0.05	0.00	0.06	0.01	0.00	0.02

3.9 Building Construction - 2027

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.09	1.38	2.35	0.00		0.01	0.01		0.01	0.01
Total	0.09	1.38	2.35	0.00		0.01	0.01		0.01	0.01

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.29	0.11	0.00	0.05	0.00	0.05	0.01	0.00	0.02
Worker	0.06	0.03	0.53	0.00	0.22	0.00	0.22	0.06	0.00	0.06
Total	0.06	0.32	0.64	0.00	0.27	0.00	0.28	0.07	0.00	0.08

3.9 Building Construction - 2028

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.04	0.59	1.00	0.00		0.00	0.00		0.00	0.00
Total	0.04	0.59	1.00	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.12	0.05	0.00	0.02	0.00	0.02	0.01	0.00	0.01
Worker	0.02	0.01	0.21	0.00	0.10	0.00	0.10	0.03	0.00	0.03
Total	0.03	0.13	0.26	0.00	0.12	0.00	0.12	0.03	0.00	0.03

3.10 Architectural Coating - 2028

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Archit. Coating	0.44					0.00	0.00		0.00	0.00
Off-Road	0.00	0.04	0.07	0.00		0.00	0.00		0.00	0.00
Total	0.44	0.04	0.07	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00
Total	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00

3.11 Asphalt Paving - 2028

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.01	0.32	0.55	0.00		0.00	0.00		0.00	0.00
Paving	0.00					0.00	0.00		0.00	0.00
Total	0.01	0.32	0.55	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12 Finishing/Landscaping - 2028

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Off-Road	0.00	0.03	0.05	0.00		0.00	0.00		0.00	0.00
Total	0.00	0.03	0.05	0.00		0.00	0.00		0.00	0.00

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix B. Air Dispersion Model Output

```
*** AERMOD - VERSION 21112 ***   *** Eastside Neighborhood School                                    ***          06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                ***          09:28:20
                                                                                                                  PAGE   1
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                    ***      MODEL SETUP OPTIONS SUMMARY      ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**Model Is Setup For Calculation of Average CONCentration Values.

   -- DEPOSITION LOGIC --
**NO GAS DEPOSITION Data Provided.
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses URBAN Dispersion Algorithm for the SBL for    46 Source(s),
  for Total of    1 Urban Area(s):
  Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  OTHER

**Model Calculates PERIOD Averages Only

**This Run Includes:    46 Source(s);       2 Source Group(s); and    1013 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
               and:      45 VOLUME source(s)
               and:       1 AREA type source(s)
               and:       0 LINE source(s)
               and:       0 RLINE/RLINEXT source(s)
               and:       0 OPENPIT source(s)
               and:       0 BUOYANT LINE source(s) with a total of      0 line(s)
```

```
**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  16216

**Output Options Selected:
        Model Outputs Tables of PERIOD Averages by Receptor
        Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
        Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                               m for Missing Hours
                                                               b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   245.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =    0.0
                 Emission Units = GRAMS/SEC                             ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.7 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   RIV30.err
**File for Summary of Results:   RIV30.sum
```

Model Output - Unit Emission Rates (1 g/s)
Residential Receptors

*** AERMOD - VERSION 21112 ***   *** Eastside Neighborhood School   ***   06/11/22
*** AERMET - VERSION 16216 ***   *** Construction HRA   ***   09:28:20
                                                                                                                 PAGE   2

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.22222E-01	466174.7	3758953.7	273.9	4.15	7.37	3.26	YES	HRDOW
L0000002	0	0.22222E-01	466160.0	3758956.3	273.6	4.15	7.37	3.26	YES	HRDOW
L0000003	0	0.22222E-01	466146.0	3758963.7	273.4	4.15	7.37	3.26	YES	HRDOW
L0000004	0	0.22222E-01	466132.0	3758971.1	273.3	4.15	7.37	3.26	YES	HRDOW
L0000005	0	0.22222E-01	466118.0	3758978.5	273.2	4.15	7.37	3.26	YES	HRDOW
L0000006	0	0.22222E-01	466104.0	3758985.9	273.1	4.15	7.37	3.26	YES	HRDOW
L0000007	0	0.22222E-01	466090.0	3758993.4	272.9	4.15	7.37	3.26	YES	HRDOW
L0000008	0	0.22222E-01	466076.0	3759000.8	272.7	4.15	7.37	3.26	YES	HRDOW
L0000009	0	0.22222E-01	466062.0	3759008.2	272.6	4.15	7.37	3.26	YES	HRDOW
L0000010	0	0.22222E-01	466048.1	3759015.9	272.4	4.15	7.37	3.26	YES	HRDOW
L0000011	0	0.22222E-01	466034.3	3759023.5	272.2	4.15	7.37	3.26	YES	HRDOW
L0000012	0	0.22222E-01	466020.4	3759031.2	272.0	4.15	7.37	3.26	YES	HRDOW
L0000013	0	0.22222E-01	466006.5	3759038.9	271.8	4.15	7.37	3.26	YES	HRDOW
L0000014	0	0.22222E-01	465992.7	3759046.5	271.6	4.15	7.37	3.26	YES	HRDOW
L0000015	0	0.22222E-01	465978.8	3759054.2	271.4	4.15	7.37	3.26	YES	HRDOW
L0000016	0	0.22222E-01	465964.9	3759061.9	270.9	4.15	7.37	3.26	YES	HRDOW
L0000017	0	0.22222E-01	465951.1	3759069.7	270.7	4.15	7.37	3.26	YES	HRDOW
L0000018	0	0.22222E-01	465937.4	3759077.7	270.4	4.15	7.37	3.26	YES	HRDOW
L0000019	0	0.22222E-01	465923.7	3759085.6	270.2	4.15	7.37	3.26	YES	HRDOW
L0000020	0	0.22222E-01	465910.0	3759093.5	269.9	4.15	7.37	3.26	YES	HRDOW
L0000021	0	0.22222E-01	465896.3	3759101.5	269.7	4.15	7.37	3.26	YES	HRDOW
L0000022	0	0.22222E-01	465882.5	3759109.4	269.4	4.15	7.37	3.26	YES	HRDOW
L0000023	0	0.22222E-01	465868.8	3759117.4	269.1	4.15	7.37	3.26	YES	HRDOW
L0000024	0	0.22222E-01	465855.1	3759125.3	268.9	4.15	7.37	3.26	YES	HRDOW
L0000025	0	0.22222E-01	465841.4	3759133.2	268.6	4.15	7.37	3.26	YES	HRDOW
L0000026	0	0.22222E-01	465827.0	3759139.7	268.4	4.15	7.37	3.26	YES	HRDOW
L0000027	0	0.22222E-01	465812.2	3759145.4	268.2	4.15	7.37	3.26	YES	HRDOW
L0000028	0	0.22222E-01	465797.4	3759151.1	267.7	4.15	7.37	3.26	YES	HRDOW
L0000029	0	0.22222E-01	465782.8	3759157.3	267.2	4.15	7.37	3.26	YES	HRDOW
L0000030	0	0.22222E-01	465768.5	3759164.0	266.8	4.15	7.37	3.26	YES	HRDOW
L0000031	0	0.22222E-01	465754.1	3759170.8	266.2	4.15	7.37	3.26	YES	HRDOW
L0000032	0	0.22222E-01	465739.8	3759177.6	265.2	4.15	7.37	3.26	YES	HRDOW
L0000033	0	0.22222E-01	465725.5	3759184.3	263.8	4.15	7.37	3.26	YES	HRDOW
L0000034	0	0.22222E-01	465712.0	3759192.5	263.7	4.15	7.37	3.26	YES	HRDOW
L0000035	0	0.22222E-01	465699.0	3759201.6	263.5	4.15	7.37	3.26	YES	HRDOW
L0000036	0	0.22222E-01	465686.0	3759210.7	262.7	4.15	7.37	3.26	YES	HRDOW
L0000037	0	0.22222E-01	465673.0	3759219.8	262.2	4.15	7.37	3.26	YES	HRDOW
L0000038	0	0.22222E-01	465659.7	3759228.5	262.2	4.15	7.37	3.26	YES	HRDOW

```
L0000039        0   0.22222E-01  465645.8 3759236.1   261.9    4.15    7.37    3.26    YES   HRDOW
L0000040        0   0.22222E-01  465631.9 3759243.7   262.1    4.15    7.37    3.26    YES   HRDOW
```

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                            ***       06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                         ***       09:28:20
                                                                                                         PAGE   3
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000041	0	0.22222E-01	465618.0	3759251.3	262.8	4.15	7.37	3.26	YES	HRDOW
L0000042	0	0.22222E-01	465604.1	3759258.9	263.6	4.15	7.37	3.26	YES	HRDOW
L0000043	0	0.22222E-01	465590.7	3759267.2	264.0	4.15	7.37	3.26	YES	HRDOW
L0000044	0	0.22222E-01	465577.8	3759276.5	264.2	4.15	7.37	3.26	YES	HRDOW
L0000045	0	0.22222E-01	465564.9	3759285.7	262.0	4.15	7.37	3.26	YES	HRDOW

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                            ***       06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                         ***       09:28:20
                                                                                                         PAGE   4
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
PAREA1	0	0.26790E-04	465841.7	3759144.3	268.7	4.15	6	1.93	YES	HRDOW

Model Output - Unit Emission Rates (1 g/s)
Residential Receptors

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***      09:28:20
                                                                                                    PAGE    5
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID                                      SOURCE IDs
-----------                                      ----------


 ONSITE     PAREA1      ,

 HAUL       L0000001  , L0000002   , L0000003   , L0000004   , L0000005   , L0000006   , L0000007   , L0000008   ,

            L0000009  , L0000010   , L0000011   , L0000012   , L0000013   , L0000014   , L0000015   , L0000016   ,

            L0000017  , L0000018   , L0000019   , L0000020   , L0000021   , L0000022   , L0000023   , L0000024   ,

            L0000025  , L0000026   , L0000027   , L0000028   , L0000029   , L0000030   , L0000031   , L0000032   ,

            L0000033  , L0000034   , L0000035   , L0000036   , L0000037   , L0000038   , L0000039   , L0000040   ,

            L0000041  , L0000042   , L0000043   , L0000044   , L0000045   ,


*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***      09:28:20
                                                                                                    PAGE    6
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                *** SOURCE IDs DEFINED AS URBAN SOURCES ***

 URBAN ID   URBAN POP                            SOURCE IDs
 --------   ---------                            ----------


            2189641.   PAREA1     , L0000001   , L0000002   , L0000003   , L0000004   , L0000005   , L0000006   ,
L0000007     ,

            L0000008  , L0000009   , L0000010   , L0000011   , L0000012   , L0000013   , L0000014   , L0000015   ,

            L0000016  , L0000017   , L0000018   , L0000019   , L0000020   , L0000021   , L0000022   , L0000023   ,

            L0000024  , L0000025   , L0000026   , L0000027   , L0000028   , L0000029   , L0000030   , L0000031   ,

            L0000032  , L0000033   , L0000034   , L0000035   , L0000036   , L0000037   , L0000038   , L0000039   ,

            L0000040  , L0000041   , L0000042   , L0000043   , L0000044   , L0000045   ,
```

C-25

Model Output - Unit Emission Rates (1 g/s)
Residential Receptors

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                              ***       06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                          ***       09:28:20
                                                                                                          PAGE   7
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

          * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = PAREA1       ; SOURCE TYPE = AREAPOLY :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                         DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .5000E+00   13  .5000E+00   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00


*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                              ***       06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                          ***       09:28:20
                                                                                                          PAGE   8
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

          * SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000001 through L0000045    ; SOURCE TYPE = VOLUME   :
 HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                         DAY OF WEEK = WEEKDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .1000E+01
   9  .1000E+01   10  .1000E+01   11  .1000E+01   12  .5000E+00   13  .5000E+00   14  .1000E+01   15  .1000E+01   16  .1000E+01
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SATURDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
                                         DAY OF WEEK = SUNDAY
   1  .0000E+00    2  .0000E+00    3  .0000E+00    4  .0000E+00    5  .0000E+00    6  .0000E+00    7  .0000E+00    8  .0000E+00
   9  .0000E+00   10  .0000E+00   11  .0000E+00   12  .0000E+00   13  .0000E+00   14  .0000E+00   15  .0000E+00   16  .0000E+00
  17  .0000E+00   18  .0000E+00   19  .0000E+00   20  .0000E+00   21  .0000E+00   22  .0000E+00   23  .0000E+00   24  .0000E+00
```

```
 *** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***       06/11/22
 *** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***       09:28:20
                                                                                                        PAGE  53
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** DISCRETE CARTESIAN RECEPTORS ***
                                 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                              (METERS)

      ( 466191.7, 3758601.9,    278.2,    278.2,     0.0);     ( 465528.2, 3758615.4,    272.0,    272.0,     0.0);
      ( 465553.2, 3758615.4,    272.3,    272.3,     0.0);     ( 465578.2, 3758615.4,    272.7,    272.7,     0.0);
      ( 465603.2, 3758615.4,    273.0,    273.0,     0.0);     ( 465628.2, 3758615.4,    273.3,    273.3,     0.0);
      ( 465653.2, 3758615.4,    273.4,    273.4,     0.0);     ( 465678.2, 3758615.4,    273.4,    273.4,     0.0);
      ( 465703.2, 3758615.4,    273.6,    273.6,     0.0);     ( 465728.2, 3758615.4,    273.9,    273.9,     0.0);
      ( 465753.2, 3758615.4,    273.9,    273.9,     0.0);     ( 465778.2, 3758615.4,    273.8,    273.8,     0.0);
      ( 465803.2, 3758615.4,    273.9,    273.9,     0.0);     ( 465828.2, 3758615.4,    274.0,    274.0,     0.0);
      ( 465853.2, 3758615.4,    274.2,    274.2,     0.0);     ( 465878.2, 3758615.4,    274.5,    274.5,     0.0);
      ( 465903.2, 3758615.4,    274.7,    274.7,     0.0);     ( 465928.2, 3758615.4,    275.0,    275.0,     0.0);
      ( 465953.2, 3758615.4,    275.2,    275.2,     0.0);     ( 465978.2, 3758615.4,    275.6,    275.6,     0.0);
      ( 466003.2, 3758615.4,    276.0,    276.0,     0.0);     ( 466028.2, 3758615.4,    276.2,    276.2,     0.0);
      ( 466053.2, 3758615.4,    276.5,    276.5,     0.0);     ( 466103.2, 3758615.4,    277.0,    277.0,     0.0);
      ( 466128.2, 3758615.4,    277.3,    277.3,     0.0);     ( 466153.2, 3758615.4,    277.6,    277.6,     0.0);
      ( 466178.2, 3758615.4,    277.9,    277.9,     0.0);     ( 465528.2, 3758640.4,    271.7,    271.7,     0.0);
      ( 465553.2, 3758640.4,    272.0,    272.0,     0.0);     ( 465578.2, 3758640.4,    272.4,    272.4,     0.0);
      ( 465603.2, 3758640.4,    272.7,    272.7,     0.0);     ( 465628.2, 3758640.4,    272.9,    272.9,     0.0);
      ( 465653.2, 3758640.4,    273.0,    273.0,     0.0);     ( 465678.2, 3758640.4,    273.1,    273.1,     0.0);
      ( 465703.2, 3758640.4,    273.3,    273.3,     0.0);     ( 465728.2, 3758640.4,    273.5,    273.5,     0.0);
      ( 465753.2, 3758640.4,    273.5,    273.5,     0.0);     ( 465778.2, 3758640.4,    273.4,    273.4,     0.0);
      ( 465803.2, 3758640.4,    273.5,    273.5,     0.0);     ( 465828.2, 3758640.4,    273.6,    273.6,     0.0);
      ( 465853.2, 3758640.4,    273.8,    273.8,     0.0);     ( 465878.2, 3758640.4,    274.1,    274.1,     0.0);
      ( 465903.2, 3758640.4,    274.4,    274.4,     0.0);     ( 465928.2, 3758640.4,    274.6,    274.6,     0.0);
      ( 465953.2, 3758640.4,    274.9,    274.9,     0.0);     ( 465978.2, 3758640.4,    275.3,    275.3,     0.0);
      ( 466003.2, 3758640.4,    275.7,    275.7,     0.0);     ( 466028.2, 3758640.4,    276.0,    276.0,     0.0);
      ( 466053.2, 3758640.4,    276.2,    276.2,     0.0);     ( 466078.2, 3758640.4,    276.5,    276.5,     0.0);
      ( 466103.2, 3758640.4,    276.8,    276.8,     0.0);     ( 466128.2, 3758640.4,    277.1,    277.1,     0.0);
      ( 466153.2, 3758640.4,    277.4,    277.4,     0.0);     ( 466178.2, 3758640.4,    277.8,    277.8,     0.0);
      ( 465528.2, 3758665.4,    271.4,    271.4,     0.0);     ( 465553.2, 3758665.4,    271.6,    271.6,     0.0);
      ( 465578.2, 3758665.4,    271.9,    271.9,     0.0);     ( 465603.2, 3758665.4,    272.3,    272.3,     0.0);
      ( 465628.2, 3758665.4,    272.5,    272.5,     0.0);     ( 465653.2, 3758665.4,    272.6,    272.6,     0.0);
      ( 465678.2, 3758665.4,    272.8,    272.8,     0.0);     ( 465703.2, 3758665.4,    273.0,    273.0,     0.0);
      ( 465728.2, 3758665.4,    273.1,    273.1,     0.0);     ( 465753.2, 3758665.4,    273.1,    273.1,     0.0);
      ( 465778.2, 3758665.4,    273.0,    273.0,     0.0);     ( 465803.2, 3758665.4,    273.1,    273.1,     0.0);
      ( 465828.2, 3758665.4,    273.2,    273.2,     0.0);     ( 465853.2, 3758665.4,    273.4,    273.4,     0.0);
      ( 465878.2, 3758665.4,    273.7,    273.7,     0.0);     ( 465903.2, 3758665.4,    274.1,    274.1,     0.0);
      ( 465928.2, 3758665.4,    274.4,    274.4,     0.0);     ( 465953.2, 3758665.4,    274.8,    274.8,     0.0);
      ( 465978.2, 3758665.4,    275.1,    275.1,     0.0);     ( 466003.2, 3758665.4,    275.5,    275.5,     0.0);
      ( 466028.2, 3758665.4,    275.8,    275.8,     0.0);     ( 466053.2, 3758665.4,    276.1,    276.1,     0.0);
      ( 466078.2, 3758665.4,    276.4,    276.4,     0.0);     ( 466128.2, 3758665.4,    277.0,    277.0,     0.0);
      ( 466153.2, 3758665.4,    277.4,    277.4,     0.0);     ( 466178.2, 3758665.4,    277.8,    277.8,     0.0);
      ( 465528.2, 3758690.4,    271.1,    271.1,     0.0);     ( 465553.2, 3758690.4,    271.3,    271.3,     0.0);
      ( 465578.2, 3758690.4,    271.5,    271.5,     0.0);     ( 465603.2, 3758690.4,    271.8,    271.8,     0.0);
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    ( 465628.2, 3758690.4,    272.1,     272.1,      0.0);        ( 465653.2, 3758690.4,    272.3,     272.3,      0.0);
    ( 465678.2, 3758690.4,    272.6,     272.6,      0.0);        ( 465703.2, 3758690.4,    272.7,     272.7,      0.0);
    ( 465728.2, 3758690.4,    272.6,     272.6,      0.0);        ( 465753.2, 3758690.4,    272.6,     272.6,      0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                    ***    06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                 ***    09:28:20
                                                                                                             PAGE  54
*** MODELOPTs:     RegDFAULT  CONC  ELEV   URBAN  ADJ_U*

                                 *** DISCRETE CARTESIAN RECEPTORS ***
                                 (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                              (METERS)

    ( 465778.2, 3758690.4,    272.6,     272.6,      0.0);        ( 465803.2, 3758690.4,    272.8,     272.8,      0.0);
    ( 465828.2, 3758690.4,    272.9,     272.9,      0.0);        ( 465853.2, 3758690.4,    273.2,     273.2,      0.0);
    ( 465878.2, 3758690.4,    273.5,     273.5,      0.0);        ( 465903.2, 3758690.4,    273.9,     273.9,      0.0);
    ( 465928.2, 3758690.4,    274.3,     274.3,      0.0);        ( 465953.2, 3758690.4,    274.6,     274.6,      0.0);
    ( 465978.2, 3758690.4,    275.0,     275.0,      0.0);        ( 466003.2, 3758690.4,    275.4,     275.4,      0.0);
    ( 466028.2, 3758690.4,    275.7,     275.7,      0.0);        ( 466053.2, 3758690.4,    276.0,     276.0,      0.0);
    ( 466078.2, 3758690.4,    276.2,     276.2,      0.0);        ( 466103.2, 3758690.4,    276.5,     276.5,      0.0);
    ( 466153.2, 3758690.4,    277.3,     277.3,      0.0);        ( 466178.2, 3758690.4,    277.8,     277.8,      0.0);
    ( 465528.2, 3758715.4,    270.8,     270.8,      0.0);        ( 465553.2, 3758715.4,    271.0,     271.0,      0.0);
    ( 465578.2, 3758715.4,    271.2,     271.2,      0.0);        ( 465603.2, 3758715.4,    271.5,     271.5,      0.0);
    ( 465628.2, 3758715.4,    271.9,     271.9,      0.0);        ( 465653.2, 3758715.4,    272.2,     272.2,      0.0);
    ( 465678.2, 3758715.4,    272.3,     272.3,      0.0);        ( 465703.2, 3758715.4,    272.3,     272.3,      0.0);
    ( 465728.2, 3758715.4,    272.3,     272.3,      0.0);        ( 465753.2, 3758715.4,    272.3,     272.3,      0.0);
    ( 465778.2, 3758715.4,    272.3,     272.3,      0.0);        ( 465803.2, 3758715.4,    272.5,     272.5,      0.0);
    ( 465828.2, 3758715.4,    272.7,     272.7,      0.0);        ( 465853.2, 3758715.4,    273.0,     273.0,      0.0);
    ( 465878.2, 3758715.4,    273.4,     273.4,      0.0);        ( 465903.2, 3758715.4,    273.8,     273.8,      0.0);
    ( 465928.2, 3758715.4,    274.2,     274.2,      0.0);        ( 465953.2, 3758715.4,    274.6,     274.6,      0.0);
    ( 465978.2, 3758715.4,    274.9,     274.9,      0.0);        ( 466003.2, 3758715.4,    275.2,     275.2,      0.0);
    ( 466028.2, 3758715.4,    275.6,     275.6,      0.0);        ( 466053.2, 3758715.4,    275.9,     275.9,      0.0);
    ( 466078.2, 3758715.4,    276.2,     276.2,      0.0);        ( 466103.2, 3758715.4,    276.5,     276.5,      0.0);
    ( 466153.2, 3758715.4,    277.3,     277.3,      0.0);        ( 466178.2, 3758715.4,    277.7,     277.7,      0.0);
    ( 465528.2, 3758740.4,    270.4,     270.4,      0.0);        ( 465553.2, 3758740.4,    270.6,     270.6,      0.0);
    ( 465603.2, 3758740.4,    271.3,     271.3,      0.0);        ( 465628.2, 3758740.4,    271.6,     271.6,      0.0);
    ( 465653.2, 3758740.4,    271.9,     271.9,      0.0);        ( 465678.2, 3758740.4,    271.9,     271.9,      0.0);
    ( 465703.2, 3758740.4,    272.0,     272.0,      0.0);        ( 465728.2, 3758740.4,    271.9,     271.9,      0.0);
    ( 465753.2, 3758740.4,    271.9,     271.9,      0.0);        ( 465778.2, 3758740.4,    272.0,     272.0,      0.0);
    ( 465803.2, 3758740.4,    272.2,     272.2,      0.0);        ( 465828.2, 3758740.4,    272.5,     272.5,      0.0);
    ( 465853.2, 3758740.4,    272.8,     272.8,      0.0);        ( 465878.2, 3758740.4,    273.2,     273.2,      0.0);
    ( 465903.2, 3758740.4,    273.7,     273.7,      0.0);        ( 465928.2, 3758740.4,    274.1,     274.1,      0.0);
    ( 465953.2, 3758740.4,    274.5,     274.5,      0.0);        ( 465978.2, 3758740.4,    274.8,     274.8,      0.0);
    ( 466003.2, 3758740.4,    275.2,     275.2,      0.0);        ( 466028.2, 3758740.4,    275.6,     275.6,      0.0);
    ( 466053.2, 3758740.4,    276.0,     276.0,      0.0);        ( 466078.2, 3758740.4,    276.3,     276.3,      0.0);
    ( 466103.2, 3758740.4,    276.6,     276.6,      0.0);        ( 466128.2, 3758740.4,    276.9,     276.9,      0.0);
    ( 466178.2, 3758740.4,    277.7,     277.7,      0.0);        ( 465628.2, 3758765.4,    271.4,     271.4,      0.0);
    ( 465653.2, 3758765.4,    271.5,     271.5,      0.0);        ( 465678.2, 3758765.4,    271.5,     271.5,      0.0);
    ( 465703.2, 3758765.4,    271.6,     271.6,      0.0);        ( 465728.2, 3758765.4,    271.6,     271.6,      0.0);
    ( 465753.2, 3758765.4,    271.6,     271.6,      0.0);        ( 465778.2, 3758765.4,    271.8,     271.8,      0.0);
    ( 465803.2, 3758765.4,    272.0,     272.0,      0.0);        ( 465828.2, 3758765.4,    272.3,     272.3,      0.0);
    ( 465853.2, 3758765.4,    272.7,     272.7,      0.0);        ( 465878.2, 3758765.4,    273.2,     273.2,      0.0);
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( 465903.2, 3758765.4,     273.5,      273.5,      0.0);        ( 465928.2, 3758765.4,     273.9,      273.9,      0.0);
( 465953.2, 3758765.4,     274.3,      274.3,      0.0);        ( 465978.2, 3758765.4,     274.8,      274.8,      0.0);
( 466003.2, 3758765.4,     275.2,      275.2,      0.0);        ( 466028.2, 3758765.4,     275.6,      275.6,      0.0);
( 466053.2, 3758765.4,     275.9,      275.9,      0.0);        ( 466078.2, 3758765.4,     276.3,      276.3,      0.0);
( 466103.2, 3758765.4,     276.6,      276.6,      0.0);        ( 466128.2, 3758765.4,     277.0,      277.0,      0.0);
( 465653.2, 3758790.4,     271.1,      271.1,      0.0);        ( 465678.2, 3758790.4,     271.1,      271.1,      0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                         ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                      ***      09:28:20
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                              *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                        (METERS)


( 465703.2, 3758790.4,     271.2,      271.2,      0.0);        ( 465728.2, 3758790.4,     271.3,      271.3,      0.0);
( 465753.2, 3758790.4,     271.4,      271.4,      0.0);        ( 465778.2, 3758790.4,     271.5,      271.5,      0.0);
( 465803.2, 3758790.4,     271.7,      271.7,      0.0);        ( 465828.2, 3758790.4,     272.1,      272.1,      0.0);
( 465853.2, 3758790.4,     272.6,      272.6,      0.0);        ( 465878.2, 3758790.4,     273.0,      273.0,      0.0);
( 465903.2, 3758790.4,     273.4,      273.4,      0.0);        ( 465928.2, 3758790.4,     273.7,      273.7,      0.0);
( 465953.2, 3758790.4,     274.2,      274.2,      0.0);        ( 465978.2, 3758790.4,     274.6,      274.6,      0.0);
( 466003.2, 3758790.4,     275.1,      275.1,      0.0);        ( 466028.2, 3758790.4,     275.5,      275.5,      0.0);
( 466053.2, 3758790.4,     275.7,      275.7,      0.0);        ( 466078.2, 3758790.4,     276.1,      276.1,      0.0);
( 466103.2, 3758790.4,     276.6,      276.6,      0.0);        ( 466153.2, 3758790.4,     277.2,      277.2,      0.0);
( 465653.2, 3758815.4,     270.7,      270.7,      0.0);        ( 465678.2, 3758815.4,     270.8,      270.8,      0.0);
( 465703.2, 3758815.4,     270.9,      270.9,      0.0);        ( 465728.2, 3758815.4,     271.0,      271.0,      0.0);
( 465753.2, 3758815.4,     271.1,      271.1,      0.0);        ( 465778.2, 3758815.4,     271.3,      271.3,      0.0);
( 465828.2, 3758815.4,     271.9,      271.9,      0.0);        ( 465853.2, 3758815.4,     272.3,      272.3,      0.0);
( 465878.2, 3758815.4,     272.8,      272.8,      0.0);        ( 465903.2, 3758815.4,     273.2,      273.2,      0.0);
( 465928.2, 3758815.4,     273.5,      273.5,      0.0);        ( 465953.2, 3758815.4,     273.9,      273.9,      0.0);
( 465978.2, 3758815.4,     274.5,      274.5,      0.0);        ( 466003.2, 3758815.4,     275.1,      275.1,      0.0);
( 466028.2, 3758815.4,     275.3,      275.3,      0.0);        ( 466053.2, 3758815.4,     275.4,      275.4,      0.0);
( 466103.2, 3758815.4,     276.4,      276.4,      0.0);        ( 466128.2, 3758815.4,     276.9,      276.9,      0.0);
( 466153.2, 3758815.4,     276.9,      276.9,      0.0);        ( 466178.2, 3758815.4,     276.6,      276.6,      0.0);
( 465678.2, 3758840.4,     270.4,      270.4,      0.0);        ( 465703.2, 3758840.4,     270.6,      270.6,      0.0);
( 465728.2, 3758840.4,     270.7,      270.7,      0.0);        ( 465753.2, 3758840.4,     270.8,      270.8,      0.0);
( 465778.2, 3758840.4,     271.0,      271.0,      0.0);        ( 465803.2, 3758840.4,     271.2,      271.2,      0.0);
( 465828.2, 3758840.4,     271.5,      271.5,      0.0);        ( 465853.2, 3758840.4,     272.1,      272.1,      0.0);
( 465878.2, 3758840.4,     272.6,      272.6,      0.0);        ( 465903.2, 3758840.4,     273.0,      273.0,      0.0);
( 465928.2, 3758840.4,     273.5,      273.5,      0.0);        ( 465953.2, 3758840.4,     273.9,      273.9,      0.0);
( 465978.2, 3758840.4,     274.3,      274.3,      0.0);        ( 466003.2, 3758840.4,     274.6,      274.6,      0.0);
( 466028.2, 3758840.4,     274.7,      274.7,      0.0);        ( 466053.2, 3758840.4,     274.6,      274.6,      0.0);
( 466078.2, 3758840.4,     275.0,      275.0,      0.0);        ( 466103.2, 3758840.4,     275.8,      275.8,      0.0);
( 466128.2, 3758840.4,     276.4,      276.4,      0.0);        ( 466153.2, 3758840.4,     276.3,      276.3,      0.0);
( 466178.2, 3758840.4,     275.9,      275.9,      0.0);        ( 465703.2, 3758865.4,     270.3,      270.3,      0.0);
( 465728.2, 3758865.4,     270.4,      270.4,      0.0);        ( 465753.2, 3758865.4,     270.6,      270.6,      0.0);
( 465778.2, 3758865.4,     270.8,      270.8,      0.0);        ( 465803.2, 3758865.4,     271.1,      271.1,      0.0);
( 465853.2, 3758865.4,     271.8,      271.8,      0.0);        ( 465878.2, 3758865.4,     272.5,      272.5,      0.0);
( 465903.2, 3758865.4,     273.0,      273.0,      0.0);        ( 465928.2, 3758865.4,     273.4,      273.4,      0.0);
( 465953.2, 3758865.4,     273.7,      273.7,      0.0);        ( 465978.2, 3758865.4,     273.8,      273.8,      0.0);
( 466028.2, 3758865.4,     273.8,      273.8,      0.0);        ( 466053.2, 3758865.4,     273.9,      273.9,      0.0);
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      ( 466078.2, 3758865.4,      274.5,      274.5,       0.0);      ( 466103.2, 3758865.4,      275.2,      275.2,       0.0);
      ( 466128.2, 3758865.4,      275.7,      275.7,       0.0);      ( 466153.2, 3758865.4,      275.6,      275.6,       0.0);
      ( 466178.2, 3758865.4,      275.3,      275.3,       0.0);      ( 465703.2, 3758890.4,      270.1,      270.1,       0.0);
      ( 465728.2, 3758890.4,      270.3,      270.3,       0.0);      ( 465753.2, 3758890.4,      270.5,      270.5,       0.0);
      ( 465778.2, 3758890.4,      270.8,      270.8,       0.0);      ( 465803.2, 3758890.4,      271.1,      271.1,       0.0);
      ( 465828.2, 3758890.4,      271.5,      271.5,       0.0);      ( 465878.2, 3758890.4,      272.1,      272.1,       0.0);
      ( 465903.2, 3758890.4,      272.6,      272.6,       0.0);      ( 465928.2, 3758890.4,      272.9,      272.9,       0.0);
      ( 465978.2, 3758890.4,      273.2,      273.2,       0.0);      ( 466003.2, 3758890.4,      273.1,      273.1,       0.0);
      ( 466028.2, 3758890.4,      273.0,      273.0,       0.0);      ( 466053.2, 3758890.4,      273.2,      273.2,       0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                      ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                  ***      09:28:20
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                               *** DISCRETE CARTESIAN RECEPTORS ***
                               (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                              (METERS)


      ( 466078.2, 3758890.4,      273.9,      273.9,       0.0);      ( 466103.2, 3758890.4,      274.6,      274.6,       0.0);
      ( 466128.2, 3758890.4,      274.9,      274.9,       0.0);      ( 465728.2, 3758915.4,      270.2,      270.2,       0.0);
      ( 465753.2, 3758915.4,      270.3,      270.3,       0.0);      ( 465778.2, 3758915.4,      270.6,      270.6,       0.0);
      ( 465803.2, 3758915.4,      271.1,      271.1,       0.0);      ( 465828.2, 3758915.4,      271.4,      271.4,       0.0);
      ( 465853.2, 3758915.4,      271.3,      271.3,       0.0);      ( 465878.2, 3758915.4,      271.5,      271.5,       0.0);
      ( 465928.2, 3758915.4,      272.1,      272.1,       0.0);      ( 465953.2, 3758915.4,      272.3,      272.3,       0.0);
      ( 465978.2, 3758915.4,      272.4,      272.4,       0.0);      ( 466003.2, 3758915.4,      272.3,      272.3,       0.0);
      ( 466028.2, 3758915.4,      272.4,      272.4,       0.0);      ( 466053.2, 3758915.4,      272.7,      272.7,       0.0);
      ( 466078.2, 3758915.4,      273.3,      273.3,       0.0);      ( 466103.2, 3758915.4,      273.9,      273.9,       0.0);
      ( 466128.2, 3758915.4,      274.0,      274.0,       0.0);      ( 465728.2, 3758940.4,      270.0,      270.0,       0.0);
      ( 465753.2, 3758940.4,      270.0,      270.0,       0.0);      ( 465778.2, 3758940.4,      270.3,      270.3,       0.0);
      ( 465803.2, 3758940.4,      270.7,      270.7,       0.0);      ( 465828.2, 3758940.4,      270.8,      270.8,       0.0);
      ( 465853.2, 3758940.4,      270.8,      270.8,       0.0);      ( 465903.2, 3758940.4,      271.1,      271.1,       0.0);
      ( 465928.2, 3758940.4,      271.3,      271.3,       0.0);      ( 465953.2, 3758940.4,      271.4,      271.4,       0.0);
      ( 465978.2, 3758940.4,      271.5,      271.5,       0.0);      ( 466003.2, 3758940.4,      271.7,      271.7,       0.0);
      ( 466028.2, 3758940.4,      271.9,      271.9,       0.0);      ( 466053.2, 3758940.4,      272.3,      272.3,       0.0);
      ( 466078.2, 3758940.4,      272.7,      272.7,       0.0);      ( 465753.2, 3758965.4,      269.5,      269.5,       0.0);
      ( 465778.2, 3758965.4,      269.6,      269.6,       0.0);      ( 465803.2, 3758965.4,      269.8,      269.8,       0.0);
      ( 465853.2, 3758965.4,      270.0,      270.0,       0.0);      ( 465878.2, 3758965.4,      270.2,      270.2,       0.0);
      ( 465903.2, 3758965.4,      270.5,      270.5,       0.0);      ( 465928.2, 3758965.4,      270.7,      270.7,       0.0);
      ( 465953.2, 3758965.4,      270.7,      270.7,       0.0);      ( 465978.2, 3758965.4,      270.9,      270.9,       0.0);
      ( 466003.2, 3758965.4,      271.2,      271.2,       0.0);      ( 466028.2, 3758965.4,      271.8,      271.8,       0.0);
      ( 465828.2, 3758990.4,      269.0,      269.0,       0.0);      ( 465853.2, 3758990.4,      269.1,      269.1,       0.0);
      ( 465878.2, 3758990.4,      269.4,      269.4,       0.0);      ( 465928.2, 3758990.4,      270.4,      270.4,       0.0);
      ( 465953.2, 3758990.4,      270.5,      270.5,       0.0);      ( 465978.2, 3758990.4,      270.7,      270.7,       0.0);
      ( 466003.2, 3758990.4,      271.2,      271.2,       0.0);      ( 466028.2, 3758990.4,      271.8,      271.8,       0.0);
      ( 466053.2, 3758990.4,      272.2,      272.2,       0.0);      ( 465953.2, 3759015.4,      270.6,      270.6,       0.0);
      ( 465978.2, 3759015.4,      270.9,      270.9,       0.0);      ( 466003.2, 3759015.4,      271.4,      271.4,       0.0);
      ( 466194.9, 3758594.2,      278.4,      278.4,       0.0);      ( 466219.9, 3758594.2,      278.7,      278.7,       0.0);
      ( 466244.9, 3758594.2,      278.9,      278.9,       0.0);      ( 466269.9, 3758594.2,      279.1,      279.1,       0.0);
      ( 466294.9, 3758594.2,      279.3,      279.3,       0.0);      ( 466319.9, 3758594.2,      279.8,      279.8,       0.0);
      ( 466344.9, 3758594.2,      280.2,      280.2,       0.0);      ( 466369.9, 3758594.2,      280.6,      280.6,       0.0);
      ( 466394.9, 3758594.2,      281.1,      281.1,       0.0);      ( 466419.9, 3758594.2,      281.5,      281.5,       0.0);
```

```
      ( 466444.9, 3758594.2,      281.9,     281.9,        0.0);        ( 466469.9, 3758594.2,      282.3,     282.3,        0.0);
      ( 466494.9, 3758594.2,      282.5,     282.5,        0.0);        ( 466519.9, 3758594.2,      282.9,     282.9,        0.0);
      ( 466194.9, 3758619.2,      278.2,     278.2,        0.0);        ( 466219.9, 3758619.2,      278.6,     278.6,        0.0);
      ( 466244.9, 3758619.2,      278.9,     278.9,        0.0);        ( 466269.9, 3758619.2,      279.2,     279.2,        0.0);
      ( 466294.9, 3758619.2,      279.5,     279.5,        0.0);        ( 466319.9, 3758619.2,      279.9,     279.9,        0.0);
      ( 466344.9, 3758619.2,      280.3,     280.3,        0.0);        ( 466369.9, 3758619.2,      280.7,     280.7,        0.0);
      ( 466394.9, 3758619.2,      281.1,     281.1,        0.0);        ( 466419.9, 3758619.2,      281.5,     281.5,        0.0);
      ( 466444.9, 3758619.2,      281.8,     281.8,        0.0);        ( 466469.9, 3758619.2,      282.1,     282.1,        0.0);
      ( 466494.9, 3758619.2,      282.4,     282.4,        0.0);        ( 466519.9, 3758619.2,      282.7,     282.7,        0.0);
      ( 466194.9, 3758644.2,      278.1,     278.1,        0.0);        ( 466219.9, 3758644.2,      278.7,     278.7,        0.0);
      ( 466244.9, 3758644.2,      279.0,     279.0,        0.0);        ( 466269.9, 3758644.2,      279.4,     279.4,        0.0);
      ( 466294.9, 3758644.2,      279.7,     279.7,        0.0);        ( 466319.9, 3758644.2,      280.0,     280.0,        0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                          ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                      ***      09:28:20
                                                                                                                    PAGE  57

*** MODELOPTs:    RegDFAULT  CONC  ELEV   URBAN  ADJ_U*


                               *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                          (METERS)


      ( 466344.9, 3758644.2,      280.4,     280.4,        0.0);        ( 466369.9, 3758644.2,      280.7,     280.7,        0.0);
      ( 466394.9, 3758644.2,      281.1,     281.1,        0.0);        ( 466419.9, 3758644.2,      281.4,     281.4,        0.0);
      ( 466444.9, 3758644.2,      281.7,     281.7,        0.0);        ( 466469.9, 3758644.2,      281.9,     281.9,        0.0);
      ( 466494.9, 3758644.2,      282.2,     282.2,        0.0);        ( 466519.9, 3758644.2,      282.4,     282.4,        0.0);
      ( 466194.9, 3758669.2,      278.2,     278.2,        0.0);        ( 466219.9, 3758669.2,      278.7,     278.7,        0.0);
      ( 466244.9, 3758669.2,      279.0,     279.0,        0.0);        ( 466269.9, 3758669.2,      279.4,     279.4,        0.0);
      ( 466294.9, 3758669.2,      279.7,     279.7,        0.0);        ( 466319.9, 3758669.2,      280.1,     280.1,        0.0);
      ( 466344.9, 3758669.2,      280.4,     280.4,        0.0);        ( 466369.9, 3758669.2,      280.8,     280.8,        0.0);
      ( 466394.9, 3758669.2,      281.1,     281.1,        0.0);        ( 466419.9, 3758669.2,      281.3,     281.3,        0.0);
      ( 466444.9, 3758669.2,      281.4,     281.4,        0.0);        ( 466469.9, 3758669.2,      281.6,     281.6,        0.0);
      ( 466494.9, 3758669.2,      281.8,     281.8,        0.0);        ( 466519.9, 3758669.2,      282.0,     282.0,        0.0);
      ( 466194.9, 3758694.2,      278.1,     278.1,        0.0);        ( 466219.9, 3758694.2,      278.4,     278.4,        0.0);
      ( 466244.9, 3758694.2,      278.7,     278.7,        0.0);        ( 466269.9, 3758694.2,      279.1,     279.1,        0.0);
      ( 466294.9, 3758694.2,      279.5,     279.5,        0.0);        ( 466319.9, 3758694.2,      280.0,     280.0,        0.0);
      ( 466344.9, 3758694.2,      280.4,     280.4,        0.0);        ( 466369.9, 3758694.2,      280.7,     280.7,        0.0);
      ( 466394.9, 3758694.2,      281.1,     281.1,        0.0);        ( 466419.9, 3758694.2,      281.1,     281.1,        0.0);
      ( 466444.9, 3758694.2,      281.1,     281.1,        0.0);        ( 466469.9, 3758694.2,      281.2,     281.2,        0.0);
      ( 466494.9, 3758694.2,      281.4,     281.4,        0.0);        ( 466519.9, 3758694.2,      281.7,     281.7,        0.0);
      ( 466194.9, 3758719.2,      278.0,     278.0,        0.0);        ( 466219.9, 3758719.2,      278.2,     278.2,        0.0);
      ( 466244.9, 3758719.2,      278.3,     278.3,        0.0);        ( 466269.9, 3758719.2,      278.6,     278.6,        0.0);
      ( 466294.9, 3758719.2,      279.4,     279.4,        0.0);        ( 466319.9, 3758719.2,      280.1,     280.1,        0.0);
      ( 466344.9, 3758719.2,      280.4,     280.4,        0.0);        ( 466369.9, 3758719.2,      280.7,     280.7,        0.0);
      ( 466394.9, 3758719.2,      281.1,     281.1,        0.0);        ( 466419.9, 3758719.2,      280.9,     280.9,        0.0);
      ( 466444.9, 3758719.2,      280.7,     280.7,        0.0);        ( 466469.9, 3758719.2,      280.8,     280.8,        0.0);
      ( 466494.9, 3758719.2,      281.0,     281.0,        0.0);        ( 466519.9, 3758719.2,      281.4,     281.4,        0.0);
      ( 466194.9, 3758744.2,      277.8,     277.8,        0.0);        ( 466219.9, 3758744.2,      277.8,     277.8,        0.0);
      ( 466244.9, 3758744.2,      277.9,     277.9,        0.0);        ( 466269.9, 3758744.2,      278.2,     278.2,        0.0);
      ( 466294.9, 3758744.2,      278.9,     278.9,        0.0);        ( 466319.9, 3758744.2,      279.9,     279.9,        0.0);
      ( 466344.9, 3758744.2,      280.0,     280.0,        0.0);        ( 466369.9, 3758744.2,      280.3,     280.3,        0.0);
      ( 466394.9, 3758744.2,      280.5,     280.5,        0.0);        ( 466419.9, 3758744.2,      280.5,     280.5,        0.0);
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    ( 466444.9, 3758744.2,    280.4,    280.4,       0.0);      ( 466469.9, 3758744.2,    280.6,    280.6,       0.0);
    ( 466494.9, 3758744.2,    280.8,    280.8,       0.0);      ( 466519.9, 3758744.2,    281.0,    281.0,       0.0);
    ( 466194.9, 3758769.2,    277.4,    277.4,       0.0);      ( 466219.9, 3758769.2,    277.5,    277.5,       0.0);
    ( 466244.9, 3758769.2,    277.5,    277.5,       0.0);      ( 466269.9, 3758769.2,    277.9,    277.9,       0.0);
    ( 466294.9, 3758769.2,    278.7,    278.7,       0.0);      ( 466319.9, 3758769.2,    279.7,    279.7,       0.0);
    ( 466344.9, 3758769.2,    279.6,    279.6,       0.0);      ( 466369.9, 3758769.2,    279.9,    279.9,       0.0);
    ( 466394.9, 3758769.2,    280.0,    280.0,       0.0);      ( 466419.9, 3758769.2,    280.1,    280.1,       0.0);
    ( 466444.9, 3758769.2,    280.2,    280.2,       0.0);      ( 466469.9, 3758769.2,    280.4,    280.4,       0.0);
    ( 466494.9, 3758769.2,    280.6,    280.6,       0.0);      ( 466519.9, 3758769.2,    280.7,    280.7,       0.0);
    ( 466194.9, 3758794.2,    276.9,    276.9,       0.0);      ( 466219.9, 3758794.2,    277.0,    277.0,       0.0);
    ( 466244.9, 3758794.2,    277.2,    277.2,       0.0);      ( 466269.9, 3758794.2,    277.8,    277.8,       0.0);
    ( 466294.9, 3758794.2,    278.6,    278.6,       0.0);      ( 466319.9, 3758794.2,    279.6,    279.6,       0.0);
    ( 466344.9, 3758794.2,    279.4,    279.4,       0.0);      ( 466369.9, 3758794.2,    279.6,    279.6,       0.0);
    ( 466394.9, 3758794.2,    279.6,    279.6,       0.0);      ( 466419.9, 3758794.2,    279.7,    279.7,       0.0);
    ( 466444.9, 3758794.2,    279.9,    279.9,       0.0);      ( 466469.9, 3758794.2,    280.2,    280.2,       0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                          ***    06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                      ***    09:28:20
                                                                                                                  PAGE  58
*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN   ADJ_U*


                             *** DISCRETE CARTESIAN RECEPTORS ***
                             (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                        (METERS)


    ( 466494.9, 3758794.2,    280.3,    280.3,       0.0);      ( 466519.9, 3758794.2,    280.5,    280.5,       0.0);
    ( 466219.9, 3758819.2,    276.6,    276.6,       0.0);      ( 466244.9, 3758819.2,    276.9,    276.9,       0.0);
    ( 466269.9, 3758819.2,    277.7,    277.7,       0.0);      ( 466294.9, 3758819.2,    278.5,    278.5,       0.0);
    ( 466319.9, 3758819.2,    279.4,    279.4,       0.0);      ( 466344.9, 3758819.2,    279.2,    279.2,       0.0);
    ( 466369.9, 3758819.2,    279.4,    279.4,       0.0);      ( 466394.9, 3758819.2,    279.3,    279.3,       0.0);
    ( 466419.9, 3758819.2,    279.4,    279.4,       0.0);      ( 466444.9, 3758819.2,    279.7,    279.7,       0.0);
    ( 466469.9, 3758819.2,    279.9,    279.9,       0.0);      ( 466494.9, 3758819.2,    280.1,    280.1,       0.0);
    ( 466519.9, 3758819.2,    280.3,    280.3,       0.0);      ( 466219.9, 3758844.2,    276.5,    276.5,       0.0);
    ( 466244.9, 3758844.2,    277.0,    277.0,       0.0);      ( 466269.9, 3758844.2,    277.8,    277.8,       0.0);
    ( 466294.9, 3758844.2,    278.5,    278.5,       0.0);      ( 466319.9, 3758844.2,    279.3,    279.3,       0.0);
    ( 466344.9, 3758844.2,    279.0,    279.0,       0.0);      ( 466369.9, 3758844.2,    278.9,    278.9,       0.0);
    ( 466394.9, 3758844.2,    278.9,    278.9,       0.0);      ( 466419.9, 3758844.2,    279.1,    279.1,       0.0);
    ( 466444.9, 3758844.2,    279.4,    279.4,       0.0);      ( 466469.9, 3758844.2,    279.6,    279.6,       0.0);
    ( 466494.9, 3758844.2,    279.8,    279.8,       0.0);      ( 466519.9, 3758844.2,    280.0,    280.0,       0.0);
    ( 466219.9, 3758869.2,    276.3,    276.3,       0.0);      ( 466244.9, 3758869.2,    277.1,    277.1,       0.0);
    ( 466269.9, 3758869.2,    277.9,    277.9,       0.0);      ( 466294.9, 3758869.2,    278.4,    278.4,       0.0);
    ( 466319.9, 3758869.2,    278.9,    278.9,       0.0);      ( 466344.9, 3758869.2,    278.9,    278.9,       0.0);
    ( 466369.9, 3758869.2,    278.9,    278.9,       0.0);      ( 466394.9, 3758869.2,    278.8,    278.8,       0.0);
    ( 466419.9, 3758869.2,    278.9,    278.9,       0.0);      ( 466444.9, 3758869.2,    279.1,    279.1,       0.0);
    ( 466469.9, 3758869.2,    279.3,    279.3,       0.0);      ( 466494.9, 3758869.2,    279.6,    279.6,       0.0);
    ( 466519.9, 3758869.2,    279.8,    279.8,       0.0);      ( 466219.9, 3758894.2,    276.0,    276.0,       0.0);
    ( 466244.9, 3758894.2,    277.0,    277.0,       0.0);      ( 466269.9, 3758894.2,    277.5,    277.5,       0.0);
    ( 466294.9, 3758894.2,    277.8,    277.8,       0.0);      ( 466319.9, 3758894.2,    278.1,    278.1,       0.0);
    ( 466344.9, 3758894.2,    278.2,    278.2,       0.0);      ( 466369.9, 3758894.2,    278.3,    278.3,       0.0);
    ( 466394.9, 3758894.2,    278.4,    278.4,       0.0);      ( 466419.9, 3758894.2,    278.6,    278.6,       0.0);
    ( 466444.9, 3758894.2,    278.8,    278.8,       0.0);      ( 466469.9, 3758894.2,    279.0,    279.0,       0.0);
    ( 466494.9, 3758894.2,    279.3,    279.3,       0.0);      ( 466519.9, 3758894.2,    279.2,    279.2,       0.0);
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( 466219.9, 3758919.2,    275.6,    275.6,    0.0);    ( 466244.9, 3758919.2,    276.5,    276.5,    0.0);
( 466269.9, 3758919.2,    277.0,    277.0,    0.0);    ( 466294.9, 3758919.2,    277.3,    277.3,    0.0);
( 466319.9, 3758919.2,    277.4,    277.4,    0.0);    ( 466344.9, 3758919.2,    277.6,    277.6,    0.0);
( 466369.9, 3758919.2,    277.8,    277.8,    0.0);    ( 466394.9, 3758919.2,    278.0,    278.0,    0.0);
( 466419.9, 3758919.2,    278.3,    278.3,    0.0);    ( 466444.9, 3758919.2,    278.5,    278.5,    0.0);
( 466469.9, 3758919.2,    278.8,    278.8,    0.0);    ( 466494.9, 3758919.2,    278.9,    278.9,    0.0);
( 466519.9, 3758919.2,    278.8,    278.8,    0.0);    ( 466219.9, 3758969.2,    275.6,    275.6,    0.0);
( 466244.9, 3758969.2,    276.3,    276.3,    0.0);    ( 466269.9, 3758969.2,    276.7,    276.7,    0.0);
( 466294.9, 3758969.2,    276.8,    276.8,    0.0);    ( 466319.9, 3758969.2,    276.8,    276.8,    0.0);
( 466344.9, 3758969.2,    276.9,    276.9,    0.0);    ( 466369.9, 3758969.2,    277.3,    277.3,    0.0);
( 466394.9, 3758969.2,    277.7,    277.7,    0.0);    ( 466419.9, 3758969.2,    277.9,    277.9,    0.0);
( 466444.9, 3758969.2,    278.2,    278.2,    0.0);    ( 466469.9, 3758969.2,    278.6,    278.6,    0.0);
( 466494.9, 3758969.2,    278.8,    278.8,    0.0);    ( 466519.9, 3758969.2,    278.5,    278.5,    0.0);
( 466219.9, 3758994.2,    275.9,    275.9,    0.0);    ( 466244.9, 3758994.2,    276.5,    276.5,    0.0);
( 466269.9, 3758994.2,    276.7,    276.7,    0.0);    ( 466294.9, 3758994.2,    276.6,    276.6,    0.0);
( 466319.9, 3758994.2,    276.7,    276.7,    0.0);    ( 466344.9, 3758994.2,    276.8,    276.8,    0.0);
( 466369.9, 3758994.2,    277.1,    277.1,    0.0);    ( 466394.9, 3758994.2,    277.6,    277.6,    0.0);
( 466419.9, 3758994.2,    277.9,    277.9,    0.0);    ( 466444.9, 3758994.2,    278.1,    278.1,    0.0);
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*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                        ***    06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                     ***    09:28:20
                                                                                                 PAGE  59

*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                        *** DISCRETE CARTESIAN RECEPTORS ***
                        (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                     (METERS)


( 466469.9, 3758994.2,    278.4,    278.4,    0.0);    ( 466494.9, 3758994.2,    278.2,    278.2,    0.0);
( 466519.9, 3758994.2,    277.3,    277.3,    0.0);    ( 466219.9, 3759019.2,    275.8,    275.8,    0.0);
( 466244.9, 3759019.2,    276.2,    276.2,    0.0);    ( 466269.9, 3759019.2,    276.3,    276.3,    0.0);
( 466294.9, 3759019.2,    276.2,    276.2,    0.0);    ( 466319.9, 3759019.2,    276.4,    276.4,    0.0);
( 466344.9, 3759019.2,    276.6,    276.6,    0.0);    ( 466369.9, 3759019.2,    276.9,    276.9,    0.0);
( 466394.9, 3759019.2,    277.4,    277.4,    0.0);    ( 466419.9, 3759019.2,    277.8,    277.8,    0.0);
( 466444.9, 3759019.2,    277.9,    277.9,    0.0);    ( 466469.9, 3759019.2,    277.9,    277.9,    0.0);
( 466494.9, 3759019.2,    277.0,    277.0,    0.0);    ( 466519.9, 3759019.2,    276.0,    276.0,    0.0);
( 466219.9, 3759044.2,    275.5,    275.5,    0.0);    ( 466244.9, 3759044.2,    275.8,    275.8,    0.0);
( 466269.9, 3759044.2,    275.8,    275.8,    0.0);    ( 466294.9, 3759044.2,    275.9,    275.9,    0.0);
( 466319.9, 3759044.2,    276.2,    276.2,    0.0);    ( 466344.9, 3759044.2,    276.4,    276.4,    0.0);
( 466369.9, 3759044.2,    276.8,    276.8,    0.0);    ( 466394.9, 3759044.2,    277.2,    277.2,    0.0);
( 466419.9, 3759044.2,    277.6,    277.6,    0.0);    ( 466444.9, 3759044.2,    277.6,    277.6,    0.0);
( 466469.9, 3759044.2,    277.2,    277.2,    0.0);    ( 466494.9, 3759044.2,    275.9,    275.9,    0.0);
( 466519.9, 3759044.2,    275.2,    275.2,    0.0);    ( 466219.9, 3759069.2,    275.3,    275.3,    0.0);
( 466244.9, 3759069.2,    275.4,    275.4,    0.0);    ( 466269.9, 3759069.2,    275.4,    275.4,    0.0);
( 466294.9, 3759069.2,    275.7,    275.7,    0.0);    ( 466319.9, 3759069.2,    276.0,    276.0,    0.0);
( 466344.9, 3759069.2,    276.2,    276.2,    0.0);    ( 466369.9, 3759069.2,    276.6,    276.6,    0.0);
( 466394.9, 3759069.2,    277.0,    277.0,    0.0);    ( 466419.9, 3759069.2,    277.3,    277.3,    0.0);
( 466444.9, 3759069.2,    277.4,    277.4,    0.0);    ( 466469.9, 3759069.2,    276.6,    276.6,    0.0);
( 466494.9, 3759069.2,    275.2,    275.2,    0.0);    ( 466519.9, 3759069.2,    274.7,    274.7,    0.0);
( 466344.9, 3759094.2,    276.1,    276.1,    0.0);    ( 466369.9, 3759094.2,    276.5,    276.5,    0.0);
( 466394.9, 3759094.2,    276.7,    276.7,    0.0);    ( 466419.9, 3759094.2,    277.1,    277.1,    0.0);
( 466444.9, 3759094.2,    277.2,    277.2,    0.0);    ( 466469.9, 3759094.2,    276.5,    276.5,    0.0);
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   ( 466494.9, 3759094.2,     275.2,     275.2,       0.0);        ( 466519.9, 3759094.2,     274.6,     274.6,       0.0);
   ( 466196.0, 3759089.2,     274.9,     274.9,       0.0);        ( 466221.0, 3759089.2,     275.1,     275.1,       0.0);
   ( 466246.0, 3759089.2,     275.2,     275.2,       0.0);        ( 466271.0, 3759089.2,     275.3,     275.3,       0.0);
   ( 466296.0, 3759089.2,     275.7,     275.7,       0.0);        ( 466321.0, 3759089.2,     276.0,     276.0,       0.0);
   ( 466146.0, 3759114.2,     273.8,     273.8,       0.0);        ( 466171.0, 3759114.2,     274.0,     274.0,       0.0);
   ( 466196.0, 3759114.2,     274.4,     274.4,       0.0);        ( 466246.0, 3759114.2,     275.1,     275.1,       0.0);
   ( 466271.0, 3759114.2,     275.3,     275.3,       0.0);        ( 466296.0, 3759114.2,     275.6,     275.6,       0.0);
   ( 466321.0, 3759114.2,     275.8,     275.8,       0.0);        ( 466346.0, 3759114.2,     276.1,     276.1,       0.0);
   ( 466396.0, 3759114.2,     276.7,     276.7,       0.0);        ( 466421.0, 3759114.2,     277.1,     277.1,       0.0);
   ( 466446.0, 3759114.2,     277.3,     277.3,       0.0);        ( 466471.0, 3759114.2,     276.8,     276.8,       0.0);
   ( 466496.0, 3759114.2,     275.3,     275.3,       0.0);        ( 466521.0, 3759114.2,     274.6,     274.6,       0.0);
   ( 466121.0, 3759139.2,     273.4,     273.4,       0.0);        ( 466146.0, 3759139.2,     273.6,     273.6,       0.0);
   ( 466171.0, 3759139.2,     273.8,     273.8,       0.0);        ( 466196.0, 3759139.2,     274.2,     274.2,       0.0);
   ( 466221.0, 3759139.2,     274.6,     274.6,       0.0);        ( 466271.0, 3759139.2,     275.2,     275.2,       0.0);
   ( 466296.0, 3759139.2,     275.5,     275.5,       0.0);        ( 466346.0, 3759139.2,     276.1,     276.1,       0.0);
   ( 466371.0, 3759139.2,     276.4,     276.4,       0.0);        ( 466396.0, 3759139.2,     276.6,     276.6,       0.0);
   ( 466421.0, 3759139.2,     276.5,     276.5,       0.0);        ( 466446.0, 3759139.2,     276.1,     276.1,       0.0);
   ( 466471.0, 3759139.2,     275.5,     275.5,       0.0);        ( 466496.0, 3759139.2,     274.4,     274.4,       0.0);
   ( 466521.0, 3759139.2,     274.1,     274.1,       0.0);        ( 466071.0, 3759164.2,     272.5,     272.5,       0.0);
   ( 466096.0, 3759164.2,     273.0,     273.0,       0.0);        ( 466121.0, 3759164.2,     273.3,     273.3,       0.0);
   ( 466146.0, 3759164.2,     273.4,     273.4,       0.0);        ( 466171.0, 3759164.2,     273.7,     273.7,       0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                              ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                          ***      09:28:20
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                       *** DISCRETE CARTESIAN RECEPTORS ***
                       (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                  (METERS)


   ( 466196.0, 3759164.2,     274.0,     274.0,       0.0);        ( 466221.0, 3759164.2,     274.4,     274.4,       0.0);
   ( 466246.0, 3759164.2,     274.8,     274.8,       0.0);        ( 466296.0, 3759164.2,     275.4,     275.4,       0.0);
   ( 466321.0, 3759164.2,     275.7,     275.7,       0.0);        ( 466346.0, 3759164.2,     276.0,     276.0,       0.0);
   ( 466371.0, 3759164.2,     276.2,     276.2,       0.0);        ( 466396.0, 3759164.2,     276.4,     276.4,       0.0);
   ( 466421.0, 3759164.2,     275.7,     275.7,       0.0);        ( 466446.0, 3759164.2,     274.5,     274.5,       0.0);
   ( 466471.0, 3759164.2,     273.8,     273.8,       0.0);        ( 466496.0, 3759164.2,     273.5,     273.5,       0.0);
   ( 466521.0, 3759164.2,     274.2,     274.2,       0.0);        ( 466046.0, 3759189.2,     271.7,     271.7,       0.0);
   ( 466071.0, 3759189.2,     272.4,     272.4,       0.0);        ( 466096.0, 3759189.2,     272.9,     272.9,       0.0);
   ( 466121.0, 3759189.2,     273.1,     273.1,       0.0);        ( 466146.0, 3759189.2,     273.3,     273.3,       0.0);
   ( 466171.0, 3759189.2,     273.6,     273.6,       0.0);        ( 466196.0, 3759189.2,     273.9,     273.9,       0.0);
   ( 466221.0, 3759189.2,     274.2,     274.2,       0.0);        ( 466296.0, 3759189.2,     275.2,     275.2,       0.0);
   ( 466321.0, 3759189.2,     275.5,     275.5,       0.0);        ( 466346.0, 3759189.2,     275.8,     275.8,       0.0);
   ( 466371.0, 3759189.2,     276.0,     276.0,       0.0);        ( 466396.0, 3759189.2,     276.2,     276.2,       0.0);
   ( 466421.0, 3759189.2,     275.2,     275.2,       0.0);        ( 466446.0, 3759189.2,     273.7,     273.7,       0.0);
   ( 466471.0, 3759189.2,     272.9,     272.9,       0.0);        ( 466496.0, 3759189.2,     273.2,     273.2,       0.0);
   ( 466521.0, 3759189.2,     274.8,     274.8,       0.0);        ( 466071.0, 3759214.2,     272.1,     272.1,       0.0);
   ( 466096.0, 3759214.2,     272.6,     272.6,       0.0);        ( 466121.0, 3759214.2,     272.8,     272.8,       0.0);
   ( 466146.0, 3759214.2,     273.0,     273.0,       0.0);        ( 466171.0, 3759214.2,     273.3,     273.3,       0.0);
   ( 466221.0, 3759214.2,     274.1,     274.1,       0.0);        ( 466246.0, 3759214.2,     274.5,     274.5,       0.0);
   ( 466271.0, 3759214.2,     274.7,     274.7,       0.0);        ( 466296.0, 3759214.2,     274.9,     274.9,       0.0);
   ( 466321.0, 3759214.2,     275.3,     275.3,       0.0);        ( 466346.0, 3759214.2,     275.6,     275.6,       0.0);
```

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( 466371.0, 3759214.2,      275.8,      275.8,       0.0);        ( 466396.0, 3759214.2,      275.9,      275.9,       0.0);
( 466421.0, 3759214.2,      275.0,      275.0,       0.0);        ( 466446.0, 3759214.2,      273.9,      273.9,       0.0);
( 466471.0, 3759214.2,      273.3,      273.3,       0.0);        ( 466496.0, 3759214.2,      273.8,      273.8,       0.0);
( 466521.0, 3759214.2,      275.4,      275.4,       0.0);        ( 466071.0, 3759239.2,      271.9,      271.9,       0.0);
( 466096.0, 3759239.2,      272.3,      272.3,       0.0);        ( 466121.0, 3759239.2,      272.5,      272.5,       0.0);
( 466171.0, 3759239.2,      273.2,      273.2,       0.0);        ( 466196.0, 3759239.2,      273.6,      273.6,       0.0);
( 466221.0, 3759239.2,      273.9,      273.9,       0.0);        ( 466246.0, 3759239.2,      274.3,      274.3,       0.0);
( 466271.0, 3759239.2,      274.7,      274.7,       0.0);        ( 466321.0, 3759239.2,      275.1,      275.1,       0.0);
( 466346.0, 3759239.2,      275.3,      275.3,       0.0);        ( 466371.0, 3759239.2,      275.5,      275.5,       0.0);
( 466396.0, 3759239.2,      275.7,      275.7,       0.0);        ( 466421.0, 3759239.2,      275.1,      275.1,       0.0);
( 466446.0, 3759239.2,      273.9,      273.9,       0.0);        ( 466471.0, 3759239.2,      273.1,      273.1,       0.0);
( 466496.0, 3759239.2,      273.8,      273.8,       0.0);        ( 466521.0, 3759239.2,      275.6,      275.6,       0.0);
( 466121.0, 3759264.2,      272.5,      272.5,       0.0);        ( 466146.0, 3759264.2,      272.8,      272.8,       0.0);
( 466171.0, 3759264.2,      273.1,      273.1,       0.0);        ( 466196.0, 3759264.2,      273.4,      273.4,       0.0);
( 466221.0, 3759264.2,      273.7,      273.7,       0.0);        ( 466246.0, 3759264.2,      274.1,      274.1,       0.0);
( 466271.0, 3759264.2,      274.4,      274.4,       0.0);        ( 466296.0, 3759264.2,      274.5,      274.5,       0.0);
( 466321.0, 3759264.2,      274.5,      274.5,       0.0);        ( 466346.0, 3759264.2,      274.7,      274.7,       0.0);
( 466371.0, 3759264.2,      274.8,      274.8,       0.0);        ( 466396.0, 3759264.2,      275.0,      275.0,       0.0);
( 466421.0, 3759264.2,      273.9,      273.9,       0.0);        ( 466446.0, 3759264.2,      273.1,      273.1,       0.0);
( 466471.0, 3759264.2,      273.4,      273.4,       0.0);        ( 466496.0, 3759264.2,      274.2,      274.2,       0.0);
( 466521.0, 3759264.2,      275.5,      275.5,       0.0);        ( 466096.0, 3759289.2,      272.0,      272.0,       0.0);
( 466121.0, 3759289.2,      272.4,      272.4,       0.0);        ( 466146.0, 3759289.2,      272.7,      272.7,       0.0);
( 466171.0, 3759289.2,      273.0,      273.0,       0.0);        ( 466196.0, 3759289.2,      273.2,      273.2,       0.0);
( 466221.0, 3759289.2,      273.5,      273.5,       0.0);        ( 466246.0, 3759289.2,      273.8,      273.8,       0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                              ***    06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                          ***    09:28:20
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*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                              *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                          (METERS)


( 466271.0, 3759289.2,      274.0,      274.0,       0.0);        ( 466296.0, 3759289.2,      273.8,      273.8,       0.0);
( 466346.0, 3759289.2,      273.8,      273.8,       0.0);        ( 466371.0, 3759289.2,      274.0,      274.0,       0.0);
( 466396.0, 3759289.2,      273.9,      273.9,       0.0);        ( 466421.0, 3759289.2,      273.1,      273.1,       0.0);
( 466446.0, 3759289.2,      273.1,      273.1,       0.0);        ( 466471.0, 3759289.2,      273.6,      273.6,       0.0);
( 466496.0, 3759289.2,      274.3,      274.3,       0.0);        ( 466521.0, 3759289.2,      275.4,      275.4,       0.0);
( 466096.0, 3759314.2,      271.9,      271.9,       0.0);        ( 466121.0, 3759314.2,      272.2,      272.2,       0.0);
( 466146.0, 3759314.2,      272.5,      272.5,       0.0);        ( 466171.0, 3759314.2,      272.9,      272.9,       0.0);
( 466196.0, 3759314.2,      273.1,      273.1,       0.0);        ( 466221.0, 3759314.2,      273.2,      273.2,       0.0);
( 466246.0, 3759314.2,      273.5,      273.5,       0.0);        ( 466271.0, 3759314.2,      273.5,      273.5,       0.0);
( 466296.0, 3759314.2,      272.8,      272.8,       0.0);        ( 466321.0, 3759314.2,      272.5,      272.5,       0.0);
( 466371.0, 3759314.2,      273.2,      273.2,       0.0);        ( 466396.0, 3759314.2,      273.0,      273.0,       0.0);
( 466421.0, 3759314.2,      272.9,      272.9,       0.0);        ( 466446.0, 3759314.2,      273.3,      273.3,       0.0);
( 466471.0, 3759314.2,      273.6,      273.6,       0.0);        ( 466496.0, 3759314.2,      274.4,      274.4,       0.0);
( 466521.0, 3759314.2,      275.6,      275.6,       0.0);        ( 466096.0, 3759339.2,      271.8,      271.8,       0.0);
( 466121.0, 3759339.2,      272.0,      272.0,       0.0);        ( 466146.0, 3759339.2,      272.3,      272.3,       0.0);
( 466171.0, 3759339.2,      272.6,      272.6,       0.0);        ( 466196.0, 3759339.2,      272.8,      272.8,       0.0);
( 466221.0, 3759339.2,      272.9,      272.9,       0.0);        ( 466246.0, 3759339.2,      273.1,      273.1,       0.0);
( 466271.0, 3759339.2,      272.8,      272.8,       0.0);        ( 466296.0, 3759339.2,      271.8,      271.8,       0.0);
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       (  466321.0, 3759339.2,      272.0,      272.0,         0.0);        (  466346.0, 3759339.2,      272.6,      272.6,         0.0);
       (  466371.0, 3759339.2,      272.9,      272.9,         0.0);        (  466396.0, 3759339.2,      272.9,      272.9,         0.0);
       (  466421.0, 3759339.2,      272.8,      272.8,         0.0);        (  466446.0, 3759339.2,      273.0,      273.0,         0.0);
       (  466471.0, 3759339.2,      273.6,      273.6,         0.0);        (  466496.0, 3759339.2,      274.8,      274.8,         0.0);
       (  466521.0, 3759339.2,      275.9,      275.9,         0.0);        (  465971.0, 3759364.2,      269.2,      269.2,         0.0);
       (  465996.0, 3759364.2,      269.2,      269.2,         0.0);        (  466046.0, 3759364.2,      270.4,      270.4,         0.0);
       (  466071.0, 3759364.2,      271.2,      271.2,         0.0);        (  466096.0, 3759364.2,      271.6,      271.6,         0.0);
       (  466121.0, 3759364.2,      271.9,      271.9,         0.0);        (  466146.0, 3759364.2,      272.1,      272.1,         0.0);
       (  466171.0, 3759364.2,      272.4,      272.4,         0.0);        (  466196.0, 3759364.2,      272.5,      272.5,         0.0);
       (  466221.0, 3759364.2,      272.3,      272.3,         0.0);        (  466246.0, 3759364.2,      271.7,      271.7,         0.0);
       (  466271.0, 3759364.2,      270.8,      270.8,         0.0);        (  466296.0, 3759364.2,      270.6,      270.6,         0.0);
       (  466321.0, 3759364.2,      271.9,      271.9,         0.0);        (  466346.0, 3759364.2,      272.7,      272.7,         0.0);
       (  466396.0, 3759364.2,      273.3,      273.3,         0.0);        (  466421.0, 3759364.2,      273.4,      273.4,         0.0);
       (  466446.0, 3759364.2,      273.8,      273.8,         0.0);        (  466471.0, 3759364.2,      274.5,      274.5,         0.0);
       (  466496.0, 3759364.2,      275.4,      275.4,         0.0);        (  466521.0, 3759364.2,      276.0,      276.0,         0.0);
       (  465996.0, 3759389.2,      267.0,      267.0,         0.0);        (  466021.0, 3759389.2,      267.5,      267.5,         0.0);
       (  466046.0, 3759389.2,      268.8,      268.8,         0.0);        (  466071.0, 3759389.2,      270.2,      270.2,         0.0);
       (  466096.0, 3759389.2,      271.1,      271.1,         0.0);        (  466121.0, 3759389.2,      271.7,      271.7,         0.0);
       (  466146.0, 3759389.2,      271.7,      271.7,         0.0);        (  466171.0, 3759389.2,      271.7,      271.7,         0.0);
       (  466196.0, 3759389.2,      271.6,      271.6,         0.0);        (  466221.0, 3759389.2,      271.0,      271.0,         0.0);
       (  466246.0, 3759389.2,      270.1,      270.1,         0.0);        (  466271.0, 3759389.2,      269.6,      269.6,         0.0);
       (  466296.0, 3759389.2,      270.7,      270.7,         0.0);        (  466321.0, 3759389.2,      272.1,      272.1,         0.0);
       (  466346.0, 3759389.2,      272.9,      272.9,         0.0);        (  466371.0, 3759389.2,      273.5,      273.5,         0.0);
       (  466396.0, 3759389.2,      273.9,      273.9,         0.0);        (  466421.0, 3759389.2,      274.2,      274.2,         0.0);
       (  466446.0, 3759389.2,      274.5,      274.5,         0.0);        (  466471.0, 3759389.2,      275.1,      275.1,         0.0);
       (  466496.0, 3759389.2,      275.7,      275.7,         0.0);        (  466521.0, 3759389.2,      276.2,      276.2,         0.0);
       (  466021.0, 3759414.2,      266.0,      266.0,         0.0);        (  466046.0, 3759414.2,      267.2,      267.2,         0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                        ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                     ***      09:28:20
                                                                                                                   PAGE  62

*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                            *** DISCRETE CARTESIAN RECEPTORS ***
                            (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                        (METERS)


       (  466071.0, 3759414.2,      268.7,      268.7,         0.0);        (  466096.0, 3759414.2,      270.4,      270.4,         0.0);
       (  466121.0, 3759414.2,      271.5,      271.5,         0.0);        (  466146.0, 3759414.2,      271.5,      271.5,         0.0);
       (  466171.0, 3759414.2,      271.1,      271.1,         0.0);        (  466196.0, 3759414.2,      270.5,      270.5,         0.0);
       (  466221.0, 3759414.2,      269.9,      269.9,         0.0);        (  466246.0, 3759414.2,      269.6,      269.6,         0.0);
       (  466271.0, 3759414.2,      269.9,      269.9,         0.0);        (  466296.0, 3759414.2,      271.4,      271.4,         0.0);
       (  466321.0, 3759414.2,      272.6,      272.6,         0.0);        (  466346.0, 3759414.2,      273.3,      273.3,         0.0);
       (  466371.0, 3759414.2,      273.8,      273.8,         0.0);        (  466421.0, 3759414.2,      274.6,      274.6,         0.0);
       (  466446.0, 3759414.2,      275.0,      275.0,         0.0);        (  466471.0, 3759414.2,      275.4,      275.4,         0.0);
       (  466496.0, 3759414.2,      275.9,      275.9,         0.0);        (  466521.0, 3759414.2,      276.3,      276.3,         0.0);
       (  466021.0, 3759439.2,      265.4,      265.4,         0.0);        (  466046.0, 3759439.2,      266.0,      266.0,         0.0);
       (  466071.0, 3759439.2,      267.1,      269.4,         0.0);        (  466096.0, 3759439.2,      269.0,      269.0,         0.0);
       (  466121.0, 3759439.2,      270.5,      270.5,         0.0);        (  466146.0, 3759439.2,      270.9,      270.9,         0.0);
       (  466171.0, 3759439.2,      270.4,      270.4,         0.0);        (  466196.0, 3759439.2,      269.6,      269.6,         0.0);
       (  466221.0, 3759439.2,      269.3,      269.3,         0.0);        (  466246.0, 3759439.2,      269.7,      269.7,         0.0);
       (  466271.0, 3759439.2,      270.8,      270.8,         0.0);        (  466296.0, 3759439.2,      272.2,      272.2,         0.0);
```

```
( 466321.0, 3759439.2,    273.0,    273.0,    0.0);     ( 466346.0, 3759439.2,    273.6,    273.6,    0.0);
( 466371.0, 3759439.2,    274.1,    274.1,    0.0);     ( 466396.0, 3759439.2,    274.4,    274.4,    0.0);
( 466421.0, 3759439.2,    274.7,    274.7,    0.0);     ( 466446.0, 3759439.2,    275.1,    275.1,    0.0);
( 466471.0, 3759439.2,    275.5,    275.5,    0.0);     ( 466496.0, 3759439.2,    275.9,    275.9,    0.0);
( 466521.0, 3759439.2,    276.3,    276.3,    0.0);     ( 466046.0, 3759464.2,    265.5,    265.5,    0.0);
( 466071.0, 3759464.2,    266.0,    266.0,    0.0);     ( 466096.0, 3759464.2,    267.2,    271.2,    0.0);
( 466121.0, 3759464.2,    268.4,    268.4,    0.0);     ( 466146.0, 3759464.2,    269.2,    269.2,    0.0);
( 466171.0, 3759464.2,    269.4,    269.4,    0.0);     ( 466196.0, 3759464.2,    269.0,    269.0,    0.0);
( 466221.0, 3759464.2,    269.1,    269.1,    0.0);     ( 466246.0, 3759464.2,    269.8,    269.8,    0.0);
( 466271.0, 3759464.2,    271.5,    271.5,    0.0);     ( 466296.0, 3759464.2,    272.9,    272.9,    0.0);
( 466321.0, 3759464.2,    273.4,    273.4,    0.0);     ( 466346.0, 3759464.2,    273.8,    273.8,    0.0);
( 466371.0, 3759464.2,    274.2,    274.2,    0.0);     ( 466396.0, 3759464.2,    274.5,    274.5,    0.0);
( 466446.0, 3759464.2,    275.2,    275.2,    0.0);     ( 466471.0, 3759464.2,    275.5,    275.5,    0.0);
( 466496.0, 3759464.2,    275.9,    275.9,    0.0);     ( 466521.0, 3759464.2,    276.3,    276.3,    0.0);
( 466046.0, 3759489.2,    265.9,    265.9,    0.0);     ( 466071.0, 3759489.2,    266.1,    266.1,    0.0);
( 466096.0, 3759489.2,    266.5,    266.5,    0.0);     ( 466121.0, 3759489.2,    266.9,    266.9,    0.0);
( 466146.0, 3759489.2,    267.2,    267.2,    0.0);     ( 466171.0, 3759489.2,    267.9,    267.9,    0.0);
( 466196.0, 3759489.2,    268.6,    268.6,    0.0);     ( 466221.0, 3759489.2,    269.2,    269.2,    0.0);
( 466246.0, 3759489.2,    270.0,    270.0,    0.0);     ( 466271.0, 3759489.2,    271.4,    271.4,    0.0);
( 466296.0, 3759489.2,    272.9,    272.9,    0.0);     ( 466321.0, 3759489.2,    273.5,    273.5,    0.0);
( 466346.0, 3759489.2,    273.9,    273.9,    0.0);     ( 466371.0, 3759489.2,    274.4,    274.4,    0.0);
( 466396.0, 3759489.2,    274.6,    274.6,    0.0);     ( 466421.0, 3759489.2,    274.8,    274.8,    0.0);
( 466471.0, 3759489.2,    275.5,    275.5,    0.0);     ( 466496.0, 3759489.2,    275.9,    275.9,    0.0);
( 466521.0, 3759489.2,    276.2,    276.2,    0.0);     ( 466046.0, 3759514.2,    266.9,    266.9,    0.0);
( 466071.0, 3759514.2,    267.4,    267.4,    0.0);     ( 466096.0, 3759514.2,    267.5,    267.5,    0.0);
( 466121.0, 3759514.2,    267.5,    267.5,    0.0);     ( 466146.0, 3759514.2,    268.0,    268.0,    0.0);
( 466171.0, 3759514.2,    268.6,    268.6,    0.0);     ( 466196.0, 3759514.2,    269.2,    269.2,    0.0);
( 466221.0, 3759514.2,    269.8,    269.8,    0.0);     ( 466246.0, 3759514.2,    270.6,    270.6,    0.0);
( 466271.0, 3759514.2,    271.9,    271.9,    0.0);     ( 466296.0, 3759514.2,    272.9,    272.9,    0.0);
( 466321.0, 3759514.2,    273.5,    273.5,    0.0);     ( 466346.0, 3759514.2,    273.9,    273.9,    0.0);
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*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***      09:28:20
                                                                                                      PAGE  63

*** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                    *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                 (METERS)

    ( 466371.0, 3759514.2,     274.1,     274.1,        0.0);     ( 466396.0, 3759514.2,     274.4,     274.4,        0.0);
    ( 466421.0, 3759514.2,     274.6,     274.6,        0.0);     ( 466471.0, 3759514.2,     275.3,     275.3,        0.0);
    ( 466496.0, 3759514.2,     275.8,     275.8,        0.0);     ( 466521.0, 3759514.2,     276.2,     276.2,        0.0);
    ( 466071.0, 3759539.2,     268.4,     268.4,        0.0);     ( 466096.0, 3759539.2,     268.7,     268.7,        0.0);
    ( 466121.0, 3759539.2,     268.7,     268.7,        0.0);     ( 466146.0, 3759539.2,     269.3,     269.3,        0.0);
    ( 466171.0, 3759539.2,     269.8,     269.8,        0.0);     ( 466196.0, 3759539.2,     270.2,     270.2,        0.0);
    ( 466221.0, 3759539.2,     270.6,     270.6,        0.0);     ( 466246.0, 3759539.2,     271.1,     271.1,        0.0);
    ( 466271.0, 3759539.2,     272.2,     272.2,        0.0);     ( 466296.0, 3759539.2,     272.9,     272.9,        0.0);
    ( 466321.0, 3759539.2,     273.4,     273.4,        0.0);     ( 466346.0, 3759539.2,     273.7,     273.7,        0.0);
    ( 466371.0, 3759539.2,     273.9,     273.9,        0.0);     ( 466396.0, 3759539.2,     274.1,     274.1,        0.0);
    ( 466421.0, 3759539.2,     274.4,     274.4,        0.0);     ( 466446.0, 3759539.2,     274.7,     274.7,        0.0);
    ( 466496.0, 3759539.2,     275.6,     275.6,        0.0);     ( 466521.0, 3759539.2,     276.0,     276.0,        0.0);
    ( 466071.0, 3759564.2,     269.2,     269.2,        0.0);     ( 466096.0, 3759564.2,     269.5,     269.5,        0.0);
    ( 466121.0, 3759564.2,     269.7,     269.7,        0.0);     ( 466146.0, 3759564.2,     270.3,     270.3,        0.0);
    ( 466171.0, 3759564.2,     270.7,     270.7,        0.0);     ( 466196.0, 3759564.2,     270.9,     270.9,        0.0);
    ( 466221.0, 3759564.2,     271.1,     271.1,        0.0);     ( 466246.0, 3759564.2,     271.4,     271.4,        0.0);
    ( 466271.0, 3759564.2,     272.2,     272.2,        0.0);     ( 466296.0, 3759564.2,     272.8,     272.8,        0.0);
    ( 466321.0, 3759564.2,     273.2,     273.2,        0.0);     ( 466346.0, 3759564.2,     273.4,     273.4,        0.0);
    ( 466371.0, 3759564.2,     273.6,     273.6,        0.0);     ( 466396.0, 3759564.2,     273.8,     273.8,        0.0);
    ( 466421.0, 3759564.2,     274.2,     274.2,        0.0);     ( 466446.0, 3759564.2,     274.6,     274.6,        0.0);
    ( 466496.0, 3759564.2,     275.5,     275.5,        0.0);     ( 466521.0, 3759564.2,     275.9,     275.9,        0.0);
    ( 466071.0, 3759589.2,     269.5,     269.5,        0.0);     ( 466096.0, 3759589.2,     269.9,     269.9,        0.0);
    ( 466121.0, 3759589.2,     270.2,     270.2,        0.0);     ( 466146.0, 3759589.2,     270.6,     270.6,        0.0);
    ( 466171.0, 3759589.2,     270.9,     270.9,        0.0);     ( 466196.0, 3759589.2,     271.0,     271.0,        0.0);
    ( 466221.0, 3759589.2,     271.3,     271.3,        0.0);     ( 466246.0, 3759589.2,     271.6,     271.6,        0.0);
    ( 466271.0, 3759589.2,     272.1,     272.1,        0.0);     ( 466296.0, 3759589.2,     272.6,     272.6,        0.0);
    ( 466321.0, 3759589.2,     273.0,     273.0,        0.0);     ( 466346.0, 3759589.2,     273.2,     273.2,        0.0);
    ( 466371.0, 3759589.2,     273.4,     273.4,        0.0);     ( 466396.0, 3759589.2,     273.7,     273.7,        0.0);
    ( 466421.0, 3759589.2,     274.1,     274.1,        0.0);     ( 466446.0, 3759589.2,     274.5,     274.5,        0.0);
    ( 466471.0, 3759589.2,     274.9,     274.9,        0.0);     ( 466521.0, 3759589.2,     275.8,     275.8,        0.0);
    ( 465526.8, 3758591.2,     272.2,     272.2,        0.0);     ( 465551.8, 3758591.2,     272.6,     272.6,        0.0);
    ( 465576.8, 3758591.2,     272.9,     272.9,        0.0);     ( 465601.8, 3758591.2,     273.3,     273.3,        0.0);
    ( 465626.8, 3758591.2,     273.6,     273.6,        0.0);     ( 465651.8, 3758591.2,     273.7,     273.7,        0.0);
    ( 465676.8, 3758591.2,     273.7,     273.7,        0.0);     ( 465701.8, 3758591.2,     273.9,     273.9,        0.0);
    ( 465726.8, 3758591.2,     274.1,     274.1,        0.0);     ( 465751.8, 3758591.2,     274.2,     274.2,        0.0);
    ( 465776.8, 3758591.2,     274.2,     274.2,        0.0);     ( 465801.8, 3758591.2,     274.2,     274.2,        0.0);
    ( 465826.8, 3758591.2,     274.4,     274.4,        0.0);     ( 465851.8, 3758591.2,     274.6,     274.6,        0.0);
    ( 465876.8, 3758591.2,     274.9,     274.9,        0.0);     ( 465901.8, 3758591.2,     275.1,     275.1,        0.0);
    ( 465926.8, 3758591.2,     275.4,     275.4,        0.0);     ( 465951.8, 3758591.2,     275.6,     275.6,        0.0);
    ( 465976.8, 3758591.2,     276.0,     276.0,        0.0);     ( 466001.8, 3758591.2,     276.3,     276.3,        0.0);
    ( 466026.8, 3758591.2,     276.6,     276.6,        0.0);     ( 466051.8, 3758591.2,     276.8,     276.8,        0.0);
    ( 466076.8, 3758591.2,     277.1,     277.1,        0.0);     ( 466101.8, 3758591.2,     277.4,     277.4,        0.0);
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       ( 466126.8, 3758591.2,      277.6,      277.6,       0.0);         ( 466151.8, 3758591.2,      277.9,      277.9,       0.0);
       ( 466176.8, 3758591.2,      278.2,      278.2,       0.0);         ( 465526.8, 3758616.2,      271.9,      271.9,       0.0);
       ( 465551.8, 3758616.2,      272.3,      272.3,       0.0);         ( 465576.8, 3758616.2,      272.7,      272.7,       0.0);
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                                        ***     06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                                     ***     09:28:20
                                                                                                                  PAGE  64
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** DISCRETE CARTESIAN RECEPTORS ***
                              (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                            (METERS)

       ( 465601.8, 3758616.2,      273.0,      273.0,       0.0);         ( 465626.8, 3758616.2,      273.2,      273.2,       0.0);
       ( 465651.8, 3758616.2,      273.3,      273.3,       0.0);         ( 465676.8, 3758616.2,      273.4,      273.4,       0.0);
       ( 465701.8, 3758616.2,      273.6,      273.6,       0.0);         ( 465726.8, 3758616.2,      273.8,      273.8,       0.0);
       ( 465751.8, 3758616.2,      273.8,      273.8,       0.0);         ( 465776.8, 3758616.2,      273.8,      273.8,       0.0);
       ( 465801.8, 3758616.2,      273.8,      273.8,       0.0);         ( 465826.8, 3758616.2,      273.9,      273.9,       0.0);
       ( 465851.8, 3758616.2,      274.2,      274.2,       0.0);         ( 465876.8, 3758616.2,      274.5,      274.5,       0.0);
       ( 465901.8, 3758616.2,      274.7,      274.7,       0.0);         ( 465926.8, 3758616.2,      274.9,      274.9,       0.0);
       ( 465951.8, 3758616.2,      275.2,      275.2,       0.0);         ( 465976.8, 3758616.2,      275.6,      275.6,       0.0);
       ( 466001.8, 3758616.2,      275.9,      275.9,       0.0);         ( 466026.8, 3758616.2,      276.2,      276.2,       0.0);
       ( 466051.8, 3758616.2,      276.4,      276.4,       0.0);         ( 466101.8, 3758616.2,      277.0,      277.0,       0.0);
       ( 466126.8, 3758616.2,      277.3,      277.3,       0.0);         ( 466151.8, 3758616.2,      277.6,      277.6,       0.0);
       ( 466176.8, 3758616.2,      277.9,      277.9,       0.0);
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Model Output - Unit Emission Rates (1 g/s)
Residential Receptors

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*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                              ***        06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                          ***        09:28:20
                                                                                                           PAGE  65
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                              (1=YES; 0=NO)

        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1 1 1 1 1
        1 1 1 1 1 1 1 1 1 1    1 1 1 1 1 1

         NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.



                             *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                              (METERS/SEC)

                               1.54,    3.09,    5.14,    8.23,   10.80,
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 *** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                         ***        06/11/22
 *** AERMET - VERSION  16216 ***   *** Construction HRA                                      ***        09:28:20
                                                                                                        PAGE  66
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                               *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

    Surface file:   ..\met data\RiversideAirportADJU (1)\KRAL_V9_ADJU\KRAL_v9.SFC            Met Version:  16216
    Profile file:   ..\met data\RiversideAirportADJU (1)\KRAL_V9_ADJU\KRAL_v9.PFL
    Surface format: FREE
    Profile format: FREE
    Surface station no.:    3171              Upper air station no.:     3190
                  Name: UNKNOWN                            Name: UNKNOWN
                  Year:  2012                              Year:  2012

    First 24 hours of scalar data
    YR MO DY JDY HR    H0     U*     W*   DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS   WD      HT  REF TA    HT
    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
    12 01 01   1 01  -25.6  0.266 -9.000 -9.000 -999.  330.    77.9  0.15  2.40   1.00    2.93   55.    10.1  288.1    2.0
    12 01 01   1 02  -26.8  0.277 -9.000 -9.000 -999.  351.    84.7  0.15  2.40   1.00    3.05   55.    10.1  287.0    2.0
    12 01 01   1 03  -21.5  0.221 -9.000 -9.000 -999.  250.    53.5  0.15  2.40   1.00    2.45   74.    10.1  284.2    2.0
    12 01 01   1 04  -22.0  0.227 -9.000 -9.000 -999.  260.    56.8  0.15  2.40   1.00    2.52   77.    10.1  285.9    2.0
    12 01 01   1 05  -20.0  0.206 -9.000 -9.000 -999.  225.    46.8  0.15  2.40   1.00    2.30   80.    10.1  285.4    2.0
    12 01 01   1 06  -14.4  0.171 -9.000 -9.000 -999.  170.    32.1  0.15  2.40   1.00    1.93   79.    10.1  287.0    2.0
    12 01 01   1 07  -14.9  0.174 -9.000 -9.000 -999.  174.    33.2  0.15  2.40   1.00    1.96   77.    10.1  284.2    2.0
    12 01 01   1 08  -11.9  0.169 -9.000 -9.000 -999.  167.    36.1  0.15  2.40   0.53    1.89   77.    10.1  288.1    2.0
    12 01 01   1 09   40.4  0.234  0.359  0.006   40.  272.   -28.1  0.15  2.40   0.31    2.10   81.    10.1  289.2    2.0
    12 01 01   1 10  112.6  0.246  0.742  0.005  129.  293.   -11.8  0.15  2.40   0.24    1.99  101.    10.1  296.4    2.0
    12 01 01   1 11  161.0  0.402  1.188  0.005  369.  611.   -35.6  0.15  2.40   0.21    3.68   78.    10.1  298.8    2.0
    12 01 01   1 12  184.7  0.337  1.516  0.005  668.  473.   -18.4  0.15  2.40   0.20    2.89   68.    10.1  300.4    2.0
    12 01 01   1 13  183.9  0.310  1.809  0.005 1139.  414.   -14.2  0.15  2.40   0.20    2.57   64.    10.1  302.5    2.0
    12 01 01   1 14  156.6  0.374  1.852  0.005 1434.  549.   -29.5  0.15  2.40   0.22    3.37   63.    10.1  303.1    2.0
    12 01 01   1 15  104.3  0.382  1.658  0.005 1546.  567.   -47.2  0.15  2.40   0.25    3.59   62.    10.1  302.5    2.0
    12 01 01   1 16   31.8  0.374  1.123  0.005 1573.  550.  -145.8  0.15  2.40   0.34    3.76   69.    10.1  300.9    2.0
    12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.  354.    84.0  0.15  2.40   0.62    3.03   59.    10.1  297.5    2.0
    12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.  264.    57.8  0.15  2.40   1.00    2.54   54.    10.1  295.4    2.0
    12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.  221.    45.6  0.15  2.40   1.00    2.27   79.    10.1  292.0    2.0
    12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.  244.    52.2  0.15  2.40   1.00    2.42   79.    10.1  292.5    2.0
    12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.  225.    46.9  0.15  2.40   1.00    2.30   95.    10.1  290.9    2.0
    12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.  199.    39.8  0.15  2.40   1.00    2.13   78.    10.1  290.4    2.0
    12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.  233.    49.0  0.15  2.40   1.00    2.35   52.    10.1  289.2    2.0
    12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.  189.    37.0  0.15  2.40   1.00    2.06   75.    10.1  288.8    2.0


    First hour of profile data
    YR MO DY HR HEIGHT F  WDIR   WSPD AMB_TMP sigmaA  sigmaW  sigmaV
    12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00


    F indicates top of profile (=1) or below (=0)
```

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***        06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***        09:28:20
                                                                                                        PAGE  87
*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                        *** THE PERIOD ( 43848 HRS) AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP: HAUL     ***
                             INCLUDING SOURCE(S):    L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
                    L0000006    , L0000007    , L0000008    , L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
                    L0000014    , L0000015    , L0000016    , L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
                    L0000022    , L0000023    , L0000024    , L0000025    , L0000026    , L0000027    , L0000028    , . . .      ,

                               *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                         ** CONC OF OTHER    IN MICROGRAMS/M**3                        **

     X-COORD (M)   Y-COORD (M)     CONC                  X-COORD (M)   Y-COORD (M)     CONC
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
      466319.89    3759044.25      1.04816                 466344.89    3759044.25      0.91451
      466369.89    3759044.25      0.80352                 466394.89    3759044.25      0.71113
      466419.89    3759044.25      0.63368                 466444.89    3759044.25      0.56961
      466469.89    3759044.25      0.51668                 466494.89    3759044.25      0.47260
      466519.89    3759044.25      0.43277                 466219.89    3759069.25      1.63179
      466244.89    3759069.25      1.39665                 466269.89    3759069.25      1.20818
      466294.89    3759069.25      1.05292                 466319.89    3759069.25      0.92521
      466344.89    3759069.25      0.81977                 466369.89    3759069.25      0.72960
      466394.89    3759069.25      0.65322                 466419.89    3759069.25      0.58823
      466444.89    3759069.25      0.53326                 466469.89    3759069.25      0.48805
      466494.89    3759069.25      0.44939                 466519.89    3759069.25      0.41320
      466344.89    3759094.25      0.73043                 466369.89    3759094.25      0.65724
      466394.89    3759094.25      0.59449                 466419.89    3759094.25      0.53958
      466444.89    3759094.25      0.49263                 466469.89    3759094.25      0.45373
      466494.89    3759094.25      0.42057                 466519.89    3759094.25      0.38914
      466196.02    3759089.23      1.61329                 466221.02    3759089.23      1.39112
      466246.02    3759089.23      1.21108                 466271.02    3759089.23      1.06205
      466296.02    3759089.23      0.93644                 466321.02    3759089.23      0.83153
      466146.02    3759114.23      1.75941 MEIR LOCATION   466171.02    3759114.23      1.52905
      466196.02    3759114.23      1.33212                 466246.02    3759114.23      1.02989
      466271.02    3759114.23      0.91500                 466296.02    3759114.23      0.81670
      466321.02    3759114.23      0.73341                 466346.02    3759114.23      0.66197
      466396.02    3759114.23      0.54573                 466421.02    3759114.23      0.49817
      466446.02    3759114.23      0.45687                 466471.02    3759114.23      0.42256
      466496.02    3759114.23      0.39431                 466521.02    3759114.23      0.36667
      466121.02    3759139.23      1.62011                 466146.02    3759139.23      1.42650
      466171.02    3759139.23      1.25974                 466196.02    3759139.23      1.11433
      466221.02    3759139.23      0.98918                 466271.02    3759139.23      0.79259
      466296.02    3759139.23      0.71420                 466346.02    3759139.23      0.58774
      466371.02    3759139.23      0.53659                 466396.02    3759139.23      0.49210
      466421.02    3759139.23      0.45375                 466446.02    3759139.23      0.42042
      466471.02    3759139.23      0.39085                 466496.02    3759139.23      0.36569
      466521.02    3759139.23      0.34075                 466071.02    3759164.23      1.68250
      466096.02    3759164.23      1.48238                 466121.02    3759164.23      1.31617
```

Model Output - Unit Emission Rates (1 g/s)
Residential Receptors

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                    ***        06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                ***        09:28:20
                                                                                                 PAGE  93
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                         *** THE SUMMARY OF MAXIMUM PERIOD ( 43848 HRS) RESULTS ***


                      ** CONC OF OTHER    IN MICROGRAMS/M**3                           **


                                                                                            NETWORK
GROUP ID                    AVERAGE CONC            RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                          MEIR Location
ONSITE    1ST HIGHEST VALUE IS      9.68744 AT (   466146.02,  3759114.23,    273.82,    273.82,    0.00)  DC
          2ND HIGHEST VALUE IS      8.30720 AT (   466071.02,  3759164.23,    272.47,    272.47,    0.00)  DC
          3RD HIGHEST VALUE IS      8.26198 AT (   466196.02,  3759089.23,    274.86,    274.86,    0.00)  DC
          4TH HIGHEST VALUE IS      8.09986 AT (   466219.89,  3759044.25,    275.54,    275.54,    0.00)  DC
          5TH HIGHEST VALUE IS      7.90792 AT (   466121.02,  3759139.23,    273.43,    273.43,    0.00)  DC
          6TH HIGHEST VALUE IS      7.49509 AT (   466219.89,  3759019.25,    275.83,    275.83,    0.00)  DC
          7TH HIGHEST VALUE IS      7.48100 AT (   466219.89,  3759069.25,    275.26,    275.26,    0.00)  DC
          8TH HIGHEST VALUE IS      7.30413 AT (   466171.02,  3759114.23,    274.04,    274.04,    0.00)  DC
          9TH HIGHEST VALUE IS      6.36018 AT (   466046.02,  3759189.23,    271.74,    271.74,    0.00)  DC
         10TH HIGHEST VALUE IS      6.35952 AT (   466096.02,  3759164.23,    273.02,    273.02,    0.00)  DC

HAUL      1ST HIGHEST VALUE IS     11.75483 AT (   466053.16,  3758990.39,    272.23,    272.23,    0.00)  DC
          2ND HIGHEST VALUE IS     10.84727 AT (   466003.16,  3759015.39,    271.40,    271.40,    0.00)  DC
          3RD HIGHEST VALUE IS      7.80206 AT (   466028.16,  3758990.39,    271.78,    271.78,    0.00)  DC
          4TH HIGHEST VALUE IS      7.33180 AT (   465978.16,  3759015.39,    270.89,    270.89,    0.00)  DC
          5TH HIGHEST VALUE IS      5.60189 AT (   466003.16,  3758990.39,    271.21,    271.21,    0.00)  DC
          6TH HIGHEST VALUE IS      5.34788 AT (   465953.16,  3759015.39,    270.55,    270.55,    0.00)  DC
          7TH HIGHEST VALUE IS      4.51475 AT (   466219.89,  3758969.25,    275.62,    275.62,    0.00)  DC
          8TH HIGHEST VALUE IS      4.38889 AT (   466028.16,  3758965.39,    271.76,    271.76,    0.00)  DC
          9TH HIGHEST VALUE IS      4.30527 AT (   466078.16,  3758940.39,    272.68,    272.68,    0.00)  DC
         10TH HIGHEST VALUE IS      4.27074 AT (   465978.16,  3758990.39,    270.73,    270.73,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```

```
*** AERMOD - VERSION 21112  ***   *** Eastside Neighborhood School                          ***      06/11/22
*** AERMET - VERSION  16216 ***   *** Construction HRA                                       ***      09:28:20
                                                                                                      PAGE  94

*** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

*** Message Summary : AERMOD Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           2 Warning Message(s)
A Total of        1638 Informational Message(s)

A Total of       43848 Hours Were Processed

A Total of        1039 Calm Hours Identified

A Total of         599 Missing Hours Identified (  1.37 Percent)


    ******** FATAL ERROR MESSAGES ********
             ***  NONE  ***


    ********   WARNING MESSAGES   ********
ME W186    752       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used        0.50
ME W187    752       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```
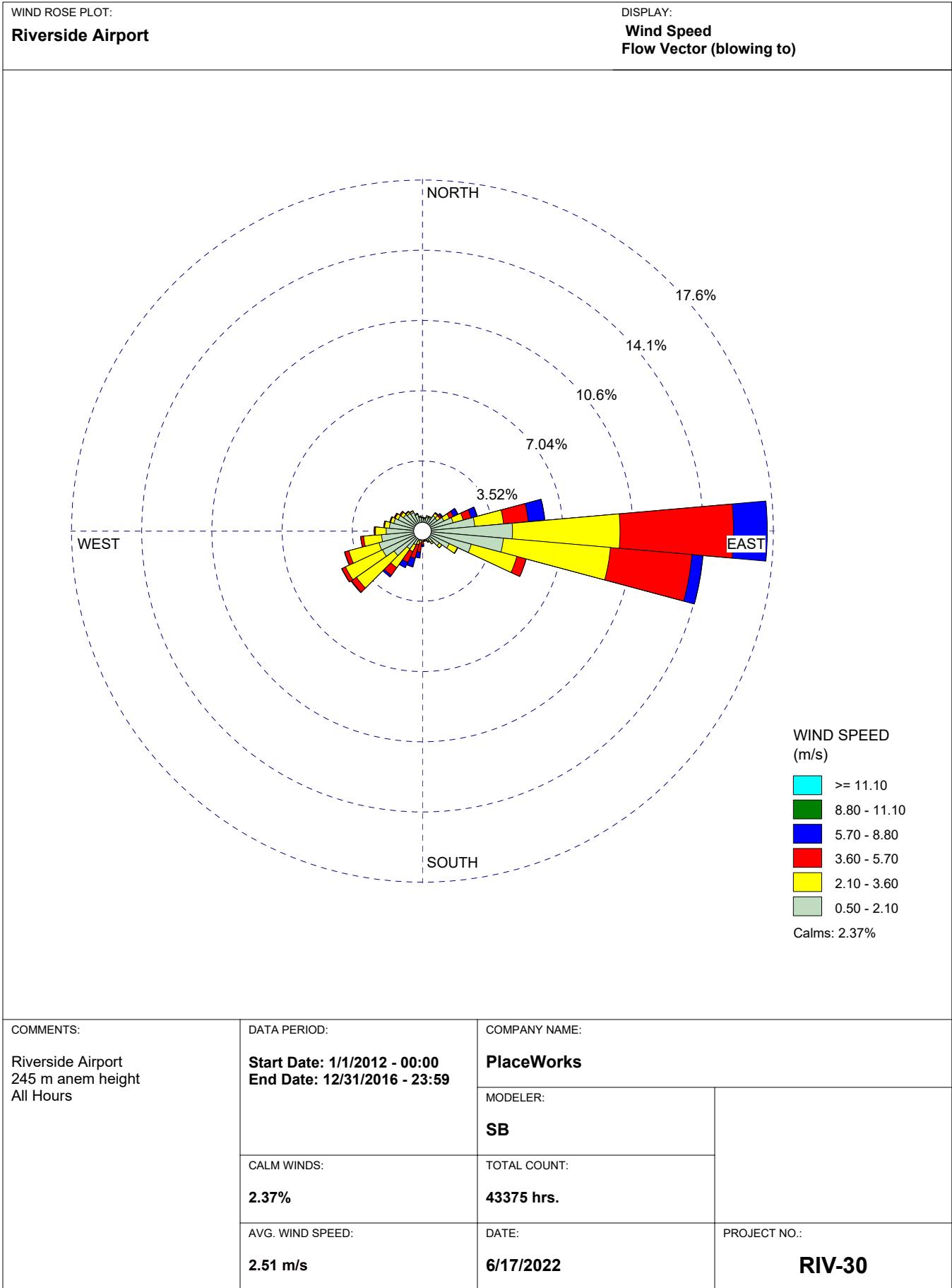
Riverside Airport

Wind Speed
Flow Vector (blowing to)

NORTH

17.6%

14.1%

10.6%

7.04%

3.52%

WEST

EAST

SOUTH

WIND SPEED
(m/s)

- >= 11.10
- 8.80 - 11.10
- 5.70 - 8.80
- 3.60 - 5.70
- 2.10 - 3.60
- 0.50 - 2.10

Calms: 2.37%

COMMENTS:	DATA PERIOD:	COMPANY NAME:	
Riverside Airport 245 m anem height All Hours	**Start Date: 1/1/2012 - 00:00** **End Date: 12/31/2016 - 23:59**	**PlaceWorks**	
		MODELER: **SB**	
	CALM WINDS: **2.37%**	TOTAL COUNT: **43375 hrs.**	
	AVG. WIND SPEED: **2.51 m/s**	DATE: **6/17/2022**	PROJECT NO.: **RIV-30**

Appendix C.   Construction Risk Calculations

Table C1
MEIR Concentrations for Risk Calculations

Contaminant	Source		Model Output [1] (µg/m³)	Emission Rates [2] (g/s)	MEIR Conc. (µg/m³)	Total MEIR Conc. Annual Average (µg/m³)	Model Output [1] (µg/m³)	Emission Rates [2] (g/s)	MEIR Conc. (µg/m³)	Total MEIR Conc. Annual Average (µg/m³)
(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Residential Receptors			**Unmitigated**				**Mitigated, Tier 4 Interim > 50 hp**			
DPM	2026	On-Site Emissions	9.69	1.01E-02	9.78E-02	9.78E-02	9.69	8.41E-04	8.15E-03	8.15E-03
		Truck Route	1.76	3.11E-06	5.48E-06		1.76	3.11E-06	5.48E-06	
	2027	On-Site Emissions	9.69	8.32E-03	8.06E-02	8.06E-02	9.69	1.24E-03	1.20E-02	1.21E-02
		Truck Route	1.76	8.92E-06	1.57E-05		1.76	8.92E-06	1.57E-05	
	2028	On-Site Emissions	9.69	1.04E-02	1.00E-01	1.00E-01	9.69	1.31E-03	1.27E-02	1.27E-02
		Truck Route	1.76	7.25E-06	1.27E-05		1.76	7.25E-06	1.27E-05	

Total DPM concentrations used for Cancer Risk and Chronic Hazard calculations

Maximum Exposed Individual Resident (MEIR) UTM coordinates: 466146.02 E, 3759114.23 N

[1] Model Output at the MEIR based on unit emission rates for sources (1 g/s) (Appendix B - Air Dispersion Model Output).

[2] Emission Rates from Emission Rate Calculations (Appendix A - Construction Emissions).

Note: The MEIR location is the receptor location associated with the maximum AERMOD predicted DPM concentrations from the on-site emission source because the calculated on-site emission rates are approximately 3 to 4 orders of magnitude higher than the calculated off-site emission rates [see column (d)]. Therefore, the maximum concentrations associated with the on-site emission sources produce the highest overall ground-level maximum exposed receptor concentrations and, consequently, highest calculated health risks.

Table C2
Residential Health Risk Calculations

Source	MEIR Conc. (μg/m³)	Weight Fraction	Contaminant	URF (μg/m³)⁻¹	CPF (mg/kg/day)⁻¹	Dose (by age bin) 3rd Trimester (mg/kg-day)	0 < 2 years (mg/kg-day)	2 < 9 years (mg/kg-day)	Carcinogenic Risks (by age bin) 3rd Trimester per million	0 < 2 years per million	2 < 9 years per million	Total Cancer Risk per million	Chronic Hazards [3] REL (μg/m³)	RESP
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
Residential Receptors - Unmitigated														
2026 On & Off-Site Emissions	9.78E-02	1.0E+00	DPM	3.0E-04	1.1E+00	3.39E-05	1.02E-04		1.08E+00	9.77E+00		10.9	5.0E+00	1.96E-02
2027	8.06E-02						8.42E-05			1.07E+01		10.7		1.61E-02
2028	1.00E-01						1.05E-04	8.30E-05		3.35E+00	7.75E-01	4.1		2.01E-02
											Total	25.7		0.056
Mitigated, Tier 4 Interim > 50 hp														
2026 On & Off-Site Emissions	8.15E-03	1.0E+00	DPM	3.0E-04	1.1E+00	2.82E-06	8.52E-06		9.00E-02	8.15E-01		0.9	5.0E+00	1.63E-03
2027	1.21E-02						1.26E-05			1.61E+00		1.6		2.41E-03
2028	1.27E-02						1.33E-05	1.05E-05		4.24E-01	9.82E-02	0.5		2.54E-03
											Total	3.0		0.007

Maximum Exposed Individual Resident (MEIR) UTM coordinates: 466146.02 E, 3759114.23 N

	3rd Trimester	0 < 2 years	2 < 9 years
OEHHA age bin exposure year(s)	2026	2026-2028	2028
Dose Exposure Factors: exposure frequency (days/year)	350	350	350
inhalation rate (L/kg-day) [1]	361	1090	861
inhalation absorption factor	1	1	1
conversion factor (mg/μg; m³/L)	1.0E-06	1.0E-06	1.0E-06
Risk Calculation Factors: age sensitivity factor	10	10	3
averaging time (years)	70	70	70
per million	1.0E+06	1.0E+06	1.0E+06
fraction of time at home	0.85	0.85	0.72

exposure durations per age bin		exposure durations (year)		
Construction Year	Const Duration [2]	3rd Trimester	0 < 2 years	2 < 9 years
2026	1.00	0.25	0.75	
2027	1.00		1.00	
2028	0.54		0.25	0.29
Total	2.54	0.25	2.0	0.29

[1] Inhalation rate taken as the 95th percentile breathing rates (OEHHA, 2015).

[2] Construction durations determined for each year to adjust receptor exposures to the exposure durations for each construction year (see App A - Construction Emissions).

[3] Chronic Hazards for DPM using the chronic reference exposure level (REL) for the Respiratory Toxicological Endpoint.