FTA ALTERNATIVES ANALYSIS
DRAFT/FINAL ENVIRONMENTAL IMPACT STATEMENT

DANBURY BRANCH IMPROVEMENT PROGRAM TASK 5

ENVIRONMENTAL TECHNICAL MEMORANDUM IMPACTS ANALYSIS

STATE PROJECT 302-008



SECTION 3: AIR QUALITY

APRIL 2011

SECTION 3. AIR QUALITY

METHODOLOGY

Air quality impacts are determined at both the regional and local levels. The determination of regional air quality impacts requires a rigorous modeling exercise, conducted by metropolitan planning organizations (MPOs) and/or state departments of transportation. For the Danbury Branch Improvement Program, the MPOs – the South Western Regional Planning Agency (SWRPA) and the Housatonic Valley Council of Elected Officials (HVCEO) – work in coordination with the Connecticut Department of Transportation (CTDOT) to conduct a conformity determination of their long- (20+ years) and near-term (within five years) transportation plans. This process involves modeling travel demand across the entire regional transportation system, considering the possible implementation of planned transportation initiatives, and applying vehicle trips, vehicle miles of travel, and associated emissions to the network. Air quality "conformity" is demonstrated when the forecasted emissions of the existing and planned road and transit networks of a transportation plan do not cause exceedances of air quality standards.

Local impact analysis takes place at the project level and focuses on carbon monoxide (CO) impacts on local air quality from the project. In order to assess CO impacts on local air quality from the Danbury Branch Improvement Program, a modeling analysis was conducted to calculate CO concentrations under Existing, No Build, Build, and Mitigated Build conditions at sensitive receptor locations in the vicinity of the intersections most likely to be impacted by the build alternative. The Build scenario represents the study area's transportation system in the 2030 horizon year with the addition of traffic generated by the Danbury Branch Improvement Program. The Mitigated Build scenario has the same traffic conditions as the Build scenario but assumes that intersection improvements (mitigation) to reduce congestion have been made.

The modeling analysis determined whether the changes in vehicular traffic conditions on local roadways would create violations of federal CO standards. The analysis was conducted using the EPA MOBILE6.2 emissions factor model and the CALQVIEW2 (Windows version of CAL3QHC Version 2) model.

IMPACTS

Regional Impacts – Transportation Conformity

SWRPA and HVCEO coordinate with the CTDOT to conduct a conformity determination of their State and Regional Transportation Plans (long-term) and Transportation Improvement Programs (TIP) (near-term). In Connecticut, the regional planning agencies (RPAs) prepare the Regional Transportation Plans and TIPs for their region. CTDOT prepares the statewide Master Transportation Plan and Statewide Transportation Improvement Program (STIP), which incorporates the MPOs' current TIPs. The Master Plan and Regional Transportation Plan identifies long-range (20+ years) transportation needs in the region. The STIP and TIP lay out the priority projects to be funded within the next five years and the allocated budget amount. The conformity analysis must demonstrate that the existing and planned road and transit network

emissions are forecasted to be less than the amount allowed in the volatile organic compounds (VOC), nitrogen oxides (NO_x), and CO emissions budgets established by the Connecticut Department of Environmental Protection (DEP) for transportation sources. The emissions budgets are set at levels that will maintain the National Ambient Air Quality Standards (NAAQS) for each pollutant. Therefore, transportation-related emissions must be less than or equal to these emissions budgets.

Project Level Conformity Determination

Federal regulations concerning the conformity of transportation projects developed, funded, or approved by the United States Department of Transportation and by MPOs are contained in 40 CFR 93. The Danbury Branch Improvement Program is included in the MPOs' current Regional Transportation Plans but is not included in their Transportation Improvement Programs (TIP).

In accordance with 40 CFR 93.115(a), the applicable criteria and procedures for determining the conformity of a project, which is not from conforming Transportation Plans and TIPs are listed in 40 CFR 93.109(b). Each of the following criteria has been satisfied, as follows:

- **Transportation Control Measures (TCMs)** – This project must not and does not interfere with the implementation of any TCMs in the current DEP State Implementation Plan (SIP), as there are none.

  Currently Conforming Regional Transportation Plan and TIP– There must be a currently conforming Regional Transportation Plan and currently conforming TIP in the project area at the time of project approval. The MPOs current 2007 Transportation Plans and the 2010-2013 Statewide Transportation Improvement Program (STIP), which incorporates the MPOs' current TIPs, were determined to be in conformity by FHWA and FTA on November 13, 2009.

  CO, PM_{10} and $PM_{2.5}$ Hot Spots – The project must not cause or contribute to any new localized CO, particulate matter between 2.5 and 10 microns in diameter (PM_{10}) and/or particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) violations or increase the frequency or severity of any existing CO, PM_{10} and/or $PM_{2.5}$ violations in CO, PM_{10} and/or $PM_{2.5}$ nonattainment and maintenance areas.

  This project will not cause or contribute to any new violations or increase the frequency or severity of any existing CO violations in CO non-attainment or maintenance areas as evidenced by the results of the CO hot spot analysis contained herein. This project is not located in a PM_{10} non-attainment or maintenance area, therefore a PM_{10} hot spot analysis was not required.

  The Danbury Branch Improvement Program is located in a $PM_{2.5}$ non-attainment area. This project could potentially be a project of local air quality concern as determined by 40 CFR 93.123 (b) (1). The potential for $PM_{2.5}$ hot-spots in the Build Alternatives could theoretically be higher or lower than that for the No Build Alternative, depending on the fuel source selected.

- **PM_{10} and $PM_{2.5}$ control measures** – The project must comply with PM_{10} and $PM_{2.5}$ control measures in the SIP. There are no PM_{10} or $PM_{2.5}$ control measures in the current SIP, so this criterion is met.

- **Emissions Budget or Emissions Reduction** – This project has been demonstrated to be consistent with the motor vehicle emissions budgets in the SIP as evidenced by CTDOT's Ozone Air Quality Conformity Determination dated February 2006.

In summary, the Danbury Branch Improvement Program has been determined to be in conformity with the Clean Air Act, as amended, pursuant to all applicable U.S. Environmental Protection Agency (EPA) regulations.

Local Impacts – Microscale Analysis

The following local impact microscale analysis is a CO modeling exercise that measures air quality impacts around signalized vehicular intersections near the existing and planned new rail stations in the corridor. The air quality impacts are estimated based on the Danbury Branch Improvement Program's vehicular traffic analysis, which accounts for changing traffic patterns and volumes over time, increased rail service, and additional station parking for the Build and No Build scenarios.

All of the study alternatives were modeled, including the No Build and TSM scenarios. The CO modeling analysis determined that none of the alternatives would create violations of federal CO standards at localized areas (where CO hotspots frequently occur). The analysis was conducted using the EPA MOBILE6.2 emissions factor model and the CALQVIEW2 (Windows version of CAL3QHC Version 2) model.

The corridor-wide traffic analysis identified four signalized intersections that could be potentially impacted by congestion from vehicular traffic such that local air quality conditions could be affected. The congestion was predicted by studies of future (year 2030) traffic volumes and level of service (operation) and is associated with traffic to and from the passenger stations. The four signalized intersections and the alternatives they are associated with are the following:

- Grist Mill Road (Route 7) / Glover Avenue [Alternatives C and E -- station improvements at existing Merritt 7 Station in Norwalk]
- Grist Mill Road (Route 7) / Main Avenue [Alternatives C and E -- station improvements at existing Merritt 7 Station in Norwalk]
- Federal Road (Route 202) / Station Road-Whisconier Road (Route 25) [Alternative D -- new station in Brookfield]
- Route 7 / Bridge Street (Route 202) [Alternative D -- new station in New Milford]

The Route 7/Bridge Street (Route 202) intersection, the Federal Road (Route 202)/Station Road-Whisconier Road (Route 25) intersection, and the Grist Mill Road (Route 7)/Main Avenue intersection are predicted to have the worst levels of service in the year 2030 PM Build scenario. The Route 7/Bridge Street (Route 202) intersection and the Grist Mill Road (Route 7)/Glover Avenue intersections are predicted to have the highest traffic volumes in this scenario.

As part of the air quality analysis, capacity and queuing analyses were utilized to determine air quality impacts for the following peak periods in the years indicated. The AM and PM peak periods tend to have the highest traffic volumes and worst level-of-service.

- 2010 morning (AM) and afternoon (PM) Existing scenarios
- 2030 AM and PM No-Build scenarios
- 2030 AM and PM Build scenarios
- 2030 AM and PM Mitigated Build scenarios.

CALQVIEW2 is a line source dispersion model that applies the Gaussian dispersion theory to traffic inputs and meteorological conditions to predict CO concentrations from vehicles on the roadway. Air quality impacts from mobile sources are modeled by analyzing queue links and free flow links. Queue links simulate vehicles idling at the stop bar of an intersection. Free-flow links simulate vehicles traveling through an intersection. Receptor locations are selected based on where people may be located who may be exposed to the CO produced by vehicles in the area (e.g., sidewalks, outdoor eating establishments). The CALQVIEW2 meteorological and background parameters used in the model are listed in Table 1.

Table 1: CALQVIEW2 Parameters

Parameter	**Value**
Averaging time	60 mins
Surface roughness length	175 cm
Settling velocity	0
Deposition velocity	0
Scale conversion factor	0.3048 (units in ft)
Output	1 (in ft)
Wind speed	1 m/s
Wind direction	0
Stability class	4 (D) – Urban
Mixing height	1000 m
1-hour background concentration	4.3 parts per million (ppm)
Multiple wind directions	Yes – 10 degree increments
Receptor height	6.0 ft
Signal times	Varies (traffic analysis)
Traffic volumes	Varies (traffic analysis)

Mobile source CO emission factors were modeled using MOBILE6.2. These input files and associated output files are included in Appendix A (MOBILE 6.2 Input and Output Files).

Results from the model represent the one-hour average CO concentrations at each receptor due to the modeled traffic, and include a background concentration of 4.3 parts per million (ppm). To determine the eight-hour average concentration at each receptor, the one-hour dispersion result from the model was multiplied by the persistence factor of 0.7. The 2010 AM Existing and PM Existing, 2030 AM No-Build and PM No-Build, 2030 AM Build and PM Build, and 2030 AM Mitigated Build and PM Mitigated Build scenarios were modeled for each of the four intersections, for a total of 32 model runs. The No-Build scenario means that no station

improvements (with their associated traffic changes) would take place (Alternatives A and B). The Build scenario assumes that station improvements included in a particular alternative (Alternatives C, D, and E) would take place. The Mitigated Build means that congested intersections associated with the Build Alternatives have been improved to reduce traffic congestion, as recommended by the traffic studies for the DEIS.

Table 2 presents the highest CO reading for each model run. Appendix B contains the CALQVIEW2 model output showing all results for each run. All results are well below the CO NAAQS of 35 ppm for one hour and 9 ppm for eight hours. The highest future CO occurs at the Route 7 / Bridge Street intersection under the 2010 Existing PM or 2030 Mitigated Build PM scenario, with one-hour CO concentration of 8.8 ppm and an eight-hour CO concentration of 6.2 ppm.

The results show that no violations of federal CO standards are expected near the stations forecasted to have the highest traffic volumes and worst level-of-service for any of the Build alternatives. Since the traffic analysis expects these four intersections to be the worst-impacted intersections in any of the alternatives, there is little concern regarding air quality impacts at all other signalized intersections near the stations.

These findings appear to be reasonable, based on the following:

- Air quality monitoring data show that existing CO levels in the overall region and state are well below the CO NAAQS. Therefore, CO hot spots would be highly unlikely in the vicinity of the planned project.

- The low level of trips that would be generated by this initiative relative to total regional trips is unlikely to negatively impact regional air quality. The VOC, NO_x, and CO emissions from the transportation system are currently below those allowed by DEP. Thus, the effects of increased travel near the stations can be accommodated without causing the emission budgets to be violated, and as a result, would not cause or contribute to further violations of the NAAQS. Furthermore, recent monitored ozone exceedances are primarily due to the transport of ozone and other pollutants from beyond Connecticut. The low number of additional vehicle trips is unlikely to cause or contribute to further ozone exceedances.

Table 2: Highest Predicted CO Concentrations

Model Run	Highest 1-hour Concentration (ppm)	Corresponding 8-hour Concentration (ppm)	Receptor Location
Federal Road (Route 202) / Station Road (Route 25) 2010 Existing AM	5.3	3.7	Westbound east midblock
Federal Road (Route 202) / Station Road (Route 25) 2010 Existing PM	5.2	3.6	Westbound east midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 No Build AM	5.2	3.6	Southbound north midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 No Build PM	5.4	3.8	Southbound north midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 Build AM	5.2	3.6	Southbound north midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 Build PM	5.5	3.9	Southbound north midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 Mitigated Build AM	5.2	3.6	Southbound north midblock
Federal Road (Route 202) / Station Road (Route 25) 2030 Mitigated Build PM	5.4	3.8	Southbound north midblock
Grist Mill Road (Route 7) / Glover Avenue 2010 Existing AM	6.3	4.4	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2010 Existing PM	6.6	4.6	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 No Build AM	6	4.2	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 No Build PM	6.2	4.3	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 Build AM	6	4.2	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 Build PM	6.2	4.3	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 Mitigated Build AM	6	4.2	Northbound south midblock
Grist Mill Road (Route 7) / Glover Avenue 2030 Mitigated Build PM	6.1	4.3	Northbound south midblock
Route 7 / Bridge Street (Route 202) 2010 Existing AM	6.7	4.7	Westbound east midblock
Route 7 / Bridge Street (Route 202) 2010 Existing PM	8.8	6.2	Northbound north midblock
Route 7 / Bridge Street (Route 202) 2030 No Build AM	6.3	4.4	Westbound east midblock
Route 7 / Bridge Street (Route 202) 2030 No Build PM	8.6	6.0	Northbound north midblock
Route 7 / Bridge Street (Route 202) 2030 Build AM	7.4	5.2	Northbound north midblock
Route 7 / Bridge Street (Route 202) 2030 Build PM	8.7	6.1	Northbound north midblock
Route 7 / Bridge Street (Route 202) 2030 Mitigated Build AM	7.2	5.0	Northbound north midblock
Route 7 / Bridge Street (Route 202) 2030 Mitigated Build PM	8.8	6.2	Northbound north midblock
Grist Mill Road (Route 7) / Main Avenue 2010 Existing AM	7.9	5.5	Westbound east midblock
Grist Mill Road (Route 7) / Main Avenue 2010 Existing PM	7.7	5.4	Southwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 No Build AM	6.9	4.8	Northwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 No Build PM	6.7	4.7	Northwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 Build AM	6.9	4.8	Northwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 Build PM	6.7	4.7	Northwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 Mitigated Build AM	6.9	4.8	Northwest corner
Grist Mill Road (Route 7) / Main Avenue 2030 Mitigated Build PM	6.6	4.6	Southbound south midblock

Mobile Source Air Toxics

In addition to the NAAQS pollutants, EPA regulates a number of mobile source air toxics (MSATs), identified in an EPA Final Rule, Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007). The EPA subsequently identified six of these from mobile sources that pose especially high cancer risks. These are acrolein, benzene 1, 3-butadiene, formaldehyde, naphthalene, and polycyclic organic matter.

The U.S. Department of Transportation, Federal Highway Administration (FHWA), has outlined a tiered approach for analyzing MSATs in National Environmental Policy Act (NEPA)

documents, with three tiers representing the levels of potential impacts from projects (Memorandum, *Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA*, dated September 30, 2009). In addition to the EPA identified six MSAT compounds listed above, FHWA and EPA cite diesel particulate matter plus diesel exhaust organic gases (diesel PM) as a high cancer risk driver. While the FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

Based on the guidance, the Danbury Branch Improvement Program falls in the middle tier, likely having low potential MSAT effects, because it is a project that would improve transit or freight operations. For this tier, FHWA recommends a qualitative analysis of potential MSAT effects.

For each alternative in this EIS, the amount of MSAT emitted would be proportional to the amount of rail activity as well as vehicle miles traveled (VMT), assuming that other variables (such as travel not associated with the rail stations) are the same for each alternative. The estimated MSATs (particularly diesel particulate matter) emitted along the rail line from the rail activity in the Build Alternatives could theoretically be higher or lower than that for the No Build Alternative, depending on the fuel source selected. The No Build and TSM alternatives (Alternatives A and B) would require continued use of diesel powered locomotives to operate Danbury Branch trains. There are currently two fuel source combinations under consideration for the Build Alternatives: all electric (Alternatives C, E, and the electrified Alternative D); or a diesel/electric combination (Alternative C with the diesel-fueled Alternative D). The estimated MSATs emitted from the diesel/electric Build scenario (Alternative C with the diesel-fueled Alternative D) would be higher than the all-electric Build scenario. If the trains are all electrified, the MSATs produced from the rail activity would decrease compared to the No Build scenario.

Regardless of fuel type, the anticipated mode shift of travelers to rail transit from their cars under Alternatives B, C, D, and E would reduce emissions associated with vehicular travel on the region's highways, based on: 1) a decrease in regional vehicular traffic volumes; and 2) increased vehicular speeds (lower emissions per mile traveled) on area highways due to the decrease in traffic. The extent of the potential emissions reductions would correspond to the reduction in VMTs associated with each alternative, which is currently not known. These reductions are only one portion of the emissions associated with each alternative. The train fuel type, as noted above, is a major factor. Associated travel patterns are also important. In the case of Alternative B (TSM), the planned increased use of bus shuttles (presumed to be diesel) could counteract any emissions reductions associated with the decrease in passenger vehicle VMTs.

The on-road VMT estimates at nearby intersections are the same or only slightly higher in the Build Alternatives than they are for the No Build Alternative. Thus, no appreciable difference in overall MSAT emissions at the nearby roadway intersections is anticipated among the various alternatives.

Comparing the net effects of all of the study alternatives, Alternative B (TSM) with diesel-powered buses would likely have little effect on reducing regional MSAT emissions; it could result in a neutral, slightly positive or slightly negative effect on emissions. Alternative C would result in the greatest reductions in MSAT emissions since it replaces existing diesel service by

electric trains and increases the frequency of rail service which will remove vehicles from the region's highways. Alternative E would be the next most effective alternative in reducing emissions for the same reasons; however, it would be less effective than Alternative C because it is only about one-third the length. The electric version of Alternative D would have a slight positive effect (decrease in regional emissions) due to the anticipated mode shift and resultant decrease in roadway VMTs. The diesel version of Alternative D would introduce a new source of diesel fuel-related MSAT emissions and would likely result in higher levels of MSAT emissions in certain local areas.

No matter what alternative is chosen, year 2030 emissions will likely be lower than present levels due to nationally mandated cleaner vehicles and fuels. These EPA control programs are projected to reduce annual MSAT emissions by 72 percent nationwide from the year 1999 to 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the EPA-projected reductions are so significant (even after accounting for VMT growth) that future MSAT emissions in the study area are anticipated to be lower as well.

$PM_{2.5}$ Hot-Spot Analysis

The Danbury Branch Improvement Program could potentially be a project of local air quality concern because of the potential increase of diesel vehicles at one or more locations. Beginning in March 2012, a quantitative $PM_{2.5}$ hot-spot analysis will be required to meet the Clean Air Act and 40 CFR 93.116 requirements. At that time, the EPA MOVES model will be required as the industry standard to conduct this analysis. Because this study will be completed before MOVES is implemented, a qualitative discussion of $PM_{2.5}$ is provided below.

Similar to the MSAT analysis, the potential for $PM_{2.5}$ hot-spots along the rail line from the rail activity in the Build Alternatives could theoretically be higher or lower than that for the No Build Alternative, depending on the fuel source selected. The potential for $PM_{2.5}$ hot-spots from the diesel/electric Build scenario (Alternative C with the diesel-fueled Alternative D) would be higher than the all-electric Build scenario. If the trains are all electrified, the potential for $PM_{2.5}$ hot-spots from the rail activity would likely be less than the No Build scenario.

Construction-Period Air Quality Protection Measures

During any earth-clearing and other construction activities associated with the Build Alternatives, potential air quality impacts include airborne dust particles from exposed soils and emissions from idling and mobile construction vehicles. To minimize impacts during construction, the following best management practices will be followed:

- Minimization of exposed erodible earth area to the extent possible.
- Stabilization of exposed earth with grass, pavement, or other cover as early as possible.
- Application of stabilizing agent (i.e., calcium chloride, water) to the work areas and haul roads.
- Covering, shielding, or stabilizing stockpiled material as necessary.
- Use of covered haul trucks.

- To minimize drag out, the incidental transport of soil by construction equipment from unpaved to paved surfaces, rinsing of construction equipment with water or any other equivalent method.
- Use of clean fuels including ultra-low sulfur diesel fuel (15 ppm sulfur), compressed natural gas or emulsified fuels.
- Eliminating any unnecessary idling of construction vehicles to no more than three minutes.

MITIGATION

It is not anticipated that any short-term or long-term adverse air quality impacts will occur as a result of the project. Therefore, no specific air quality mitigation measures are proposed.

APPENDIX A

MOBILE6.2 Model Input / Output

MOBILE6.2 Input Files

2010 Run – Fairfield County

```
MOBILE6 INPUT FILE :
> Generic 2010 Winter CO Intersection Inputs for Hartford & Southwest CT Maintenance Areas, as
> well as all other areas of Connecticut, EXCEPT the New Haven Maintenance Area.
SPREADSHEET       :
POLLUTANTS        : CO

RUN DATA
> 2010 Generic Run for Intersection Analysis in Fairfield County, CT
> April, 2011
>
> ********************************************************************************************************
> Note that the composite emission factors produced with this input file include both start
> and running emissions.  EPA Guidance indicates that start emissions are typically negligible
> at intersections; therefore, use of composite emission factors will produce CO impacts that
> are conservatively high.  If modeled impacts (including background CO) approach or exceed the
> CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
> ********************************************************************************************************
>

>******************** Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Northeast NLEV inputs
94+ LDG IMP       : NLEVNE.D

* Fuel Data
FUEL PROGRAM      : 2 N
NO REFUELING      :

>2002 Registration Age distribution most recent data available
REG DIST          : CTreg05.d

* I/M Data
I/M DESC FILE     : CTIM05pl.d
ANTI-TAMP PROG    :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR       : cthvmt09.def
SPEED VMT         : 10svmt1W.cty
VMT BY FACILITY   : FCVMTF.CTY

* 2010 expressway/ramp VMT fractions
VMT FRACTIONS     :
0.3720  0.0935  0.3112  0.0959  0.0441  0.0263  0.0026  0.0022
0.0016  0.0059  0.0069  0.0075  0.0269  0.0013  0.0007  0.0014

SCENARIO RECORD   : 2010 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
AVERAGE SPEED     : 55. Non-Ramp 100.0 0.0 0.0 0.0
CALENDAR YEAR     : 2010
EVALUATION MONTH  : 1
FUEL RVP          : 11.95

* Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP      : 41. 41.

END OF RUN
```

>****************** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)

* Northeast NLEV inputs
94+ LDG IMP : NLEVNE.D

* Fuel Data
FUEL PROGRAM : 2 N
NO REFUELING :

>2002 Registration Age distribution most recent data available
REG DIST : CTreg05.d

* I/M Data
I/M DESC FILE : CTIM05pl.d
ANTI-TAMP PROG :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR : cthvmt09.def
SPEED VMT : 10svmt1W.cty
VMT BY FACILITY : FCVMTA.CTY

* 2010 arterial/collector VMT fractions
VMT FRACTIONS :
0.3918 0.0985 0.3277 0.1010 0.0464 0.0084 0.0008 0.0007
0.0005 0.0019 0.0022 0.0024 0.0086 0.0004 0.0002 0.0085

SCENARIO RECORD : 2010 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
AVERAGE SPEED : 25. Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR : 2010
EVALUATION MONTH : 1
FUEL RVP : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP : 41. 41.

END OF RUN

>****************** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Northeast NLEV inputs
94+ LDG IMP : NLEVNE.D

* Fuel Data
FUEL PROGRAM : 2 N
NO REFUELING :

>2002 Registration Age distribution most recent data available
REG DIST : CTreg05.d

* I/M Data
I/M DESC FILE : CTIM05pl.d
ANTI-TAMP PROG :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data (File FCVMTR.CTY assigns all VMT for this portion of the M6 run to RAMPS)
VMT BY FACILITY : FCVMTR.CTY

```
* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 10svmt1W.cty
VMT BY FACILITY    : FCVMTR.CTY

* 2010 expressway/ramp VMT fractions
VMT FRACTIONS      :
0.3720  0.0935  0.3112  0.0959  0.0441  0.0263  0.0026  0.0022
0.0016  0.0059  0.0069  0.0075  0.0269  0.0013  0.0007  0.0014

SCENARIO RECORD    : 2010 winter intersection: M6 assumes Ramp @ 34.6mph
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 10svmt1W.cty
VMT BY FACILITY    : FCVMTL.CTY

* 2010 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3909  0.0982  0.3269  0.1008  0.0463  0.0088  0.0009  0.0007
0.0005  0.0020  0.0023  0.0025  0.0090  0.0004  0.0002  0.0096

SCENARIO RECORD    : 2010 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
AVERAGE SPEED      : 2.5 Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END                                    OF                                    RUN
```

2010 Run – Litchfield County

```
MOBILE6 INPUT FILE :
> Generic 2010 Winter CO Intersection Inputs for Hartford & Southwest CT Maintenance Areas, as
> well as all other areas of Connecticut, EXCEPT the New Haven Maintenance Area.
SPREADSHEET       :
POLLUTANTS        : CO

RUN DATA
> 2010 Generic Run for Intersection Analysis in Litchfield County, CT
> April, 2011
>
> ********************************************************************************************
> Note that the composite emission factors produced with this input file include both start
> and running emissions.  EPA Guidance indicates that start emissions are typically negligible
> at intersections; therefore, use of composite emission factors will produce CO impacts that
> are conservatively high.  If modeled impacts (including background CO) approach or exceed the
> CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
> ********************************************************************************************
>

>******************** Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Northeast NLEV inputs
94+ LDG IMP       : NLEVNE.D

* Fuel Data
FUEL PROGRAM      : 2 N
NO REFUELING      :

>2002 Registration Age distribution most recent data available
REG DIST          : CTreg05.d

* I/M Data
I/M DESC FILE     : CTIM05pl.d
ANTI-TAMP PROG    :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR       : cthvmt09.def
SPEED VMT         : 10svmt3W.cty
VMT BY FACILITY   : FCVMTF.CTY

* 2010 expressway/ramp VMT fractions
VMT FRACTIONS     :
0.3720  0.0935  0.3112  0.0959  0.0441  0.0263  0.0026  0.0022
0.0016  0.0059  0.0069  0.0075  0.0269  0.0013  0.0007  0.0014

SCENARIO RECORD   : 2010 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
AVERAGE SPEED     : 55. Non-Ramp 100.0 0.0 0.0 0.0
CALENDAR YEAR     : 2010
EVALUATION MONTH  : 1
FUEL RVP          : 11.95

* Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP      : 41. 41.

END OF RUN

>****************** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)
```

```
* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 10svmt3W.cty
VMT BY FACILITY    : FCVMTA.CTY

* 2010 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3918  0.0985  0.3277  0.1010  0.0464  0.0084  0.0008  0.0007
0.0005  0.0019  0.0022  0.0024  0.0086  0.0004  0.0002  0.0085

SCENARIO RECORD     : 2010 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
AVERAGE SPEED      : 25. Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data (File FCVMTR.CTY assigns all VMT for this portion of the M6 run to RAMPS)
VMT BY FACILITY    : FCVMTR.CTY

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 10svmt3W.cty
```

```
VMT BY FACILITY    : FCVMTR.CTY

* 2010 expressway/ramp VMT fractions
VMT FRACTIONS      :
0.3720  0.0935  0.3112  0.0959  0.0441  0.0263  0.0026  0.0022
0.0016  0.0059  0.0069  0.0075  0.0269  0.0013  0.0007  0.0014

SCENARIO RECORD    : 2010 winter intersection: M6 assumes Ramp @ 34.6mph
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 10svmt3W.cty
VMT BY FACILITY    : FCVMTL.CTY

* 2010 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3909  0.0982  0.3269  0.1008  0.0463  0.0088  0.0009  0.0007
0.0005  0.0020  0.0023  0.0025  0.0090  0.0004  0.0002  0.0096

SCENARIO RECORD    : 2010 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
AVERAGE SPEED      : 2.5 Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2010
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN
```

2030 Run – Fairfield County

```
MOBILE6 INPUT FILE :
> Generic 2030 Winter CO Intersection Inputs for Hartford & Southwest CT Maintenance Areas, as
> well as all other areas of Connecticut, EXCEPT the New Haven Maintenance Area.
SPREADSHEET       :
POLLUTANTS        : CO

RUN DATA
> 2030 Generic Run for Intersection Analysis in Fairfield County, CT
> April, 2011
>
> ********************************************************************************************
> Note that the composite emission factors produced with this input file include both start
> and running emissions.  EPA Guidance indicates that start emissions are typically negligible
> at intersections; therefore, use of composite emission factors will produce CO impacts that
> are conservatively high.  If modeled impacts (including background CO) approach or exceed the
> CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
> ********************************************************************************************
>

>********** Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Northeast NLEV inputs
94+ LDG IMP       : NLEVNE.D

* Fuel Data
FUEL PROGRAM      : 2 N
NO REFUELING      :

>2002 Registration Age distribution most recent data available
REG DIST          : CTreg05.d

* I/M Data
I/M DESC FILE     : CTIM05pl.d
ANTI-TAMP PROG    :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR       : cthvmt09.def
SPEED VMT         : 30svmt1W.cty
VMT BY FACILITY   : FCVMTF.CTY

* 2030 expressway/ramp VMT fractions
VMT FRACTIONS     :
0.2938  0.1070  0.3559  0.1097  0.0505  0.0262  0.0026  0.0022
0.0017  0.0059  0.0069  0.0075  0.0268  0.0013  0.0007  0.0013

SCENARIO RECORD   : 2030 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
AVERAGE SPEED     : 55. Non-Ramp 100.0 0.0 0.0 0.0
CALENDAR YEAR     : 2030
EVALUATION MONTH  : 1
FUEL RVP          : 11.95

* Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP      : 41. 41.

END OF RUN

>********** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)
```

```
* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 30svmt1W.cty
VMT BY FACILITY    : FCVMTA.CTY

* 2030 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3094  0.1126  0.3747  0.1155  0.0532  0.0084  0.0008  0.0007
0.0005  0.0019  0.0022  0.0024  0.0086  0.0004  0.0002  0.0085

SCENARIO RECORD     : 2030 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
AVERAGE SPEED      : 25. Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2030
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data (File FCVMTR.CTY assigns all VMT for this portion of the M6 run to RAMPS)
VMT BY FACILITY    : FCVMTR.CTY

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 30svmt1W.cty
```

```
VMT BY FACILITY    : FCVMTR.CTY

* 2030 expressway/ramp VMT fractions
VMT FRACTIONS      :
0.2938  0.1070  0.3559  0.1097  0.0505  0.0262  0.0026  0.0022
0.0017  0.0059  0.0069  0.0075  0.0268  0.0013  0.0007  0.0013

SCENARIO RECORD    : 2030 winter intersection: M6 assumes Ramp @ 34.6mph
CALENDAR YEAR      : 2030
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 30svmt1W.cty
VMT BY FACILITY    : FCVMTL.CTY

* 2030 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3087  0.1123  0.3738  0.1152  0.0530  0.0088  0.0009  0.0007
0.0006  0.0020  0.0023  0.0025  0.0090  0.0004  0.0002  0.0096

SCENARIO RECORD    : 2030 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
AVERAGE SPEED      : 2.5 Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2030
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END                                    OF                                    RUN
```

2030 Run – Litchfield County

```
MOBILE6 INPUT FILE :
> Generic 2030 Winter CO Intersection Inputs for Hartford & Southwest CT Maintenance Areas, as
> well as all other areas of Connecticut, EXCEPT the New Haven Maintenance Area.
SPREADSHEET       :
POLLUTANTS        : CO

RUN DATA
> 2030 Generic Run for Intersection Analysis in Litchfield County, CT
> April, 2011
>
> ********************************************************************************************
> Note that the composite emission factors produced with this input file include both start
> and running emissions.  EPA Guidance indicates that start emissions are typically negligible
> at intersections; therefore, use of composite emission factors will produce CO impacts that
> are conservatively high.  If modeled impacts (including background CO) approach or exceed the
> CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
> ********************************************************************************************
>

>********** Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Northeast NLEV inputs
94+ LDG IMP       : NLEVNE.D

* Fuel Data
FUEL PROGRAM      : 2 N
NO REFUELING      :

>2002 Registration Age distribution most recent data available
REG DIST          : CTreg05.d

* I/M Data
I/M DESC FILE     : CTIM05pl.d
ANTI-TAMP PROG    :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR       : cthvmt09.def
SPEED VMT         : 30svmt3W.cty
VMT BY FACILITY   : FCVMTF.CTY

* 2030 expressway/ramp VMT fractions
VMT FRACTIONS     :
0.2938  0.1070  0.3559  0.1097  0.0505  0.0262  0.0026  0.0022
0.0017  0.0059  0.0069  0.0075  0.0268  0.0013  0.0007  0.0013

SCENARIO RECORD   : 2030 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
AVERAGE SPEED     : 55. Non-Ramp 100.0 0.0 0.0 0.0
CALENDAR YEAR     : 2030
EVALUATION MONTH  : 1
FUEL RVP          : 11.95

* Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP      : 41. 41.

END OF RUN

>********** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)
```

```
* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 30svmt3W.cty
VMT BY FACILITY    : FCVMTA.CTY

* 2030 arterial/collector VMT fractions
VMT FRACTIONS      :
0.3094  0.1126  0.3747  0.1155  0.0532  0.0084  0.0008  0.0007
0.0005  0.0019  0.0022  0.0024  0.0086  0.0004  0.0002  0.0085

SCENARIO RECORD     : 2030 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
AVERAGE SPEED      : 25. Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR      : 2030
EVALUATION MONTH   : 1
FUEL RVP           : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP       : 41. 41.

END OF RUN

>****************** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Northeast NLEV inputs
94+ LDG IMP        : NLEVNE.D

* Fuel Data
FUEL PROGRAM       : 2 N
NO REFUELING       :

>2002 Registration Age distribution most recent data available
REG DIST           : CTreg05.d

* I/M Data
I/M DESC FILE      : CTIM05pl.d
ANTI-TAMP PROG     :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data (File FCVMTR.CTY assigns all VMT for this portion of the M6 run to RAMPS)
VMT BY FACILITY    : FCVMTR.CTY

* VMT Data
VMT BY HOUR        : cthvmt09.def
SPEED VMT          : 30svmt3W.cty
```

VMT BY FACILITY : FCVMTR.CTY

* 2030 expressway/ramp VMT fractions
VMT FRACTIONS :
0.2938 0.1070 0.3559 0.1097 0.0505 0.0262 0.0026 0.0022
0.0017 0.0059 0.0069 0.0075 0.0268 0.0013 0.0007 0.0013

SCENARIO RECORD : 2030 winter intersection: M6 assumes Ramp @ 34.6mph
CALENDAR YEAR : 2030
EVALUATION MONTH : 1
FUEL RVP : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP : 41. 41.

END OF RUN

>****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Northeast NLEV inputs
94+ LDG IMP : NLEVNE.D

* Fuel Data
FUEL PROGRAM : 2 N
NO REFUELING :

>2002 Registration Age distribution most recent data available
REG DIST : CTreg05.d

* I/M Data
I/M DESC FILE : CTIM05pl.d
ANTI-TAMP PROG :
83 71 50 22222 21111111 1 12 096. 12111112

* VMT Data
VMT BY HOUR : cthvmt09.def
SPEED VMT : 30svmt3W.cty
VMT BY FACILITY : FCVMTL.CTY

* 2030 arterial/collector VMT fractions
VMT FRACTIONS :
0.3087 0.1123 0.3738 0.1152 0.0530 0.0088 0.0009 0.0007
0.0006 0.0020 0.0023 0.0025 0.0090 0.0004 0.0002 0.0096

SCENARIO RECORD : 2030 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
AVERAGE SPEED : 2.5 Arterial 0.0 100.0 0.0 0.0
CALENDAR YEAR : 2030
EVALUATION MONTH : 1
FUEL RVP : 11.95

* Weather Data for Weather Data for all of CT, EXCEPT New Haven Maintenance Area
MIN/MAX TEMP : 41. 41.

END OF RUN

MOBILE6.2 Output Files

2010 Run - Fairfield County

```
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR10.IN (file 1, run 1).              *
*******************************************************************************
* 2010 Generic Run for Intersection Analysis in Fairfield County, CT
* April, 2011
*
* ***********************************************************************************************
* Note that the composite emission factors produced with this input file include both start
* and running emissions.  EPA Guidance indicates that start emissions are typically negligible
* at intersections; therefore, use of composite emission factors will produce CO impacts that
* are conservatively high.  If modeled impacts (including background CO) approach or exceed the
* CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
* ***********************************************************************************************
*
********************* Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
          User has supplied post-1999 sulfur levels.
  M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR
```

```
* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTF.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2010 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M581 Warning:
           The user supplied freeway average speed of 55.0
           will be used for all hours of the day. 100% of VMT
           has been assigned to the freeway roadway type for
           all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2010
                        Month:  Jan.
                     Altitude:  Low
              Minimum Temperature:  41.0 (F)
              Maximum Temperature:  41.0 (F)
                Absolute Humidity:   75. grains/lb
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                   ATP Program:  Yes
                Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3717    0.4047    0.1379              0.0241    0.0003    0.0021    0.0578    0.0014
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :      12.61     12.70     13.50     12.90      6.75     0.755     0.430     1.264     10.45
11.938
  ---------------------------------------------------------------------------------------------------------------
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR10.IN (file 1, run 2).              *
*******************************************************************************
****************** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
```

* data file: NLEVNE.D
  M616 Comment:
          User has supplied post-1999 sulfur levels.
  M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTA.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
          User supplied VMT mix.

* #
* 2010 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
* File 1, Run 2, Scenario 1.
* #
  M583 Warning:
          The user supplied arterial average speed of 25.0
          will be used for all hours of the day. 100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.

```
 M112 Warning:
          Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
   data file: TECH12.D
 M 48 Warning:
          there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
                Calendar Year:  2010
                      Month:  Jan.
                   Altitude:  Low
          Minimum Temperature:  41.0 (F)
          Maximum Temperature:  41.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  Yes
            Evap I/M Program:  Yes
               ATP Program:  Yes
            Reformulated Gas:  Yes

     Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
           GVWR:              <6000     >6000     (All)
                  ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.3914    0.4262    0.1452              0.0077    0.0004    0.0022    0.0184    0.0085
1.0000
 ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     11.30     11.30     11.97     11.47      9.11     0.974     0.571     1.996     15.59
11.219
 ---------------------------------------------------------------------------------------------------------------
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR10.IN (file 1, run 3).              *
*******************************************************************************
******************* Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp
speed=34.6mph)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
 M616 Comment:
          User has supplied post-1999 sulfur levels.
 M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
```

```
          1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
          1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors
 M615 Comment:
          User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2010 winter intersection: M6 assumes Ramp @ 34.6mph
* File 1, Run 3, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M112 Warning:
          Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
   data file: TECH12.D
 M 48 Warning:
          there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
               Calendar Year:  2010
                     Month:  Jan.
                  Altitude:  Low
          Minimum Temperature:  41.0 (F)
          Maximum Temperature:  41.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  Yes
            Evap I/M Program:  Yes
                ATP Program:  Yes
            Reformulated Gas:  Yes
```

```
      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
            GVWR:             <6000     >6000     (All)
                  ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3717    0.4047    0.1379            0.0241    0.0003    0.0021    0.0578    0.0014
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     15.40     14.89     15.37     15.01      6.68     0.808     0.465     1.442     12.32
14.130
  ---------------------------------------------------------------------------------------------------------------
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR10.IN (file 1, run 4).         *
*******************************************************************************
****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
```

```
* data file: 10SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTL.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # # #
* 2010 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
* File 1, Run 4, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of  2.5
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M112 Warning:
            Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2010
                        Month:  Jan.
                     Altitude:  Low
              Minimum Temperature:  41.0 (F)
              Maximum Temperature:  41.0 (F)
                Absolute Humidity:   75. grains/lb
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  Yes
                 Evap I/M Program:  Yes
                     ATP Program:  Yes
                Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3905    0.4251    0.1449              0.0080    0.0004    0.0022    0.0193    0.0096
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     25.04     24.18     27.40     25.00     41.82     2.845     1.768     8.226     100.86
25.498
  ---------------------------------------------------------------------------------------------------------------
```

2010 Run - Litchfield County

```
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH10.IN (file 1, run 1).             *
*******************************************************************************
* 2010 Generic Run for Intersection Analysis in Litchfield County, CT
* April, 2011
*
* ***********************************************************************************************
* Note that the composite emission factors produced with this input file include both start
* and running emissions.  EPA Guidance indicates that start emissions are typically negligible
* at intersections; therefore, use of composite emission factors will produce CO impacts that
* are conservatively high.  If modeled impacts (including background CO) approach or exceed the
* CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
* ***********************************************************************************************
*
********************* Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF
```

```
* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTF.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2010 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M581 Warning:
          The user supplied freeway average speed of 55.0
          will be used for all hours of the day. 100% of VMT
          has been assigned to the freeway roadway type for
          all hours of the day and all vehicle types.
  M112 Warning:
            Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
           there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
                 Calendar Year:  2010
                       Month:  Jan.
                    Altitude:  Low
            Minimum Temperature:  41.0 (F)
            Maximum Temperature:  41.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                 ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
            GVWR:              <6000     >6000     (All)
                   ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3717    0.4047    0.1379              0.0241    0.0003    0.0021    0.0578    0.0014
1.0000
  -----------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :      12.61     12.70     13.50     12.90      6.75     0.755     0.430     1.264     10.45
11.938
  -----------------------------------------------------------------------------------------------------------------
********************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                   *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH10.IN (file 1, run 2).          *
********************************************************************************
****************** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
```

User has supplied post-1999 sulfur levels.
M603 Comment:
User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTA.CTY

Reading User Supplied ROADWAY VMT Factors
M615 Comment:
User supplied VMT mix.

* #
* 2010 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
* File 1, Run 2, Scenario 1.
* #
M583 Warning:
The user supplied arterial average speed of 25.0
will be used for all hours of the day. 100% of VMT
has been assigned to the arterial/collector roadway
type for all hours of the day and all vehicle types.
M112 Warning:
Wintertime Reformulated Gasoline Rules Apply

*** I/M credits for Tech1&2 vehicles were read from the following external
data file: TECH12.D
M 48 Warning:
there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D
Calendar Year: 2010
Month: Jan.
Altitude: Low
Minimum Temperature: 41.0 (F)
Maximum Temperature: 41.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:		<6000	>6000	(All)						
VMT Distribution:	0.3914	0.4262	0.1452		0.0077	0.0004	0.0022	0.0184	0.0085	1.0000
Composite Emission Factors (g/mi):										
Composite CO :	11.30	11.30	11.97	11.47	9.11	0.974	0.571	1.996	15.59	11.219

****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH10.IN (file 1, run 3). *
****
********** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
M616 Comment:
User has supplied post-1999 sulfur levels.
M603 Comment:
User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:

1.00 MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

Reading User Supplied ROADWAY VMT Factors

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

Reading User Supplied ROADWAY VMT Factors
M615 Comment:
User supplied VMT mix.

* #
* 2010 winter intersection: M6 assumes Ramp @ 34.6mph
* File 1, Run 3, Scenario 1.
* #
M112 Warning:
Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
data file: TECH12.D
M 48 Warning:
there are no sales for vehicle class HDGV8b

LEV phase-in data read from file NLEVNE.D
Calendar Year: 2010
Month: Jan.
Altitude: Low
Minimum Temperature: 41.0 (F)
Maximum Temperature: 41.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: Yes

Vehicle Type: LDGV LDGT12 LDGT34 LDGT HDGV LDDV LDDT HDDV MC All Veh

```
            GVWR:             <6000    >6000    (All)
                   ------    ------   ------   ------   ------   ------   ------   ------   ------   ------
  VMT Distribution:    0.3717   0.4047   0.1379            0.0241   0.0003   0.0021   0.0578   0.0014
1.0000
 ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     15.40    14.89    15.37    15.01     6.68    0.808    0.465    1.442    12.32
14.130
 ---------------------------------------------------------------------------------------------------------------------
*****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                 *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH10.IN (file 1, run 4).        *
*****************************************************************************
****************** Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
 M616 Comment:
          User has supplied post-1999 sulfur levels.
 M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00    MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 10SVMT3W.CTY
```

```
* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTL.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2010 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
* File 1, Run 4, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
           The user supplied arterial average speed of  2.5
           will be used for all hours of the day.  100% of VMT
           has been assigned to the arterial/collector roadway
           type for all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2010
                        Month:  Jan.
                     Altitude:  Low
              Minimum Temperature:  41.0 (F)
              Maximum Temperature:  41.0 (F)
                Absolute Humidity:   75. grains/lb
              Fuel Sulfur Content:   30. ppm

              Exhaust I/M Program:  Yes
                Evap I/M Program:  Yes
                    ATP Program:  Yes
                Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3905    0.4251    0.1449              0.0080    0.0004    0.0022    0.0193    0.0096
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     25.04     24.18     27.40     25.00     41.82     2.845     1.768     8.226     100.86
25.498
  ---------------------------------------------------------------------------------------------------------------
```

2030 Run - Fairfield County

```
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR30.IN (file 1, run 1).              *
*******************************************************************************
* 2030 Generic Run for Intersection Analysis in Fairfield County, CT
* April, 2011
*
* ***********************************************************************************************
* Note that the composite emission factors produced with this input file include both start
* and running emissions.  EPA Guidance indicates that start emissions are typically negligible
* at intersections; therefore, use of composite emission factors will produce CO impacts that
* are conservatively high.  If modeled impacts (including background CO) approach or exceed the
* CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
* ***********************************************************************************************
*
********************* Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
```

```
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTF.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M581 Warning:
          The user supplied freeway average speed of 55.0
          will be used for all hours of the day. 100% of VMT
          has been assigned to the freeway roadway type for
          all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2030
                        Month:  Jan.
                     Altitude:  Low
            Minimum Temperature:  41.0 (F)
            Maximum Temperature:  41.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                 ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:             <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.2935    0.4629    0.1578              0.0240    0.0003    0.0024    0.0578    0.0013
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :      10.06      9.13      9.08      9.12      5.68     0.475     0.238     0.173     10.45
8.774
  ---------------------------------------------------------------------------------------------------------------
********************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                   *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR30.IN (file 1, run 2).               *
********************************************************************************
******************* Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)
```

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
 M616 Comment:
 User has supplied post-1999 sulfur levels.
 M603 Comment:
 User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)
 M 49 Warning:
 1.00 MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTA.CTY

 Reading User Supplied ROADWAY VMT Factors
 M615 Comment:
 User supplied VMT mix.

* #
* 2030 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
* File 1, Run 2, Scenario 1.
* #
 M583 Warning:
 The user supplied arterial average speed of 25.0
 will be used for all hours of the day. 100% of VMT
 has been assigned to the arterial/collector roadway

type for all hours of the day and all vehicle types.
M112 Warning:
Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
data file: TECH12.D
M 48 Warning:
there are no sales for vehicle class HDGV8b
M 48 Warning:
there are no sales for vehicle class LDDT12

LEV phase-in data read from file NLEVNE.D
Calendar Year: 2030
Month: Jan.
Altitude: Low
Minimum Temperature: 41.0 (F)
Maximum Temperature: 41.0 (F)
Absolute Humidity: 75. grains/lb
Fuel Sulfur Content: 30. ppm

Exhaust I/M Program: Yes
Evap I/M Program: Yes
ATP Program: Yes
Reformulated Gas: Yes

Vehicle Type:	LDGV	LDGT12	LDGT34	LDGT	HDGV	LDDV	LDDT	HDDV	MC	All Veh
GVWR:	<6000	>6000	(All)							
VMT Distribution:	0.3091	0.4873	0.1662		0.0077	0.0003	0.0025	0.0184	0.0085	1.0000
Composite Emission Factors (g/mi):										
Composite CO :	9.08	8.05	7.98	8.03	7.66	0.621	0.324	0.274	15.59	8.252

****
* MOBILE6.2.03 (24-Sep-2003) *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR30.IN (file 1, run 3). *
****
********** Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp speed=34.6mph)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
M616 Comment:
User has supplied post-1999 sulfur levels.
M603 Comment:
User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)
M 49 Warning:
1.00 MYR sum not = 1. (will normalize)

```
 M 49 Warning:
          1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
          1.00    MYR sum not = 1. (will normalize)
 M 49 Warning:
          1.00    MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors
 M615 Comment:
          User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: M6 assumes Ramp @ 34.6mph
* File 1, Run 3, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M112 Warning:
          Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
   data file: TECH12.D
 M 48 Warning:
         there are no sales for vehicle class HDGV8b
 M 48 Warning:
         there are no sales for vehicle class LDDT12

LEV phase-in data read from file NLEVNE.D
               Calendar Year:  2030
                     Month:  Jan.
                  Altitude:  Low
          Minimum Temperature:  41.0 (F)
          Maximum Temperature:  41.0 (F)
           Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm
```

```
            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                  ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
            GVWR:             <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.2935    0.4629    0.1578              0.0240    0.0003    0.0024    0.0578    0.0013
1.0000
  ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     11.34     10.22     10.17     10.21      5.62     0.511     0.259     0.198     12.32
9.828
  ---------------------------------------------------------------------------------------------------------------------
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: C:\MOBILE62\MOBILE6\RUN\FAIR30.IN (file 1, run 4).        *
*************************************************************************
******************* Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR
```

```
* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT1W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTL.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
* File 1, Run 4, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of  2.5
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2030
                        Month:  Jan.
                     Altitude:  Low
            Minimum Temperature:  41.0 (F)
            Maximum Temperature:  41.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                 ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:             <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3084    0.4861    0.1657              0.0081    0.0003    0.0025    0.0193    0.0096
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite CO  :     18.22     17.12     17.57     17.23     35.26     1.870     1.054     1.128    100.86
18.132
  ---------------------------------------------------------------------------------------------------------------
```

2030 Run - Litchfield County

```
*****************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH30.IN (file 1, run 1).           *
*****************************************************************************
* 2030 Generic Run for Intersection Analysis in Litchfield County, CT
* April, 2011
*
* ***************************************************************************************************
* Note that the composite emission factors produced with this input file include both start
* and running emissions.  EPA Guidance indicates that start emissions are typically negligible
* at intersections; therefore, use of composite emission factors will produce CO impacts that
* are conservatively high.  If modeled impacts (including background CO) approach or exceed the
* CO NAAQS, consult CTDEP to discuss applying a more refined method that excludes start emissions.
* ***************************************************************************************************
*
********************* Expressway Freeflow (USE FOR FREEWAYS ONLY, NOT RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF
```

```
* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTF.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: Freeway Freeflow @ 55 mph (REPLACE ?? WITH SPEED)
* File 1, Run 1, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M581 Warning:
           The user supplied freeway average speed of 55.0
           will be used for all hours of the day. 100% of VMT
           has been assigned to the freeway roadway type for
           all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2030
                        Month:  Jan.
                     Altitude:  Low
            Minimum Temperature:  41.0 (F)
            Maximum Temperature:  41.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                 ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.2935    0.4629    0.1578              0.0240    0.0003    0.0024    0.0578    0.0013
1.0000
  -----------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
     Composite CO  :      10.06      9.13      9.08      9.12      5.68     0.475     0.238     0.173     10.45
8.774
  -----------------------------------------------------------------------------------------------------------------
*********************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                    *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH30.IN (file 1, run 2).         *
*********************************************************************************
****************** Arterial/Collector/Local Freeflow (DO NOT USE FOR RAMPS)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
```

* data file: NLEVNE.D
  M616 Comment:
          User has supplied post-1999 sulfur levels.
  M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)
  M 49 Warning:
            1.00   MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTA.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
          User supplied VMT mix.

* #
* 2030 winter intersection: Arterial/Collector/Local @ 25 mph (REPLACE ??? WITH SPEED)
* File 1, Run 2, Scenario 1.
* #
  M583 Warning:
        The user supplied arterial average speed of 25.0
        will be used for all hours of the day. 100% of VMT
        has been assigned to the arterial/collector roadway
        type for all hours of the day and all vehicle types.

```
 M112 Warning:
          Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
   data file: TECH12.D
 M 48 Warning:
          there are no sales for vehicle class HDGV8b
 M 48 Warning:
          there are no sales for vehicle class LDDT12

 LEV phase-in data read from file NLEVNE.D
                Calendar Year:  2030
                      Month:  Jan.
                   Altitude:  Low
          Minimum Temperature:  41.0 (F)
          Maximum Temperature:  41.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  Yes
            Evap I/M Program:  Yes
               ATP Program:  Yes
            Reformulated Gas:  Yes

     Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
           GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
  VMT Distribution:    0.3091    0.4873    0.1662              0.0077    0.0003    0.0025    0.0184    0.0085
1.0000
 ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
   Composite CO  :       9.08      8.05      7.98      8.03      7.66     0.621     0.324     0.274     15.59
8.252
 ---------------------------------------------------------------------------------------------------------------
*******************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                                  *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH30.IN (file 1, run 3).         *
*******************************************************************************
******************* Ramp Freeflow (Use for all freeway ramps; MOBILE6 assumes avg freeflow ramp
speed=34.6mph)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
 M616 Comment:
          User has supplied post-1999 sulfur levels.
 M603 Comment:
          User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
            1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
```

```
          1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
          1.00     MYR sum not = 1. (will normalize)
 M 49 Warning:
          1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors

* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTR.CTY

 Reading User Supplied ROADWAY VMT Factors
 M615 Comment:
          User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: M6 assumes Ramp @ 34.6mph
* File 1, Run 3, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
 M112 Warning:
          Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
   data file: TECH12.D
 M 48 Warning:
          there are no sales for vehicle class HDGV8b
 M 48 Warning:
          there are no sales for vehicle class LDDT12

LEV phase-in data read from file NLEVNE.D
               Calendar Year:  2030
                     Month:  Jan.
                  Altitude:  Low
          Minimum Temperature:  41.0 (F)
          Maximum Temperature:  41.0 (F)
            Absolute Humidity:   75. grains/lb
          Fuel Sulfur Content:   30. ppm

          Exhaust I/M Program:  Yes
```

```
              Evap I/M Program:  Yes
                  ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
            GVWR:              <6000     >6000     (All)
                   ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.2935    0.4629    0.1578              0.0240    0.0003    0.0024    0.0578    0.0013
1.0000
  ---------------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     11.34     10.22     10.17     10.21      5.62     0.511     0.259     0.198     12.32
9.828
  ---------------------------------------------------------------------------------------------------------------------
*************************************************************************
* MOBILE6.2.03 (24-Sep-2003)                                            *
* Input file: C:\MOBILE62\MOBILE6\RUN\LITCH30.IN (file 1, run 4).       *
*************************************************************************
******************* Arterial/Collector/Local Idle @ 2.5 mph (Use for queues after multiplying by 2.5)

* Reading 94+ LEV IMPLEMENTATION SCHEDULE from the following external
* data file: NLEVNE.D
  M616 Comment:
            User has supplied post-1999 sulfur levels.
  M603 Comment:
            User has disabled the calculation of REFUELING emissions.

*2002 Registration Age distribution most recent data available

* Reading Registration Distributions from the following external
* data file: CTREG05.D
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)
  M 49 Warning:
              1.00     MYR sum not = 1. (will normalize)

* Reading I/M program description records from the following external
* data file: CTIM05PL.D
*CT I/M PROGRAMS for all years 2005 and later (modified Jun 05 PMB/AG to reflect DMV info that 8,501-
10,000 lb get TSI & GC (no OBD)
*Biennial OBDII I/M "tailpipe" test for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR. Program start
year reflects OBD test that replaced the ASM
*Biennial OBDII evaporative "test" for post-MY1995 gasoline vehicles up to 8,500 lbs GVWR
*Biennial 2500/IDLE I/M tailpipe test for all HDGT 8,501 - 10,000 lbs GVWR (per above comment)
*Biennial GC evaporative "test" for all HDGT 8,501 - 10,000 lbs (per above comment)
*Biennial ASM I/M tailpipe test for pre-96 gasoline vehicles up to 8,500 lbs GVWR

* Reading ASM I/M Test Credits from ASMDATA.D
*Biennial Gas Cap evaporative test for pre-96 gasoline vehicles up to 8,500 lbs GVWR
```

```
* Reading Hourly VMT distribution from the following external
* data file: CTHVMT09.DEF

* Reading Hourly, Roadway, and Speed VMT dist. from the following external
* data file: 30SVMT3W.CTY

* Reading Hourly Roadway VMT distribution from the following external
* data file: FCVMTL.CTY

  Reading User Supplied ROADWAY VMT Factors
  M615 Comment:
            User supplied VMT mix.

* # # # # # # # # # # # # # # # # # # # # # # # # #
* 2030 winter intersection: Idle @ 2.5 mph (x 2.5 to get idle rate for CAL3QHC)
* File 1, Run 4, Scenario 1.
* # # # # # # # # # # # # # # # # # # # # # # # # #
  M583 Warning:
          The user supplied arterial average speed of  2.5
          will be used for all hours of the day.  100% of VMT
          has been assigned to the arterial/collector roadway
          type for all hours of the day and all vehicle types.
  M112 Warning:
             Wintertime Reformulated Gasoline Rules Apply
*** I/M credits for Tech1&2 vehicles were read from the following external
    data file: TECH12.D
  M 48 Warning:
            there are no sales for vehicle class HDGV8b
  M 48 Warning:
            there are no sales for vehicle class LDDT12

 LEV phase-in data read from file NLEVNE.D
                  Calendar Year:  2030
                        Month:  Jan.
                     Altitude:  Low
            Minimum Temperature:  41.0 (F)
            Maximum Temperature:  41.0 (F)
              Absolute Humidity:   75. grains/lb
            Fuel Sulfur Content:   30. ppm

            Exhaust I/M Program:  Yes
              Evap I/M Program:  Yes
                 ATP Program:  Yes
              Reformulated Gas:  Yes

      Vehicle Type:      LDGV    LDGT12    LDGT34      LDGT      HDGV      LDDV      LDDT      HDDV        MC
All Veh
             GVWR:              <6000     >6000     (All)
                    ------    ------    ------    ------    ------    ------    ------    ------    ------    ------
   VMT Distribution:    0.3084    0.4861    0.1657              0.0081    0.0003    0.0025    0.0193    0.0096
1.0000
  ---------------------------------------------------------------------------------------------------------------
 Composite Emission Factors (g/mi):
    Composite CO  :     18.22     17.12     17.57     17.23     35.26     1.870     1.054     1.128    100.86
18.132
  ---------------------------------------------------------------------------------------------------------------
```

APPENDIX B

CALQVIEW2 Model Output

Appendix B - CALQVIEW2 Model Output Results

This appendix contains the CALQVIEW2 model results for the following intersections:

- Federal Road (Route 202) / Station Road (Route 25) 2010 Existing AM
- Federal Road (Route 202) / Station Road (Route 25) 2010 Existing PM
- Federal Road (Route 202) / Station Road (Route 25) 2030 No Build AM
- Federal Road (Route 202) / Station Road (Route 25) 2030 No Build PM
- Federal Road (Route 202) / Station Road (Route 25) 2030 Build AM
- Federal Road (Route 202) / Station Road (Route 25) 2030 Build PM
- Federal Road (Route 202) / Station Road (Route 25) 2030 Mitigated Build AM
- Federal Road (Route 202) / Station Road (Route 25) 2030 Mitigated Build PM

- Grist Mill Road (Route 7) / Glover Avenue 2010 Existing AM
- Grist Mill Road (Route 7) / Glover Avenue 2010 Existing PM
- Grist Mill Road (Route 7) / Glover Avenue 2030 No Build AM
- Grist Mill Road (Route 7) / Glover Avenue 2030 No Build PM
- Grist Mill Road (Route 7) / Glover Avenue 2030 Build AM
- Grist Mill Road (Route 7) / Glover Avenue 2030 Build PM
- Grist Mill Road (Route 7) / Glover Avenue 2030 Mitigated Build AM
- Grist Mill Road (Route 7) / Glover Avenue 2030 Mitigated Build PM

- Route 7 / Bridge Street (Route 202) 2010 Existing AM
- Route 7 / Bridge Street (Route 202) 2010 Existing PM
- Route 7 / Bridge Street (Route 202) 2030 No Build AM
- Route 7 / Bridge Street (Route 202) 2030 No Build PM
- Route 7 / Bridge Street (Route 202) 2030 Build AM
- Route 7 / Bridge Street (Route 202) 2030 Build PM
- Route 7 / Bridge Street (Route 202) 2030 Mitigated Build AM
- Route 7 / Bridge Street (Route 202) 2030 Mitigated Build PM

- Grist Mill Road (Route 7) / Main Avenue 2010 Existing AM
- Grist Mill Road (Route 7) / Main Avenue 2010 Existing PM
- Grist Mill Road (Route 7) / Main Avenue 2030 No Build AM
- Grist Mill Road (Route 7) / Main Avenue 2030 No Build PM
- Grist Mill Road (Route 7) / Main Avenue 2030 Build AM
- Grist Mill Road (Route 7) / Main Avenue 2030 Build PM
- Grist Mill Road (Route 7) / Main Avenue 2030 Mitigated Build AM
- Grist Mill Road (Route 7) / Main Avenue 2030 Mitigated Build PM

JOB: FederalStation2010ExistingAM RUN: FederalStation2010ExistingAM

DATE : 4/ 7/11
TIME : 14:57:40

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	101.	11.2	.0	24.0		
2. Station EB L	*	200.0	424.0	204.5	424.0	*	4.	90.	AG	303.	100.0	.0	12.0	.04	.2
3. Station EB TR	*	200.0	412.0	217.1	412.0	*	17.	90.	AG	303.	100.0	.0	12.0	.17	.9
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	101.	11.2	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	494.	11.2	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	594.9	436.0	*	53.	270.	AG	241.	100.0	.0	12.0	.61	2.7
7. Whisconier WB R	*	648.0	448.0	623.3	448.0	*	25.	270.	AG	194.	100.0	.0	12.0	.25	1.3
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	494.	11.2	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	184.	11.2	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	231.2	*	31.	360.	AG	241.	100.0	.0	12.0	.28	1.6
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	184.	11.2	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	215.	11.2	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	621.4	*	15.	180.	AG	241.	100.0	.0	12.0	.15	.7
14. Federal SB TR	*	412.0	636.0	412.0	615.5	*	20.	180.	AG	225.	100.0	.0	12.0	.18	1.0
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	215.	11.2	.0	24.0		

JOB: FederalStation2010ExistingAM RUN: FederalStation2010ExistingAM

DATE : 4/ 7/11
TIME : 14:57:40

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	39	4.0	21	1926	173.64	3	3
3. Station EB TR	60	39	4.0	80	1938	173.64	3	3
6. Whisconier WB LT	60	31	4.0	313	1337	173.64	3	3
7. Whisconier WB R	60	25	4.0	181	1515	173.64	3	3
10. Federal NB LTR	60	31	5.0	184	1774	173.64	3	3
13. Federal SB L	60	31	3.0	86	1429	173.64	3	3
14. Federal SB TR	60	29	5.0	129	1753	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2010ExistingAM RUN: FederalStation2010ExistingAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.7	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.3	4.3	4.3	4.3
10.	4.8	4.4	4.4	4.3	4.3	4.6	4.3	4.3	4.3	4.4	4.3	4.3
20.	4.9	4.3	4.4	4.3	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.3
30.	4.8	4.3	4.4	4.3	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.3
40.	4.8	4.3	4.5	4.3	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.3
50.	4.7	4.3	4.5	4.3	4.3	4.4	4.3	4.3	4.3	4.4	4.3	4.3
60.	4.6	4.3	4.6	4.3	4.4	4.4	4.3	4.3	4.3	4.4	4.3	4.3
70.	4.5	4.3	4.6	4.3	4.4	4.4	4.3	4.3	4.3	4.4	4.3	4.3
80.	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.3	4.3	4.6	4.3	4.4
90.	4.3	4.4	4.6	4.3	4.3	4.3	4.4	4.4	4.3	4.5	4.3	4.4
100.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.4	4.3	4.7	4.4	4.5
110.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3	4.9	4.3	4.5
120.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.3	4.9	4.3	4.5
130.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.3	5.0	4.3	4.5
140.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.3	4.8	4.3	4.6
150.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.3	4.6	4.4	4.6
160.	4.3	4.4	4.4	4.3	4.3	4.3	4.6	4.3	4.3	4.5	4.4	4.8
170.	4.3	4.4	4.4	4.3	4.3	4.3	4.7	4.3	4.3	4.4	4.5	4.8
180.	4.3	4.3	4.3	4.3	4.3	4.3	4.9	4.3	4.3	4.3	4.4	4.7
190.	4.3	4.3	4.3	4.3	4.4	4.3	4.9	4.4	4.4	4.3	4.5	4.6
200.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.4	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.3	4.4	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.5	4.4	4.3	5.3	4.3	4.4	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.4	4.4	4.3	5.1	4.3	4.6	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.4	4.4	4.3	4.9	4.4	4.6	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.4	4.3	4.3	4.7	4.4	4.7	4.3	4.5	4.5
260.	4.3	4.3	4.3	4.5	4.3	4.3	4.5	4.4	4.7	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.6	4.4	4.3	4.3	4.5	4.6	4.3	4.4	4.4
280.	4.4	4.4	4.3	4.7	4.4	4.3	4.3	4.5	4.6	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.8	4.4	4.3	4.3	4.4	4.4	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.9	4.4	4.4	4.3	4.4	4.4	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.9	4.4	4.5	4.3	4.4	4.4	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.8	4.3	4.6	4.3	4.4	4.5	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.7	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
340.	4.4	4.4	4.3	4.5	4.3	4.7	4.3	4.4	4.4	4.3	4.3	4.3
350.	4.5	4.4	4.3	4.4	4.3	4.6	4.3	4.4	4.4	4.3	4.3	4.3
360.	4.7	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.3	4.3	4.3	4.3
MAX	4.9	4.4	4.6	4.9	4.4	4.7	5.3	4.5	4.7	5.0	4.5	4.8
DEGR.	20	0	60	300	60	330	220	270	250	130	170	160

THE HIGHEST CONCENTRATION OF 5.30 PPM OCCURRED AT RECEPTOR REC7 .

JOB: FederalStation2010ExistingAM RUN: FederalStation2010ExistingAM

DATE : 4/ 7/11
TIME : 14:57:40

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	20	0	60	300	60	330	220	270	250	130	170	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.1	.3	.5	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.1	.0	.0	.1	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.5	.0	.0
15	*	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.1	.0

JOB: FederalStation2010ExistingPM RUN: FederalStation2010ExistingPM

DATE : 4/ 7/11
TIME : 15: 4:35

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	.0	418.0	200.0	418.0	200.	90.	AG	92.	11.2	.0	24.0		
2. Station EB L	200.0	424.0	202.8	424.0	3.	90.	AG	326.	100.0	.0	12.0	.04	.1
3. Station EB TR	200.0	412.0	218.4	412.0	18.	90.	AG	326.	100.0	.0	12.0	.23	.9
4. Whisconier EB out	454.0	418.0	848.0	418.0	394.	90.	AG	92.	11.2	.0	24.0		
5. Whisconier WB in	848.0	442.0	648.0	442.0	200.	270.	AG	402.	11.2	.0	24.0		
6. Whisconier WB LT	648.0	436.0	599.8	436.0	48.	270.	AG	272.	100.0	.0	12.0	.56	2.5
7. Whisconier WB R	648.0	448.0	628.3	448.0	20.	270.	AG	186.	100.0	.0	12.0	.20	1.0
8. Station WB out	406.0	442.0	.0	442.0	406.	270.	AG	402.	11.2	.0	24.0		
9. Federal NB in	442.0	.0	442.0	200.0	200.	360.	AG	436.	11.2	.0	12.0		
10. Federal NB LTR	442.0	200.0	442.0	276.3	76.	360.	AG	248.	100.0	.0	12.0	.68	3.9
11. Federal NB out	442.0	454.0	442.0	836.0	382.	360.	AG	436.	11.2	.0	24.0		
12. Federal SB in	418.0	836.0	418.0	636.0	200.	180.	AG	321.	11.2	.0	24.0		
13. Federal SB L	424.0	636.0	424.0	612.8	23.	180.	AG	210.	100.0	.0	12.0	.20	1.2
14. Federal SB TR	412.0	636.0	412.0	613.6	22.	180.	AG	194.	100.0	.0	12.0	.20	1.1
15. Federal SB out	424.0	404.0	424.0	.0	404.	180.	AG	321.	11.2	.0	24.0		

JOB: FederalStation2010ExistingPM RUN: FederalStation2010ExistingPM

DATE : 4/ 7/11
TIME : 15: 4:35

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	42	4.0	12	1689	173.64	3	3
3. Station EB TR	60	42	4.0	80	1709	173.64	3	3
6. Whisconier WB LT	60	35	4.0	252	1422	173.64	3	3
7. Whisconier WB R	60	24	4.0	150	1515	173.64	3	3
10. Federal NB LTR	60	32	5.0	436	1836	173.64	3	3
13. Federal SB L	60	27	3.0	157	1662	173.64	3	3
14. Federal SB TR	60	25	5.0	164	1725	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2010ExistingPM RUN: FederalStation2010ExistingPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.7	4.5	4.3	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
10.	4.8	4.4	4.4	4.3	4.4	4.6	4.3	4.4	4.3	4.5	4.4	4.3
20.	4.9	4.4	4.5	4.3	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
30.	4.9	4.4	4.6	4.3	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
40.	4.8	4.3	4.7	4.3	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
50.	4.7	4.3	4.7	4.3	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
60.	4.6	4.3	4.7	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3
70.	4.5	4.4	4.7	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3
80.	4.3	4.5	4.6	4.3	4.4	4.3	4.3	4.3	4.3	4.7	4.4	4.3
90.	4.3	4.4	4.6	4.3	4.3	4.3	4.4	4.4	4.3	4.7	4.4	4.4
100.	4.3	4.4	4.5	4.3	4.3	4.3	4.4	4.4	4.3	4.9	4.5	4.4
110.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.3	4.5
120.	4.4	4.4	4.5	4.3	4.3	4.3	4.5	4.3	4.3	5.1	4.3	4.5
130.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.3	4.3	5.0	4.3	4.5
140.	4.3	4.4	4.5	4.3	4.3	4.3	4.4	4.3	4.3	5.0	4.3	4.5
150.	4.3	4.5	4.5	4.3	4.3	4.3	4.4	4.3	4.3	4.8	4.4	4.5
160.	4.3	4.5	4.5	4.3	4.3	4.3	4.6	4.3	4.3	4.6	4.6	4.6
170.	4.3	4.5	4.4	4.3	4.4	4.3	4.8	4.3	4.3	4.5	4.6	4.6
180.	4.3	4.5	4.3	4.4	4.4	4.3	4.9	4.5	4.4	4.3	4.6	4.5
190.	4.3	4.3	4.3	4.5	4.5	4.3	5.0	4.5	4.5	4.3	4.4	4.5
200.	4.3	4.3	4.3	4.5	4.5	4.3	5.2	4.4	4.5	4.3	4.4	4.4
210.	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.4	4.5	4.3	4.4	4.4
220.	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.3	4.6	4.3	4.4	4.4
230.	4.3	4.3	4.3	4.5	4.4	4.4	5.0	4.3	4.7	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.4	4.4	4.8	4.4	4.7	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.4	4.3	4.6	4.5	4.7	4.3	4.5	4.5
260.	4.3	4.3	4.3	4.7	4.4	4.3	4.4	4.5	4.7	4.3	4.5	4.4
270.	4.3	4.3	4.3	4.8	4.4	4.3	4.3	4.5	4.6	4.3	4.4	4.4
280.	4.3	4.4	4.3	4.8	4.5	4.3	4.3	4.5	4.6	4.3	4.4	4.3
290.	4.4	4.4	4.3	4.9	4.4	4.3	4.3	4.4	4.5	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.9	4.4	4.4	4.3	4.4	4.5	4.3	4.3	4.3
310.	4.4	4.4	4.3	5.0	4.3	4.5	4.3	4.5	4.6	4.3	4.3	4.3
320.	4.4	4.4	4.3	5.0	4.3	4.6	4.3	4.5	4.6	4.3	4.3	4.3
330.	4.4	4.4	4.3	5.0	4.3	4.7	4.3	4.5	4.6	4.3	4.3	4.3
340.	4.4	4.4	4.3	4.9	4.4	4.7	4.3	4.5	4.6	4.3	4.3	4.3
350.	4.5	4.4	4.3	4.7	4.4	4.7	4.3	4.5	4.5	4.3	4.3	4.3
360.	4.7	4.5	4.3	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
MAX	4.9	4.5	4.7	5.0	4.5	4.7	5.2	4.5	4.7	5.1	4.6	4.6
DEGR.	20	0	40	310	190	330	200	180	230	120	160	160

THE HIGHEST CONCENTRATION OF 5.20 PPM OCCURRED AT RECEPTOR REC7 .

JOB: FederalStation2010ExistingPM RUN: FederalStation2010ExistingPM

DATE : 4/ 7/11
TIME : 15: 4:35

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM)											
	*	ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	20	0	40	310	190	330	200	180	230	120	160	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	*	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.3	.6	.1	.0	.0	.1	.0	.0	.1	.0
11	*	.0	.1	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0	.0
15	*	.0	.0	.1	.1	.1	.0	.0	.1	.0	.0	.1	.0

JOB: FederalStation2030NoBuildAM RUN: FederalStation2030NoBuildAM

DATE : 4/15/11
TIME : 13: 1: 2

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	149.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	208.5	424.0	*	9.	90.	AG	223.	100.0	.0	12.0	.08	.4
3. Station EB TR	*	200.0	412.0	223.2	412.0	*	23.	90.	AG	223.	100.0	.0	12.0	.23	1.2
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	149.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	769.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	514.5	436.0	*	134.	270.	AG	177.	100.0	.0	12.0	.94	6.8
7. Whisconier WB R	*	648.0	448.0	601.1	448.0	*	47.	270.	AG	143.	100.0	.0	12.0	.47	2.4
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	769.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	315.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	253.4	*	53.	360.	AG	177.	100.0	.0	12.0	.48	2.7
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	315.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	454.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	607.2	*	29.	180.	AG	177.	100.0	.0	12.0	.29	1.5
14. Federal SB TR	*	412.0	636.0	412.0	591.0	*	45.	180.	AG	166.	100.0	.0	12.0	.40	2.3
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	454.	8.3	.0	24.0		

JOB: FederalStation2030NoBuildAM RUN: FederalStation2030NoBuildAM

DATE : 4/15/11
TIME : 13: 1: 2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	39	4.0	40	1926	127.94	3	3
3. Station EB TR	60	39	4.0	109	1938	127.94	3	3
6. Whisconier WB LT	60	31	4.0	426	1177	127.94	3	3
7. Whisconier WB R	60	25	4.0	343	1515	127.94	3	3
10. Federal NB LTR	60	31	5.0	315	1794	127.94	3	3
13. Federal SB L	60	31	3.0	170	1443	127.94	3	3
14. Federal SB TR	60	29	5.0	284	1755	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030NoBuildAM RUN: FederalStation2030NoBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.6	4.4	4.3	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
10.	4.7	4.4	4.4	4.3	4.3	4.5	4.3	4.3	4.3	4.4	4.4	4.3
20.	4.8	4.4	4.4	4.4	4.3	4.4	4.3	4.3	4.3	4.4	4.4	4.3
30.	4.9	4.3	4.6	4.4	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
40.	4.8	4.3	4.6	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3
50.	4.7	4.3	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
60.	4.6	4.4	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
70.	4.5	4.5	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.4	4.3	4.3
80.	4.4	4.5	4.6	4.3	4.5	4.4	4.4	4.4	4.3	4.5	4.4	4.4
90.	4.3	4.5	4.5	4.3	4.4	4.3	4.4	4.5	4.3	4.6	4.4	4.4
100.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.6	4.3	4.8	4.4	4.5
110.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.6	4.3	4.8	4.4	4.5
120.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.5	4.3	5.0	4.3	4.5
130.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.3	4.5
140.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.4	5.1	4.3	4.6
150.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.4	4.9	4.4	4.7
160.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.8	4.5	4.8
170.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.3	4.5	4.5	4.7
180.	4.3	4.4	4.3	4.3	4.4	4.3	4.8	4.4	4.4	4.4	4.6	4.7
190.	4.3	4.3	4.3	4.5	4.5	4.3	4.9	4.4	4.4	4.3	4.5	4.6
200.	4.3	4.3	4.3	4.5	4.4	4.3	4.9	4.4	4.4	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.4	4.4	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.6	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.6	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.4	4.8	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.4	4.8	4.3	4.6	4.5
260.	4.3	4.3	4.3	4.5	4.4	4.3	4.8	4.6	4.7	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.6	4.5	4.3	4.6	4.5	4.6	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.5	4.5	4.3	4.5	4.5	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.4	4.5	4.3	4.4	4.5	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.4	4.6	4.3	4.4	4.5	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.4	4.6	4.3	4.4	4.5	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.8	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.7	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
340.	4.4	4.4	4.3	4.6	4.3	4.6	4.3	4.5	4.5	4.3	4.3	4.3
350.	4.6	4.4	4.3	4.5	4.4	4.6	4.3	4.4	4.4	4.3	4.3	4.3
360.	4.6	4.4	4.3	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
MAX	4.9	4.5	4.6	4.8	4.5	4.7	5.1	4.6	4.8	5.2	4.6	4.8
DEGR.	30	70	30	300	50	320	220	100	240	130	180	160

THE HIGHEST CONCENTRATION OF 5.20 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030NoBuildAM RUN: FederalStation2030NoBuildAM

DATE : 4/15/11
TIME : 13: 1: 2

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	30	70	30	300	50	320	220	100	240	130	180	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.1	.1	.0	.2	.3	.4	.3	.0	.1	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0	.0
15	*	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.1	.0

JOB: FederalStation2030NoBuildPM RUN: FederalStation2030NoBuildPM

DATE : 4/15/11
TIME : 13: 4:10

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	138.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	206.7	424.0	*	7.	90.	AG	240.	100.0	.0	12.0	.09	.3
3. Station EB TR	*	200.0	412.0	225.0	412.0	*	25.	90.	AG	240.	100.0	.0	12.0	.32	1.3
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	138.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	668.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	561.1	436.0	*	87.	270.	AG	200.	100.0	.0	12.0	.84	4.4
7. Whisconier WB R	*	648.0	448.0	605.3	448.0	*	43.	270.	AG	137.	100.0	.0	12.0	.43	2.2
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	668.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	765.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	1582.7	*	1383.	360.	AG	183.	100.0	.0	12.0	1.17	70.2
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	765.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	733.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	583.9	*	52.	180.	AG	154.	100.0	.0	12.0	.44	2.6
14. Federal SB TR	*	412.0	636.0	412.0	584.1	*	52.	180.	AG	143.	100.0	.0	12.0	.47	2.6
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	733.	8.3	.0	24.0		

JOB: FederalStation2030NoBuildPM RUN: FederalStation2030NoBuildPM

DATE : 4/15/11
TIME : 13: 4:10

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	42	4.0	29	1689	127.94	3	3
3. Station EB TR	60	42	4.0	109	1709	127.94	3	3
6. Whisconier WB LT	60	35	4.0	343	1286	127.94	3	3
7. Whisconier WB R	60	24	4.0	325	1515	127.94	3	3
10. Federal NB LTR	60	32	5.0	765	1867	127.94	3	3
13. Federal SB L	60	27	3.0	353	1709	127.94	3	3
14. Federal SB TR	60	25	5.0	380	1728	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030NoBuildPM RUN: FederalStation2030NoBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.7	4.8	4.7	4.8	4.9	4.5	4.3	5.0	4.9	4.6	4.8	4.3
10.	4.9	4.9	4.8	4.5	4.6	4.5	4.3	4.6	4.6	5.0	5.0	4.4
20.	5.0	4.8	4.9	4.4	4.4	4.4	4.3	4.4	4.4	5.0	4.9	4.4
30.	5.0	4.7	4.8	4.4	4.3	4.4	4.3	4.3	4.3	4.9	4.7	4.4
40.	4.9	4.7	4.8	4.3	4.3	4.4	4.3	4.3	4.3	4.9	4.7	4.4
50.	4.8	4.6	4.8	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
60.	4.7	4.7	4.8	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
70.	4.6	4.8	4.6	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
80.	4.5	4.8	4.6	4.3	4.4	4.4	4.4	4.3	4.3	4.8	4.7	4.5
90.	4.4	4.8	4.5	4.3	4.4	4.3	4.4	4.4	4.3	5.0	4.8	4.5
100.	4.4	4.7	4.6	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.8	4.6
110.	4.4	4.8	4.5	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.7	4.6
120.	4.4	4.8	4.6	4.3	4.3	4.3	4.5	4.4	4.3	5.3	4.6	4.6
130.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.3	5.3	4.6	4.6
140.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.4	5.4	4.6	4.6
150.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.4	5.3	4.8	4.6
160.	4.3	4.7	4.6	4.3	4.3	4.3	4.6	4.3	4.3	5.1	4.8	4.8
170.	4.3	4.7	4.5	4.3	4.4	4.3	4.6	4.4	4.6	5.0	4.7	4.8
180.	4.3	4.5	4.4	4.4	4.7	4.3	4.8	4.7	4.8	4.7	4.6	4.7
190.	4.3	4.3	4.3	4.6	4.8	4.3	4.8	4.9	5.1	4.4	4.6	4.6
200.	4.3	4.3	4.3	4.6	5.0	4.3	4.9	4.9	5.2	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.6	5.0	4.3	5.0	4.9	5.1	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.6	4.9	4.3	5.2	4.9	5.3	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.6	4.8	4.4	5.2	4.7	5.2	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.8	4.4	5.1	4.9	5.3	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.8	4.4	5.0	4.9	5.2	4.3	4.5	4.5
260.	4.3	4.3	4.3	4.6	4.8	4.4	4.8	4.9	5.1	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.7	4.9	4.4	4.6	5.0	5.2	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.9	4.4	4.4	5.0	5.0	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.9	4.5	4.4	4.9	5.0	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.8	4.6	4.4	4.9	5.0	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.8	4.7	4.4	4.9	5.0	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.9	4.8	4.8	4.4	5.0	5.1	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.9	4.9	4.8	4.4	5.0	5.1	4.3	4.3	4.3
340.	4.4	4.4	4.3	5.0	5.0	4.7	4.4	5.4	5.2	4.3	4.3	4.3
350.	4.5	4.5	4.4	5.0	5.1	4.7	4.4	5.2	5.2	4.5	4.4	4.3
360.	4.7	4.8	4.7	4.8	4.9	4.5	4.3	5.0	4.9	4.6	4.8	4.3
MAX	5.0	4.9	4.9	5.0	5.1	4.8	5.2	5.4	5.3	5.4	5.0	4.8
DEGR.	20	10	20	340	350	320	220	340	220	140	10	160

THE HIGHEST CONCENTRATION OF 5.40 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030NoBuildPM RUN: FederalStation2030NoBuildPM

DATE : 4/15/11
TIME : 13: 4:10

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	20	10	20	340	350	320	220	340	220	140	10	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.3	.4	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.1	.4	.4	.6	.6	.1	.1	.6	.5	.3	.4	.0
11	*	.0	.1	.0	.0	.2	.0	.0	.3	.2	.1	.1	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.1	.2	.3	.1	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.1	.1	.4	.1	.0
15	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

JOB: FederalStation2030BuildAM RUN: FederalStation2030BuildAM

DATE : 4/15/11
TIME : 13: 7: 2

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	161.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	208.5	424.0	*	9.	90.	AG	223.	100.0	.0	12.0	.08	.4
3. Station EB TR	*	200.0	412.0	225.8	412.0	*	26.	90.	AG	223.	100.0	.0	12.0	.25	1.3
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	161.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	774.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	490.5	436.0	*	158.	270.	AG	177.	100.0	.0	12.0	.98	8.0
7. Whisconier WB R	*	648.0	448.0	600.8	448.0	*	47.	270.	AG	143.	100.0	.0	12.0	.47	2.4
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	774.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	345.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	258.5	*	58.	360.	AG	177.	100.0	.0	12.0	.53	3.0
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	345.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	484.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	602.1	*	34.	180.	AG	177.	100.0	.0	12.0	.35	1.7
14. Federal SB TR	*	412.0	636.0	412.0	591.0	*	45.	180.	AG	166.	100.0	.0	12.0	.40	2.3
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	484.	8.3	.0	24.0		

JOB: FederalStation2030BuildAM RUN: FederalStation2030BuildAM

DATE : 4/15/11
TIME : 13: 7: 2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	39	4.0	40	1926	127.94	3	3
3. Station EB TR	60	39	4.0	121	1946	127.94	3	3
6. Whisconier WB LT	60	31	4.0	429	1143	127.94	3	3
7. Whisconier WB R	60	25	4.0	345	1515	127.94	3	3
10. Federal NB LTR	60	31	5.0	345	1778	127.94	3	3
13. Federal SB L	60	31	3.0	200	1445	127.94	3	3
14. Federal SB TR	60	29	5.0	284	1755	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030BuildAM RUN: FederalStation2030BuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.6	4.4	4.4	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
10.	4.7	4.5	4.4	4.4	4.3	4.5	4.3	4.3	4.3	4.4	4.5	4.3
20.	4.8	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.6	4.4	4.3
30.	4.9	4.3	4.6	4.4	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3
40.	4.8	4.3	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
50.	4.7	4.4	4.6	4.3	4.6	4.4	4.3	4.3	4.3	4.5	4.4	4.3
60.	4.6	4.4	4.6	4.3	4.6	4.4	4.3	4.3	4.3	4.5	4.4	4.3
70.	4.5	4.6	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
80.	4.5	4.6	4.6	4.3	4.5	4.4	4.4	4.4	4.3	4.6	4.4	4.4
90.	4.3	4.5	4.5	4.3	4.4	4.3	4.4	4.5	4.3	4.7	4.4	4.5
100.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.6	4.3	4.9	4.5	4.6
110.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.7	4.3	4.9	4.4	4.5
120.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.6	4.3	5.0	4.4	4.5
130.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.6	4.3	5.2	4.3	4.5
140.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.5	4.4	5.1	4.3	4.6
150.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.4	5.1	4.4	4.7
160.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.9	4.5	4.8
170.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.5	4.5	4.8
180.	4.3	4.4	4.4	4.3	4.5	4.3	4.8	4.4	4.4	4.4	4.6	4.7
190.	4.3	4.3	4.3	4.5	4.5	4.3	4.9	4.4	4.4	4.3	4.5	4.6
200.	4.3	4.3	4.3	4.5	4.5	4.3	4.9	4.4	4.4	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.4	4.5	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.6	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.8	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.4	4.8	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.4	4.3	5.0	4.4	4.8	4.3	4.6	4.5
260.	4.3	4.3	4.3	4.5	4.4	4.3	4.8	4.6	4.7	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.6	4.5	4.4	4.7	4.5	4.6	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.5	4.5	4.4	4.5	4.5	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.4	4.5	4.3	4.4	4.5	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.4	4.6	4.3	4.4	4.5	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.4	4.6	4.3	4.4	4.5	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.8	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.8	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
340.	4.4	4.4	4.3	4.7	4.4	4.6	4.3	4.5	4.5	4.3	4.3	4.3
350.	4.6	4.4	4.3	4.6	4.4	4.6	4.3	4.4	4.4	4.3	4.3	4.3
360.	4.6	4.4	4.4	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
MAX	4.9	4.6	4.6	4.8	4.6	4.7	5.1	4.7	4.8	5.2	4.6	4.8
DEGR.	30	70	30	300	50	320	220	110	230	130	180	160

THE HIGHEST CONCENTRATION OF 5.20 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030BuildAM RUN: FederalStation2030BuildAM

DATE : 4/15/11
TIME : 13: 7: 2

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1 30	REC2 70	REC3 30	REC4 300	REC5 50	REC6 320	REC7 220	REC8 110	REC9 230	REC10 130	REC11 180	REC12 160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.2	.1	.0	.3	.3	.4	.4	.0	.1	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.2	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0	.0
15	*	.0	.1	.1	.1	.0	.0	.0	.0	.0	.0	.1	.0

JOB: FederalStation2030BuildPM RUN: FederalStation2030BuildPM

DATE : 4/15/11
TIME : 13: 9:36

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	139.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	206.7	424.0	*	7.	90.	AG	240.	100.0	.0	12.0	.09	.3
3. Station EB TR	*	200.0	412.0	225.3	412.0	*	25.	90.	AG	240.	100.0	.0	12.0	.32	1.3
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	139.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	740.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	506.0	436.0	*	142.	270.	AG	200.	100.0	.0	12.0	.96	7.2
7. Whisconier WB R	*	648.0	448.0	601.4	448.0	*	47.	270.	AG	137.	100.0	.0	12.0	.47	2.4
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	740.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	767.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	1603.1	*	1403.	360.	AG	183.	100.0	.0	12.0	1.17	71.3
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	767.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	735.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	583.6	*	52.	180.	AG	154.	100.0	.0	12.0	.44	2.7
14. Federal SB TR	*	412.0	636.0	412.0	584.1	*	52.	180.	AG	143.	100.0	.0	12.0	.47	2.6
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	735.	8.3	.0	24.0		

JOB: FederalStation2030BuildPM RUN: FederalStation2030BuildPM

DATE : 4/15/11
TIME : 13: 9:36

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	42	4.0	29	1689	127.94	3	3
3. Station EB TR	60	42	4.0	110	1709	127.94	3	3
6. Whisconier WB LT	60	35	4.0	385	1269	127.94	3	3
7. Whisconier WB R	60	24	4.0	355	1515	127.94	3	3
10. Federal NB LTR	60	32	5.0	767	1867	127.94	3	3
13. Federal SB L	60	27	3.0	355	1710	127.94	3	3
14. Federal SB TR	60	25	5.0	380	1728	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030BuildPM RUN: FederalStation2030BuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.7	4.8	4.7	4.8	4.9	4.6	4.3	5.0	4.9	4.6	4.8	4.3
10.	4.9	4.9	4.8	4.6	4.6	4.5	4.3	4.6	4.6	5.0	5.0	4.4
20.	5.0	4.8	4.9	4.5	4.4	4.4	4.3	4.4	4.4	5.0	4.9	4.4
30.	5.0	4.7	4.9	4.4	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
40.	4.9	4.7	4.9	4.4	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
50.	4.8	4.6	4.8	4.3	4.5	4.4	4.3	4.3	4.3	4.9	4.7	4.4
60.	4.7	4.8	4.8	4.3	4.6	4.4	4.3	4.3	4.3	4.9	4.7	4.4
70.	4.6	4.8	4.7	4.3	4.6	4.4	4.3	4.3	4.3	4.9	4.7	4.4
80.	4.6	4.9	4.6	4.3	4.5	4.4	4.4	4.4	4.3	4.8	4.8	4.5
90.	4.4	4.8	4.5	4.3	4.4	4.3	4.4	4.5	4.3	5.0	4.8	4.6
100.	4.4	4.7	4.6	4.3	4.3	4.3	4.5	4.6	4.3	5.2	4.9	4.7
110.	4.4	4.8	4.6	4.3	4.3	4.3	4.5	4.6	4.3	5.2	4.7	4.6
120.	4.4	4.8	4.6	4.3	4.3	4.3	4.5	4.6	4.3	5.3	4.7	4.6
130.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.5	4.3	5.4	4.6	4.6
140.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.4	4.4	5.5	4.6	4.6
150.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.4	5.4	4.8	4.6
160.	4.3	4.7	4.6	4.3	4.3	4.3	4.7	4.3	4.4	5.1	4.8	4.8
170.	4.3	4.7	4.5	4.3	4.4	4.3	4.6	4.4	4.7	5.0	4.7	4.8
180.	4.3	4.5	4.4	4.4	4.7	4.3	4.8	4.7	4.8	4.7	4.7	4.7
190.	4.3	4.3	4.3	4.6	4.8	4.3	4.9	4.9	5.1	4.4	4.6	4.6
200.	4.3	4.3	4.3	4.6	5.0	4.3	4.9	4.9	5.2	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.6	5.0	4.3	5.0	4.9	5.1	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.6	4.9	4.3	5.2	4.9	5.3	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.6	4.8	4.4	5.2	4.7	5.2	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.8	4.4	5.3	4.9	5.3	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.8	4.4	5.1	4.9	5.2	4.3	4.6	4.5
260.	4.3	4.3	4.3	4.6	4.8	4.4	4.9	5.0	5.1	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.7	4.9	4.4	4.8	5.0	5.2	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.9	4.6	4.5	5.0	5.0	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.9	4.6	4.4	4.9	5.0	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.8	4.7	4.4	4.9	5.0	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.8	4.7	4.4	4.9	5.0	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.9	4.8	4.8	4.4	5.0	5.1	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.9	4.9	4.8	4.4	5.0	5.1	4.3	4.3	4.3
340.	4.4	4.4	4.3	5.0	5.0	4.7	4.4	5.4	5.2	4.3	4.3	4.3
350.	4.5	4.5	4.4	5.0	5.1	4.7	4.4	5.2	5.2	4.5	4.4	4.3
360.	4.7	4.8	4.7	4.8	4.9	4.6	4.3	5.0	4.9	4.6	4.8	4.3
MAX	5.0	4.9	4.9	5.0	5.1	4.8	5.3	5.4	5.3	5.5	5.0	4.8
DEGR.	20	10	20	340	350	320	240	340	220	140	10	160

THE HIGHEST CONCENTRATION OF 5.50 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030BuildPM RUN: FederalStation2030BuildPM

DATE : 4/15/11
TIME : 13: 9:36

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	20	10	20	340	350	320	240	340	220	140	10	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.1	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.1	.4	.4	.6	.6	.1	.1	.6	.5	.3	.4	.0
11	*	.0	.1	.0	.0	.2	.0	.0	.3	.2	.1	.1	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.1	.2	.3	.1	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.1	.1	.4	.1	.0
15	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

JOB: FederalStation2030MitigatedBuildAM RUN: FederalStation2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:11:35

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	161.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	208.5	424.0	*	9.	90.	AG	223.	100.0	.0	12.0	.08	.4
3. Station EB TR	*	200.0	412.0	225.8	412.0	*	26.	90.	AG	223.	100.0	.0	12.0	.25	1.3
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	161.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	774.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	531.8	436.0	*	116.	270.	AG	172.	100.0	.0	12.0	.91	5.9
7. Whisconier WB R	*	648.0	448.0	606.5	448.0	*	42.	270.	AG	126.	100.0	.0	12.0	.43	2.1
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	774.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	345.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	260.4	*	60.	360.	AG	183.	100.0	.0	12.0	.55	3.1
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	345.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	484.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	601.0	*	35.	180.	AG	183.	100.0	.0	12.0	.35	1.8
14. Federal SB TR	*	412.0	636.0	412.0	589.4	*	47.	180.	AG	172.	100.0	.0	12.0	.42	2.4
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	484.	8.3	.0	24.0		

JOB: FederalStation2030MitigatedBuildAM RUN: FederalStation2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:11:35

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	39	4.0	40	1926	127.94	3	3
3. Station EB TR	60	39	4.0	121	1946	127.94	3	3
6. Whisconier WB LT	60	30	4.0	429	1174	127.94	3	3
7. Whisconier WB R	60	22	4.0	345	1515	127.94	3	3
10. Federal NB LTR	60	32	5.0	345	1778	127.94	3	3
13. Federal SB L	60	32	3.0	200	1475	127.94	3	3
14. Federal SB TR	60	30	5.0	284	1755	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030MitigatedBuildAM RUN: FederalStation2030MitigatedBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.6	4.4	4.4	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
10.	4.7	4.5	4.4	4.3	4.3	4.5	4.3	4.3	4.3	4.4	4.5	4.3
20.	4.8	4.4	4.4	4.4	4.3	4.4	4.3	4.3	4.3	4.6	4.4	4.3
30.	4.9	4.3	4.5	4.4	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
40.	4.8	4.3	4.6	4.3	4.3	4.4	4.3	4.3	4.3	4.5	4.4	4.3
50.	4.7	4.3	4.6	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3
60.	4.6	4.4	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
70.	4.5	4.5	4.6	4.3	4.5	4.4	4.3	4.3	4.3	4.5	4.4	4.3
80.	4.4	4.5	4.6	4.3	4.4	4.4	4.4	4.4	4.3	4.6	4.3	4.4
90.	4.3	4.5	4.5	4.3	4.4	4.3	4.4	4.4	4.3	4.7	4.4	4.4
100.	4.3	4.4	4.5	4.3	4.3	4.3	4.5	4.5	4.3	4.9	4.4	4.5
110.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.5	4.3	5.0	4.4	4.5
120.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3	5.1	4.3	4.5
130.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.3	4.5
140.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.4	5.2	4.3	4.6
150.	4.3	4.4	4.4	4.3	4.3	4.3	4.5	4.3	4.4	5.0	4.4	4.7
160.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.4	4.9	4.5	4.8
170.	4.3	4.5	4.4	4.3	4.3	4.3	4.6	4.3	4.3	4.5	4.5	4.8
180.	4.3	4.4	4.4	4.3	4.5	4.3	4.8	4.4	4.4	4.4	4.6	4.7
190.	4.3	4.3	4.3	4.5	4.5	4.3	4.8	4.4	4.4	4.3	4.5	4.6
200.	4.3	4.3	4.3	4.5	4.5	4.3	4.9	4.4	4.4	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.5	4.4	4.3	4.9	4.4	4.5	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.3	4.6	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.3	4.9	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.4	4.3	5.0	4.4	4.8	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.4	4.3	4.8	4.4	4.8	4.3	4.6	4.5
260.	4.3	4.3	4.3	4.5	4.4	4.3	4.6	4.6	4.7	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.6	4.5	4.3	4.6	4.5	4.6	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.5	4.5	4.3	4.5	4.5	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.4	4.5	4.3	4.4	4.5	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.4	4.5	4.3	4.4	4.5	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.4	4.6	4.3	4.4	4.5	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.8	4.3	4.7	4.3	4.4	4.5	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.8	4.3	4.6	4.3	4.4	4.5	4.3	4.3	4.3
340.	4.4	4.4	4.3	4.7	4.4	4.6	4.3	4.5	4.5	4.3	4.3	4.3
350.	4.6	4.4	4.3	4.6	4.4	4.6	4.3	4.4	4.4	4.3	4.3	4.3
360.	4.6	4.4	4.4	4.4	4.4	4.6	4.3	4.4	4.4	4.4	4.4	4.3
MAX	4.9	4.5	4.6	4.8	4.5	4.7	5.0	4.6	4.9	5.2	4.6	4.8
DEGR.	30	10	40	300	60	320	220	260	230	130	180	160

THE HIGHEST CONCENTRATION OF 5.20 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030MitigatedBuildAM RUN: FederalStation2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:11:35

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	30	10	40	300	60	320	220	260	230	130	180	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.2	.3	.4	.0	.0	.1	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.2	.1	.0	.2	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.1	.0	.0	.0	.0	.0	.1	.1	.1	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0	.0
15	*	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.1	.0

JOB: FederalStation2030MitigatedBuildPM RUN: FederalStation2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:13:43

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Station EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	139.	8.3	.0	24.0		
2. Station EB L	*	200.0	424.0	206.7	424.0	*	7.	90.	AG	240.	100.0	.0	12.0	.09	.3
3. Station EB TR	*	200.0	412.0	225.3	412.0	*	25.	90.	AG	240.	100.0	.0	12.0	.32	1.3
4. Whisconier EB out	*	454.0	418.0	848.0	418.0	*	394.	90.	AG	139.	8.3	.0	24.0		
5. Whisconier WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	740.	8.3	.0	24.0		
6. Whisconier WB LT	*	648.0	436.0	558.8	436.0	*	89.	270.	AG	189.	100.0	.0	12.0	.84	4.5
7. Whisconier WB R	*	648.0	448.0	599.5	448.0	*	49.	270.	AG	143.	100.0	.0	12.0	.48	2.5
8. Station WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	740.	8.3	.0	24.0		
9. Federal NB in	*	442.0	.0	442.0	200.0	*	200.	360.	AG	767.	8.3	.0	12.0		
10. Federal NB LTR	*	442.0	200.0	442.0	1290.4	*	1090.	360.	AG	177.	100.0	.0	12.0	1.12	55.4
11. Federal NB out	*	442.0	454.0	442.0	836.0	*	382.	360.	AG	767.	8.3	.0	24.0		
12. Federal SB in	*	418.0	836.0	418.0	636.0	*	200.	180.	AG	735.	8.3	.0	24.0		
13. Federal SB L	*	424.0	636.0	424.0	579.7	*	56.	180.	AG	166.	100.0	.0	12.0	.47	2.9
14. Federal SB TR	*	412.0	636.0	412.0	579.9	*	56.	180.	AG	154.	100.0	.0	12.0	.51	2.9
15. Federal SB out	*	424.0	404.0	424.0	.0	*	404.	180.	AG	735.	8.3	.0	24.0		

JOB: FederalStation2030MitigatedBuildPM RUN: FederalStation2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:13:43

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Station EB L	60	42	4.0	29	1689	127.94	3	3
3. Station EB TR	60	42	4.0	110	1709	127.94	3	3
6. Whisconier WB LT	60	33	4.0	385	1316	127.94	3	3
7. Whisconier WB R	60	25	4.0	355	1515	127.94	3	3
10. Federal NB LTR	60	31	5.0	767	1867	127.94	3	3
13. Federal SB L	60	29	3.0	355	1727	127.94	3	3
14. Federal SB TR	60	27	5.0	380	1728	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	464.0	464.0	6.0
9. NB N Midblock	464.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: FederalStation2030MitigatedBuildPM RUN: FederalStation2030MitigatedBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.7	4.7	4.6	4.8	4.8	4.6	4.3	4.9	4.8	4.6	4.8	4.3
10.	4.8	4.8	4.7	4.5	4.6	4.5	4.3	4.6	4.6	4.9	4.9	4.3
20.	5.0	4.8	4.9	4.4	4.4	4.4	4.3	4.4	4.4	5.0	4.9	4.4
30.	5.0	4.7	4.8	4.3	4.3	4.4	4.3	4.3	4.3	4.9	4.7	4.4
40.	4.9	4.7	4.8	4.3	4.3	4.4	4.3	4.3	4.3	4.9	4.7	4.4
50.	4.8	4.6	4.8	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
60.	4.7	4.7	4.8	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
70.	4.6	4.7	4.7	4.3	4.4	4.4	4.3	4.3	4.3	4.9	4.7	4.4
80.	4.5	4.7	4.6	4.3	4.4	4.4	4.4	4.3	4.3	4.8	4.7	4.5
90.	4.4	4.7	4.5	4.3	4.4	4.3	4.4	4.4	4.3	5.0	4.8	4.5
100.	4.4	4.6	4.6	4.3	4.3	4.3	4.5	4.4	4.3	5.2	4.8	4.6
110.	4.4	4.7	4.6	4.3	4.3	4.3	4.5	4.4	4.3	5.3	4.7	4.6
120.	4.4	4.8	4.6	4.3	4.3	4.3	4.5	4.4	4.3	5.3	4.6	4.6
130.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.3	5.4	4.6	4.6
140.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.4	5.4	4.6	4.6
150.	4.3	4.8	4.6	4.3	4.3	4.3	4.5	4.3	4.4	5.4	4.8	4.6
160.	4.3	4.7	4.6	4.3	4.3	4.3	4.6	4.3	4.3	5.3	4.8	4.8
170.	4.3	4.6	4.5	4.3	4.4	4.3	4.6	4.4	4.6	5.1	4.7	4.8
180.	4.3	4.5	4.4	4.4	4.7	4.3	4.8	4.7	4.8	4.7	4.7	4.7
190.	4.3	4.3	4.3	4.6	4.8	4.3	5.0	4.9	5.1	4.5	4.6	4.6
200.	4.3	4.3	4.3	4.6	5.0	4.3	4.9	4.9	5.2	4.3	4.5	4.5
210.	4.3	4.3	4.3	4.6	5.0	4.3	5.1	4.9	5.2	4.3	4.5	4.5
220.	4.3	4.3	4.3	4.6	4.9	4.3	5.2	4.9	5.3	4.3	4.5	4.5
230.	4.3	4.3	4.3	4.6	4.8	4.4	5.2	4.7	5.3	4.3	4.5	4.5
240.	4.3	4.3	4.3	4.5	4.8	4.4	5.2	4.9	5.3	4.3	4.5	4.5
250.	4.3	4.3	4.3	4.6	4.8	4.4	5.0	4.9	5.3	4.3	4.6	4.5
260.	4.3	4.3	4.3	4.6	4.8	4.4	4.8	5.0	5.2	4.3	4.5	4.5
270.	4.3	4.4	4.3	4.7	4.9	4.4	4.7	5.0	5.2	4.3	4.5	4.4
280.	4.4	4.4	4.3	4.7	4.9	4.5	4.4	5.0	5.0	4.3	4.4	4.4
290.	4.4	4.4	4.3	4.7	4.9	4.5	4.4	4.9	5.0	4.3	4.3	4.3
300.	4.4	4.4	4.3	4.8	4.8	4.6	4.4	4.9	5.0	4.3	4.3	4.3
310.	4.4	4.4	4.3	4.8	4.8	4.8	4.4	4.9	5.0	4.3	4.3	4.3
320.	4.4	4.4	4.3	4.9	4.8	4.8	4.4	5.0	5.1	4.3	4.3	4.3
330.	4.4	4.4	4.3	4.9	4.9	4.8	4.4	5.1	5.1	4.3	4.3	4.3
340.	4.4	4.4	4.3	5.0	5.0	4.7	4.4	5.4	5.2	4.3	4.3	4.3
350.	4.5	4.5	4.4	5.0	5.1	4.7	4.4	5.3	5.2	4.5	4.4	4.3
360.	4.7	4.7	4.6	4.8	4.8	4.6	4.3	4.9	4.8	4.6	4.8	4.3
MAX	5.0	4.8	4.9	5.0	5.1	4.8	5.2	5.4	5.3	5.4	4.9	4.8
DEGR.	20	10	20	340	350	310	220	340	220	130	10	160

THE HIGHEST CONCENTRATION OF 5.40 PPM OCCURRED AT RECEPTOR REC10.

JOB: FederalStation2030MitigatedBuildPM RUN: FederalStation2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:13:43

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM)											
	*	ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	20	10	20	340	350	310	220	340	220	130	10	160
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.3	.4	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
8	*	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.1	.3	.4	.6	.6	.1	.1	.6	.5	.3	.3	.0
11	*	.0	.1	.0	.0	.2	.0	.0	.3	.2	.1	.1	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13	*	.0	.0	.0	.0	.0	.0	.0	.1	.2	.3	.1	.0
14	*	.0	.0	.0	.0	.0	.0	.0	.1	.1	.4	.1	.0
15	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2010ExistingAM RUN: GristMillGlover2010ExistingAM

DATE : 4/ 7/11
TIME : 15: 8:43

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	2153.	11.2	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	379.3	424.0	*	179.	90.	AG	313.	100.0	.0	24.0	.43	9.1
3. Grist Mill EB R	*	200.0	406.0	249.9	406.0	*	50.	90.	AG	102.	100.0	.0	12.0	.33	2.5
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	2153.	11.2	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1324.	11.2	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	620.3	430.0	*	28.	270.	AG	364.	100.0	.0	12.0	.20	1.4
7. Grist Mill WB T	*	648.0	448.0	603.1	448.0	*	45.	270.	AG	110.	100.0	.0	24.0	.23	2.3
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1324.	11.2	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	115.	11.2	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	242.5	*	47.	360.	AG	411.	100.0	.0	12.0	.60	2.4
11. Glover NB LR	*	448.0	196.0	448.0	217.3	*	21.	360.	AG	411.	100.0	.0	12.0	.71	1.1
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	115.	11.2	.0	24.0		

JOB: GristMillGlover2010ExistingAM RUN: GristMillGlover2010ExistingAM

DATE : 4/ 7/11
TIME : 15: 8:43

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	110	37	5.0	1773	3450	173.64	3	4
3. Grist Mill EB R	110	24	5.0	380	1584	173.64	3	4
6. Grist Mill WB L	110	86	3.0	59	1702	173.64	3	4
7. Grist Mill WB T	110	13	5.0	1265	3403	173.64	3	4
10. Glover NB L	110	97	5.0	85	2610	173.64	3	3
11. Glover NB LR	110	97	5.0	30	776	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2010ExistingAM RUN: GristMillGlover2010ExistingAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	* 5.3	4.6	4.5	4.4	4.9	5.5	4.3	4.3	4.3	4.3
10.	* 5.3	4.4	4.4	4.4	5.0	5.4	4.3	4.3	4.3	4.3
20.	* 5.4	4.4	4.4	4.5	5.0	5.4	4.3	4.3	4.3	4.3
30.	* 5.4	4.3	4.6	4.5	5.0	5.3	4.3	4.3	4.3	4.3
40.	* 5.7	4.3	4.8	4.6	5.1	5.4	4.3	4.3	4.3	4.3
50.	* 5.7	4.4	5.0	4.6	5.1	5.4	4.3	4.3	4.3	4.3
60.	* 5.7	4.5	5.1	4.5	5.2	5.5	4.3	4.3	4.3	4.3
70.	* 5.6	4.9	5.2	4.4	5.5	5.5	4.3	4.3	4.3	4.3
80.	* 5.4	5.0	5.1	4.3	5.4	5.3	4.4	4.5	4.4	4.5
90.	* 5.0	4.9	5.0	4.3	5.0	4.9	4.7	4.6	4.6	4.9
100.	* 4.5	4.6	4.7	4.3	4.6	4.5	5.0	4.8	4.8	5.4
110.	* 4.3	4.4	4.5	4.3	4.4	4.4	5.2	5.0	4.8	5.6
120.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.8	4.7	5.6
130.	* 4.4	4.3	4.3	4.3	4.3	4.3	5.2	4.8	4.7	5.5
140.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.6	5.5
150.	* 4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.7	4.6	5.4
160.	* 4.3	4.4	4.3	4.3	4.3	4.3	5.2	4.7	4.5	5.4
170.	* 4.3	4.4	4.3	4.3	4.3	4.3	5.3	4.6	4.7	5.4
180.	* 4.3	4.4	4.3	4.3	4.4	4.3	5.4	4.7	4.9	5.2
190.	* 4.3	4.3	4.3	4.3	4.4	4.3	5.4	4.6	4.9	5.2
200.	* 4.3	4.3	4.3	4.3	4.4	4.3	5.5	4.4	5.0	5.2
210.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.3	4.3	5.1	5.2
220.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.4	5.4	5.3
230.	* 4.3	4.3	4.3	4.4	4.3	4.4	5.1	4.6	5.4	5.3
240.	* 4.3	4.3	4.3	4.6	4.3	4.3	5.0	4.8	5.7	5.4
250.	* 4.4	4.3	4.3	4.9	4.3	4.4	5.0	5.1	5.6	5.3
260.	* 4.5	4.5	4.3	5.3	4.5	4.6	4.9	5.2	5.5	5.1
270.	* 4.7	4.9	4.3	5.6	4.8	5.1	4.7	4.9	5.0	4.7
280.	* 5.1	5.3	4.3	5.9	5.0	5.4	4.5	4.6	4.6	4.4
290.	* 5.4	5.5	4.4	6.1	5.1	5.4	4.3	4.4	4.4	4.3
300.	* 5.5	5.4	4.4	6.3	4.9	5.2	4.3	4.3	4.3	4.3
310.	* 5.4	5.3	4.6	6.1	4.7	5.2	4.3	4.3	4.3	4.3
320.	* 5.4	5.2	4.6	5.8	4.6	5.4	4.3	4.3	4.3	4.3
330.	* 5.2	4.9	4.6	5.4	4.6	5.4	4.3	4.3	4.3	4.3
340.	* 5.1	4.8	4.6	4.9	4.7	5.5	4.3	4.3	4.3	4.3
350.	* 5.2	4.7	4.5	4.5	4.8	5.6	4.3	4.3	4.3	4.3
360.	* 5.3	4.6	4.5	4.4	4.9	5.5	4.3	4.3	4.3	4.3
MAX	* 5.7	5.5	5.2	6.3	5.5	5.6	5.5	5.2	5.7	5.6
DEGR.	* 40	290	70	300	70	350	200	260	240	110

THE HIGHEST CONCENTRATION OF 6.30 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2010ExistingAM RUN: GristMillGlover2010ExistingAM

DATE : 4/ 7/11
TIME : 15: 8:43

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)									
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
LINK #	*	40	290	70	300	70	350	200	260	240	110
1	*	.1	.1	.0	.1	.0	.0	.0	.1	.1	.0
2	*	.7	.8	.0	.1	.0	.0	.0	.4	.7	.6
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.1	.0	1.0	.7	.4	.0	.0	.1
5	*	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0
6	*	.0	.0	.0	.0	.1	.4	.4	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0
8	*	.3	.3	.0	.1	.0	.0	.0	.4	.6	.6
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.6	.8	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.9	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2010ExistingPM RUN: GristMillGlover2010ExistingPM

DATE : 4/ 7/11
TIME : 15:11:59

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	1332.	11.2	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	353.3	424.0	*	153.	90.	AG	410.	100.0	.0	24.0	.36	7.8
3. Grist Mill EB R	*	200.0	406.0	206.3	406.0	*	6.	90.	AG	93.	100.0	.0	12.0	.05	.3
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	1332.	11.2	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1404.	11.2	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	635.8	430.0	*	12.	270.	AG	373.	100.0	.0	12.0	.11	.6
7. Grist Mill WB T	*	648.0	448.0	557.7	448.0	*	90.	270.	AG	224.	100.0	.0	24.0	.29	4.6
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1404.	11.2	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	449.	11.2	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	347.2	*	151.	360.	AG	354.	100.0	.0	12.0	.71	7.7
11. Glover NB LR	*	448.0	196.0	448.0	260.7	*	65.	360.	AG	354.	100.0	.0	12.0	.92	3.3
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	449.	11.2	.0	24.0		

JOB: GristMillGlover2010ExistingPM RUN: GristMillGlover2010ExistingPM

DATE : 4/ 7/11
TIME : 15:11:59

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	100	44	5.0	1274	3573	173.64	3	4
3. Grist Mill EB R	100	20	5.0	58	1599	173.64	3	4
6. Grist Mill WB L	100	80	3.0	28	1734	173.64	3	4
7. Grist Mill WB T	100	24	5.0	1376	3467	173.64	3	4
10. Glover NB L	100	76	5.0	361	2987	173.64	3	3
11. Glover NB LR	100	76	5.0	88	570	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2010ExistingPM RUN: GristMillGlover2010ExistingPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	* 5.2	4.5	4.7	5.0	4.7	5.3	4.3	4.3	4.3	4.3
10.	* 5.4	4.4	4.7	4.6	4.7	5.1	4.3	4.3	4.3	4.3
20.	* 5.4	4.4	5.1	4.5	4.7	5.1	4.3	4.3	4.3	4.3
30.	* 5.6	4.3	5.3	4.5	4.7	5.0	4.3	4.3	4.3	4.3
40.	* 5.7	4.3	5.5	4.6	4.8	5.1	4.3	4.3	4.3	4.3
50.	* 5.6	4.4	5.7	4.5	4.9	5.2	4.3	4.3	4.3	4.3
60.	* 5.7	4.7	5.6	4.5	5.1	5.2	4.3	4.3	4.3	4.3
70.	* 5.4	4.9	5.3	4.3	5.2	5.2	4.3	4.3	4.3	4.3
80.	* 5.2	5.0	5.2	4.3	5.1	5.0	4.4	4.5	4.4	4.4
90.	* 4.8	4.9	5.0	4.3	4.9	4.7	4.6	4.7	4.6	4.9
100.	* 4.6	4.6	4.9	4.3	4.5	4.4	4.9	4.8	4.7	5.3
110.	* 4.4	4.5	4.7	4.3	4.4	4.3	5.1	4.9	4.7	5.8
120.	* 4.5	4.5	4.5	4.3	4.3	4.3	5.2	4.7	4.5	5.8
130.	* 4.5	4.7	4.6	4.3	4.3	4.3	5.1	4.6	4.6	5.8
140.	* 4.3	4.9	4.6	4.3	4.3	4.3	5.1	4.6	4.5	5.7
150.	* 4.3	5.1	4.6	4.3	4.3	4.3	4.9	4.5	4.6	5.5
160.	* 4.3	5.1	4.6	4.3	4.3	4.3	5.1	4.5	5.0	5.5
170.	* 4.3	5.0	4.5	4.3	4.5	4.3	5.1	4.7	5.2	5.3
180.	* 4.3	4.7	4.4	4.4	4.9	4.3	5.2	4.9	5.1	5.2
190.	* 4.3	4.4	4.3	4.6	5.2	4.3	5.2	4.9	4.9	5.0
200.	* 4.3	4.3	4.3	4.6	5.1	4.3	5.3	4.7	4.9	5.1
210.	* 4.3	4.3	4.3	4.6	4.9	4.3	5.3	4.5	5.0	5.1
220.	* 4.3	4.3	4.3	4.6	4.7	4.5	5.6	4.3	5.2	5.1
230.	* 4.3	4.3	4.3	4.6	4.5	4.5	5.4	4.5	5.4	5.1
240.	* 4.3	4.3	4.3	4.8	4.4	4.6	5.4	4.8	5.6	5.2
250.	* 4.3	4.3	4.3	5.1	4.4	4.4	5.4	5.1	5.7	5.2
260.	* 4.4	4.5	4.3	5.3	4.5	4.6	5.1	5.2	5.5	5.0
270.	* 4.6	4.9	4.3	5.6	4.9	4.8	4.7	4.9	5.0	4.7
280.	* 4.9	5.3	4.3	5.8	5.1	5.0	4.6	4.6	4.6	4.4
290.	* 5.1	5.5	4.3	5.9	5.0	5.2	4.3	4.4	4.4	4.3
300.	* 5.2	5.3	4.5	6.4	4.8	5.1	4.3	4.3	4.3	4.3
310.	* 5.1	5.1	4.6	6.4	4.7	5.1	4.3	4.3	4.3	4.3
320.	* 5.1	4.9	4.7	6.6	4.5	5.2	4.3	4.3	4.3	4.3
330.	* 5.0	4.7	4.6	6.5	4.5	5.1	4.3	4.3	4.3	4.3
340.	* 5.0	4.5	4.6	6.2	4.5	5.2	4.3	4.3	4.3	4.3
350.	* 5.1	4.5	4.5	5.5	4.6	5.3	4.3	4.3	4.3	4.3
360.	* 5.2	4.5	4.7	5.0	4.7	5.3	4.3	4.3	4.3	4.3
MAX	* 5.7	5.5	5.7	6.6	5.2	5.3	5.6	5.2	5.7	5.8
DEGR.	* 40	290	50	320	70	0	220	260	250	110

THE HIGHEST CONCENTRATION OF 6.60 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2010ExistingPM RUN: GristMillGlover2010ExistingPM

DATE : 4/ 7/11
TIME : 15:11:59

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)									
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
LINK #	*	40	290	50	320	70	0	220	260	250	110
1	*	.0	.1	.0	.0	.0	.0	.0	.1	.1	.0
2	*	1.0	.8	.0	.2	.0	.0	.0	.4	.7	.7
3	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.1	.0	.6	.4	.3	.0	.0	.1
5	*	.0	.0	.1	.0	.1	.2	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0
7	*	.0	.0	.0	.0	.2	.2	.7	.0	.0	.0
8	*	.3	.3	.0	.1	.0	.0	.0	.4	.6	.6
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.6	.8	.0	.0	.1	.0	.0	.1
11	*	.0	.0	.4	1.1	.0	.0	.1	.0	.0	.0
12	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2030NoBuildAM RUN: GristMillGlover2030NoBuildAM

DATE : 4/15/11
TIME : 13:18:39

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	2584.	8.3	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	415.3	424.0	*	215.	90.	AG	231.	100.0	.0	24.0	.50	10.9
3. Grist Mill EB R	*	200.0	406.0	259.8	406.0	*	60.	90.	AG	75.	100.0	.0	12.0	.40	3.0
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	2584.	8.3	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1589.	8.3	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	614.6	430.0	*	33.	270.	AG	268.	100.0	.0	12.0	.24	1.7
7. Grist Mill WB T	*	648.0	448.0	594.0	448.0	*	54.	270.	AG	81.	100.0	.0	24.0	.27	2.7
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1589.	8.3	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	138.	8.3	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	256.5	*	60.	360.	AG	303.	100.0	.0	12.0	.72	3.1
11. Glover NB LR	*	448.0	196.0	448.0	229.3	*	33.	360.	AG	303.	100.0	.0	12.0	.86	1.7
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	138.	8.3	.0	24.0		

JOB: GristMillGlover2030NoBuildAM RUN: GristMillGlover2030NoBuildAM

DATE : 4/15/11
TIME : 13:18:39

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	110	37	5.0	2128	3540	127.94	3	4
3. Grist Mill EB R	110	24	5.0	456	1584	127.94	3	4
6. Grist Mill WB L	110	86	3.0	71	1702	127.94	3	4
7. Grist Mill WB T	110	13	5.0	1518	3403	127.94	3	4
10. Glover NB L	110	97	5.0	102	2610	127.94	3	3
11. Glover NB LR	110	97	5.0	36	776	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030NoBuildAM RUN: GristMillGlover2030NoBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
10.	5.2	4.9	4.5	4.4	4.9	5.2	4.3	4.3	4.3	4.3
20.	5.2	4.8	4.5	4.4	4.9	5.1	4.3	4.3	4.3	4.3
30.	5.3	4.6	4.6	4.5	4.9	5.2	4.3	4.3	4.3	4.3
40.	5.3	4.5	4.8	4.6	5.0	5.3	4.3	4.3	4.3	4.3
50.	5.3	4.5	5.0	4.5	5.0	5.3	4.3	4.3	4.3	4.3
60.	5.3	4.5	5.1	4.4	5.1	5.4	4.3	4.3	4.3	4.3
70.	5.4	4.8	5.1	4.3	5.4	5.3	4.3	4.3	4.3	4.3
80.	5.1	4.9	5.0	4.3	5.3	5.2	4.4	4.4	4.4	4.5
90.	4.9	4.9	4.8	4.3	5.0	4.8	4.6	4.6	4.6	4.8
100.	4.5	4.5	4.6	4.3	4.6	4.5	4.9	4.8	4.7	5.2
110.	4.3	4.4	4.5	4.3	4.4	4.4	5.1	4.8	4.7	5.3
120.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.7	5.3
130.	4.3	4.3	4.3	4.3	4.3	4.3	5.1	4.7	4.6	5.3
140.	4.3	4.3	4.3	4.3	4.3	4.3	5.1	4.7	4.6	5.3
150.	4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.7	4.8	5.2
160.	4.3	4.5	4.3	4.3	4.3	4.3	4.9	4.6	4.7	5.2
170.	4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.6	5.0	5.3
180.	4.3	4.4	4.3	4.3	4.5	4.3	5.1	4.7	5.1	5.2
190.	4.3	4.3	4.3	4.3	4.5	4.3	5.2	4.6	5.1	5.1
200.	4.3	4.3	4.3	4.3	4.4	4.3	5.2	4.4	5.1	5.1
210.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.4	5.1	5.1
220.	4.3	4.3	4.3	4.3	4.3	4.3	5.1	4.5	5.2	5.2
230.	4.3	4.3	4.3	4.4	4.3	4.4	5.0	4.7	5.3	5.3
240.	4.3	4.3	4.3	4.6	4.3	4.3	5.0	4.8	5.4	5.3
250.	4.4	4.3	4.3	4.7	4.3	4.4	4.9	5.1	5.3	5.2
260.	4.5	4.5	4.3	5.1	4.5	4.6	4.9	5.0	5.3	4.9
270.	4.7	4.8	4.3	5.3	4.8	5.0	4.7	4.9	4.9	4.7
280.	5.1	5.1	4.3	5.5	5.1	5.3	4.5	4.6	4.5	4.4
290.	5.3	5.3	4.3	5.7	5.1	5.3	4.3	4.3	4.4	4.3
300.	5.3	5.2	4.4	5.9	4.9	5.2	4.3	4.3	4.3	4.3
310.	5.2	5.1	4.5	6.0	4.8	5.2	4.3	4.3	4.3	4.3
320.	5.2	5.1	4.6	5.7	4.7	5.3	4.3	4.3	4.3	4.3
330.	5.1	5.0	4.5	5.5	4.5	5.3	4.3	4.3	4.3	4.3
340.	5.1	5.0	4.5	5.2	4.7	5.3	4.3	4.3	4.3	4.3
350.	5.1	5.0	4.5	4.7	4.8	5.4	4.3	4.3	4.3	4.3
360.	5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
MAX	5.4	5.3	5.1	6.0	5.4	5.4	5.2	5.1	5.4	5.3
DEGR.	70	290	60	310	70	60	120	250	240	110

THE HIGHEST CONCENTRATION OF 6.00 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030NoBuildAM RUN: GristMillGlover2030NoBuildAM

DATE : 4/15/11
TIME : 13:18:39

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	*	CO/LINK (PPM) ANGLE (DEGREES) REC1 70	REC2 290	REC3 60	REC4 310	REC5 70	REC6 60	REC7 120	REC8 250	REC9 240	REC10 110
1	*	.0	.1	.0	.1	.0	.0	.0	.1	.1	.0
2	*	.6	.6	.0	.1	.0	.0	.0	.4	.5	.4
3	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.1	.0	.1	.0	.9	.8	.4	.0	.0	.1
5	*	.0	.0	.1	.0	.1	.3	.5	.0	.0	.0
6	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	*	.2	.3	.0	.1	.0	.0	.0	.3	.5	.5
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.4	.6	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.8	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2030NoBuildPM RUN: GristMillGlover2030NoBuildPM

DATE : 4/15/11
TIME : 13:20:37

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	1599.	8.3	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	383.8	424.0	*	184.	90.	AG	302.	100.0	.0	24.0	.44	9.3
3. Grist Mill EB R	*	200.0	406.0	207.7	406.0	*	8.	90.	AG	69.	100.0	.0	12.0	.06	.4
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	1599.	8.3	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1685.	8.3	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	633.1	430.0	*	15.	270.	AG	275.	100.0	.0	12.0	.13	.8
7. Grist Mill WB T	*	648.0	448.0	539.7	448.0	*	108.	270.	AG	165.	100.0	.0	24.0	.34	5.5
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1685.	8.3	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	539.	8.3	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	401.5	*	206.	360.	AG	261.	100.0	.0	12.0	.86	10.4
11. Glover NB LR	*	448.0	196.0	448.0	351.0	*	155.	360.	AG	261.	100.0	.0	12.0	1.06	7.9
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	539.	8.3	.0	24.0		

JOB: GristMillGlover2030NoBuildPM RUN: GristMillGlover2030NoBuildPM

DATE : 4/15/11
TIME : 13:20:37

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	100	44	5.0	1529	3573	127.94	3	4
3. Grist Mill EB R	100	20	5.0	70	1599	127.94	3	4
6. Grist Mill WB L	100	80	3.0	34	1734	127.94	3	4
7. Grist Mill WB T	100	24	5.0	1651	3467	127.94	3	4
10. Glover NB L	100	76	5.0	433	2963	127.94	3	3
11. Glover NB LR	100	76	5.0	106	590	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030NoBuildPM RUN: GristMillGlover2030NoBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	5.0	4.6	4.7	5.2	4.6	5.1	4.3	4.3	4.3	4.3
10.	5.2	4.4	4.8	4.7	4.7	5.1	4.3	4.3	4.3	4.3
20.	5.2	4.4	5.2	4.6	4.7	5.0	4.3	4.3	4.3	4.3
30.	5.3	4.3	5.4	4.5	4.7	5.0	4.3	4.3	4.3	4.3
40.	5.3	4.3	5.5	4.5	4.8	5.0	4.3	4.3	4.3	4.3
50.	5.4	4.4	5.4	4.5	4.9	5.1	4.3	4.3	4.3	4.3
60.	5.3	4.6	5.3	4.4	5.0	5.1	4.3	4.3	4.3	4.3
70.	5.3	5.1	5.1	4.3	5.1	5.1	4.3	4.3	4.3	4.3
80.	5.1	5.1	5.0	4.3	5.0	4.9	4.4	4.5	4.4	4.4
90.	4.8	5.2	4.8	4.3	4.8	4.7	4.6	4.7	4.6	4.9
100.	4.7	5.0	4.8	4.3	4.5	4.4	4.8	4.8	4.7	5.3
110.	4.5	4.9	4.7	4.3	4.4	4.3	5.0	4.9	4.6	5.5
120.	4.5	4.9	4.5	4.3	4.3	4.3	5.0	4.7	4.5	5.6
130.	4.5	5.0	4.5	4.3	4.3	4.3	5.0	4.5	4.7	5.6
140.	4.3	5.2	4.5	4.3	4.3	4.3	4.9	4.5	4.7	5.5
150.	4.3	5.4	4.6	4.3	4.3	4.3	4.9	4.5	4.9	5.2
160.	4.3	5.2	4.6	4.3	4.4	4.3	4.9	4.5	5.1	5.1
170.	4.3	5.0	4.5	4.3	4.6	4.3	5.0	4.7	5.2	5.2
180.	4.3	4.6	4.4	4.4	5.0	4.3	5.1	5.1	5.2	5.1
190.	4.3	4.4	4.3	4.5	5.5	4.3	5.1	5.1	5.0	5.0
200.	4.3	4.3	4.3	4.6	5.5	4.3	5.2	4.9	5.0	5.0
210.	4.3	4.3	4.3	4.6	5.3	4.3	5.2	4.6	5.2	5.0
220.	4.3	4.3	4.3	4.5	5.1	4.4	5.3	4.5	5.3	5.0
230.	4.3	4.3	4.3	4.6	5.0	4.5	5.3	4.6	5.4	5.1
240.	4.3	4.3	4.3	4.7	4.9	4.5	5.3	4.8	5.4	5.1
250.	4.3	4.3	4.3	4.9	4.9	4.5	5.2	5.0	5.6	5.0
260.	4.4	4.5	4.3	5.1	5.0	4.7	5.0	5.2	5.3	4.9
270.	4.5	4.8	4.3	5.2	5.3	4.9	4.7	4.9	5.0	4.7
280.	4.8	5.2	4.3	5.4	5.5	4.9	4.6	4.6	4.5	4.4
290.	5.0	5.5	4.3	5.6	5.3	5.1	4.3	4.4	4.4	4.3
300.	5.0	5.4	4.4	5.8	5.0	5.0	4.3	4.3	4.3	4.3
310.	5.1	5.3	4.6	5.8	4.8	5.0	4.3	4.3	4.3	4.3
320.	4.9	5.1	4.5	6.1	4.5	5.1	4.3	4.3	4.3	4.3
330.	4.9	5.0	4.6	6.2	4.5	5.1	4.3	4.3	4.3	4.3
340.	4.8	4.9	4.6	6.1	4.5	5.1	4.3	4.3	4.3	4.3
350.	4.9	4.8	4.5	5.7	4.6	5.2	4.3	4.3	4.3	4.3
360.	5.0	4.6	4.7	5.2	4.6	5.1	4.3	4.3	4.3	4.3
MAX	5.4	5.5	5.5	6.2	5.5	5.2	5.3	5.2	5.6	5.6
DEGR.	50	290	40	330	190	350	220	260	250	120

THE HIGHEST CONCENTRATION OF 6.20 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030NoBuildPM RUN: GristMillGlover2030NoBuildPM

DATE : 4/15/11
TIME : 13:20:37

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	* CO/LINK (PPM)									
	* ANGLE (DEGREES)									
	* REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
LINK #	* 50	290	40	330	190	350	220	260	250	120
1	* .0	.1	.0	.0	.0	.0	.0	.1	.1	.0
2	* .8	.8	.0	.2	.0	.0	.0	.4	.6	.6
3	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	* .0	.0	.1	.0	.0	.4	.2	.0	.0	.0
5	* .0	.0	.0	.0	.0	.1	.0	.0	.0	.0
6	* .0	.0	.0	.0	.0	.2	.1	.0	.0	.0
7	* .0	.0	.1	.0	.0	.2	.5	.0	.0	.0
8	* .3	.3	.0	.1	.0	.0	.0	.4	.6	.5
9	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	* .0	.0	.5	.6	.5	.0	.1	.0	.0	.1
11	* .0	.0	.4	.9	.6	.0	.1	.0	.0	.1
12	* .0	.0	.1	.1	.1	.0	.0	.0	.0	.0

JOB: GristMillGlover2030BuildAM RUN: GristMillGlover2030BuildAM

DATE : 4/15/11
TIME : 13:22:41

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	2585.	8.3	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	415.3	424.0	*	215.	90.	AG	231.	100.0	.0	24.0	.50	10.9
3. Grist Mill EB R	*	200.0	406.0	260.0	406.0	*	60.	90.	AG	75.	100.0	.0	12.0	.40	3.0
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	2585.	8.3	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1596.	8.3	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	611.3	430.0	*	37.	270.	AG	268.	100.0	.0	12.0	.27	1.9
7. Grist Mill WB T	*	648.0	448.0	594.0	448.0	*	54.	270.	AG	81.	100.0	.0	24.0	.27	2.7
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1596.	8.3	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	138.	8.3	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	256.5	*	60.	360.	AG	303.	100.0	.0	12.0	.72	3.1
11. Glover NB LR	*	448.0	196.0	448.0	229.3	*	33.	360.	AG	303.	100.0	.0	12.0	.86	1.7
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	138.	8.3	.0	24.0		

JOB: GristMillGlover2030BuildAM RUN: GristMillGlover2030BuildAM

DATE : 4/15/11
TIME : 13:22:41

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	110	37	5.0	2128	3540	127.94	3	4
3. Grist Mill EB R	110	24	5.0	457	1584	127.94	3	4
6. Grist Mill WB L	110	86	3.0	78	1702	127.94	3	4
7. Grist Mill WB T	110	13	5.0	1518	3403	127.94	3	4
10. Glover NB L	110	97	5.0	102	2610	127.94	3	3
11. Glover NB LR	110	97	5.0	36	776	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030BuildAM RUN: GristMillGlover2030BuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) * REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	* 5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
10.	* 5.2	4.9	4.5	4.4	4.9	5.2	4.3	4.3	4.3	4.3
20.	* 5.2	4.8	4.5	4.4	4.9	5.1	4.3	4.3	4.3	4.3
30.	* 5.3	4.6	4.6	4.5	4.9	5.2	4.3	4.3	4.3	4.3
40.	* 5.3	4.5	4.8	4.6	5.0	5.3	4.3	4.3	4.3	4.3
50.	* 5.3	4.5	5.0	4.5	5.0	5.3	4.3	4.3	4.3	4.3
60.	* 5.3	4.5	5.1	4.4	5.1	5.4	4.3	4.3	4.3	4.3
70.	* 5.4	4.8	5.1	4.3	5.4	5.3	4.3	4.3	4.3	4.3
80.	* 5.1	4.9	5.0	4.3	5.3	5.2	4.4	4.4	4.4	4.5
90.	* 4.9	4.9	4.8	4.3	5.0	4.8	4.6	4.6	4.6	4.8
100.	* 4.5	4.5	4.6	4.3	4.6	4.5	4.9	4.8	4.7	5.2
110.	* 4.3	4.4	4.5	4.3	4.4	4.4	5.1	4.9	4.7	5.3
120.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.7	5.3
130.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.6	5.3
140.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.1	4.7	4.6	5.3
150.	* 4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.7	4.8	5.2
160.	* 4.3	4.5	4.3	4.3	4.3	4.3	4.9	4.6	4.7	5.2
170.	* 4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.6	5.0	5.3
180.	* 4.3	4.4	4.3	4.3	4.5	4.3	5.1	4.7	5.1	5.2
190.	* 4.3	4.3	4.3	4.3	4.5	4.3	5.2	4.6	5.1	5.1
200.	* 4.3	4.3	4.3	4.3	4.4	4.3	5.2	4.4	5.1	5.1
210.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.4	5.1	5.1
220.	* 4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.5	5.2	5.2
230.	* 4.3	4.3	4.3	4.4	4.3	4.4	5.1	4.7	5.3	5.3
240.	* 4.3	4.3	4.3	4.6	4.3	4.3	5.0	4.8	5.4	5.3
250.	* 4.4	4.3	4.3	4.7	4.3	4.4	4.9	5.1	5.3	5.2
260.	* 4.5	4.5	4.3	5.1	4.5	4.6	4.9	5.0	5.3	4.9
270.	* 4.7	4.8	4.3	5.3	4.8	5.0	4.7	4.9	4.9	4.7
280.	* 5.1	5.1	4.3	5.5	5.1	5.3	4.5	4.6	4.5	4.4
290.	* 5.3	5.3	4.3	5.7	5.1	5.3	4.3	4.3	4.4	4.3
300.	* 5.3	5.2	4.4	5.9	4.9	5.2	4.3	4.3	4.3	4.3
310.	* 5.2	5.1	4.5	6.0	4.8	5.3	4.3	4.3	4.3	4.3
320.	* 5.2	5.1	4.6	5.7	4.7	5.4	4.3	4.3	4.3	4.3
330.	* 5.1	5.0	4.5	5.5	4.5	5.3	4.3	4.3	4.3	4.3
340.	* 5.1	5.0	4.5	5.2	4.7	5.3	4.3	4.3	4.3	4.3
350.	* 5.1	5.0	4.5	4.7	4.8	5.4	4.3	4.3	4.3	4.3
360.	* 5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
MAX	* 5.4	5.3	5.1	6.0	5.4	5.4	5.2	5.1	5.4	5.3
DEGR.	* 70	290	60	310	70	60	120	250	240	110

THE HIGHEST CONCENTRATION OF 6.00 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030BuildAM RUN: GristMillGlover2030BuildAM

DATE : 4/15/11
TIME : 13:22:41

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)									
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
LINK #	*	70	290	60	310	70	60	120	250	240	110
1	*	.0	.1	.0	.1	.0	.0	.0	.1	.1	.0
2	*	.6	.6	.0	.1	.0	.0	.0	.4	.5	.4
3	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.1	.0	.1	.0	.9	.8	.4	.0	.0	.1
5	*	.0	.0	.1	.0	.1	.3	.5	.0	.0	.0
6	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	*	.2	.3	.0	.1	.0	.0	.0	.3	.5	.5
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.4	.6	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.8	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2030BuildPM RUN: GristMillGlover2030BuildPM

DATE : 4/15/11
TIME : 13:24:26

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	418.0	200.0	418.0	*	200.	90.	AG	1599.	8.3	.0	36.0		
2. Grist Mill EB T	*	200.0	424.0	383.8	424.0	*	184.	90.	AG	302.	100.0	.0	24.0	.44	9.3
3. Grist Mill EB R	*	200.0	406.0	207.7	406.0	*	8.	90.	AG	69.	100.0	.0	12.0	.06	.4
4. Grist Mill EB out	*	454.0	412.0	848.0	412.0	*	394.	90.	AG	1599.	8.3	.0	24.0		
5. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	1685.	8.3	.0	36.0		
6. Grist Mill WB L	*	648.0	430.0	633.1	430.0	*	15.	270.	AG	275.	100.0	.0	12.0	.13	.8
7. Grist Mill WB T	*	648.0	448.0	539.7	448.0	*	108.	270.	AG	165.	100.0	.0	24.0	.34	5.5
8. Grist Mill WB out	*	406.0	448.0	.0	448.0	*	406.	270.	AG	1685.	8.3	.0	24.0		
9. Glover NB in	*	442.0	.0	442.0	196.0	*	196.	360.	AG	547.	8.3	.0	24.0		
10. Glover NB L	*	436.0	196.0	436.0	405.8	*	210.	360.	AG	261.	100.0	.0	12.0	.87	10.7
11. Glover NB LR	*	448.0	196.0	448.0	375.7	*	180.	360.	AG	261.	100.0	.0	12.0	1.08	9.1
12. Glover SB out	*	418.0	400.0	418.0	.0	*	400.	180.	AG	547.	8.3	.0	24.0		

JOB: GristMillGlover2030BuildPM RUN: GristMillGlover2030BuildPM

DATE : 4/15/11
TIME : 13:24:26

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	100	44	5.0	1529	3573	127.94	3	4
3. Grist Mill EB R	100	20	5.0	70	1599	127.94	3	4
6. Grist Mill WB L	100	80	3.0	34	1734	127.94	3	4
7. Grist Mill WB T	100	24	5.0	1651	3467	127.94	3	4
10. Glover NB L	100	76	5.0	434	2929	127.94	3	3
11. Glover NB LR	100	76	5.0	113	621	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030BuildPM RUN: GristMillGlover2030BuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	5.0	4.6	4.8	5.2	4.6	5.1	4.3	4.3	4.3	4.3
10.	5.2	4.4	4.9	4.8	4.7	5.1	4.3	4.3	4.3	4.3
20.	5.2	4.4	5.3	4.6	4.7	5.0	4.3	4.3	4.3	4.3
30.	5.3	4.3	5.5	4.5	4.7	5.0	4.3	4.3	4.3	4.3
40.	5.3	4.3	5.5	4.5	4.8	5.0	4.3	4.3	4.3	4.3
50.	5.4	4.5	5.4	4.5	4.9	5.1	4.3	4.3	4.3	4.3
60.	5.3	4.6	5.4	4.4	5.0	5.1	4.3	4.3	4.3	4.3
70.	5.3	5.1	5.1	4.3	5.1	5.1	4.3	4.3	4.3	4.3
80.	5.1	5.2	5.0	4.3	5.0	4.9	4.4	4.5	4.4	4.4
90.	4.9	5.4	4.8	4.3	4.8	4.7	4.6	4.7	4.6	4.9
100.	4.7	5.1	4.8	4.3	4.5	4.4	4.8	4.8	4.7	5.3
110.	4.5	5.0	4.7	4.3	4.4	4.3	5.0	4.9	4.6	5.6
120.	4.5	5.1	4.5	4.3	4.3	4.3	5.0	4.7	4.5	5.6
130.	4.5	5.1	4.5	4.3	4.3	4.3	5.0	4.5	4.7	5.6
140.	4.3	5.4	4.5	4.3	4.3	4.3	4.9	4.5	4.8	5.5
150.	4.3	5.4	4.6	4.3	4.3	4.3	4.9	4.5	5.0	5.2
160.	4.3	5.2	4.6	4.3	4.4	4.3	4.9	4.6	5.3	5.1
170.	4.3	5.0	4.5	4.3	4.7	4.3	5.0	4.8	5.2	5.2
180.	4.3	4.6	4.4	4.4	5.2	4.3	5.1	5.2	5.2	5.1
190.	4.3	4.4	4.3	4.5	5.7	4.3	5.1	5.2	5.0	5.0
200.	4.3	4.3	4.3	4.6	5.8	4.3	5.2	5.1	5.0	5.0
210.	4.3	4.3	4.3	4.6	5.7	4.3	5.2	4.7	5.2	5.0
220.	4.3	4.3	4.3	4.5	5.5	4.4	5.3	4.5	5.3	5.0
230.	4.3	4.3	4.3	4.6	5.2	4.5	5.3	4.6	5.4	5.1
240.	4.3	4.3	4.3	4.7	5.1	4.5	5.3	4.8	5.4	5.1
250.	4.3	4.3	4.3	4.9	5.0	4.5	5.3	5.0	5.6	5.0
260.	4.4	4.5	4.3	5.1	5.0	4.7	5.0	5.2	5.3	4.9
270.	4.5	4.8	4.3	5.2	5.4	5.0	4.7	4.9	5.0	4.7
280.	4.8	5.2	4.3	5.4	5.5	4.9	4.6	4.6	4.5	4.4
290.	5.0	5.5	4.3	5.6	5.4	5.1	4.3	4.4	4.4	4.3
300.	5.0	5.4	4.4	5.8	5.1	5.0	4.3	4.3	4.3	4.3
310.	5.1	5.3	4.6	5.8	4.9	5.0	4.3	4.3	4.3	4.3
320.	4.9	5.1	4.5	6.1	4.6	5.1	4.3	4.3	4.3	4.3
330.	4.9	5.0	4.6	6.2	4.5	5.1	4.3	4.3	4.3	4.3
340.	4.8	4.9	4.6	6.1	4.5	5.1	4.3	4.3	4.3	4.3
350.	4.9	4.8	4.5	5.7	4.6	5.2	4.3	4.3	4.3	4.3
360.	5.0	4.6	4.8	5.2	4.6	5.1	4.3	4.3	4.3	4.3
MAX	5.4	5.5	5.5	6.2	5.8	5.2	5.3	5.2	5.6	5.6
DEGR.	50	290	30	330	200	350	220	180	250	110

THE HIGHEST CONCENTRATION OF 6.20 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030BuildPM RUN: GristMillGlover2030BuildPM

DATE : 4/15/11
TIME : 13:24:26

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	*	CO/LINK (PPM) ANGLE (DEGREES) REC1 50	REC2 290	REC3 30	REC4 330	REC5 200	REC6 350	REC7 220	REC8 180	REC9 250	REC10 110
1	*	.0	.1	.0	.0	.0	.0	.0	.0	.1	.0
2	*	.8	.8	.0	.2	.0	.0	.0	.0	.6	.5
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.1	.0	.0	.4	.2	.2	.0	.1
5	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0
8	*	.3	.3	.0	.1	.0	.0	.0	.0	.6	.5
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.5	.6	.6	.0	.1	.3	.0	.1
11	*	.0	.0	.4	.9	.8	.0	.1	.3	.0	.1
12	*	.0	.0	.2	.1	.1	.0	.0	.1	.0	.0

JOB: GristMillGlover2030MitigatedBuildAM RUN: GristMillGlover2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:25:57

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	418.0	200.0	418.0	200.	90.	AG	2585.	8.3	.0	36.0		
2. Grist Mill EB T	200.0	424.0	415.3	424.0	215.	90.	AG	231.	100.0	.0	24.0	.50	10.9
3. Grist Mill EB R	200.0	406.0	260.0	406.0	60.	90.	AG	75.	100.0	.0	12.0	.40	3.0
4. Grist Mill EB out	454.0	412.0	848.0	412.0	394.	90.	AG	2585.	8.3	.0	24.0		
5. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	1596.	8.3	.0	36.0		
6. Grist Mill WB L	648.0	430.0	611.3	430.0	37.	270.	AG	268.	100.0	.0	12.0	.27	1.9
7. Grist Mill WB T	648.0	448.0	594.0	448.0	54.	270.	AG	81.	100.0	.0	24.0	.27	2.7
8. Grist Mill WB out	406.0	448.0	.0	448.0	406.	270.	AG	1596.	8.3	.0	24.0		
9. Glover NB in	442.0	.0	442.0	196.0	196.	360.	AG	138.	8.3	.0	24.0		
10. Glover NB L	436.0	196.0	436.0	256.5	60.	360.	AG	303.	100.0	.0	12.0	.72	3.1
11. Glover NB LR	448.0	196.0	448.0	229.3	33.	360.	AG	303.	100.0	.0	12.0	.86	1.7
12. Glover SB out	418.0	400.0	418.0	.0	400.	180.	AG	138.	8.3	.0	24.0		

JOB: GristMillGlover2030MitigatedBuildAM RUN: GristMillGlover2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:25:57

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	110	37	5.0	2128	3540	127.94	3	4
3. Grist Mill EB R	110	24	5.0	457	1584	127.94	3	4
6. Grist Mill WB L	110	86	3.0	78	1702	127.94	3	4
7. Grist Mill WB T	110	13	5.0	1518	3403	127.94	3	4
10. Glover NB L	110	97	5.0	102	2610	127.94	3	3
11. Glover NB LR	110	97	5.0	36	776	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030MitigatedBuildAM RUN: GristMillGlover2030MitigatedBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
10.	5.2	4.9	4.5	4.4	4.9	5.2	4.3	4.3	4.3	4.3
20.	5.2	4.8	4.5	4.4	4.9	5.1	4.3	4.3	4.3	4.3
30.	5.3	4.6	4.6	4.5	4.9	5.2	4.3	4.3	4.3	4.3
40.	5.3	4.5	4.8	4.6	5.0	5.3	4.3	4.3	4.3	4.3
50.	5.3	4.5	5.0	4.5	5.0	5.3	4.3	4.3	4.3	4.3
60.	5.3	4.5	5.1	4.4	5.1	5.4	4.3	4.3	4.3	4.3
70.	5.4	4.8	5.1	4.3	5.4	5.3	4.3	4.3	4.3	4.3
80.	5.1	4.9	5.0	4.3	5.3	5.2	4.4	4.4	4.4	4.5
90.	4.9	4.9	4.8	4.3	5.0	4.8	4.6	4.6	4.6	4.8
100.	4.5	4.5	4.6	4.3	4.6	4.5	4.9	4.8	4.7	5.2
110.	4.3	4.4	4.5	4.3	4.4	4.4	5.1	4.9	4.7	5.3
120.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.7	5.3
130.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.7	4.6	5.3
140.	4.3	4.3	4.3	4.3	4.3	4.3	5.1	4.7	4.6	5.3
150.	4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.7	4.8	5.2
160.	4.3	4.5	4.3	4.3	4.3	4.3	4.9	4.6	4.7	5.2
170.	4.3	4.4	4.3	4.3	4.3	4.3	5.1	4.6	5.0	5.3
180.	4.3	4.4	4.3	4.3	4.5	4.3	5.1	4.7	5.1	5.2
190.	4.3	4.3	4.3	4.3	4.5	4.3	5.2	4.6	5.1	5.1
200.	4.3	4.3	4.3	4.3	4.4	4.3	5.2	4.4	5.1	5.1
210.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.4	5.1	5.1
220.	4.3	4.3	4.3	4.3	4.3	4.3	5.2	4.5	5.2	5.2
230.	4.3	4.3	4.3	4.4	4.3	4.4	5.1	4.7	5.3	5.3
240.	4.3	4.3	4.3	4.6	4.3	4.3	5.0	4.8	5.4	5.3
250.	4.4	4.3	4.3	4.7	4.3	4.4	4.9	5.1	5.3	5.2
260.	4.5	4.5	4.3	5.1	4.5	4.6	4.9	5.0	5.3	4.9
270.	4.7	4.8	4.3	5.3	4.8	5.0	4.7	4.9	4.9	4.7
280.	5.1	5.1	4.3	5.5	5.1	5.3	4.5	4.6	4.5	4.4
290.	5.3	5.3	4.3	5.7	5.1	5.3	4.3	4.3	4.4	4.3
300.	5.3	5.2	4.4	5.9	4.9	5.2	4.3	4.3	4.3	4.3
310.	5.2	5.1	4.5	6.0	4.8	5.3	4.3	4.3	4.3	4.3
320.	5.2	5.1	4.6	5.7	4.7	5.4	4.3	4.3	4.3	4.3
330.	5.1	5.0	4.5	5.5	4.5	5.3	4.3	4.3	4.3	4.3
340.	5.1	5.0	4.5	5.2	4.7	5.3	4.3	4.3	4.3	4.3
350.	5.1	5.0	4.5	4.7	4.8	5.4	4.3	4.3	4.3	4.3
360.	5.1	5.0	4.4	4.5	4.9	5.3	4.3	4.3	4.3	4.3
MAX	5.4	5.3	5.1	6.0	5.4	5.4	5.2	5.1	5.4	5.3
DEGR.	70	290	60	310	70	60	120	250	240	110

THE HIGHEST CONCENTRATION OF 6.00 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030MitigatedBuildAM RUN: GristMillGlover2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:25:57

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)									
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
LINK #	*	70	290	60	310	70	60	120	250	240	110
1	*	.0	.1	.0	.1	.0	.0	.0	.1	.1	.0
2	*	.6	.6	.0	.1	.0	.0	.0	.4	.5	.4
3	*	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.1	.0	.1	.0	.9	.8	.4	.0	.0	.1
5	*	.0	.0	.1	.0	.1	.3	.5	.0	.0	.0
6	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	*	.2	.3	.0	.1	.0	.0	.0	.3	.5	.5
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.4	.6	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.8	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: GristMillGlover2030MitigatedBuildPM RUN: GristMillGlover2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:27:59

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	418.0	200.0	418.0	200.	90.	AG	1599.	8.3	.0	36.0		
2. Grist Mill EB T	200.0	424.0	383.8	424.0	184.	90.	AG	302.	100.0	.0	24.0	.44	9.3
3. Grist Mill EB R	200.0	406.0	207.7	406.0	8.	90.	AG	69.	100.0	.0	12.0	.06	.4
4. Grist Mill EB out	454.0	412.0	848.0	412.0	394.	90.	AG	1599.	8.3	.0	24.0		
5. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	1685.	8.3	.0	36.0		
6. Grist Mill WB L	648.0	430.0	632.9	430.0	15.	270.	AG	278.	100.0	.0	12.0	.14	.8
7. Grist Mill WB T	648.0	448.0	535.2	448.0	113.	270.	AG	172.	100.0	.0	24.0	.35	5.7
8. Grist Mill WB out	406.0	448.0	.0	448.0	406.	270.	AG	1685.	8.3	.0	24.0		
9. Glover NB in	442.0	.0	442.0	196.0	196.	360.	AG	547.	8.3	.0	24.0		
10. Glover NB L	436.0	196.0	436.0	389.9	194.	360.	AG	257.	100.0	.0	12.0	.82	9.9
11. Glover NB LR	448.0	196.0	448.0	314.5	119.	360.	AG	257.	100.0	.0	12.0	1.02	6.0
12. Glover SB out	418.0	400.0	418.0	.0	400.	180.	AG	547.	8.3	.0	24.0		

JOB: GristMillGlover2030MitigatedBuildPM RUN: GristMillGlover2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:27:59

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB T	100	44	5.0	1529	3573	127.94	3	4
3. Grist Mill EB R	100	20	5.0	70	1599	127.94	3	4
6. Grist Mill WB L	100	81	3.0	34	1734	127.94	3	4
7. Grist Mill WB T	100	25	5.0	1651	3467	127.94	3	4
10. Glover NB L	100	75	5.0	434	2929	127.94	3	3
11. Glover NB LR	100	75	5.0	113	621	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	390.0	6.0
2. SW Corner	394.0	390.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	464.0	200.0	6.0
5. SE Corner	464.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	470.0	6.0
8. NE Corner	464.0	470.0	6.0
9. NW Corner	396.0	470.0	6.0
10. WB W Midblock	196.0	470.0	6.0

JOB: GristMillGlover2030MitigatedBuildPM RUN: GristMillGlover2030MitigatedBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10
0.	5.0	4.6	4.7	5.1	4.6	5.1	4.3	4.3	4.3	4.3
10.	5.2	4.4	4.8	4.7	4.7	5.1	4.3	4.3	4.3	4.3
20.	5.2	4.4	5.2	4.6	4.7	5.1	4.3	4.3	4.3	4.3
30.	5.3	4.3	5.4	4.5	4.7	5.0	4.3	4.3	4.3	4.3
40.	5.3	4.3	5.4	4.5	4.8	5.0	4.3	4.3	4.3	4.3
50.	5.4	4.4	5.3	4.5	4.9	5.1	4.3	4.3	4.3	4.3
60.	5.3	4.5	5.3	4.4	5.0	5.1	4.3	4.3	4.3	4.3
70.	5.3	4.9	5.1	4.3	5.1	5.1	4.3	4.3	4.3	4.3
80.	5.1	5.0	5.0	4.3	5.0	4.9	4.4	4.5	4.4	4.4
90.	4.8	5.1	4.8	4.3	4.8	4.7	4.6	4.7	4.6	4.9
100.	4.6	4.9	4.8	4.3	4.5	4.4	4.8	4.8	4.7	5.3
110.	4.5	4.7	4.7	4.3	4.4	4.3	5.0	4.9	4.6	5.5
120.	4.5	4.8	4.5	4.3	4.3	4.3	5.0	4.7	4.5	5.6
130.	4.5	4.9	4.5	4.3	4.3	4.3	5.0	4.5	4.6	5.6
140.	4.3	5.1	4.5	4.3	4.3	4.3	4.9	4.5	4.6	5.5
150.	4.3	5.2	4.6	4.3	4.3	4.3	4.9	4.5	4.8	5.2
160.	4.3	5.1	4.6	4.3	4.3	4.3	5.0	4.5	5.0	5.1
170.	4.3	5.0	4.5	4.3	4.5	4.3	5.1	4.7	5.1	5.2
180.	4.3	4.6	4.4	4.4	4.9	4.3	5.1	5.0	5.2	5.1
190.	4.3	4.4	4.3	4.5	5.2	4.3	5.1	4.9	5.0	5.0
200.	4.3	4.3	4.3	4.6	5.2	4.3	5.2	4.9	5.0	5.0
210.	4.3	4.3	4.3	4.6	5.1	4.3	5.2	4.6	5.2	5.0
220.	4.3	4.3	4.3	4.5	5.0	4.4	5.3	4.5	5.3	5.0
230.	4.3	4.3	4.3	4.6	4.9	4.5	5.3	4.6	5.4	5.1
240.	4.3	4.3	4.3	4.7	4.9	4.5	5.2	4.8	5.4	5.1
250.	4.3	4.3	4.3	4.9	4.8	4.5	5.3	5.0	5.6	5.0
260.	4.4	4.5	4.3	5.1	4.8	4.6	5.0	5.2	5.3	4.9
270.	4.5	4.8	4.3	5.2	5.1	4.9	4.7	4.9	5.0	4.7
280.	4.8	5.2	4.3	5.4	5.2	4.9	4.6	4.6	4.5	4.4
290.	5.0	5.5	4.3	5.6	5.1	5.1	4.3	4.4	4.4	4.3
300.	5.0	5.4	4.4	5.8	4.8	5.0	4.3	4.3	4.3	4.3
310.	5.1	5.3	4.6	5.8	4.7	5.1	4.3	4.3	4.3	4.3
320.	4.9	5.1	4.5	6.1	4.5	5.1	4.3	4.3	4.3	4.3
330.	4.9	5.0	4.6	6.1	4.5	5.1	4.3	4.3	4.3	4.3
340.	4.8	4.9	4.6	6.0	4.5	5.1	4.3	4.3	4.3	4.3
350.	4.9	4.8	4.5	5.6	4.6	5.2	4.3	4.3	4.3	4.3
360.	5.0	4.6	4.7	5.1	4.6	5.1	4.3	4.3	4.3	4.3
MAX	5.4	5.5	5.4	6.1	5.2	5.2	5.3	5.2	5.6	5.6
DEGR.	50	290	30	320	190	350	220	260	250	120

THE HIGHEST CONCENTRATION OF 6.10 PPM OCCURRED AT RECEPTOR REC4 .

JOB: GristMillGlover2030MitigatedBuildPM RUN: GristMillGlover2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:27:59

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	*	CO/LINK (PPM) ANGLE (DEGREES) REC1 50	REC2 290	REC3 30	REC4 320	REC5 190	REC6 350	REC7 220	REC8 260	REC9 250	REC10 120
1	*	.0	.1	.0	.0	.0	.0	.0	.1	.1	.0
2	*	.8	.8	.0	.2	.0	.0	.0	.4	.6	.6
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.1	.0	.0	.4	.2	.0	.0	.0
5	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
6	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0
7	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.0
8	*	.3	.3	.0	.1	.0	.0	.0	.4	.6	.5
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.5	.6	.5	.0	.1	.0	.0	.1
11	*	.0	.0	.3	.8	.3	.0	.1	.0	.0	.1
12	*	.0	.0	.2	.1	.1	.0	.0	.0	.0	.0

JOB: Route7Bridge2010ExistingAM RUN: Route7Bridge2010ExistingAM

DATE : 4/ 7/11
TIME : 21:32:46

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	98.	11.2	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	242.2	424.0	42.	90.	AG	411.	100.0	.0	12.0	.70	2.1
3. Fort Hill EB R	200.0	412.0	214.3	412.0	14.	90.	AG	381.	100.0	.0	12.0	.16	.7
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	98.	11.2	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1253.	11.2	.0	48.0		
6. Bridge WB L	648.0	434.0	444.6	434.0	203.	270.	AG	584.	100.0	.0	24.0	.49	10.3
7. Bridge WB T	648.0	452.0	619.3	452.0	29.	270.	AG	292.	100.0	.0	12.0	.13	1.5
8. Bridge WB R	648.0	464.0	611.0	464.0	37.	270.	AG	292.	100.0	.0	12.0	.17	1.9
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1253.	11.2	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	672.	11.2	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	216.4	16.	360.	AG	423.	100.0	.0	12.0	.42	.8
12. Route 7 NB T	456.0	200.0	456.0	241.9	42.	360.	AG	601.	100.0	.0	24.0	.11	2.1
13. Route 7 NB R	474.0	200.0	474.0	368.6	169.	360.	AG	301.	100.0	.0	12.0	.77	8.6
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	672.	11.2	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	622.	11.2	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	553.7	82.	180.	AG	394.	100.0	.0	12.0	.76	4.2
17. Route 7 SB TR	424.0	636.0	424.0	468.4	168.	180.	AG	271.	100.0	.0	12.0	.75	8.5
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	622.	11.2	.0	24.0		

JOB: Route7Bridge2010ExistingAM RUN: Route7Bridge2010ExistingAM

DATE : 4/ 7/11
TIME : 21:32:46

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	110	97	5.0	69	1800	173.64	3	3
3. Fort Hill EB R	110	90	5.0	29	1537	173.64	3	3
6. Bridge WB L	110	69	5.0	1079	3570	173.64	3	3
7. Bridge WB T	110	69	5.0	76	1845	173.64	3	3
8. Bridge WB R	110	69	5.0	98	1900	173.64	3	3
11. Route 7 NB L	110	100	3.0	30	1601	173.64	3	3
12. Route 7 NB T	110	71	5.0	217	3310	173.64	3	3
13. Route 7 NB R	110	71	5.0	425	1900	173.64	3	3
16. Route 7 SB L	110	93	3.0	143	1718	173.64	3	3
17. Route 7 SB TR	110	64	5.0	479	1809	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2010ExistingAM RUN: Route7Bridge2010ExistingAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.9	4.9	4.8	5.4	5.6	5.1	4.3	4.5	4.5	4.4	5.0	4.3
10.	5.2	4.9	5.1	5.0	5.3	5.0	4.3	4.3	4.4	4.6	5.3	4.3
20.	5.4	5.0	4.9	4.7	5.3	4.7	4.3	4.3	4.3	4.6	5.5	4.3
30.	5.3	4.9	5.1	4.6	5.4	4.6	4.3	4.3	4.3	4.6	5.4	4.3
40.	5.5	4.9	5.3	4.5	5.4	4.6	4.3	4.3	4.3	4.6	5.2	4.3
50.	5.3	5.0	5.6	4.4	5.5	4.6	4.3	4.3	4.3	4.6	5.0	4.5
60.	5.1	5.4	5.8	4.3	5.7	4.6	4.3	4.3	4.3	4.6	4.9	4.5
70.	4.9	5.5	5.8	4.3	5.4	4.5	4.3	4.3	4.3	4.6	4.9	4.5
80.	4.7	5.3	5.6	4.3	4.9	4.4	4.4	4.4	4.3	4.7	5.1	4.7
90.	4.7	5.1	5.5	4.3	4.6	4.4	4.5	4.7	4.3	4.9	5.4	5.0
100.	4.5	4.7	5.2	4.3	4.3	4.3	4.7	5.1	4.3	5.2	5.8	5.1
110.	4.5	4.7	4.8	4.3	4.3	4.3	4.8	5.5	4.3	5.4	5.6	5.2
120.	4.5	4.8	4.6	4.3	4.3	4.3	4.8	5.4	4.4	5.7	5.3	5.1
130.	4.4	4.8	4.7	4.3	4.3	4.3	4.7	5.5	4.5	6.0	5.0	5.4
140.	4.3	4.9	4.7	4.3	4.3	4.3	4.7	5.4	4.6	6.2	4.9	5.3
150.	4.3	5.0	4.7	4.3	4.3	4.3	4.7	5.4	4.6	6.1	4.8	5.3
160.	4.3	5.0	4.6	4.3	4.4	4.3	4.9	5.4	4.7	5.9	4.9	5.4
170.	4.3	4.8	4.6	4.4	4.7	4.3	5.3	5.6	4.9	5.5	5.0	5.3
180.	4.3	4.6	4.4	4.4	5.1	4.3	5.7	5.8	4.9	5.1	4.9	5.0
190.	4.3	4.4	4.3	4.5	5.6	4.3	6.1	5.9	5.2	4.5	4.8	4.9
200.	4.3	4.3	4.3	4.7	5.5	4.3	6.3	5.7	5.4	4.4	4.7	4.7
210.	4.3	4.3	4.3	4.7	5.3	4.3	6.7	5.4	5.6	4.4	4.7	4.7
220.	4.3	4.3	4.3	4.6	5.0	4.5	6.6	5.1	5.7	4.5	4.7	4.7
230.	4.3	4.3	4.3	4.6	4.8	4.5	6.5	4.8	5.6	4.4	4.8	4.8
240.	4.3	4.3	4.3	4.7	4.6	4.6	6.3	4.6	5.6	4.4	4.8	4.8
250.	4.3	4.3	4.3	5.0	4.5	4.5	5.8	4.8	5.4	4.3	5.0	4.8
260.	4.3	4.3	4.3	5.2	4.4	4.5	5.3	5.0	5.2	4.3	4.9	4.7
270.	4.3	4.5	4.3	5.8	4.5	4.8	4.9	4.8	4.9	4.3	4.8	4.6
280.	4.4	4.6	4.3	6.2	4.6	5.0	4.7	4.9	4.8	4.3	4.5	4.4
290.	4.5	4.7	4.3	6.5	4.6	5.5	4.6	4.8	4.6	4.3	4.4	4.3
300.	4.5	4.7	4.3	6.6	4.7	5.6	4.6	4.8	4.6	4.3	4.3	4.3
310.	4.6	4.6	4.4	6.4	4.9	5.8	4.6	4.9	4.6	4.3	4.3	4.3
320.	4.5	4.5	4.5	6.4	5.1	5.8	4.4	5.0	4.7	4.3	4.3	4.3
330.	4.5	4.5	4.4	6.0	5.5	5.5	4.3	5.1	4.7	4.3	4.3	4.3
340.	4.5	4.5	4.4	5.9	5.7	5.6	4.3	5.1	4.7	4.3	4.3	4.3
350.	4.7	4.6	4.4	5.8	5.7	5.6	4.3	4.9	4.6	4.3	4.5	4.3
360.	4.9	4.9	4.8	5.4	5.6	5.1	4.3	4.5	4.5	4.4	5.0	4.3
MAX	5.5	5.5	5.8	6.6	5.7	5.8	6.7	5.9	5.7	6.2	5.8	5.4
DEGR.	40	70	60	300	60	310	210	190	220	140	100	130

THE HIGHEST CONCENTRATION OF 6.70 PPM OCCURRED AT RECEPTOR REC7 .

JOB: Route7Bridge2010ExistingAM RUN: Route7Bridge2010ExistingAM

DATE : 4/ 7/11
TIME : 21:32:46

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	* CO/LINK (PPM)											
	* ANGLE (DEGREES)											
	* REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	* 40	70	60	300	60	310	210	190	220	140	100	130
1	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	* .5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
3	* .3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	* .0	.1	.1	.0	.1	.0	.0	.0	.0	.0	.1	.0
6	* .0	1.0	.1	.0	1.1	1.2	1.1	1.1	.0	.4	1.3	.0
7	* .0	.0	.0	.0	.1	.0	.4	.0	.0	.0	.0	.0
8	* .0	.0	.0	.0	.1	.0	.7	.0	.0	.0	.0	.0
9	* .2	.0	.0	.1	.0	.0	.0	.0	.1	.0	.0	.5
10	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	* .0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
12	* .0	.0	.6	1.2	.0	.0	.1	.1	.0	.0	.0	.1
13	* .0	.0	.3	.8	.0	.0	.1	.3	.0	.0	.0	.1
14	* .0	.0	.0	.0	.0	.1	.0	.0	.3	.1	.0	.0
15	* .0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	* .1	.0	.0	.0	.0	.1	.0	.0	.6	.7	.0	.0
17	* .1	.0	.0	.0	.0	.1	.0	.0	.4	.7	.1	.0
18	* .0	.1	.2	.1	.0	.0	.0	.1	.0	.0	.0	.0

JOB: Route7Bridge2010ExistingdPM RUN: Route7Bridge2010ExistingdPM

DATE : 4/ 7/11
TIME : 21:50:36

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	363.	11.2	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	476.0	424.0	276.	90.	AG	369.	100.0	.0	12.0	1.01	14.0
3. Fort Hill EB R	200.0	412.0	221.6	412.0	22.	90.	AG	283.	100.0	.0	12.0	.10	1.1
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	363.	11.2	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1103.	11.2	.0	48.0		
6. Bridge WB L	648.0	434.0	458.5	434.0	189.	270.	AG	699.	100.0	.0	24.0	.53	9.6
7. Bridge WB T	648.0	452.0	557.4	452.0	91.	270.	AG	349.	100.0	.0	12.0	.51	4.6
8. Bridge WB R	648.0	464.0	574.7	464.0	73.	270.	AG	349.	100.0	.0	12.0	.41	3.7
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1103.	11.2	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	1495.	11.2	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	375.6	176.	360.	AG	392.	100.0	.0	12.0	.99	8.9
12. Route 7 NB T	456.0	200.0	456.0	316.9	117.	360.	AG	629.	100.0	.0	24.0	.28	5.9
13. Route 7 NB R	474.0	200.0	474.0	3295.3	3095.	360.	AG	314.	100.0	.0	12.0	1.52	157.2
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	1495.	11.2	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	678.	11.2	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	483.7	152.	180.	AG	365.	100.0	.0	12.0	.84	7.7
17. Route 7 SB TR	424.0	636.0	424.0	466.5	170.	180.	AG	287.	100.0	.0	12.0	.69	8.6
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	678.	11.2	.0	24.0		

JOB: Route7Bridge2010ExistingdPM RUN: Route7Bridge2010ExistingdPM

DATE : 4/ 7/11
TIME : 21:50:36

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	120	95	5.0	309	2044	173.64	3	3
3. Fort Hill EB R	120	73	5.0	54	1599	173.64	3	3
6. Bridge WB L	120	90	5.0	770	3813	173.64	3	3
7. Bridge WB T	120	90	5.0	184	1881	173.64	3	3
8. Bridge WB R	120	90	5.0	149	1900	173.64	3	3
11. Route 7 NB L	120	101	3.0	198	1711	173.64	3	3
12. Route 7 NB T	120	81	5.0	529	3538	173.64	3	3
13. Route 7 NB R	120	81	5.0	769	1900	173.64	3	3
16. Route 7 SB L	120	94	3.0	259	1769	173.64	3	3
17. Route 7 SB TR	120	74	5.0	419	1860	173.64	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2010ExistingdPM RUN: Route7Bridge2010ExistingdPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.1	6.0	5.6	6.6	7.3	5.7	4.5	5.8	7.7	4.9	5.4	4.4
10.	5.3	6.3	6.2	5.6	6.4	5.1	4.3	5.0	7.1	5.2	6.2	4.5
20.	5.5	6.4	6.7	5.1	5.8	4.7	4.3	4.5	6.0	5.3	6.4	4.5
30.	5.8	6.0	6.9	4.8	5.8	4.6	4.3	4.3	5.3	5.2	6.5	4.5
40.	5.9	5.9	7.1	4.6	6.0	4.7	4.3	4.3	4.9	5.2	6.3	4.6
50.	5.9	5.9	6.9	4.5	6.2	4.7	4.3	4.3	4.8	5.2	6.1	4.8
60.	5.9	6.3	6.5	4.3	6.3	4.7	4.3	4.3	4.7	5.2	5.9	4.8
70.	5.9	6.5	6.1	4.3	5.8	4.6	4.3	4.3	4.6	5.1	5.6	4.9
80.	5.4	6.3	5.9	4.3	5.3	4.5	4.4	4.7	4.6	5.3	5.9	5.1
90.	5.2	5.7	5.7	4.3	4.7	4.4	4.5	5.0	4.6	5.4	6.2	5.7
100.	4.8	5.2	5.3	4.3	4.3	4.3	4.6	5.6	4.6	5.6	6.5	5.6
110.	4.9	5.2	5.0	4.3	4.3	4.3	4.7	6.1	4.6	5.8	6.3	6.0
120.	4.9	5.4	4.8	4.3	4.3	4.3	4.8	6.0	4.8	6.5	6.1	6.0
130.	4.7	5.7	4.8	4.3	4.3	4.3	4.8	5.9	5.2	6.7	5.6	6.0
140.	4.4	6.1	4.9	4.3	4.3	4.3	4.8	5.8	5.4	7.0	5.7	5.9
150.	4.4	6.4	4.9	4.3	4.3	4.3	4.7	5.7	5.9	6.9	6.1	5.5
160.	4.3	6.1	4.8	4.3	4.4	4.3	5.0	5.8	6.5	6.8	6.3	5.3
170.	4.3	5.5	4.7	4.4	4.9	4.3	5.5	6.3	7.4	6.6	6.4	5.1
180.	4.3	4.9	4.5	4.6	5.7	4.3	5.9	7.2	8.6	5.6	6.1	5.0
190.	4.3	4.4	4.4	4.8	6.6	4.3	6.5	7.7	8.8	5.0	5.5	4.9
200.	4.3	4.3	4.3	5.0	7.0	4.4	6.9	7.5	8.5	4.6	5.2	4.8
210.	4.3	4.3	4.3	5.0	6.7	4.5	7.6	7.0	8.0	4.6	5.3	4.8
220.	4.3	4.3	4.3	4.9	6.3	4.8	8.0	6.5	7.6	4.5	5.3	4.8
230.	4.3	4.3	4.3	4.9	6.0	5.1	8.1	6.0	7.1	4.5	5.4	4.8
240.	4.3	4.3	4.3	4.9	5.8	5.1	7.8	6.1	7.0	4.4	5.5	4.9
250.	4.3	4.3	4.3	5.2	5.6	4.9	7.4	6.1	6.5	4.3	5.4	4.9
260.	4.3	4.4	4.3	5.5	5.6	5.0	6.7	6.1	6.2	4.3	5.2	4.7
270.	4.3	4.6	4.3	6.0	5.8	5.3	5.8	6.3	6.1	4.3	4.8	4.6
280.	4.5	4.9	4.3	6.5	6.1	5.7	5.2	6.2	5.9	4.3	4.6	4.4
290.	4.6	5.1	4.3	6.9	6.0	6.3	4.9	6.2	5.8	4.3	4.3	4.3
300.	4.6	5.2	4.3	7.3	6.2	6.6	4.8	6.4	5.9	4.3	4.3	4.3
310.	4.6	5.2	4.5	7.6	6.3	6.8	4.8	6.5	6.1	4.3	4.3	4.3
320.	4.6	5.1	4.5	7.9	6.7	6.8	4.6	6.5	6.4	4.3	4.3	4.3
330.	4.6	5.1	4.6	7.9	7.1	6.8	4.7	6.7	6.9	4.3	4.3	4.3
340.	4.6	5.1	4.6	7.8	7.8	6.6	4.6	6.6	7.3	4.3	4.3	4.3
350.	4.8	5.4	4.8	7.4	7.9	6.3	4.6	6.5	7.8	4.4	4.6	4.3
360.	5.1	6.0	5.6	6.6	7.3	5.7	4.5	5.8	7.7	4.9	5.4	4.4
MAX	5.9	6.5	7.1	7.9	7.9	6.8	8.1	7.7	8.8	7.0	6.5	6.0
DEGR.	40	70	40	320	350	310	230	190	190	140	30	120

THE HIGHEST CONCENTRATION OF 8.80 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2010ExistingdPM RUN: Route7Bridge2010ExistingdPM

DATE : 4/ 7/11
TIME : 21:50:36

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	70	40	320	350	310	230	190	190	140	30	120
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.6	.3	.0	.2	.2	.0	.0	.2	.2	.0	.0	.7
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.1	.0	.0	.1	.1	.1	.0	.0	.0	.0	.0
5	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	1.1	.4	.0	1.1	1.4	1.4	1.2	.2	.4	.0	.0
7	*	.0	.1	.1	.0	.0	.3	.7	.0	.0	.1	.0	.0
8	*	.0	.1	.1	.0	.0	.1	1.0	.0	.0	.1	.0	.0
9	*	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.5
10	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
11	*	.0	.0	.7	.6	.0	.0	.2	.3	.1	.0	.0	.2
12	*	.0	.0	.9	1.6	.0	.0	.2	.4	.1	.0	.0	.2
13	*	.2	.3	.4	1.0	1.4	.2	.2	1.1	2.8	.4	.4	.1
14	*	.1	.0	.0	.0	.3	.1	.0	.0	.5	.3	.3	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.0	.0	.0	.3	.2	.0	.0	.3	.7	.7	.0
17	*	.1	.0	.0	.0	.2	.1	.0	.0	.2	.7	.8	.0
18	*	.0	.1	.2	.1	.0	.0	.0	.1	.1	.0	.0	.0

JOB: Route7Bridge2030NoBuildAM RUN: Route7Bridge2030NoBuildAM

DATE : 4/15/11
TIME : 13:36:16

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	132.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	284.5	424.0	84.	90.	AG	303.	100.0	.0	12.0	.95	4.3
3. Fort Hill EB R	200.0	412.0	219.2	412.0	19.	90.	AG	281.	100.0	.0	12.0	.22	1.0
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	132.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1530.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	400.9	434.0	247.	270.	AG	431.	100.0	.0	24.0	.59	12.6
7. Bridge WB T	648.0	452.0	612.9	452.0	35.	270.	AG	215.	100.0	.0	12.0	.16	1.8
8. Bridge WB R	648.0	464.0	600.1	464.0	48.	270.	AG	215.	100.0	.0	12.0	.22	2.4
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1530.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	811.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	220.9	21.	360.	AG	312.	100.0	.0	12.0	.51	1.1
12. Route 7 NB T	456.0	200.0	456.0	250.5	50.	360.	AG	443.	100.0	.0	24.0	.14	2.6
13. Route 7 NB R	474.0	200.0	474.0	454.7	255.	360.	AG	222.	100.0	.0	12.0	.93	12.9
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	811.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	749.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	507.6	128.	180.	AG	290.	100.0	.0	12.0	.93	6.5
17. Route 7 SB TR	424.0	636.0	424.0	398.1	238.	180.	AG	200.	100.0	.0	12.0	.90	12.1
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	749.	8.3	.0	24.0		

JOB: Route7Bridge2030NoBuildAM RUN: Route7Bridge2030NoBuildAM

DATE : 4/15/11
TIME : 13:36:16

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	*	110	97	5.0	93	1799	127.94	3	3
3. Fort Hill EB R	*	110	90	5.0	39	1537	127.94	3	3
6. Bridge WB L	*	110	69	5.0	1310	3570	127.94	3	3
7. Bridge WB T	*	110	69	5.0	93	1845	127.94	3	3
8. Bridge WB R	*	110	69	5.0	127	1900	127.94	3	3
11. Route 7 NB L	*	110	100	3.0	37	1601	127.94	3	3
12. Route 7 NB T	*	110	71	5.0	260	3310	127.94	3	3
13. Route 7 NB R	*	110	71	5.0	514	1900	127.94	3	3
16. Route 7 SB L	*	110	93	3.0	174	1718	127.94	3	3
17. Route 7 SB TR	*	110	64	5.0	575	1809	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (FT) X	Y	Z	*
1. EB W Midblock	*	196.0	384.0	6.0	*
2. SW Corner	*	394.0	384.0	6.0	*
3. SB S Midblock	*	394.0	200.0	6.0	*
4. NB S Midblock	*	490.0	200.0	6.0	*
5. SE Corner	*	490.0	384.0	6.0	*
6. EB E Midblock	*	648.0	384.0	6.0	*
7. WB E Midblock	*	648.0	482.0	6.0	*
8. NE Corner	*	490.0	482.0	6.0	*
9. NB N Midblock	*	476.0	640.0	6.0	*
10. SB N Midblock	*	400.0	640.0	6.0	*
11. NW Corner	*	400.0	464.0	6.0	*
12. WB W Midblock	*	196.0	464.0	6.0	*

JOB: Route7Bridge2030NoBuildAM RUN: Route7Bridge2030NoBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.9	5.1	4.7	5.3	5.6	5.0	4.3	4.4	4.4	4.4	4.8	4.3
10.	5.1	5.5	5.0	4.9	5.2	4.9	4.3	4.3	4.4	4.5	5.1	4.3
20.	5.2	5.8	5.1	4.6	5.1	4.6	4.3	4.3	4.3	4.6	5.3	4.3
30.	5.3	5.7	5.1	4.5	5.1	4.6	4.3	4.3	4.3	4.6	5.3	4.3
40.	5.5	5.6	5.2	4.5	5.1	4.6	4.3	4.3	4.3	4.6	5.2	4.3
50.	5.4	5.6	5.4	4.4	5.2	4.6	4.3	4.3	4.3	4.6	5.0	4.4
60.	5.3	5.7	5.5	4.3	5.4	4.6	4.3	4.3	4.3	4.6	4.9	4.5
70.	5.1	5.6	5.5	4.3	5.1	4.5	4.3	4.3	4.3	4.5	4.9	4.5
80.	5.0	5.4	5.5	4.3	4.7	4.4	4.4	4.4	4.3	4.7	5.2	4.8
90.	4.7	5.0	5.2	4.3	4.5	4.3	4.5	4.6	4.3	4.8	5.6	5.0
100.	4.5	4.8	5.0	4.3	4.3	4.3	4.6	5.0	4.3	5.0	6.0	5.3
110.	4.4	4.7	4.8	4.3	4.3	4.3	4.7	5.3	4.3	5.1	6.2	5.4
120.	4.5	4.7	4.6	4.3	4.3	4.3	4.7	5.1	4.4	5.5	6.2	5.4
130.	4.4	4.7	4.6	4.3	4.3	4.3	4.7	5.2	4.5	5.5	6.2	5.4
140.	4.3	4.8	4.6	4.3	4.3	4.3	4.7	5.1	4.5	5.7	6.1	5.3
150.	4.3	4.8	4.6	4.3	4.3	4.3	4.6	5.1	4.5	5.8	6.2	5.3
160.	4.3	4.9	4.6	4.3	4.4	4.3	4.9	5.2	4.6	5.7	6.0	5.3
170.	4.3	4.8	4.6	4.3	4.6	4.3	5.0	5.4	4.8	5.5	5.7	5.2
180.	4.3	4.5	4.4	4.4	5.0	4.3	5.4	5.7	5.1	5.2	5.4	5.0
190.	4.3	4.4	4.3	4.5	5.4	4.3	5.7	5.9	5.3	4.6	5.0	4.9
200.	4.3	4.3	4.3	4.6	5.4	4.3	5.9	5.9	5.5	4.4	4.8	4.7
210.	4.3	4.3	4.3	4.6	5.3	4.3	6.1	5.7	5.5	4.5	4.7	4.7
220.	4.3	4.3	4.3	4.6	5.1	4.5	6.3	5.4	5.5	4.5	4.7	4.7
230.	4.3	4.3	4.3	4.6	5.0	4.5	6.1	5.4	5.5	4.4	4.7	4.7
240.	4.3	4.3	4.3	4.6	5.0	4.5	5.9	5.1	5.3	4.4	4.9	4.8
250.	4.3	4.3	4.3	4.8	5.0	4.4	5.9	5.2	5.1	4.3	5.0	4.8
260.	4.3	4.3	4.3	5.1	5.0	4.5	5.4	5.0	5.0	4.3	5.0	4.7
270.	4.3	4.5	4.3	5.5	5.3	4.8	4.9	4.9	4.9	4.3	4.7	4.6
280.	4.4	4.7	4.3	5.8	5.4	5.2	4.6	4.8	4.7	4.3	4.5	4.4
290.	4.5	4.7	4.3	6.0	5.7	5.4	4.5	4.7	4.6	4.3	4.3	4.3
300.	4.5	4.7	4.3	6.2	5.8	5.4	4.6	4.9	4.6	4.3	4.3	4.3
310.	4.5	4.5	4.4	6.2	5.9	5.4	4.5	5.0	4.6	4.3	4.3	4.3
320.	4.5	4.5	4.5	6.0	6.2	5.6	4.3	5.1	4.6	4.3	4.3	4.3
330.	4.5	4.5	4.5	6.0	6.3	5.3	4.3	5.1	4.7	4.3	4.3	4.3
340.	4.5	4.5	4.4	5.8	6.2	5.3	4.3	4.9	4.7	4.3	4.3	4.3
350.	4.7	4.7	4.6	5.5	5.9	5.2	4.3	4.8	4.6	4.3	4.5	4.3
360.	4.9	5.1	4.7	5.3	5.6	5.0	4.3	4.4	4.4	4.4	4.8	4.3
MAX	5.5	5.8	5.5	6.2	6.3	5.6	6.3	5.9	5.5	5.8	6.2	5.4
DEGR.	40	20	60	300	330	320	220	190	200	150	110	110

THE HIGHEST CONCENTRATION OF 6.30 PPM OCCURRED AT RECEPTOR REC7 .

JOB: Route7Bridge2030NoBuildAM RUN: Route7Bridge2030NoBuildAM

DATE : 4/15/11
TIME : 13:36:16

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1 40	REC2 20	REC3 60	REC4 300	REC5 330	REC6 320	REC7 220	REC8 190	REC9 200	REC10 150	REC11 110	REC12 110
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.6	.0	.0	.8	.8	.9	.8	.2	.3	1.3	.2
7	*	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
8	*	.0	.0	.0	.0	.0	.1	.6	.0	.0	.0	.0	.0
9	*	.2	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.5
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.5	1.0	.0	.0	.1	.1	.0	.0	.0	.0
13	*	.0	.0	.2	.6	.7	.0	.1	.6	.1	.1	.2	.1
14	*	.0	.1	.0	.0	.1	.1	.0	.0	.2	.1	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.2	.0	.0	.1	.1	.0	.0	.4	.5	.0	.0
17	*	.1	.5	.0	.0	.3	.1	.0	.0	.3	.5	.4	.0
18	*	.0	.0	.2	.1	.0	.0	.0	.1	.0	.0	.0	.0

JOB: Route7Bridge2030NoBuildPM RUN: Route7Bridge2030NoBuildPM

DATE : 4/15/11
TIME : 13:38:38

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	447.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	1220.8	424.0	1021.	90.	AG	272.	100.0	.0	12.0	1.24	51.9
3. Fort Hill EB R	200.0	412.0	227.1	412.0	27.	90.	AG	209.	100.0	.0	12.0	.13	1.4
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	447.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1353.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	418.7	434.0	229.	270.	AG	515.	100.0	.0	24.0	.64	11.7
7. Bridge WB T	648.0	452.0	532.4	452.0	116.	270.	AG	257.	100.0	.0	12.0	.65	5.9
8. Bridge WB R	648.0	464.0	557.0	464.0	91.	270.	AG	257.	100.0	.0	12.0	.51	4.6
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1353.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	1856.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	1259.3	1059.	360.	AG	289.	100.0	.0	12.0	1.41	53.8
12. Route 7 NB T	456.0	200.0	456.0	340.4	140.	360.	AG	463.	100.0	.0	24.0	.34	7.1
13. Route 7 NB R	474.0	200.0	474.0	5101.6	4902.	360.	AG	232.	100.0	.0	12.0	1.86	249.0
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	1856.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	824.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	253.4	383.	180.	AG	269.	100.0	.0	12.0	1.04	19.4
17. Route 7 SB TR	424.0	636.0	424.0	419.8	216.	180.	AG	212.	100.0	.0	12.0	.83	11.0
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	824.	8.3	.0	24.0		

JOB: Route7Bridge2030NoBuildPM RUN: Route7Bridge2030NoBuildPM

DATE : 4/15/11
TIME : 13:38:38

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	120	95	5.0	379	2044	127.94	3	3
3. Fort Hill EB R	120	73	5.0	68	1599	127.94	3	3
6. Bridge WB L	120	90	5.0	933	3813	127.94	3	3
7. Bridge WB T	120	90	5.0	235	1881	127.94	3	3
8. Bridge WB R	120	90	5.0	185	1900	127.94	3	3
11. Route 7 NB L	120	101	3.0	281	1711	127.94	3	3
12. Route 7 NB T	120	81	5.0	634	3538	127.94	3	3
13. Route 7 NB R	120	81	5.0	941	1900	127.94	3	3
16. Route 7 SB L	120	94	3.0	322	1769	127.94	3	3
17. Route 7 SB TR	120	74	5.0	502	1860	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2030NoBuildPM RUN: Route7Bridge2030NoBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.0	6.0	5.8	6.7	7.3	5.8	4.4	5.7	7.3	5.2	5.6	4.4
10.	5.3	7.0	6.6	5.7	6.4	5.5	4.3	5.0	6.5	5.6	6.3	4.6
20.	5.4	7.2	7.1	5.1	5.9	5.1	4.3	4.4	5.5	5.7	6.7	4.6
30.	5.6	7.2	7.0	4.9	5.9	5.0	4.3	4.3	5.0	5.7	6.6	4.6
40.	5.9	7.2	6.9	4.7	6.2	5.1	4.3	4.3	4.8	5.7	6.5	4.7
50.	5.8	7.2	6.6	4.6	6.4	5.1	4.3	4.3	4.7	5.6	6.4	4.9
60.	5.9	7.5	6.1	4.5	6.4	5.1	4.3	4.3	4.6	5.6	6.3	4.9
70.	5.9	7.4	5.8	4.4	6.1	5.2	4.3	4.3	4.5	5.6	6.2	4.8
80.	5.8	7.1	5.7	4.4	5.6	5.0	4.5	4.6	4.5	5.7	6.8	5.3
90.	5.5	6.5	5.4	4.3	5.1	4.7	4.7	5.3	4.5	5.8	7.6	5.8
100.	5.0	5.8	5.1	4.3	4.5	4.4	5.0	5.9	4.6	6.1	8.3	6.0
110.	4.8	5.6	4.9	4.3	4.3	4.3	5.1	6.4	4.6	6.2	8.2	5.9
120.	4.8	5.8	4.8	4.3	4.3	4.3	5.2	6.2	4.9	6.8	8.0	5.9
130.	4.6	6.2	4.8	4.3	4.3	4.3	5.2	6.0	5.2	7.0	7.7	5.7
140.	4.4	6.3	4.8	4.3	4.3	4.3	5.1	5.9	5.4	7.2	7.4	5.6
150.	4.3	6.4	4.8	4.3	4.3	4.3	5.1	5.8	5.7	7.4	7.5	5.2
160.	4.3	5.9	4.8	4.3	4.4	4.3	5.3	5.6	6.2	7.1	7.2	5.1
170.	4.3	5.5	4.6	4.4	4.8	4.3	5.5	5.9	7.1	6.7	6.8	5.1
180.	4.3	4.9	4.5	4.6	5.4	4.3	5.9	6.7	8.1	5.8	5.8	4.9
190.	4.3	4.4	4.3	4.8	6.3	4.3	6.2	7.4	8.6	5.0	5.4	4.9
200.	4.3	4.3	4.3	4.9	6.7	4.4	6.5	7.6	8.4	4.5	5.0	4.7
210.	4.3	4.3	4.3	4.9	6.7	4.4	7.2	7.5	8.0	4.5	5.0	4.7
220.	4.3	4.3	4.3	4.9	6.4	4.6	7.5	7.4	7.4	4.5	5.2	4.8
230.	4.3	4.3	4.3	4.9	6.2	4.8	7.8	7.2	7.1	4.4	5.2	4.8
240.	4.3	4.3	4.3	4.8	5.9	4.9	7.6	7.0	6.8	4.4	5.2	4.8
250.	4.3	4.3	4.3	5.0	5.7	4.9	7.3	6.9	6.4	4.3	5.3	4.8
260.	4.3	4.3	4.3	5.3	5.8	5.0	6.8	6.6	6.2	4.3	5.0	4.7
270.	4.3	4.6	4.3	5.6	6.1	5.7	6.0	6.5	6.2	4.3	4.8	4.5
280.	4.5	4.8	4.3	5.9	6.3	6.2	5.2	6.2	6.1	4.3	4.4	4.4
290.	4.6	4.9	4.3	6.2	6.7	6.6	4.9	6.1	6.0	4.3	4.3	4.3
300.	4.6	5.0	4.3	6.6	6.8	7.1	5.0	6.3	6.1	4.3	4.3	4.3
310.	4.6	5.0	4.4	7.0	7.3	7.0	4.9	6.5	6.2	4.3	4.3	4.3
320.	4.6	5.0	4.5	7.3	7.6	7.1	4.8	6.6	6.5	4.3	4.3	4.3
330.	4.6	4.9	4.5	7.7	7.7	6.7	4.8	6.5	6.9	4.3	4.3	4.3
340.	4.6	4.9	4.5	7.6	7.9	6.6	4.7	6.6	7.3	4.3	4.3	4.3
350.	4.8	5.4	5.0	7.4	7.8	6.3	4.6	6.5	7.7	4.6	4.7	4.3
360.	5.0	6.0	5.8	6.7	7.3	5.8	4.4	5.7	7.3	5.2	5.6	4.4
MAX	5.9	7.5	7.1	7.7	7.9	7.1	7.8	7.6	8.6	7.4	8.3	6.0
DEGR.	40	60	20	330	340	300	230	200	190	150	100	100

THE HIGHEST CONCENTRATION OF 8.60 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2030NoBuildPM RUN: Route7Bridge2030NoBuildPM

DATE : 4/15/11
TIME : 13:38:38

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	60	20	330	340	300	230	200	190	150	100	100
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.5	.6	.2	.2	.4	.5	.4	.3	.2	.2	.6	.6
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
6	*	.0	1.1	.3	.1	.9	1.1	1.1	.9	.2	.4	1.3	.3
7	*	.0	.1	.0	.0	.0	.2	.5	.0	.0	.1	.2	.0
8	*	.0	.1	.0	.0	.0	.1	.7	.0	.0	.0	.1	.0
9	*	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.4
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.2	.4	.6	.5	.5	.2	.2	.4	.5	.6	.5	.1
12	*	.0	.0	.4	1.2	.0	.0	.2	.3	.1	.0	.0	.0
13	*	.1	.3	.4	.8	.9	.2	.2	.9	2.0	.3	.3	.1
14	*	.1	.0	.1	.0	.2	.1	.0	.0	.5	.3	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.5	.4	.4	.2	.1	.4	.5	.6	.4	.1
17	*	.1	.1	.1	.0	.2	.1	.0	.0	.2	.6	.4	.1
18	*	.0	.1	.2	.1	.0	.0	.0	.1	.1	.0	.0	.0

JOB: Route7Bridge2030BuildAM RUN: Route7Bridge2030BuildAM

DATE : 4/15/11
TIME : 13:40:52

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	140.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	333.0	424.0	133.	90.	AG	303.	100.0	.0	12.0	1.03	6.8
3. Fort Hill EB R	200.0	412.0	219.2	412.0	19.	90.	AG	281.	100.0	.0	12.0	.22	1.0
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	140.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1534.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	400.5	434.0	248.	270.	AG	431.	100.0	.0	24.0	.59	12.6
7. Bridge WB T	648.0	452.0	612.5	452.0	35.	270.	AG	215.	100.0	.0	12.0	.16	1.8
8. Bridge WB R	648.0	464.0	599.7	464.0	48.	270.	AG	215.	100.0	.0	12.0	.22	2.5
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1534.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	867.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	220.9	21.	360.	AG	312.	100.0	.0	12.0	.51	1.1
12. Route 7 NB T	456.0	200.0	456.0	250.5	50.	360.	AG	443.	100.0	.0	24.0	.14	2.6
13. Route 7 NB R	474.0	200.0	474.0	716.5	516.	360.	AG	222.	100.0	.0	12.0	1.03	26.2
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	867.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	774.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	345.7	290.	180.	AG	290.	100.0	.0	12.0	1.06	14.7
17. Route 7 SB TR	424.0	636.0	424.0	398.1	238.	180.	AG	200.	100.0	.0	12.0	.90	12.1
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	774.	8.3	.0	24.0		

JOB: Route7Bridge2030BuildAM RUN: Route7Bridge2030BuildAM

DATE : 4/15/11
TIME : 13:40:52

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	110	97	5.0	101	1801	127.94	3	3
3. Fort Hill EB R	110	90	5.0	39	1537	127.94	3	3
6. Bridge WB L	110	69	5.0	1312	3570	127.94	3	3
7. Bridge WB T	110	69	5.0	94	1845	127.94	3	3
8. Bridge WB R	110	69	5.0	128	1900	127.94	3	3
11. Route 7 NB L	110	100	3.0	37	1601	127.94	3	3
12. Route 7 NB T	110	71	5.0	260	3310	127.94	3	3
13. Route 7 NB R	110	71	5.0	570	1900	127.94	3	3
16. Route 7 SB L	110	93	3.0	199	1718	127.94	3	3
17. Route 7 SB TR	110	64	5.0	575	1809	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2030BuildAM RUN: Route7Bridge2030BuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.9	5.4	4.9	5.5	6.0	5.0	4.3	4.9	6.0	4.4	4.8	4.3
10.	5.1	5.8	5.4	5.0	5.4	4.9	4.3	4.6	5.8	4.5	5.4	4.3
20.	5.2	6.3	5.4	4.6	5.2	4.6	4.3	4.4	5.3	4.6	5.6	4.3
30.	5.3	6.4	5.3	4.5	5.1	4.6	4.3	4.3	5.0	4.6	5.8	4.3
40.	5.6	6.4	5.2	4.5	5.1	4.6	4.3	4.3	4.7	4.7	5.8	4.3
50.	5.5	6.2	5.4	4.4	5.2	4.6	4.3	4.3	4.6	4.8	5.7	4.5
60.	5.5	6.2	5.5	4.3	5.4	4.6	4.3	4.3	4.6	4.8	5.5	4.6
70.	5.4	6.0	5.5	4.3	5.1	4.5	4.3	4.3	4.5	4.7	5.6	4.6
80.	5.2	5.8	5.5	4.3	4.7	4.4	4.4	4.4	4.5	4.9	5.9	4.9
90.	4.9	5.5	5.2	4.3	4.5	4.3	4.5	4.6	4.5	5.0	6.2	5.4
100.	4.6	5.2	5.0	4.3	4.3	4.3	4.6	5.0	4.5	5.2	6.6	5.5
110.	4.4	5.1	4.8	4.3	4.3	4.3	4.7	5.3	4.5	5.3	6.7	5.6
120.	4.5	5.1	4.6	4.3	4.3	4.3	4.7	5.1	4.7	5.8	6.7	5.6
130.	4.4	5.0	4.6	4.3	4.3	4.3	4.7	5.2	4.8	5.8	6.7	5.4
140.	4.3	5.0	4.7	4.3	4.3	4.3	4.7	5.1	4.9	6.1	6.6	5.3
150.	4.3	4.9	4.6	4.3	4.3	4.3	4.6	5.1	5.2	6.1	6.7	5.3
160.	4.3	4.9	4.6	4.3	4.4	4.3	4.9	5.2	5.7	6.1	6.4	5.3
170.	4.3	4.8	4.6	4.4	4.6	4.3	5.0	5.4	6.5	5.8	6.0	5.2
180.	4.3	4.5	4.4	4.4	5.0	4.3	5.4	5.8	7.0	5.4	5.5	5.0
190.	4.3	4.4	4.3	4.5	5.4	4.3	5.7	6.2	7.4	4.7	5.0	4.9
200.	4.3	4.3	4.3	4.7	5.4	4.3	5.9	6.3	7.3	4.5	4.8	4.7
210.	4.3	4.3	4.3	4.7	5.3	4.3	6.1	6.4	7.0	4.5	4.7	4.7
220.	4.3	4.3	4.3	4.6	5.2	4.5	6.2	6.4	6.4	4.5	4.8	4.7
230.	4.3	4.3	4.3	4.6	5.2	4.5	6.2	6.3	6.3	4.5	4.9	4.7
240.	4.3	4.3	4.3	4.6	5.3	4.5	6.0	6.2	6.1	4.4	5.1	4.8
250.	4.3	4.3	4.3	4.8	5.3	4.4	6.1	6.3	5.8	4.3	5.2	4.8
260.	4.3	4.3	4.3	5.1	5.5	4.6	5.7	6.1	5.6	4.3	5.1	4.7
270.	4.3	4.6	4.3	5.5	5.7	5.0	5.3	5.9	5.5	4.3	4.8	4.6
280.	4.4	4.8	4.3	5.8	5.9	5.5	4.8	5.8	5.3	4.3	4.6	4.4
290.	4.5	4.9	4.3	6.0	6.1	5.6	4.7	5.7	5.2	4.3	4.4	4.3
300.	4.5	4.9	4.3	6.2	6.3	5.6	4.7	5.7	5.3	4.3	4.3	4.3
310.	4.5	4.7	4.4	6.2	6.3	5.5	4.6	5.7	5.4	4.3	4.3	4.3
320.	4.5	4.6	4.5	6.1	6.5	5.7	4.5	5.8	5.5	4.3	4.3	4.3
330.	4.5	4.5	4.5	6.2	6.7	5.4	4.4	5.9	5.9	4.3	4.3	4.3
340.	4.5	4.5	4.5	6.0	6.6	5.4	4.3	5.8	6.1	4.3	4.3	4.3
350.	4.7	4.8	4.8	5.8	6.4	5.2	4.3	5.5	6.2	4.3	4.5	4.3
360.	4.9	5.4	4.9	5.5	6.0	5.0	4.3	4.9	6.0	4.4	4.8	4.3
MAX	5.6	6.4	5.5	6.2	6.7	5.7	6.2	6.4	7.4	6.1	6.7	5.6
DEGR.	40	40	60	300	330	320	220	210	190	140	110	110

THE HIGHEST CONCENTRATION OF 7.40 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2030BuildAM RUN: Route7Bridge2030BuildAM

DATE : 4/15/11
TIME : 13:40:52

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	40	60	300	330	320	220	210	190	140	110	110
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.8	.0	.0	.8	.8	.9	.8	.2	.3	1.3	.2
7	*	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
8	*	.0	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0
9	*	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.5
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0
12	*	.0	.0	.5	1.0	.0	.0	.1	.0	.0	.0	.0	.0
13	*	.1	.3	.2	.6	.8	.1	.1	.8	2.0	.3	.2	.1
14	*	.0	.1	.0	.0	.1	.1	.0	.0	.2	.1	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.5	.0	.0	.4	.1	.0	.3	.4	.6	.5	.1
17	*	.1	.4	.0	.0	.3	.1	.0	.1	.2	.5	.4	.0
18	*	.0	.0	.2	.1	.0	.0	.0	.1	.1	.0	.0	.0

JOB: Route7Bridge2030BuildPM RUN: Route7Bridge2030BuildPM

DATE : 4/15/11
TIME : 13:43: 4

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	447.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	1220.8	424.0	1021.	90.	AG	272.	100.0	.0	12.0	1.24	51.9
3. Fort Hill EB R	200.0	412.0	227.1	412.0	27.	90.	AG	209.	100.0	.0	12.0	.13	1.4
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	447.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1442.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	404.4	434.0	244.	270.	AG	515.	100.0	.0	24.0	.68	12.4
7. Bridge WB T	648.0	452.0	528.4	452.0	120.	270.	AG	257.	100.0	.0	12.0	.68	6.1
8. Bridge WB R	648.0	464.0	545.1	464.0	103.	270.	AG	257.	100.0	.0	12.0	.57	5.2
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1442.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	1822.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	861.9	662.	360.	AG	289.	100.0	.0	12.0	1.23	33.6
12. Route 7 NB T	456.0	200.0	456.0	340.4	140.	360.	AG	463.	100.0	.0	24.0	.34	7.1
13. Route 7 NB R	474.0	200.0	474.0	5133.1	4933.	360.	AG	232.	100.0	.0	12.0	1.87	250.6
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	1822.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	825.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	242.8	393.	180.	AG	269.	100.0	.0	12.0	1.05	20.0
17. Route 7 SB TR	424.0	636.0	424.0	419.8	216.	180.	AG	212.	100.0	.0	12.0	.83	11.0
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	825.	8.3	.0	24.0		

JOB: Route7Bridge2030BuildPM RUN: Route7Bridge2030BuildPM

DATE : 4/15/11
TIME : 13:43: 4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	120	95	5.0	379	2044	127.94	3	3
3. Fort Hill EB R	120	73	5.0	68	1599	127.94	3	3
6. Bridge WB L	120	90	5.0	990	3813	127.94	3	3
7. Bridge WB T	120	90	5.0	243	1881	127.94	3	3
8. Bridge WB R	120	90	5.0	209	1900	127.94	3	3
11. Route 7 NB L	120	101	3.0	244	1711	127.94	3	3
12. Route 7 NB T	120	81	5.0	634	3538	127.94	3	3
13. Route 7 NB R	120	81	5.0	944	1900	127.94	3	3
16. Route 7 SB L	120	94	3.0	323	1769	127.94	3	3
17. Route 7 SB TR	120	74	5.0	502	1860	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2030BuildPM RUN: Route7Bridge2030BuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.0	6.1	5.8	6.6	7.2	5.8	4.4	5.6	7.1	5.0	5.5	4.4
10.	5.2	7.1	6.6	5.8	6.4	5.5	4.3	5.0	6.4	5.4	6.2	4.5
20.	5.4	7.5	7.1	5.1	5.9	5.1	4.3	4.4	5.5	5.6	6.6	4.5
30.	5.5	7.4	7.1	4.9	6.0	5.0	4.3	4.3	5.0	5.7	6.6	4.5
40.	5.9	7.3	7.0	4.7	6.3	5.1	4.3	4.3	4.8	5.6	6.5	4.6
50.	5.8	7.3	6.7	4.6	6.4	5.2	4.3	4.3	4.7	5.6	6.4	4.9
60.	5.9	7.5	6.2	4.5	6.4	5.1	4.3	4.3	4.6	5.6	6.3	4.9
70.	5.9	7.4	5.8	4.4	6.1	5.2	4.3	4.3	4.5	5.5	6.2	4.9
80.	5.9	7.1	5.7	4.4	5.6	5.0	4.5	4.7	4.5	5.7	6.8	5.3
90.	5.5	6.5	5.3	4.3	5.1	4.7	4.7	5.4	4.5	5.8	7.6	6.0
100.	5.0	5.8	5.1	4.3	4.5	4.4	5.0	6.1	4.6	6.1	8.3	6.1
110.	4.8	5.6	4.9	4.3	4.3	4.3	5.1	6.5	4.6	6.1	8.2	6.0
120.	4.8	5.8	4.8	4.3	4.3	4.3	5.2	6.4	4.9	6.8	8.1	5.9
130.	4.6	6.2	4.8	4.3	4.3	4.3	5.2	6.2	5.2	7.0	7.9	5.7
140.	4.4	6.3	4.8	4.3	4.3	4.3	5.1	5.9	5.4	7.2	7.8	5.6
150.	4.3	6.4	4.8	4.3	4.3	4.3	5.1	5.9	5.7	7.4	8.0	5.3
160.	4.3	5.9	4.7	4.3	4.4	4.3	5.3	5.6	6.2	7.1	7.8	5.1
170.	4.3	5.5	4.6	4.4	4.8	4.3	5.5	5.9	7.2	6.8	7.3	5.1
180.	4.3	4.9	4.5	4.6	5.4	4.3	5.9	6.7	8.1	5.9	6.2	4.9
190.	4.3	4.4	4.3	4.7	6.3	4.3	6.2	7.4	8.7	5.1	5.6	4.9
200.	4.3	4.3	4.3	4.9	6.7	4.4	6.5	7.6	8.5	4.5	5.1	4.7
210.	4.3	4.3	4.3	4.9	6.7	4.4	7.2	7.5	8.0	4.5	5.1	4.8
220.	4.3	4.3	4.3	4.9	6.4	4.6	7.5	7.4	7.4	4.5	5.2	4.8
230.	4.3	4.3	4.3	4.8	6.2	4.9	7.8	7.3	7.1	4.4	5.2	4.8
240.	4.3	4.3	4.3	4.8	5.9	4.9	7.7	7.1	6.7	4.4	5.3	4.8
250.	4.3	4.3	4.3	4.9	5.7	4.9	7.3	7.1	6.4	4.3	5.3	4.8
260.	4.3	4.3	4.3	5.3	5.8	5.0	6.8	6.6	6.2	4.3	5.1	4.7
270.	4.3	4.6	4.3	5.6	6.1	5.7	6.0	6.5	6.2	4.3	4.8	4.5
280.	4.5	4.8	4.3	5.9	6.3	6.3	5.2	6.2	6.1	4.3	4.5	4.4
290.	4.6	4.9	4.3	6.3	6.8	6.7	4.9	6.1	6.0	4.3	4.3	4.3
300.	4.6	5.0	4.3	6.6	7.0	7.1	5.0	6.3	6.0	4.3	4.3	4.3
310.	4.6	5.0	4.4	7.0	7.4	7.1	4.9	6.5	6.2	4.3	4.3	4.3
320.	4.6	5.0	4.5	7.3	7.7	7.1	4.8	6.6	6.4	4.3	4.3	4.3
330.	4.6	4.9	4.5	7.7	7.7	6.7	4.7	6.5	6.9	4.3	4.3	4.3
340.	4.6	4.9	4.5	7.7	7.9	6.5	4.6	6.6	7.2	4.3	4.3	4.3
350.	4.8	5.4	5.0	7.5	7.7	6.2	4.5	6.4	7.5	4.5	4.6	4.3
360.	5.0	6.1	5.8	6.6	7.2	5.8	4.4	5.6	7.1	5.0	5.5	4.4
MAX	5.9	7.5	7.1	7.7	7.9	7.1	7.8	7.6	8.7	7.4	8.3	6.1
DEGR.	40	20	20	330	340	300	230	200	190	150	100	100

THE HIGHEST CONCENTRATION OF 8.70 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2030BuildPM RUN: Route7Bridge2030BuildPM

DATE : 4/15/11
TIME : 13:43: 4

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	40	20	20	330	340	300	230	200	190	150	100	100
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.5	.4	.2	.2	.4	.5	.4	.3	.2	.2	.6	.6
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
6	*	.0	.6	.3	.1	.9	1.1	1.1	.9	.3	.4	1.3	.4
7	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.1	.2	.0
8	*	.0	.0	.0	.0	.0	.1	.7	.0	.0	.0	.1	.0
9	*	.2	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.4
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.2	.6	.6	.5	.5	.2	.2	.4	.5	.6	.5	.1
12	*	.0	.0	.4	1.2	.0	.0	.2	.3	.1	.0	.0	.0
13	*	.1	.4	.4	.8	.9	.2	.2	.9	2.0	.3	.3	.1
14	*	.1	.2	.1	.0	.2	.1	.0	.0	.5	.3	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.5	.5	.4	.4	.2	.1	.4	.5	.6	.4	.1
17	*	.1	.4	.1	.0	.2	.1	.0	.0	.2	.6	.4	.1
18	*	.0	.0	.2	.1	.0	.0	.0	.1	.1	.0	.0	.0

JOB: Route7Bridge2030MitigatedBuildAM RUN: Route7Bridge2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:45: 4

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	140.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	277.3	424.0	77.	90.	AG	299.	100.0	.0	12.0	.89	3.9
3. Fort Hill EB R	200.0	412.0	219.0	412.0	19.	90.	AG	278.	100.0	.0	12.0	.20	1.0
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	140.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1534.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	400.5	434.0	248.	270.	AG	431.	100.0	.0	24.0	.59	12.6
7. Bridge WB T	648.0	452.0	612.5	452.0	35.	270.	AG	215.	100.0	.0	12.0	.16	1.8
8. Bridge WB R	648.0	464.0	601.1	464.0	47.	270.	AG	209.	100.0	.0	12.0	.21	2.4
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1534.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	867.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	220.9	21.	360.	AG	312.	100.0	.0	12.0	.51	1.1
12. Route 7 NB T	456.0	200.0	456.0	252.6	53.	360.	AG	462.	100.0	.0	24.0	.15	2.7
13. Route 7 NB R	474.0	200.0	474.0	1243.6	1044.	360.	AG	231.	100.0	.0	12.0	1.14	53.0
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	867.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	774.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	500.5	135.	180.	AG	284.	100.0	.0	12.0	.91	6.9
17. Route 7 SB TR	424.0	636.0	424.0	381.6	254.	180.	AG	203.	100.0	.0	12.0	.92	12.9
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	774.	8.3	.0	24.0		

JOB: Route7Bridge2030MitigatedBuildAM RUN: Route7Bridge2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:45: 4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	110	96	5.0	101	1801	127.94	3	3
3. Fort Hill EB R	110	89	5.0	39	1537	127.94	3	3
6. Bridge WB L	110	69	5.0	1312	3570	127.94	3	3
7. Bridge WB T	110	69	5.0	94	1845	127.94	3	3
8. Bridge WB R	110	67	5.0	128	1900	127.94	3	3
11. Route 7 NB L	110	100	3.0	37	1601	127.94	3	3
12. Route 7 NB T	110	74	5.0	260	3310	127.94	3	3
13. Route 7 NB R	110	74	5.0	570	1900	127.94	3	3
16. Route 7 SB L	110	91	3.0	199	1718	127.94	3	3
17. Route 7 SB TR	110	65	5.0	575	1809	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2030MitigatedBuildAM RUN: Route7Bridge2030MitigatedBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.9	5.4	4.9	5.6	6.1	5.0	4.3	5.1	6.6	4.5	5.0	4.3
10.	5.1	5.8	5.3	5.0	5.5	4.9	4.3	4.7	6.2	4.8	5.5	4.3
20.	5.3	6.1	5.2	4.6	5.2	4.6	4.3	4.4	5.5	4.9	5.7	4.4
30.	5.3	6.0	5.2	4.5	5.1	4.6	4.3	4.3	5.0	4.9	5.6	4.4
40.	5.6	5.9	5.2	4.5	5.1	4.6	4.3	4.3	4.8	4.9	5.5	4.4
50.	5.4	5.9	5.5	4.4	5.2	4.6	4.3	4.3	4.7	4.9	5.4	4.5
60.	5.4	5.9	5.5	4.3	5.4	4.6	4.3	4.3	4.6	4.9	5.2	4.6
70.	5.1	5.8	5.5	4.3	5.1	4.5	4.3	4.3	4.5	4.8	5.2	4.6
80.	5.0	5.6	5.5	4.3	4.7	4.4	4.4	4.4	4.5	5.0	5.5	4.9
90.	4.8	5.3	5.3	4.3	4.5	4.3	4.5	4.6	4.5	5.0	5.7	5.1
100.	4.5	4.9	5.0	4.3	4.3	4.3	4.6	5.0	4.5	5.3	6.2	5.3
110.	4.5	4.8	4.8	4.3	4.3	4.3	4.7	5.3	4.5	5.4	6.3	5.4
120.	4.5	4.7	4.6	4.3	4.3	4.3	4.7	5.1	4.7	5.8	6.3	5.4
130.	4.4	4.8	4.6	4.3	4.3	4.3	4.7	5.2	4.9	5.8	6.3	5.3
140.	4.3	4.8	4.7	4.3	4.3	4.3	4.7	5.1	5.0	6.0	6.2	5.4
150.	4.3	4.9	4.6	4.3	4.3	4.3	4.6	5.1	5.2	6.0	6.4	5.2
160.	4.3	4.9	4.6	4.3	4.4	4.3	4.9	5.2	5.8	6.0	6.1	5.3
170.	4.3	4.8	4.6	4.4	4.6	4.3	5.0	5.4	6.5	5.6	5.8	5.2
180.	4.3	4.5	4.4	4.4	5.0	4.3	5.4	5.8	7.0	5.2	5.4	5.0
190.	4.3	4.4	4.3	4.5	5.4	4.3	5.7	6.1	7.2	4.6	5.0	4.9
200.	4.3	4.3	4.3	4.7	5.4	4.3	5.8	6.2	7.2	4.4	4.8	4.7
210.	4.3	4.3	4.3	4.7	5.3	4.3	6.1	6.1	6.9	4.5	4.7	4.7
220.	4.3	4.3	4.3	4.6	5.1	4.5	6.2	6.1	6.4	4.5	4.7	4.7
230.	4.3	4.3	4.3	4.6	5.1	4.5	6.1	6.0	6.3	4.4	4.7	4.7
240.	4.3	4.3	4.3	4.6	5.0	4.5	6.0	5.7	6.0	4.4	4.9	4.8
250.	4.3	4.3	4.3	4.8	5.0	4.4	5.9	5.8	5.8	4.3	4.9	4.8
260.	4.3	4.3	4.3	5.1	5.1	4.5	5.4	5.6	5.6	4.3	4.9	4.7
270.	4.3	4.5	4.3	5.5	5.3	4.9	5.1	5.4	5.5	4.3	4.7	4.6
280.	4.4	4.7	4.3	5.8	5.5	5.2	4.7	5.5	5.3	4.3	4.5	4.4
290.	4.5	4.7	4.3	6.0	5.7	5.4	4.7	5.5	5.3	4.3	4.4	4.3
300.	4.5	4.7	4.3	6.2	5.8	5.6	4.8	5.6	5.3	4.3	4.3	4.3
310.	4.5	4.5	4.4	6.4	6.1	5.6	4.7	5.8	5.4	4.3	4.3	4.3
320.	4.5	4.5	4.5	6.0	6.2	5.8	4.6	5.8	5.6	4.3	4.3	4.3
330.	4.5	4.5	4.5	6.1	6.4	5.5	4.5	5.9	6.0	4.3	4.3	4.3
340.	4.5	4.5	4.4	6.0	6.5	5.4	4.5	5.9	6.4	4.3	4.3	4.3
350.	4.7	4.7	4.7	5.7	6.4	5.3	4.4	5.7	6.7	4.3	4.6	4.3
360.	4.9	5.4	4.9	5.6	6.1	5.0	4.3	5.1	6.6	4.5	5.0	4.3
MAX	5.6	6.1	5.5	6.4	6.5	5.8	6.2	6.2	7.2	6.0	6.4	5.4
DEGR.	40	20	50	310	340	320	220	200	190	140	150	110

THE HIGHEST CONCENTRATION OF 7.20 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2030MitigatedBuildAM RUN: Route7Bridge2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:45: 4

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES) REC1 40	REC2 20	REC3 50	REC4 310	REC5 340	REC6 320	REC7 220	REC8 200	REC9 190	REC10 140	REC11 150	REC12 110
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	.5	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.2
3	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	.0	.6	.1	.0	.8	.8	.9	.8	.2	.3	1.0	.2
7	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
8	.0	.0	.0	.0	.0	.1	.5	.0	.0	.0	.0	.0
9	.2	.1	.0	.1	.0	.0	.0	.0	.0	.0	.1	.5
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.4	1.0	.0	.0	.1	.1	.0	.0	.1	.0
13	.1	.3	.3	.7	.9	.2	.1	.8	2.0	.3	.3	.1
14	.0	.1	.0	.0	.1	.1	.0	.0	.2	.1	.0	.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	.1	.2	.0	.0	.2	.1	.0	.0	.2	.5	.0	.0
17	.1	.5	.0	.0	.2	.1	.0	.1	.2	.5	.5	.1
18	.0	.0	.2	.1	.0	.0	.0	.1	.1	.0	.1	.0

JOB: Route7Bridge2030MitigatedBuildPM RUN: Route7Bridge2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:47: 5

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Fort Hill EB in	.0	418.0	200.0	418.0	200.	90.	AG	447.	8.3	.0	24.0		
2. Fort Hill EB LT	200.0	424.0	1220.8	424.0	1021.	90.	AG	272.	100.0	.0	12.0	1.24	51.9
3. Fort Hill EB R	200.0	412.0	227.1	412.0	27.	90.	AG	209.	100.0	.0	12.0	.13	1.4
4. Bridge EB out	480.0	410.0	848.0	410.0	368.	90.	AG	447.	8.3	.0	24.0		
5. Bridge WB in	848.0	446.0	648.0	446.0	200.	270.	AG	1442.	8.3	.0	48.0		
6. Bridge WB L	648.0	434.0	412.5	434.0	235.	270.	AG	498.	100.0	.0	24.0	.60	12.0
7. Bridge WB T	648.0	452.0	532.4	452.0	116.	270.	AG	249.	100.0	.0	12.0	.60	5.9
8. Bridge WB R	648.0	464.0	548.6	464.0	99.	270.	AG	249.	100.0	.0	12.0	.51	5.1
9. Fort Hill WB out	406.0	442.0	.0	442.0	406.	270.	AG	1442.	8.3	.0	24.0		
10. Route 7 NB in	456.0	.0	456.0	200.0	200.	360.	AG	1822.	8.3	.0	48.0		
11. Route 7 NB L	438.0	200.0	438.0	861.9	662.	360.	AG	289.	100.0	.0	12.0	1.23	33.6
12. Route 7 NB T	456.0	200.0	456.0	342.1	142.	360.	AG	469.	100.0	.0	24.0	.35	7.2
13. Route 7 NB R	474.0	200.0	474.0	5299.0	5099.	360.	AG	235.	100.0	.0	12.0	1.93	259.0
14. Route 7 NB out	454.0	470.0	454.0	836.0	366.	360.	AG	1822.	8.3	.0	24.0		
15. Route 7 SB in	430.0	836.0	430.0	636.0	200.	180.	AG	825.	8.3	.0	24.0		
16. Route 7 SB L	436.0	636.0	436.0	242.8	393.	180.	AG	269.	100.0	.0	12.0	1.05	20.0
17. Route 7 SB TR	424.0	636.0	424.0	410.8	225.	180.	AG	214.	100.0	.0	12.0	.85	11.4
18. Route 7 SB out	420.0	396.0	420.0	.0	396.	180.	AG	825.	8.3	.0	24.0		

JOB: Route7Bridge2030MitigatedBuildPM RUN: Route7Bridge2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:47: 5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Fort Hill EB LT	120	95	5.0	379	2044	127.94	3	3
3. Fort Hill EB R	120	73	5.0	68	1599	127.94	3	3
6. Bridge WB L	120	87	5.0	990	3813	127.94	3	3
7. Bridge WB T	120	87	5.0	243	1881	127.94	3	3
8. Bridge WB R	120	87	5.0	209	1900	127.94	3	3
11. Route 7 NB L	120	101	3.0	244	1711	127.94	3	3
12. Route 7 NB T	120	82	5.0	634	3538	127.94	3	3
13. Route 7 NB R	120	82	5.0	944	1900	127.94	3	3
16. Route 7 SB L	120	94	3.0	323	1769	127.94	3	3
17. Route 7 SB TR	120	75	5.0	502	1860	127.94	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	490.0	200.0	6.0
5. SE Corner	490.0	384.0	6.0
6. EB E Midblock	648.0	384.0	6.0
7. WB E Midblock	648.0	482.0	6.0
8. NE Corner	490.0	482.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	400.0	640.0	6.0
11. NW Corner	400.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: Route7Bridge2030MitigatedBuildPM RUN: Route7Bridge2030MitigatedBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.0	6.0	5.8	6.6	7.2	5.7	4.5	5.6	7.2	5.0	5.5	4.4
10.	5.2	6.9	6.6	5.7	6.4	5.4	4.3	5.0	6.5	5.4	6.2	4.5
20.	5.4	7.4	7.1	5.1	5.9	5.1	4.3	4.4	5.5	5.6	6.6	4.5
30.	5.5	7.2	7.0	4.9	5.9	5.0	4.3	4.3	5.0	5.7	6.6	4.5
40.	5.9	7.3	7.0	4.7	6.3	5.1	4.3	4.3	4.8	5.6	6.5	4.6
50.	5.8	7.3	6.7	4.6	6.4	5.2	4.3	4.3	4.7	5.6	6.4	4.9
60.	5.9	7.4	6.2	4.5	6.4	5.1	4.3	4.3	4.6	5.6	6.3	4.9
70.	5.9	7.3	5.8	4.4	6.1	5.2	4.3	4.3	4.5	5.5	6.2	4.8
80.	5.8	7.1	5.7	4.4	5.6	5.0	4.5	4.7	4.5	5.7	6.9	5.3
90.	5.5	6.4	5.3	4.3	5.1	4.7	4.7	5.4	4.5	5.8	7.6	5.9
100.	5.0	5.8	5.1	4.3	4.5	4.4	5.0	5.8	4.6	6.1	8.1	6.0
110.	4.8	5.6	4.9	4.3	4.3	4.3	5.1	6.5	4.6	6.1	8.2	6.0
120.	4.8	5.9	4.8	4.3	4.3	4.3	5.2	6.3	4.9	6.7	8.1	5.9
130.	4.6	6.2	4.8	4.3	4.3	4.3	5.2	6.1	5.2	7.0	7.9	5.7
140.	4.4	6.5	4.8	4.3	4.3	4.3	5.1	5.9	5.4	7.2	7.6	5.6
150.	4.3	6.4	4.8	4.3	4.3	4.3	5.1	5.7	5.7	7.3	7.8	5.3
160.	4.3	5.9	4.7	4.3	4.4	4.3	5.3	5.6	6.1	7.1	7.6	5.1
170.	4.3	5.5	4.6	4.4	4.8	4.3	5.5	5.9	7.0	6.7	6.9	5.1
180.	4.3	4.9	4.5	4.6	5.4	4.3	5.9	6.7	8.1	5.8	5.9	4.9
190.	4.3	4.4	4.3	4.7	6.3	4.3	6.2	7.4	8.8	5.1	5.4	4.9
200.	4.3	4.3	4.3	4.9	6.7	4.4	6.5	7.6	8.4	4.5	5.0	4.7
210.	4.3	4.3	4.3	4.9	6.7	4.4	7.2	7.6	8.0	4.5	5.1	4.8
220.	4.3	4.3	4.3	4.9	6.5	4.6	7.5	7.4	7.4	4.5	5.2	4.8
230.	4.3	4.3	4.3	4.8	6.2	4.9	7.7	7.3	7.1	4.4	5.2	4.8
240.	4.3	4.3	4.3	4.8	5.9	4.9	7.6	7.0	6.7	4.4	5.3	4.8
250.	4.3	4.3	4.3	4.9	5.7	4.9	7.4	7.0	6.4	4.3	5.3	4.8
260.	4.3	4.3	4.3	5.3	5.8	5.1	6.8	6.6	6.2	4.3	5.1	4.7
270.	4.3	4.6	4.3	5.6	6.1	5.8	6.1	6.5	6.2	4.3	4.8	4.5
280.	4.5	4.8	4.3	6.0	6.4	6.3	5.2	6.2	6.1	4.3	4.5	4.4
290.	4.6	4.9	4.3	6.3	6.7	6.6	4.9	6.1	6.0	4.3	4.3	4.3
300.	4.6	5.0	4.3	6.6	7.0	7.0	5.0	6.3	6.0	4.3	4.3	4.3
310.	4.6	5.0	4.4	7.0	7.3	7.0	4.9	6.5	6.2	4.3	4.3	4.3
320.	4.6	5.0	4.5	7.3	7.6	7.0	4.8	6.6	6.4	4.3	4.3	4.3
330.	4.6	4.9	4.5	7.7	7.7	6.6	4.7	6.5	6.9	4.3	4.3	4.3
340.	4.6	4.9	4.5	7.6	7.9	6.5	4.6	6.6	7.2	4.3	4.3	4.3
350.	4.8	5.3	4.9	7.4	7.7	6.1	4.5	6.4	7.5	4.5	4.6	4.3
360.	5.0	6.0	5.8	6.6	7.2	5.7	4.5	5.6	7.2	5.0	5.5	4.4
MAX	5.9	7.4	7.1	7.7	7.9	7.0	7.7	7.6	8.8	7.3	8.2	6.0
DEGR.	40	20	20	330	340	300	230	200	190	150	110	100

THE HIGHEST CONCENTRATION OF 8.80 PPM OCCURRED AT RECEPTOR REC9 .

JOB: Route7Bridge2030MitigatedBuildPM RUN: Route7Bridge2030MitigatedBuildPM

DATE : 4/15/11
TIME : 13:47: 5

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	20	20	330	340	300	230	200	190	150	110	100
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.5	.4	.2	.2	.4	.5	.4	.3	.2	.2	.6	.6
3	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.0	.0	.0	.0	.1	.1	.1	.0	.0	.0	.1	.0
5	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	*	.0	.4	.3	.1	.9	1.0	1.0	.9	.3	.3	1.5	.3
7	*	.0	.0	.0	.0	.0	.2	.5	.0	.0	.1	.1	.0
8	*	.0	.0	.0	.0	.0	.1	.7	.0	.0	.0	.0	.0
9	*	.2	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.4
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.2	.6	.6	.5	.5	.2	.2	.4	.5	.6	.5	.1
12	*	.0	.0	.4	1.2	.0	.0	.2	.3	.1	.0	.0	.0
13	*	.1	.4	.4	.8	.9	.2	.2	.9	2.1	.3	.3	.1
14	*	.1	.2	.1	.0	.2	.1	.0	.0	.5	.3	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.5	.5	.4	.4	.2	.1	.4	.5	.6	.4	.1
17	*	.1	.5	.1	.0	.2	.1	.0	.0	.2	.6	.4	.1
18	*	.0	.0	.2	.1	.0	.0	.0	.1	.1	.0	.0	.0

JOB: GristMillMain2010ExistingAM RUN: GristMillMain2010ExistingAM

DATE : 4/ 7/11
TIME : 15:16:42

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	1803.	11.2	.0	36.0		
2. Grist Mill EB L	200.0	424.0	862.4	424.0	662.	90.	AG	254.	100.0	.0	12.0	1.01	33.6
3. Grist Mill EB LT	200.0	412.0	234.8	412.0	35.	90.	AG	254.	100.0	.0	12.0	.74	1.8
4. Grist Mill EB R	200.0	400.0	298.2	400.0	98.	90.	AG	203.	100.0	.0	12.0	.52	5.0
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	1803.	11.2	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	123.	11.2	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	506.6	436.0	141.	270.	AG	423.	100.0	.0	12.0	1.35	7.2
8. Grist Mill WB TR	648.0	448.0	361.0	448.0	287.	270.	AG	423.	100.0	.0	12.0	1.28	14.6
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	123.	11.2	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	519.	11.2	.0	24.0		
11. Main NB L	438.0	200.0	438.0	278.5	78.	360.	AG	267.	100.0	.0	12.0	.89	4.0
12. Main NB TR	450.0	200.0	450.0	319.4	119.	360.	AG	258.	100.0	.0	12.0	.56	6.1
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	519.	11.2	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	1716.	11.2	.0	36.0		
15. Main SB L	436.0	636.0	436.0	625.5	10.	180.	AG	301.	100.0	.0	12.0	.06	.5
16. Main SB T	424.0	636.0	424.0	320.1	316.	180.	AG	301.	100.0	.0	12.0	1.00	16.0
17. Main SB R	412.0	636.0	412.0	470.2	166.	180.	AG	93.	100.0	.0	12.0	.91	8.4
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	1716.	11.2	.0	24.0		

JOB: GristMillMain2010ExistingAM RUN: GristMillMain2010ExistingAM

DATE : 4/ 7/11
TIME : 15:16:42

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	110	60	6.0	1329	3459	173.64	3	4
3. Grist Mill EB LT	110	60	6.0	100	354	173.64	3	4
4. Grist Mill EB R	110	48	6.0	374	1463	173.64	3	4
7. Grist Mill WB LT	110	100	5.0	35	960	173.64	3	3
8. Grist Mill WB TR	110	100	5.0	88	2558	173.64	3	3
11. Main NB L	110	63	4.0	161	485	173.64	3	4
12. Main NB TR	110	61	6.0	358	1718	173.64	3	4
15. Main SB L	110	71	6.0	27	1563	173.64	3	4
16. Main SB T	110	71	6.0	580	2068	173.64	3	4
17. Main SB R	110	22	6.0	1109	1668	173.64	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2010ExistingAM RUN: GristMillMain2010ExistingAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.1	5.7	5.3	5.7	5.9	5.8	4.3	4.7	4.5	4.7	5.0	4.3
10.	5.3	6.1	5.7	5.1	5.8	5.5	4.3	4.4	4.4	4.9	5.4	4.3
20.	5.5	6.2	5.9	5.0	5.7	5.4	4.3	4.3	4.3	5.1	5.5	4.3
30.	5.7	6.0	6.1	4.9	6.1	5.3	4.3	4.3	4.3	5.1	5.4	4.4
40.	5.9	6.1	6.2	4.7	6.2	5.3	4.3	4.3	4.3	5.1	5.4	4.4
50.	5.9	6.3	5.9	4.5	6.5	5.4	4.3	4.3	4.3	5.0	5.2	4.5
60.	6.0	6.6	5.7	4.5	6.8	5.4	4.3	4.3	4.3	5.0	5.2	4.4
70.	6.3	6.8	5.6	4.3	6.6	5.4	4.3	4.4	4.3	4.9	5.3	4.5
80.	6.0	6.8	5.3	4.3	6.0	5.2	4.3	5.0	4.3	5.0	5.9	5.0
90.	5.5	6.3	5.3	4.3	5.3	4.8	4.6	6.1	4.3	5.2	6.8	5.4
100.	4.9	5.5	5.1	4.3	4.6	4.5	4.8	7.1	4.3	5.2	7.6	5.5
110.	4.6	5.3	4.9	4.3	4.3	4.3	5.2	7.6	4.3	5.4	7.6	5.7
120.	4.6	5.4	4.9	4.3	4.3	4.3	5.3	7.4	4.5	5.7	7.3	5.3
130.	4.5	5.5	4.9	4.3	4.3	4.3	5.2	7.0	4.7	5.8	6.9	5.3
140.	4.4	5.6	5.0	4.3	4.3	4.3	5.1	6.6	4.8	6.1	6.8	5.2
150.	4.4	5.8	5.0	4.3	4.3	4.3	5.2	6.3	4.9	6.0	6.8	5.2
160.	4.3	5.7	5.0	4.3	4.4	4.3	5.4	6.2	4.9	6.1	6.9	5.2
170.	4.3	5.2	4.9	4.4	4.7	4.3	5.6	6.3	5.2	5.8	6.9	5.1
180.	4.3	4.9	4.6	4.5	4.9	4.3	6.0	6.5	5.4	5.4	6.6	4.8
190.	4.3	4.5	4.4	4.7	5.3	4.3	6.5	6.7	5.5	4.9	6.1	4.8
200.	4.3	4.4	4.3	4.9	5.1	4.3	6.9	6.7	5.5	4.5	5.9	4.7
210.	4.3	4.3	4.3	4.9	5.2	4.4	7.1	6.6	5.3	4.5	5.8	4.7
220.	4.3	4.3	4.3	4.9	5.1	4.5	7.5	6.5	5.3	4.5	5.8	4.7
230.	4.3	4.3	4.3	4.9	5.1	4.6	7.7	6.6	5.2	4.4	6.0	4.8
240.	4.3	4.3	4.3	4.9	5.2	4.6	7.9	6.7	5.2	4.4	6.0	4.8
250.	4.3	4.3	4.3	5.0	5.0	4.6	7.9	6.8	5.2	4.3	5.6	4.8
260.	4.5	4.5	4.3	5.1	5.3	4.7	7.4	6.5	5.1	4.3	5.4	4.5
270.	4.7	4.7	4.3	5.4	5.5	5.6	6.4	5.9	5.0	4.3	4.7	4.4
280.	4.9	5.1	4.3	5.7	5.6	6.2	5.2	5.4	5.0	4.3	4.3	4.3
290.	5.0	4.9	4.3	5.8	5.5	6.8	4.7	5.1	4.9	4.3	4.3	4.3
300.	5.0	4.8	4.4	6.0	5.7	6.9	4.4	5.0	4.9	4.3	4.3	4.3
310.	5.0	4.8	4.4	6.2	5.8	6.8	4.5	5.0	4.9	4.3	4.3	4.3
320.	4.9	4.8	4.6	6.2	5.9	6.8	4.4	5.1	4.9	4.3	4.3	4.3
330.	4.9	4.9	4.5	6.4	6.0	6.5	4.4	5.1	4.9	4.3	4.3	4.3
340.	4.8	5.0	4.4	6.4	6.1	6.2	4.3	5.0	4.9	4.3	4.3	4.3
350.	5.1	5.4	4.7	6.1	6.1	6.0	4.3	4.9	4.7	4.4	4.6	4.3
360.	5.1	5.7	5.3	5.7	5.9	5.8	4.3	4.7	4.5	4.7	5.0	4.3
MAX	6.3	6.8	6.2	6.4	6.8	6.9	7.9	7.6	5.5	6.1	7.6	5.7
DEGR.	70	70	40	340	60	300	240	110	190	140	110	110

THE HIGHEST CONCENTRATION OF 7.90 PPM OCCURRED AT RECEPTOR REC7 .

JOB: GristMillMain2010ExistingAM RUN: GristMillMain2010ExistingAM

DATE : 4/ 7/11
TIME : 15:16:42

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES) REC1 70	REC2 70	REC3 40	REC4 340	REC5 60	REC6 300	REC7 240	REC8 110	REC9 190	REC10 140	REC11 110	REC12 110
1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	.6	.5	.2	.1	.6	.6	.5	.5	.1	.2	.5	.6
3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
5	.1	.4	.1	.0	.7	.6	.4	.5	.0	.1	.4	.1
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.1	.3	.1	.0	.6	.6	1.0	.8	.0	.2	.3	.1
8	.3	.5	.2	.1	.6	.6	1.5	1.5	.2	.2	1.5	.2
9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
10	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	.0	.0	.4	.4	.0	.0	.0	.0	.0	.0	.0	.0
12	.0	.0	.3	.8	.0	.0	.0	.0	.1	.0	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	.2	.5	.0	.3	.0	.2	.1	.0	.4	.7	.6	.1
17	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
18	.0	.3	.6	.4	.0	.0	.1	.0	.2	.0	.0	.1

JOB: GristMillMain2010ExistingPM RUN: GristMillMain2010ExistingPM

DATE : 4/ 7/11
TIME : 16:17:25

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	1642.	11.2	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3420.7	424.0	3221.	90.	AG	265.	100.0	.0	12.0	1.22	163.6
3. Grist Mill EB LT	200.0	412.0	200.3	412.0	0.	90.	AG	265.	100.0	.0	12.0	.01	.0
4. Grist Mill EB R	200.0	400.0	235.4	400.0	35.	90.	AG	182.	100.0	.0	12.0	.21	1.8
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	1642.	11.2	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	32.	11.2	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	507.3	436.0	141.	270.	AG	428.	100.0	.0	12.0	1.83	7.1
8. Grist Mill WB TR	648.0	448.0	641.9	448.0	6.	270.	AG	428.	100.0	.0	12.0	.53	.3
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	32.	11.2	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	1041.	11.2	.0	24.0		
11. Main NB L	438.0	200.0	438.0	1058.4	858.	360.	AG	247.	100.0	.0	12.0	1.27	43.6
12. Main NB TR	450.0	200.0	450.0	466.7	267.	360.	AG	238.	100.0	.0	12.0	.96	13.5
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	1041.	11.2	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	1798.	11.2	.0	36.0		
15. Main SB L	436.0	636.0	436.0	633.7	2.	180.	AG	321.	100.0	.0	12.0	.02	.1
16. Main SB T	424.0	636.0	424.0	65.0	571.	180.	AG	321.	100.0	.0	12.0	1.08	29.0
17. Main SB R	412.0	636.0	412.0	-1441.3	2077.	180.	AG	121.	100.0	.0	12.0	1.15	105.5
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	1798.	11.2	.0	24.0		

JOB: GristMillMain2010ExistingPM RUN: GristMillMain2010ExistingPM

DATE : 4/ 7/11
TIME : 16:17:25

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	100	57	6.0	1476	3465	173.64	3	4
3. Grist Mill EB LT	100	57	6.0	1	354	173.64	3	4
4. Grist Mill EB R	100	39	6.0	166	1492	173.64	3	4
7. Grist Mill WB LT	100	92	5.0	22	1232	173.64	3	3
8. Grist Mill WB TR	100	92	5.0	10	1939	173.64	3	3
11. Main NB L	100	53	4.0	326	629	173.64	3	4
12. Main NB TR	100	51	6.0	715	1814	173.64	3	4
15. Main SB L	100	69	6.0	6	1592	173.64	3	4
16. Main SB T	100	69	6.0	446	1801	173.64	3	4
17. Main SB R	100	26	6.0	1346	1775	173.64	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2010ExistingPM RUN: GristMillMain2010ExistingPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.0	5.9	6.1	6.4	6.4	5.7	4.3	5.1	4.9	5.0	5.4	4.3
10.	4.9	6.5	6.9	5.3	5.7	5.5	4.3	4.5	4.5	5.4	6.1	4.3
20.	5.2	6.7	7.3	4.9	5.5	5.4	4.3	4.3	4.3	5.7	6.2	4.4
30.	5.4	6.7	7.5	4.8	5.5	5.3	4.3	4.3	4.3	5.7	6.2	4.5
40.	5.6	6.7	7.2	4.7	5.6	5.3	4.3	4.3	4.3	5.6	6.0	4.6
50.	5.7	6.9	7.0	4.6	5.9	5.3	4.3	4.3	4.3	5.5	5.9	4.7
60.	5.7	7.0	6.7	4.6	6.1	5.5	4.3	4.3	4.3	5.5	5.8	4.7
70.	5.9	7.4	6.6	4.5	6.2	5.6	4.3	4.3	4.3	5.4	5.8	4.8
80.	5.9	7.7	6.5	4.5	6.0	5.4	4.5	4.7	4.3	5.5	6.3	5.2
90.	5.7	7.4	6.3	4.4	5.5	5.2	4.9	5.4	4.4	5.7	6.9	5.5
100.	5.2	6.7	6.1	4.3	4.8	4.7	5.2	6.0	4.5	5.8	7.3	5.7
110.	4.9	6.4	5.9	4.3	4.4	4.4	5.2	6.1	4.5	5.9	7.2	5.7
120.	4.9	6.5	5.9	4.3	4.3	4.3	5.2	5.9	4.6	6.3	6.7	5.4
130.	4.8	6.6	6.0	4.3	4.3	4.3	5.2	5.7	4.7	6.4	6.6	5.4
140.	4.7	6.7	6.2	4.3	4.3	4.3	5.2	5.5	4.7	6.5	6.9	5.4
150.	4.6	6.9	6.3	4.3	4.3	4.3	5.2	5.2	4.8	6.7	7.0	5.1
160.	4.4	7.0	6.1	4.3	4.4	4.3	5.3	5.0	4.7	6.9	7.1	5.0
170.	4.4	6.6	5.8	4.5	4.9	4.3	5.5	5.5	5.2	6.5	7.1	4.8
180.	4.3	5.9	5.3	4.9	5.9	4.3	5.8	6.1	5.9	6.0	6.3	4.8
190.	4.3	4.9	4.7	5.3	6.6	4.4	6.1	6.8	6.4	5.1	5.4	4.7
200.	4.3	4.5	4.4	5.7	7.0	4.4	6.4	7.0	6.4	4.6	5.0	4.6
210.	4.3	4.3	4.3	5.8	7.0	4.7	6.6	6.9	6.2	4.4	4.7	4.7
220.	4.3	4.3	4.3	5.8	6.9	4.8	6.9	6.9	6.0	4.5	4.8	4.7
230.	4.3	4.3	4.3	5.8	6.6	4.9	6.9	6.6	6.0	4.4	4.8	4.7
240.	4.3	4.3	4.3	5.7	6.5	4.9	6.8	6.3	5.6	4.4	4.9	4.7
250.	4.3	4.3	4.3	5.9	6.5	4.9	6.7	6.4	5.6	4.3	4.8	4.6
260.	4.4	4.4	4.3	5.9	6.6	5.1	6.2	6.4	5.6	4.3	4.7	4.5
270.	4.6	4.5	4.3	6.1	6.8	5.7	5.6	6.1	5.5	4.3	4.6	4.4
280.	4.9	4.7	4.3	6.2	6.9	6.1	5.0	5.8	5.4	4.3	4.3	4.3
290.	5.0	4.8	4.3	6.4	6.8	6.4	4.8	5.6	5.4	4.3	4.3	4.3
300.	5.0	4.8	4.4	6.6	6.7	6.6	4.6	5.6	5.4	4.3	4.3	4.3
310.	4.9	4.8	4.4	6.8	6.7	6.4	4.8	5.8	5.5	4.3	4.3	4.3
320.	4.9	4.8	4.5	7.0	6.9	6.5	4.7	5.9	5.7	4.3	4.3	4.3
330.	4.8	4.7	4.4	7.0	7.0	6.3	4.6	5.9	5.6	4.3	4.3	4.3
340.	4.8	4.7	4.4	7.2	7.3	5.9	4.4	5.9	5.6	4.3	4.3	4.3
350.	4.8	5.1	5.0	7.1	6.9	5.8	4.3	5.6	5.4	4.6	4.7	4.3
360.	5.0	5.9	6.1	6.4	6.4	5.7	4.3	5.1	4.9	5.0	5.4	4.3
MAX	5.9	7.7	7.5	7.2	7.3	6.6	6.9	7.0	6.4	6.9	7.3	5.7
DEGR.	70	80	30	340	340	300	220	200	190	160	100	100

THE HIGHEST CONCENTRATION OF 7.70 PPM OCCURRED AT RECEPTOR REC2 .

JOB: GristMillMain2010ExistingPM RUN: GristMillMain2010ExistingPM

DATE : 4/ 7/11
TIME : 16:17:25

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	*	CO/LINK (PPM) ANGLE (DEGREES)											
	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
LINK #	*	70	80	30	340	340	300	220	200	190	160	100	100
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.6	.7	.2	.1	.4	.6	.5	.4	.1	.1	.7	.7
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.1	.4	.1	.0	.1	.6	.4	.1	.0	.1	.3	.1
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.1	.3	.1	.0	.0	.6	.9	.0	.0	.1	.4	.1
8	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.4	.5	.7	.7	.1	.1	.5	.5	.5	.4	.1
12	*	.1	.3	.4	.9	.7	.0	.1	.6	.2	.1	.2	.1
13	*	.0	.0	.0	.0	.2	.1	.0	.0	.4	.2	.1	.0
14	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.2	.6	.8	.6	.6	.2	.2	.5	.5	.9	.6	.2
17	*	.1	.3	.4	.2	.2	.1	.1	.2	.2	.5	.3	.1
18	*	.0	.4	.7	.4	.0	.0	.1	.4	.2	.1	.0	.0

JOB: GristMillMain2030NoBuildAM RUN: GristMillMain2030NoBuildAM

DATE : 4/15/11
TIME : 13:50: 8

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	2164.	8.3	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3595.4	424.0	3395.	90.	AG	187.	100.0	.0	12.0	1.21	172.5
3. Grist Mill EB LT	200.0	412.0	260.0	412.0	60.	90.	AG	187.	100.0	.0	12.0	.89	3.1
4. Grist Mill EB R	200.0	400.0	317.8	400.0	118.	90.	AG	150.	100.0	.0	12.0	.63	6.0
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	2164.	8.3	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	148.	8.3	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	-310.6	436.0	959.	270.	AG	312.	100.0	.0	12.0	4.12	48.7
8. Grist Mill WB TR	648.0	448.0	623.6	448.0	24.	270.	AG	312.	100.0	.0	12.0	.59	1.2
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	148.	8.3	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	623.	8.3	.0	24.0		
11. Main NB L	438.0	200.0	438.0	755.8	556.	360.	AG	197.	100.0	.0	12.0	1.29	28.2
12. Main NB TR	450.0	200.0	450.0	343.4	143.	360.	AG	190.	100.0	.0	12.0	.67	7.3
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	623.	8.3	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	2059.	8.3	.0	36.0		
15. Main SB L	436.0	636.0	436.0	623.6	12.	180.	AG	222.	100.0	.0	12.0	.07	.6
16. Main SB T	424.0	636.0	424.0	-869.0	1505.	180.	AG	222.	100.0	.0	12.0	1.20	76.5
17. Main SB R	412.0	636.0	412.0	-845.9	1482.	180.	AG	69.	100.0	.0	12.0	1.10	75.3
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	2059.	8.3	.0	24.0		

JOB: GristMillMain2030NoBuildAM RUN: GristMillMain2030NoBuildAM

DATE : 4/15/11
TIME : 13:50: 8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	110	60	6.0	1595	3459	127.94	3	4
3. Grist Mill EB LT	110	60	6.0	120	354	127.94	3	4
4. Grist Mill EB R	110	48	6.0	449	1463	127.94	3	4
7. Grist Mill WB LT	110	100	5.0	107	960	127.94	3	3
8. Grist Mill WB TR	110	100	5.0	41	2558	127.94	3	3
11. Main NB L	110	63	4.0	193	405	127.94	3	4
12. Main NB TR	110	61	6.0	430	1718	127.94	3	4
15. Main SB L	110	71	6.0	32	1563	127.94	3	4
16. Main SB T	110	71	6.0	696	2068	127.94	3	4
17. Main SB R	110	22	6.0	1331	1668	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030NoBuildAM RUN: GristMillMain2030NoBuild

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
10.	5.5	6.1	6.2	5.2	5.5	5.3	4.3	4.5	4.3	4.9	5.5	4.3
20.	5.5	6.3	6.6	4.7	5.5	5.1	4.3	4.3	4.3	5.2	5.6	4.3
30.	5.9	6.2	6.6	4.6	5.5	5.1	4.3	4.3	4.3	5.3	5.5	4.4
40.	6.2	6.2	6.4	4.6	5.7	5.2	4.3	4.3	4.3	5.3	5.5	4.5
50.	6.1	6.2	6.3	4.5	5.7	5.2	4.3	4.3	4.3	5.2	5.4	4.6
60.	6.2	6.5	6.1	4.5	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.5
70.	6.2	6.6	6.1	4.4	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.6
80.	6.0	6.8	5.8	4.4	5.6	5.2	4.5	4.7	4.3	5.3	5.8	5.0
90.	5.6	6.4	5.6	4.4	5.2	5.0	4.8	5.2	4.4	5.3	6.3	5.5
100.	5.1	5.9	5.6	4.3	4.7	4.6	5.0	5.6	4.4	5.4	6.6	5.9
110.	4.7	5.7	5.5	4.3	4.3	4.3	5.0	5.8	4.5	5.5	6.7	6.0
120.	4.7	5.8	5.5	4.3	4.3	4.3	5.1	5.8	4.5	5.7	6.6	6.1
130.	4.5	5.9	5.5	4.3	4.3	4.3	5.0	5.7	4.5	5.6	6.4	6.1
140.	4.5	6.0	5.6	4.3	4.3	4.3	5.0	5.7	4.6	5.9	6.6	5.9
150.	4.6	6.1	5.7	4.3	4.3	4.3	4.9	5.5	4.6	6.0	6.7	5.9
160.	4.4	6.3	5.9	4.3	4.4	4.3	5.1	5.5	4.7	6.2	6.8	5.6
170.	4.4	6.1	5.8	4.4	4.8	4.3	5.4	5.9	4.9	6.1	6.9	5.6
180.	4.3	5.5	5.3	4.9	5.5	4.3	5.6	6.4	5.6	5.6	6.4	5.4
190.	4.3	4.8	4.7	5.3	6.0	4.4	6.0	6.7	5.9	5.1	5.7	5.2
200.	4.3	4.4	4.3	5.4	6.0	4.4	6.3	6.6	5.8	4.7	5.4	5.2
210.	4.3	4.3	4.3	5.4	5.9	4.6	6.6	6.5	5.7	4.6	5.2	5.3
220.	4.3	4.3	4.3	5.4	5.7	4.5	6.8	6.4	5.7	4.7	5.3	5.4
230.	4.3	4.3	4.3	5.3	5.5	4.7	6.7	6.1	5.6	4.6	5.4	5.4
240.	4.3	4.3	4.3	5.2	5.5	4.7	6.8	6.3	5.6	4.6	5.5	5.5
250.	4.3	4.3	4.3	5.2	5.4	4.7	6.5	6.6	5.4	4.5	5.9	5.5
260.	4.5	4.6	4.3	5.4	5.9	5.0	6.1	6.5	5.3	4.4	5.6	5.3
270.	4.9	5.1	4.3	5.5	6.1	5.6	5.5	6.0	5.1	4.3	5.1	4.9
280.	5.4	5.4	4.4	5.7	6.3	5.9	4.9	5.5	5.2	4.3	4.6	4.5
290.	5.5	5.5	4.4	5.9	6.2	6.0	4.6	5.2	5.0	4.3	4.4	4.4
300.	5.5	5.2	4.6	6.3	6.2	6.1	4.5	5.2	5.1	4.3	4.3	4.3
310.	5.4	5.1	4.6	6.4	6.1	5.9	4.6	5.2	5.2	4.3	4.3	4.3
320.	5.4	5.1	4.8	6.6	6.2	6.1	4.5	5.3	5.2	4.3	4.3	4.3
330.	5.2	5.0	4.7	6.6	6.1	5.9	4.4	5.4	5.2	4.3	4.3	4.3
340.	5.2	5.0	4.6	6.5	6.3	5.7	4.3	5.3	5.0	4.3	4.3	4.3
350.	5.2	5.4	5.0	6.3	6.2	5.6	4.3	5.1	4.8	4.4	4.7	4.3
360.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
MAX	6.2	6.8	6.6	6.6	6.3	6.1	6.8	6.7	5.9	6.2	6.9	6.1
DEGR.	40	80	20	320	280	300	220	190	190	160	170	120

THE HIGHEST CONCENTRATION OF 6.90 PPM OCCURRED AT RECEPTOR REC11.

JOB: GristMillMain2030NoBuildAM RUN: GristMillMain2030NoBuild

DATE : 4/15/11
TIME : 13:50: 8

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	80	20	320	280	300	220	190	190	160	170	120
1	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
2	*	.3	.5	.1	.1	.3	.4	.3	.3	.1	.1	.3	.4
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
4	*	.4	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
5	*	.0	.4	.1	.0	.0	.6	.4	.2	.0	.1	.0	.0
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.5	.3	.2	.2	.6	.6	.7	.6	.2	.2	.6	.8
8	*	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.4	.1	.1	.3	.4	.4	.3	.1
12	*	.0	.0	.2	.6	.0	.0	.1	.2	.1	.0	.1	.1
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0
14	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.6	.4	.3	.1	.1	.4	.4	.6	.6	.1
17	*	.0	.2	.2	.1	.1	.0	.0	.1	.1	.3	.3	.0
18	*	.0	.4	.5	.4	.1	.0	.1	.3	.1	.1	.4	.1

JOB: GristMillMain2030NoBuildPM RUN: GristMillMain2030NBPM

DATE : 4/15/11
TIME : 13:52:44

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	1635.	8.3	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3368.7	424.0	3169.	90.	AG	196.	100.0	.0	12.0	1.21	161.0
3. Grist Mill EB LT	200.0	412.0	200.3	412.0	0.	90.	AG	196.	100.0	.0	12.0	.01	.0
4. Grist Mill EB R	200.0	400.0	235.4	400.0	35.	90.	AG	134.	100.0	.0	12.0	.21	1.8
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	1635.	8.3	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	32.	8.3	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	473.0	436.0	175.	270.	AG	316.	100.0	.0	12.0	2.44	8.9
8. Grist Mill WB TR	648.0	448.0	642.8	448.0	5.	270.	AG	316.	100.0	.0	12.0	.40	.3
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	32.	8.3	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	1041.	8.3	.0	24.0		
11. Main NB L	438.0	200.0	438.0	1651.7	1452.	360.	AG	182.	100.0	.0	12.0	1.65	73.7
12. Main NB TR	450.0	200.0	450.0	615.9	416.	360.	AG	175.	100.0	.0	12.0	1.02	21.1
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	1041.	8.3	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	1798.	8.3	.0	36.0		
15. Main SB L	436.0	636.0	436.0	633.7	2.	180.	AG	237.	100.0	.0	12.0	.02	.1
16. Main SB T	424.0	636.0	424.0	423.8	212.	180.	AG	237.	100.0	.0	12.0	.94	10.8
17. Main SB R	412.0	636.0	412.0	-2145.7	2782.	180.	AG	89.	100.0	.0	12.0	1.22	141.3
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	1798.	8.3	.0	24.0		

JOB: GristMillMain2030NoBuildPM RUN: GristMillMain2030NBPM

DATE : 4/15/11
TIME : 13:52:44

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	100	57	6.0	1469	3459	127.94	3	4
3. Grist Mill EB LT	100	57	6.0	1	354	127.94	3	4
4. Grist Mill EB R	100	39	6.0	166	1463	127.94	3	4
7. Grist Mill WB LT	100	92	5.0	22	960	127.94	3	3
8. Grist Mill WB TR	100	92	5.0	10	2558	127.94	3	3
11. Main NB L	100	53	4.0	326	485	127.94	3	4
12. Main NB TR	100	51	6.0	715	1718	127.94	3	4
15. Main SB L	100	69	6.0	6	1563	127.94	3	4
16. Main SB T	100	69	6.0	446	2068	127.94	3	4
17. Main SB R	100	26	6.0	1346	1668	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030NoBuildPM RUN: GristMillMain2030NBPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.8	5.7	5.4	5.8	6.2	5.1	4.3	5.2	4.9	4.9	5.2	4.3
10.	5.0	6.0	5.9	5.0	5.5	5.0	4.3	4.6	4.5	5.3	5.7	4.4
20.	4.9	6.1	6.2	4.7	5.4	4.9	4.3	4.3	4.3	5.4	6.0	4.4
30.	5.2	6.1	6.1	4.6	5.4	5.1	4.3	4.3	4.3	5.4	6.0	4.5
40.	5.2	6.0	6.0	4.6	5.6	5.1	4.3	4.3	4.3	5.3	5.9	4.5
50.	5.4	5.9	5.7	4.5	5.6	5.1	4.3	4.3	4.3	5.2	5.8	4.7
60.	5.3	6.0	5.6	4.5	5.6	5.1	4.3	4.3	4.3	5.1	5.6	4.6
70.	5.4	6.2	5.5	4.5	5.7	5.2	4.3	4.3	4.3	5.1	5.5	4.7
80.	5.4	6.4	5.4	4.4	5.5	5.1	4.5	4.6	4.3	5.1	6.0	4.9
90.	5.4	6.1	5.3	4.4	5.1	4.9	4.8	5.1	4.4	5.3	6.5	5.3
100.	4.8	5.7	5.2	4.3	4.6	4.6	5.0	5.6	4.4	5.3	6.7	5.3
110.	4.6	5.4	5.0	4.3	4.3	4.3	5.0	5.8	4.5	5.5	6.5	5.3
120.	4.7	5.4	5.1	4.3	4.3	4.3	5.0	5.7	4.5	5.9	6.2	5.1
130.	4.5	5.4	5.1	4.3	4.3	4.3	5.0	5.7	4.5	5.9	6.1	5.1
140.	4.5	5.7	5.3	4.3	4.3	4.3	4.9	5.6	4.6	6.3	5.9	4.9
150.	4.5	5.6	5.3	4.3	4.3	4.3	5.0	5.5	4.6	6.3	5.8	4.9
160.	4.4	5.6	5.2	4.3	4.4	4.3	5.1	5.3	4.7	6.5	5.9	4.7
170.	4.4	5.6	5.2	4.5	4.8	4.3	5.3	5.5	4.9	6.0	5.7	4.8
180.	4.3	5.0	4.8	4.7	5.3	4.3	5.5	5.8	5.6	5.4	5.4	4.7
190.	4.3	4.6	4.6	5.0	5.7	4.4	5.7	6.0	6.0	4.9	5.0	4.6
200.	4.3	4.3	4.3	5.1	5.8	4.4	5.8	6.2	6.2	4.5	4.7	4.6
210.	4.3	4.3	4.3	5.1	5.8	4.5	5.9	5.8	6.0	4.4	4.6	4.6
220.	4.3	4.3	4.3	5.0	5.7	4.5	6.1	5.6	5.8	4.4	4.6	4.6
230.	4.3	4.3	4.3	5.0	5.6	4.7	6.2	5.9	5.6	4.4	4.7	4.6
240.	4.3	4.3	4.3	4.9	5.6	4.6	6.0	5.8	5.5	4.4	4.7	4.6
250.	4.3	4.3	4.3	5.0	5.5	4.6	5.9	5.8	5.3	4.3	4.7	4.5
260.	4.4	4.4	4.3	5.1	5.5	4.8	5.7	5.9	5.2	4.3	4.6	4.5
270.	4.5	4.5	4.3	5.2	5.7	5.2	5.2	5.9	5.1	4.3	4.5	4.4
280.	4.7	4.6	4.3	5.3	5.7	5.6	4.9	5.6	5.1	4.3	4.3	4.3
290.	4.8	4.7	4.3	5.4	5.8	5.9	4.7	5.6	5.1	4.3	4.3	4.3
300.	4.8	4.7	4.4	5.6	5.8	6.0	4.7	5.7	5.2	4.3	4.3	4.3
310.	4.8	4.7	4.4	5.7	5.9	6.0	4.7	5.7	5.2	4.3	4.3	4.3
320.	4.7	4.6	4.4	5.8	6.1	6.1	4.6	5.8	5.2	4.3	4.3	4.3
330.	4.7	4.6	4.4	5.9	6.4	5.9	4.5	5.9	5.3	4.3	4.3	4.3
340.	4.7	4.6	4.4	6.1	6.4	5.4	4.4	6.0	5.3	4.3	4.3	4.3
350.	4.7	4.9	4.8	6.0	6.6	5.3	4.4	5.6	5.2	4.5	4.7	4.3
360.	4.8	5.7	5.4	5.8	6.2	5.1	4.3	5.2	4.9	4.9	5.2	4.3
MAX	5.4	6.4	6.2	6.1	6.6	6.1	6.2	6.2	6.2	6.5	6.7	5.3
DEGR.	50	80	20	340	350	320	230	200	200	160	100	90

THE HIGHEST CONCENTRATION OF 6.70 PPM OCCURRED AT RECEPTOR REC11.

JOB: GristMillMain2030NoBuildPM RUN: GristMillMain2030NBPM

DATE : 4/15/11
TIME : 13:52:44

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	50	80	20	340	350	320	230	200	200	160	100	90
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.4	.5	.1	.1	.3	.4	.4	.3	.1	.1	.5	.4
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.0	.3	.1	.0	.1	.4	.3	.1	.0	.1	.2	.1
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.0	.3	.1	.0	.1	.5	.7	.1	.0	.1	.4	.1
8	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.5	.1	.1	.4	.4	.4	.3	.1
12	*	.1	.2	.3	.7	.6	.1	.1	.5	.5	.3	.2	.1
13	*	.1	.0	.0	.0	.2	.1	.0	.0	.3	.1	.1	.0
14	*	.0	.0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.0	.1	.1	.3	.1	.0	.0	.3	.6	.5	.1
17	*	.0	.2	.3	.1	.1	.0	.1	.2	.2	.4	.2	.1
18	*	.0	.3	.5	.3	.0	.0	.1	.3	.1	.1	.0	.0

JOB: GristMillMain2030BuildAM RUN: GristMillMain2030BuildAM

DATE : 4/15/11
TIME : 13:54:38

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	2164.	8.3	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3595.4	424.0	3395.	90.	AG	187.	100.0	.0	12.0	1.21	172.5
3. Grist Mill EB LT	200.0	412.0	260.0	412.0	60.	90.	AG	187.	100.0	.0	12.0	.89	3.1
4. Grist Mill EB R	200.0	400.0	317.8	400.0	118.	90.	AG	150.	100.0	.0	12.0	.63	6.0
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	2164.	8.3	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	148.	8.3	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	-310.6	436.0	959.	270.	AG	312.	100.0	.0	12.0	4.12	48.7
8. Grist Mill WB TR	648.0	448.0	623.6	448.0	24.	270.	AG	312.	100.0	.0	12.0	.59	1.2
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	148.	8.3	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	623.	8.3	.0	24.0		
11. Main NB L	438.0	200.0	438.0	755.8	556.	360.	AG	197.	100.0	.0	12.0	1.29	28.2
12. Main NB TR	450.0	200.0	450.0	343.4	143.	360.	AG	190.	100.0	.0	12.0	.67	7.3
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	623.	8.3	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	2059.	8.3	.0	36.0		
15. Main SB L	436.0	636.0	436.0	623.6	12.	180.	AG	222.	100.0	.0	12.0	.07	.6
16. Main SB T	424.0	636.0	424.0	-869.0	1505.	180.	AG	222.	100.0	.0	12.0	1.20	76.5
17. Main SB R	412.0	636.0	412.0	-845.9	1482.	180.	AG	69.	100.0	.0	12.0	1.10	75.3
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	2059.	8.3	.0	24.0		

JOB: GristMillMain2030BuildAM RUN: GristMillMain2030BuildAM

DATE : 4/15/11
TIME : 13:54:38

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	110	60	6.0	1595	3459	127.94	3	4
3. Grist Mill EB LT	110	60	6.0	120	354	127.94	3	4
4. Grist Mill EB R	110	48	6.0	449	1463	127.94	3	4
7. Grist Mill WB LT	110	100	5.0	107	960	127.94	3	3
8. Grist Mill WB TR	110	100	5.0	41	2558	127.94	3	3
11. Main NB L	110	63	4.0	193	405	127.94	3	4
12. Main NB TR	110	61	6.0	430	1718	127.94	3	4
15. Main SB L	110	71	6.0	32	1563	127.94	3	4
16. Main SB T	110	71	6.0	696	2068	127.94	3	4
17. Main SB R	110	22	6.0	1331	1668	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030BuildAM RUN: GristMillMain2030BuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
10.	5.5	6.1	6.2	5.2	5.5	5.3	4.3	4.5	4.3	4.9	5.5	4.3
20.	5.5	6.3	6.6	4.7	5.5	5.1	4.3	4.3	4.3	5.2	5.6	4.3
30.	5.9	6.2	6.6	4.6	5.5	5.1	4.3	4.3	4.3	5.3	5.5	4.4
40.	6.2	6.2	6.4	4.6	5.7	5.2	4.3	4.3	4.3	5.3	5.5	4.5
50.	6.1	6.2	6.3	4.5	5.7	5.2	4.3	4.3	4.3	5.2	5.4	4.6
60.	6.2	6.5	6.1	4.5	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.5
70.	6.2	6.6	6.1	4.4	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.6
80.	6.0	6.8	5.8	4.4	5.6	5.2	4.5	4.7	4.3	5.3	5.8	5.0
90.	5.6	6.4	5.6	4.4	5.2	5.0	4.8	5.2	4.4	5.3	6.3	5.5
100.	5.1	5.9	5.6	4.3	4.7	4.6	5.0	5.6	4.4	5.4	6.6	5.9
110.	4.7	5.7	5.5	4.3	4.3	4.3	5.0	5.8	4.5	5.5	6.7	6.0
120.	4.7	5.8	5.5	4.3	4.3	4.3	5.1	5.8	4.5	5.7	6.6	6.1
130.	4.5	5.9	5.5	4.3	4.3	4.3	5.0	5.7	4.5	5.6	6.4	6.1
140.	4.5	6.0	5.6	4.3	4.3	4.3	5.0	5.7	4.6	5.9	6.6	5.9
150.	4.6	6.1	5.7	4.3	4.3	4.3	4.9	5.5	4.6	6.0	6.7	5.9
160.	4.4	6.3	5.9	4.3	4.4	4.3	5.1	5.5	4.7	6.2	6.8	5.6
170.	4.4	6.1	5.8	4.4	4.8	4.3	5.4	5.9	4.9	6.1	6.9	5.6
180.	4.3	5.5	5.3	4.9	5.5	4.3	5.6	6.4	5.6	5.6	6.4	5.4
190.	4.3	4.8	4.7	5.3	6.0	4.4	6.0	6.7	5.9	5.1	5.7	5.2
200.	4.3	4.4	4.3	5.4	6.0	4.4	6.3	6.6	5.8	4.7	5.4	5.2
210.	4.3	4.3	4.3	5.4	5.9	4.6	6.6	6.5	5.7	4.6	5.2	5.3
220.	4.3	4.3	4.3	5.4	5.7	4.5	6.8	6.4	5.7	4.7	5.3	5.4
230.	4.3	4.3	4.3	5.3	5.5	4.7	6.7	6.1	5.6	4.6	5.4	5.4
240.	4.3	4.3	4.3	5.2	5.5	4.7	6.8	6.3	5.6	4.6	5.5	5.5
250.	4.3	4.3	4.3	5.2	5.4	4.7	6.5	6.6	5.4	4.5	5.9	5.5
260.	4.5	4.6	4.3	5.4	5.9	5.0	6.1	6.5	5.3	4.4	5.6	5.3
270.	4.9	5.1	4.3	5.5	6.1	5.6	5.5	6.0	5.1	4.3	5.1	4.9
280.	5.4	5.4	4.4	5.7	6.3	5.9	4.9	5.5	5.2	4.3	4.6	4.5
290.	5.5	5.5	4.4	5.9	6.2	6.0	4.6	5.2	5.0	4.3	4.4	4.4
300.	5.5	5.2	4.6	6.3	6.2	6.1	4.5	5.2	5.1	4.3	4.3	4.3
310.	5.4	5.1	4.6	6.4	6.1	5.9	4.6	5.2	5.2	4.3	4.3	4.3
320.	5.4	5.1	4.8	6.6	6.2	6.1	4.5	5.3	5.2	4.3	4.3	4.3
330.	5.2	5.0	4.7	6.6	6.1	5.9	4.4	5.4	5.2	4.3	4.3	4.3
340.	5.2	5.0	4.6	6.5	6.3	5.7	4.3	5.3	5.0	4.3	4.3	4.3
350.	5.2	5.4	5.0	6.3	6.2	5.6	4.3	5.1	4.8	4.4	4.7	4.3
360.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
MAX	6.2	6.8	6.6	6.6	6.3	6.1	6.8	6.7	5.9	6.2	6.9	6.1
DEGR.	40	80	20	320	280	300	220	190	190	160	170	120

THE HIGHEST CONCENTRATION OF 6.90 PPM OCCURRED AT RECEPTOR REC11.

JOB: GristMillMain2030BuildAM RUN: GristMillMain2030BuildAM

DATE : 4/15/11
TIME : 13:54:38

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	80	20	320	280	300	220	190	190	160	170	120
1	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
2	*	.3	.5	.1	.1	.3	.4	.3	.3	.1	.1	.3	.4
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
4	*	.4	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
5	*	.0	.4	.1	.0	.0	.6	.4	.2	.0	.1	.0	.0
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.5	.3	.2	.2	.6	.6	.7	.6	.2	.2	.6	.8
8	*	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.4	.1	.1	.3	.4	.4	.3	.1
12	*	.0	.0	.2	.6	.0	.0	.1	.2	.1	.0	.1	.1
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0
14	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.6	.4	.3	.1	.1	.4	.4	.6	.6	.1
17	*	.0	.2	.2	.1	.1	.0	.0	.1	.1	.3	.3	.0
18	*	.0	.4	.5	.4	.1	.0	.1	.3	.1	.1	.4	.1

JOB: GristMillMain2030BuildPM RUN: GristMillMain2030BuildPM

DATE : 4/15/11
TIME : 13:56:50

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	1642.	8.3	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3420.7	424.0	3221.	90.	AG	196.	100.0	.0	12.0	1.22	163.6
3. Grist Mill EB LT	200.0	412.0	200.6	412.0	1.	90.	AG	196.	100.0	.0	12.0	.05	.0
4. Grist Mill EB R	200.0	400.0	235.4	400.0	35.	90.	AG	134.	100.0	.0	12.0	.21	1.8
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	1642.	8.3	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	32.	8.3	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	507.3	436.0	141.	270.	AG	316.	100.0	.0	12.0	1.83	7.1
8. Grist Mill WB TR	648.0	448.0	641.9	448.0	6.	270.	AG	316.	100.0	.0	12.0	.53	.3
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	32.	8.3	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	1041.	8.3	.0	24.0		
11. Main NB L	438.0	200.0	438.0	1058.4	858.	360.	AG	182.	100.0	.0	12.0	1.27	43.6
12. Main NB TR	450.0	200.0	450.0	466.7	267.	360.	AG	175.	100.0	.0	12.0	.96	13.5
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	1041.	8.3	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	1798.	8.3	.0	36.0		
15. Main SB L	436.0	636.0	436.0	633.7	2.	180.	AG	237.	100.0	.0	12.0	.02	.1
16. Main SB T	424.0	636.0	424.0	65.0	571.	180.	AG	237.	100.0	.0	12.0	1.08	29.0
17. Main SB R	412.0	636.0	412.0	-1441.3	2077.	180.	AG	89.	100.0	.0	12.0	1.15	105.5
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	1798.	8.3	.0	24.0		

JOB: GristMillMain2030BuildPM RUN: GristMillMain2030BuildPM

DATE : 4/15/11
TIME : 13:56:50

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	100	57	6.0	1476	3465	127.94	3	4
3. Grist Mill EB LT	100	57	6.0	2	120	127.94	3	4
4. Grist Mill EB R	100	39	6.0	166	1492	127.94	3	4
7. Grist Mill WB LT	100	92	5.0	22	1232	127.94	3	3
8. Grist Mill WB TR	100	92	5.0	10	1939	127.94	3	3
11. Main NB L	100	53	4.0	326	629	127.94	3	4
12. Main NB TR	100	51	6.0	715	1814	127.94	3	4
15. Main SB L	100	69	6.0	6	1592	127.94	3	4
16. Main SB T	100	69	6.0	446	1801	127.94	3	4
17. Main SB R	100	26	6.0	1346	1775	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030BuildPM RUN: GristMillMain2030BuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	* CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.8	5.5	5.6	5.7	5.8	5.2	4.3	4.9	4.8	4.8	5.1	4.3
10.	4.9	5.9	6.3	5.1	5.2	5.0	4.3	4.5	4.5	5.2	5.5	4.3
20.	4.9	5.9	6.6	4.7	5.0	5.0	4.3	4.3	4.3	5.4	5.8	4.4
30.	5.2	6.0	6.6	4.6	5.1	5.1	4.3	4.3	4.3	5.4	5.8	4.5
40.	5.2	6.1	6.5	4.6	5.3	5.1	4.3	4.3	4.3	5.3	5.6	4.5
50.	5.3	6.2	6.2	4.5	5.5	5.1	4.3	4.3	4.3	5.2	5.6	4.7
60.	5.2	6.5	6.1	4.5	5.5	5.1	4.3	4.3	4.3	5.1	5.4	4.6
70.	5.3	6.5	5.9	4.5	5.7	5.2	4.3	4.3	4.3	5.1	5.3	4.6
80.	5.4	6.7	5.8	4.4	5.5	5.1	4.5	4.6	4.3	5.1	5.9	4.7
90.	5.5	6.5	5.7	4.4	5.1	4.9	4.8	5.1	4.4	5.3	6.3	5.2
100.	4.9	6.1	5.6	4.3	4.6	4.6	5.0	5.6	4.4	5.3	6.7	5.3
110.	4.7	5.8	5.4	4.3	4.3	4.3	5.0	5.7	4.5	5.4	6.4	5.3
120.	4.8	5.9	5.6	4.3	4.3	4.3	5.0	5.5	4.5	5.7	6.2	5.2
130.	4.6	5.9	5.6	4.3	4.3	4.3	5.0	5.4	4.5	5.7	6.1	5.2
140.	4.6	6.2	5.8	4.3	4.3	4.3	4.9	5.1	4.6	5.9	6.1	5.0
150.	4.6	6.2	5.8	4.3	4.3	4.3	5.0	5.0	4.6	6.1	6.2	5.0
160.	4.4	6.2	5.6	4.3	4.4	4.3	5.1	4.8	4.6	6.2	6.4	4.7
170.	4.4	6.1	5.5	4.4	4.8	4.3	5.3	5.1	5.0	6.0	6.3	4.8
180.	4.3	5.3	5.0	4.8	5.5	4.3	5.5	5.6	5.4	5.5	5.8	4.7
190.	4.3	4.6	4.5	5.2	6.1	4.4	5.7	6.1	5.8	5.0	5.2	4.6
200.	4.3	4.3	4.3	5.4	6.2	4.4	5.8	6.5	5.9	4.4	4.6	4.6
210.	4.3	4.3	4.3	5.5	6.3	4.6	6.0	6.1	5.6	4.4	4.6	4.6
220.	4.3	4.3	4.3	5.4	6.1	4.6	6.2	5.9	5.5	4.4	4.6	4.6
230.	4.3	4.3	4.3	5.4	6.0	4.8	6.3	6.0	5.4	4.4	4.7	4.6
240.	4.3	4.3	4.3	5.3	6.0	4.7	6.1	5.9	5.4	4.4	4.7	4.6
250.	4.3	4.3	4.3	5.3	5.9	4.7	5.9	5.8	5.3	4.3	4.7	4.6
260.	4.4	4.4	4.3	5.5	5.9	4.9	5.7	5.9	5.2	4.3	4.6	4.5
270.	4.6	4.5	4.3	5.6	6.1	5.3	5.1	5.7	5.1	4.3	4.5	4.4
280.	4.7	4.6	4.3	5.7	6.1	5.5	4.8	5.4	5.1	4.3	4.3	4.3
290.	4.8	4.7	4.3	5.8	6.1	5.9	4.6	5.4	5.1	4.3	4.3	4.3
300.	4.8	4.7	4.4	6.0	6.1	5.9	4.6	5.3	5.2	4.3	4.3	4.3
310.	4.8	4.7	4.4	6.1	6.1	5.9	4.7	5.3	5.2	4.3	4.3	4.3
320.	4.7	4.6	4.4	6.2	6.1	6.0	4.6	5.4	5.2	4.3	4.3	4.3
330.	4.7	4.6	4.4	6.4	6.3	5.9	4.5	5.5	5.3	4.3	4.3	4.3
340.	4.7	4.6	4.4	6.4	6.3	5.4	4.4	5.6	5.3	4.3	4.3	4.3
350.	4.7	4.9	4.9	6.3	6.3	5.3	4.3	5.3	5.1	4.5	4.7	4.3
360.	4.8	5.5	5.6	5.7	5.8	5.2	4.3	4.9	4.8	4.8	5.1	4.3
MAX	5.5	6.7	6.6	6.4	6.3	6.0	6.3	6.5	5.9	6.2	6.7	5.3
DEGR.	90	80	20	330	210	320	230	200	200	160	100	100

THE HIGHEST CONCENTRATION OF 6.70 PPM OCCURRED AT RECEPTOR REC11.

JOB: GristMillMain2030BuildPM RUN: GristMillMain2030BuildPM

DATE : 4/15/11
TIME : 13:56:50

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	*	CO/LINK (PPM) ANGLE (DEGREES) REC1 90	REC2 80	REC3 20	REC4 330	REC5 210	REC6 320	REC7 230	REC8 200	REC9 200	REC10 160	REC11 100	REC12 100
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.4	.5	.1	.1	.0	.4	.4	.3	.1	.1	.5	.5
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.1	.3	.1	.0	.0	.4	.3	.1	.0	.1	.3	.1
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.1	.2	.1	.0	.0	.5	.7	.0	.0	.0	.3	.1
8	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.4	.1	.1	.4	.4	.4	.3	.1
12	*	.1	.2	.2	.6	.6	.0	.1	.5	.1	.1	.2	.1
13	*	.0	.0	.0	.0	.0	.1	.0	.0	.3	.1	.1	.0
14	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.6	.5	.5	.1	.1	.4	.4	.6	.5	.1
17	*	.1	.2	.3	.1	.2	.0	.1	.2	.2	.4	.2	.0
18	*	.1	.3	.5	.3	.3	.0	.1	.3	.1	.1	.0	.0

JOB: GristMillMain2030MitigatedBuildAM RUN: GristMillMain2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:58:44

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	.0	412.0	200.0	412.0	200.	90.	AG	2164.	8.3	.0	36.0		
2. Grist Mill EB L	200.0	424.0	3595.4	424.0	3395.	90.	AG	187.	100.0	.0	12.0	1.21	172.5
3. Grist Mill EB LT	200.0	412.0	260.0	412.0	60.	90.	AG	187.	100.0	.0	12.0	.89	3.1
4. Grist Mill EB R	200.0	400.0	317.8	400.0	118.	90.	AG	150.	100.0	.0	12.0	.63	6.0
5. Grist Mill EB out	466.0	418.0	848.0	418.0	382.	90.	AG	2164.	8.3	.0	24.0		
6. Grist Mill WB in	848.0	442.0	648.0	442.0	200.	270.	AG	148.	8.3	.0	24.0		
7. Grist Mill WB LT	648.0	436.0	-310.6	436.0	959.	270.	AG	312.	100.0	.0	12.0	4.12	48.7
8. Grist Mill WB TR	648.0	448.0	623.6	448.0	24.	270.	AG	312.	100.0	.0	12.0	.59	1.2
9. Grist Mill WB out	406.0	442.0	.0	442.0	406.	270.	AG	148.	8.3	.0	24.0		
10. Main NB in	444.0	.0	444.0	200.0	200.	360.	AG	623.	8.3	.0	24.0		
11. Main NB L	438.0	200.0	438.0	755.8	556.	360.	AG	197.	100.0	.0	12.0	1.29	28.2
12. Main NB TR	450.0	200.0	450.0	343.4	143.	360.	AG	190.	100.0	.0	12.0	.67	7.3
13. Main NB out	454.0	454.0	454.0	836.0	382.	360.	AG	623.	8.3	.0	24.0		
14. Main SB in	424.0	836.0	424.0	636.0	200.	180.	AG	2066.	8.3	.0	36.0		
15. Main SB L	436.0	636.0	436.0	623.6	12.	180.	AG	222.	100.0	.0	12.0	.07	.6
16. Main SB T	424.0	636.0	424.0	-869.0	1505.	180.	AG	222.	100.0	.0	12.0	1.20	76.5
17. Main SB R	412.0	636.0	412.0	-916.4	1552.	180.	AG	69.	100.0	.0	12.0	1.10	78.9
18. Main SB out	420.0	396.0	420.0	.0	396.	180.	AG	2066.	8.3	.0	24.0		

JOB: GristMillMain2030MitigatedBuildAM RUN: GristMillMain2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:58:44

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	110	60	6.0	1595	3459	127.94	3	4
3. Grist Mill EB LT	110	60	6.0	120	354	127.94	3	4
4. Grist Mill EB R	110	48	6.0	449	1463	127.94	3	4
7. Grist Mill WB LT	110	100	5.0	107	960	127.94	3	3
8. Grist Mill WB TR	110	100	5.0	41	2558	127.94	3	3
11. Main NB L	110	63	4.0	193	405	127.94	3	4
12. Main NB TR	110	61	6.0	430	1718	127.94	3	4
15. Main SB L	110	71	6.0	32	1563	127.94	3	4
16. Main SB T	110	71	6.0	696	2068	127.94	3	4
17. Main SB R	110	22	6.0	1338	1668	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030MitigatedBuildAM RUN: GristMillMain2030MitigatedBuildAM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
10.	5.5	6.1	6.2	5.2	5.5	5.3	4.3	4.5	4.3	4.9	5.5	4.3
20.	5.5	6.3	6.7	4.7	5.5	5.1	4.3	4.3	4.3	5.2	5.6	4.3
30.	5.9	6.2	6.6	4.6	5.5	5.1	4.3	4.3	4.3	5.3	5.5	4.4
40.	6.2	6.2	6.4	4.6	5.7	5.2	4.3	4.3	4.3	5.3	5.5	4.5
50.	6.1	6.2	6.3	4.5	5.7	5.2	4.3	4.3	4.3	5.2	5.4	4.6
60.	6.2	6.5	6.1	4.5	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.5
70.	6.2	6.6	6.1	4.4	5.8	5.3	4.3	4.3	4.3	5.2	5.3	4.6
80.	6.0	6.8	5.8	4.4	5.6	5.2	4.5	4.7	4.3	5.3	5.8	5.0
90.	5.6	6.4	5.6	4.4	5.2	5.0	4.8	5.2	4.4	5.3	6.3	5.5
100.	5.1	5.9	5.6	4.3	4.7	4.6	5.0	5.6	4.4	5.4	6.6	5.9
110.	4.7	5.7	5.5	4.3	4.3	4.3	5.0	5.8	4.5	5.5	6.7	6.0
120.	4.7	5.8	5.5	4.3	4.3	4.3	5.1	5.8	4.5	5.7	6.6	6.1
130.	4.5	5.9	5.5	4.3	4.3	4.3	5.0	5.7	4.5	5.6	6.4	6.1
140.	4.5	6.0	5.6	4.3	4.3	4.3	5.0	5.7	4.6	5.9	6.6	5.9
150.	4.6	6.1	5.7	4.3	4.3	4.3	4.9	5.5	4.6	6.0	6.7	5.9
160.	4.4	6.3	5.9	4.3	4.4	4.3	5.1	5.5	4.7	6.2	6.8	5.6
170.	4.4	6.1	5.8	4.4	4.8	4.3	5.4	5.9	4.9	6.1	6.9	5.6
180.	4.3	5.5	5.3	4.9	5.5	4.3	5.6	6.4	5.6	5.6	6.4	5.4
190.	4.3	4.8	4.7	5.3	6.0	4.4	6.0	6.7	5.9	5.1	5.7	5.2
200.	4.3	4.4	4.3	5.4	6.0	4.4	6.3	6.6	5.8	4.7	5.4	5.2
210.	4.3	4.3	4.3	5.4	5.9	4.6	6.6	6.5	5.7	4.6	5.2	5.3
220.	4.3	4.3	4.3	5.4	5.7	4.5	6.8	6.4	5.7	4.7	5.3	5.4
230.	4.3	4.3	4.3	5.3	5.5	4.7	6.7	6.1	5.6	4.6	5.4	5.4
240.	4.3	4.3	4.3	5.2	5.5	4.7	6.8	6.3	5.6	4.6	5.5	5.5
250.	4.3	4.3	4.3	5.2	5.4	4.7	6.5	6.6	5.4	4.5	5.9	5.5
260.	4.5	4.6	4.3	5.4	5.9	5.0	6.1	6.5	5.3	4.4	5.6	5.3
270.	4.9	5.1	4.3	5.5	6.1	5.6	5.5	6.0	5.1	4.3	5.1	4.9
280.	5.4	5.4	4.4	5.7	6.3	5.9	4.9	5.5	5.2	4.3	4.6	4.5
290.	5.5	5.5	4.4	5.9	6.2	6.0	4.6	5.2	5.0	4.3	4.4	4.4
300.	5.5	5.2	4.6	6.3	6.2	6.1	4.5	5.2	5.1	4.3	4.3	4.3
310.	5.4	5.1	4.6	6.4	6.1	5.9	4.6	5.2	5.2	4.3	4.3	4.3
320.	5.4	5.1	4.8	6.6	6.2	6.1	4.5	5.3	5.2	4.3	4.3	4.3
330.	5.2	5.0	4.7	6.6	6.1	5.9	4.4	5.4	5.2	4.3	4.3	4.3
340.	5.2	5.0	4.6	6.5	6.3	5.7	4.3	5.3	5.0	4.3	4.3	4.3
350.	5.2	5.4	5.0	6.3	6.2	5.6	4.3	5.1	4.8	4.4	4.7	4.3
360.	5.3	5.7	5.7	5.9	5.8	5.4	4.3	4.8	4.6	4.6	4.9	4.3
MAX	6.2	6.8	6.7	6.6	6.3	6.1	6.8	6.7	5.9	6.2	6.9	6.1
DEGR.	40	80	20	320	280	300	220	190	190	160	170	120

THE HIGHEST CONCENTRATION OF 6.90 PPM OCCURRED AT RECEPTOR REC11.

JOB: GristMillMain2030MitigatedBuildAM RUN: GristMillMain2030MitigatedBuildAM

DATE : 4/15/11
TIME : 13:58:44

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	* CO/LINK (PPM) ANGLE (DEGREES)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
	*	40	80	20	320	280	300	220	190	190	160	170	120
1	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
2	*	.3	.5	.1	.1	.3	.4	.3	.3	.1	.1	.3	.4
3	*	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
4	*	.4	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.1
5	*	.0	.4	.1	.0	.0	.6	.4	.2	.0	.1	.0	.0
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.5	.3	.2	.2	.6	.6	.7	.6	.2	.2	.6	.8
8	*	.0	.0	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.4	.1	.1	.3	.4	.4	.3	.1
12	*	.0	.0	.2	.6	.0	.0	.1	.2	.1	.0	.1	.1
13	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0
14	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.6	.4	.3	.1	.1	.4	.4	.6	.6	.1
17	*	.0	.2	.2	.1	.1	.0	.0	.1	.1	.3	.3	.0
18	*	.0	.4	.6	.4	.1	.0	.1	.3	.1	.1	.4	.1

JOB: GristMillMain2030MitigatedBuildPM RUN: GristMillMain2030MitigatedBuildPM

DATE : 4/18/11
TIME : 8:47:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 175. CM
U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. Grist Mill EB in	*	.0	412.0	200.0	412.0	*	200.	90.	AG	1642.	8.3	.0	36.0		
2. Grist Mill EB L	*	200.0	424.0	3420.7	424.0	*	3221.	90.	AG	196.	100.0	.0	12.0	1.22	163.6
3. Grist Mill EB LT	*	200.0	412.0	200.6	412.0	*	1.	90.	AG	196.	100.0	.0	12.0	.05	.0
4. Grist Mill EB R	*	200.0	400.0	235.4	400.0	*	35.	90.	AG	134.	100.0	.0	12.0	.21	1.8
5. Grist Mill EB out	*	466.0	418.0	848.0	418.0	*	382.	90.	AG	1642.	8.3	.0	24.0		
6. Grist Mill WB in	*	848.0	442.0	648.0	442.0	*	200.	270.	AG	32.	8.3	.0	24.0		
7. Grist Mill WB LT	*	648.0	436.0	507.3	436.0	*	141.	270.	AG	316.	100.0	.0	12.0	1.83	7.1
8. Grist Mill WB TR	*	648.0	448.0	641.9	448.0	*	6.	270.	AG	316.	100.0	.0	12.0	.53	.3
9. Grist Mill WB out	*	406.0	442.0	.0	442.0	*	406.	270.	AG	32.	8.3	.0	24.0		
10. Main NB in	*	444.0	.0	444.0	200.0	*	200.	360.	AG	1041.	8.3	.0	24.0		
11. Main NB L	*	438.0	200.0	438.0	1158.6	*	959.	360.	AG	182.	100.0	.0	12.0	1.32	48.7
12. Main NB TR	*	450.0	200.0	450.0	399.4	*	199.	360.	AG	175.	100.0	.0	12.0	.51	10.1
13. Main NB out	*	454.0	454.0	454.0	836.0	*	382.	360.	AG	1041.	8.3	.0	24.0		
14. Main SB in	*	424.0	836.0	424.0	636.0	*	200.	180.	AG	1798.	8.3	.0	36.0		
15. Main SB L	*	436.0	636.0	436.0	633.7	*	2.	180.	AG	237.	100.0	.0	12.0	.02	.1
16. Main SB T	*	424.0	636.0	424.0	65.0	*	571.	180.	AG	237.	100.0	.0	12.0	1.08	29.0
17. Main SB R	*	412.0	636.0	412.0	-1441.3	*	2077.	180.	AG	89.	100.0	.0	12.0	1.15	105.5
18. Main SB out	*	420.0	396.0	420.0	.0	*	396.	180.	AG	1798.	8.3	.0	24.0		

JOB: GristMillMain2030MitigatedBuildPM RUN: GristMillMain2030MitigatedBuildPM

DATE : 4/18/11
TIME : 8:47:54

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
2. Grist Mill EB L	100	57	6.0	1476	3465	127.94	3	4
3. Grist Mill EB LT	100	57	6.0	2	120	127.94	3	4
4. Grist Mill EB R	100	39	6.0	166	1492	127.94	3	4
7. Grist Mill WB LT	100	92	5.0	22	1232	127.94	3	3
8. Grist Mill WB TR	100	92	5.0	10	1939	127.94	3	3
11. Main NB L	100	53	4.0	326	603	127.94	3	4
12. Main NB TR	100	51	6.0	715	3445	127.94	3	4
15. Main SB L	100	69	6.0	6	1592	127.94	3	4
16. Main SB T	100	69	6.0	446	1801	127.94	3	4
17. Main SB R	100	26	6.0	1346	1775	127.94	3	4

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. EB W Midblock	196.0	384.0	6.0
2. SW Corner	394.0	384.0	6.0
3. SB S Midblock	394.0	200.0	6.0
4. NB S Midblock	466.0	200.0	6.0
5. SE Corner	466.0	390.0	6.0
6. EB E Midblock	648.0	390.0	6.0
7. WB E Midblock	648.0	464.0	6.0
8. NE Corner	476.0	464.0	6.0
9. NB N Midblock	476.0	640.0	6.0
10. SB N Midblock	396.0	640.0	6.0
11. NW Corner	396.0	464.0	6.0
12. WB W Midblock	196.0	464.0	6.0

JOB: GristMillMain2030MitigatedBuildPM RUN: GristMillMain2030MitigatedBuildPM

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12
0.	4.8	5.5	5.6	5.7	5.7	5.2	4.3	5.0	4.8	4.8	5.1	4.3
10.	4.9	6.0	6.2	5.1	5.1	5.0	4.3	4.5	4.5	5.2	5.6	4.3
20.	4.9	5.9	6.6	4.7	5.0	5.0	4.3	4.3	4.3	5.4	5.8	4.4
30.	5.2	5.9	6.5	4.6	5.1	5.1	4.3	4.3	4.3	5.4	5.8	4.5
40.	5.2	5.9	6.5	4.6	5.3	5.1	4.3	4.3	4.3	5.3	5.6	4.5
50.	5.3	6.0	6.2	4.5	5.5	5.1	4.3	4.3	4.3	5.2	5.6	4.7
60.	5.2	6.3	6.1	4.5	5.5	5.1	4.3	4.3	4.3	5.1	5.4	4.6
70.	5.3	6.4	5.9	4.5	5.7	5.2	4.3	4.3	4.3	5.1	5.3	4.6
80.	5.3	6.6	5.8	4.4	5.5	5.1	4.5	4.6	4.3	5.1	5.8	4.7
90.	5.5	6.5	5.7	4.4	5.1	4.9	4.8	5.1	4.4	5.3	6.2	5.2
100.	4.9	6.1	5.6	4.3	4.6	4.6	5.0	5.6	4.4	5.3	6.5	5.2
110.	4.7	5.8	5.4	4.3	4.3	4.3	5.0	5.7	4.5	5.4	6.2	5.3
120.	4.8	5.9	5.6	4.3	4.3	4.3	5.0	5.5	4.5	5.7	6.0	5.2
130.	4.6	5.9	5.6	4.3	4.3	4.3	5.0	5.4	4.5	5.7	6.0	5.2
140.	4.6	6.2	5.8	4.3	4.3	4.3	4.9	5.1	4.6	5.9	5.9	5.0
150.	4.6	6.2	5.8	4.3	4.3	4.3	5.0	5.0	4.6	6.0	6.1	5.0
160.	4.4	6.2	5.6	4.3	4.4	4.3	5.1	4.8	4.6	6.2	6.4	4.7
170.	4.4	6.1	5.5	4.4	4.8	4.3	5.3	5.1	4.9	6.0	6.3	4.8
180.	4.3	5.3	5.0	4.8	5.5	4.3	5.5	5.6	5.4	5.5	5.8	4.7
190.	4.3	4.6	4.5	5.2	6.1	4.4	5.7	6.0	5.8	5.0	5.2	4.6
200.	4.3	4.3	4.3	5.4	6.2	4.4	5.8	6.2	5.8	4.4	4.6	4.6
210.	4.3	4.3	4.3	5.5	6.3	4.6	6.0	5.8	5.6	4.4	4.6	4.6
220.	4.3	4.3	4.3	5.4	6.1	4.6	6.2	5.6	5.5	4.4	4.6	4.6
230.	4.3	4.3	4.3	5.4	6.0	4.8	6.3	5.6	5.4	4.4	4.7	4.6
240.	4.3	4.3	4.3	5.3	6.0	4.7	6.1	5.5	5.4	4.4	4.7	4.6
250.	4.3	4.3	4.3	5.3	5.9	4.7	5.9	5.5	5.3	4.3	4.7	4.6
260.	4.4	4.4	4.3	5.5	5.9	4.9	5.6	5.6	5.2	4.3	4.6	4.5
270.	4.6	4.5	4.3	5.6	6.0	5.3	5.0	5.5	5.1	4.3	4.5	4.4
280.	4.7	4.6	4.3	5.7	6.0	5.4	4.8	5.3	5.1	4.3	4.3	4.3
290.	4.8	4.7	4.3	5.8	5.9	5.8	4.6	5.3	5.1	4.3	4.3	4.3
300.	4.8	4.7	4.4	6.0	5.8	5.9	4.6	5.3	5.2	4.3	4.3	4.3
310.	4.8	4.7	4.4	6.1	5.8	5.9	4.7	5.3	5.2	4.3	4.3	4.3
320.	4.7	4.6	4.4	6.2	5.7	6.0	4.6	5.4	5.2	4.3	4.3	4.3
330.	4.7	4.6	4.4	6.4	5.8	5.9	4.5	5.5	5.3	4.3	4.3	4.3
340.	4.7	4.6	4.4	6.4	5.8	5.4	4.4	5.6	5.3	4.3	4.3	4.3
350.	4.7	4.9	4.9	6.3	5.9	5.4	4.3	5.3	5.2	4.5	4.7	4.3
360.	4.8	5.5	5.6	5.7	5.7	5.2	4.3	5.0	4.8	4.8	5.1	4.3
MAX	5.5	6.6	6.6	6.4	6.3	6.0	6.3	6.2	5.8	6.2	6.5	5.3
DEGR.	90	80	20	330	210	320	230	200	190	160	100	110

THE HIGHEST CONCENTRATION OF 6.60 PPM OCCURRED AT RECEPTOR REC3 .

JOB: GristMillMain2030MitigatedBuildPM RUN: GristMillMain2030MitigatedBuildPM

DATE : 4/18/11
TIME : 8:47:54

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

LINK #	*	CO/LINK (PPM) ANGLE (DEGREES) REC1 90	REC2 80	REC3 20	REC4 330	REC5 210	REC6 320	REC7 230	REC8 200	REC9 190	REC10 160	REC11 100	REC12 110
1	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2	*	.4	.5	.1	.1	.0	.4	.4	.3	.1	.1	.5	.5
3	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	*	.1	.3	.1	.0	.0	.4	.3	.1	.0	.1	.3	.1
6	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	*	.1	.2	.1	.0	.0	.5	.7	.0	.0	.0	.3	.0
8	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
9	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	*	.1	.3	.4	.5	.4	.1	.1	.4	.3	.4	.3	.1
12	*	.1	.1	.2	.6	.6	.0	.1	.2	.1	.1	.0	.1
13	*	.0	.0	.0	.0	.0	.1	.0	.0	.3	.1	.1	.0
14	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
15	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16	*	.1	.4	.6	.5	.5	.1	.1	.4	.4	.6	.5	.1
17	*	.1	.2	.3	.1	.2	.0	.1	.2	.2	.4	.2	.0
18	*	.1	.3	.5	.3	.3	.0	.1	.3	.1	.1	.0	.1