SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

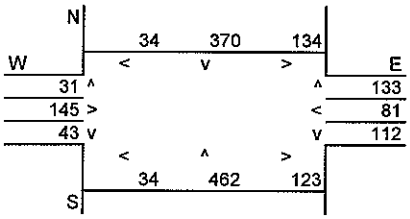
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

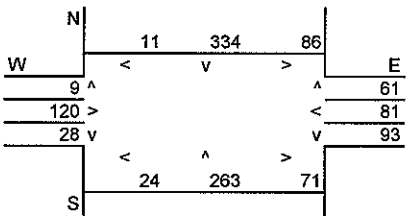
Intersection: 60th Street West/Avenue K
Analysis Condition: Existing (2008) Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	20	20
East-West Roadway:	Avenue K	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,164	N-S Road:	813
E-W Road:	728	E-W Road:	512

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	1,164	5.39	0.88	0.48	0.36	0.25
East-West Road	3.3	2.6	2.2	1.7	728	5.39	0.13	0.10	0.09	0.07
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	813	5.39	0.61	0.33	0.25	0.18
East-West Road	3.3	2.6	2.2	1.7	512	5.39	0.09	0.07	0.06	0.05

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.9	3.6	1.9
25 Feet from Roadway Edge	3.5	3.3	1.6
50 Feet from Roadway Edge	3.3	3.2	1.5
100 Feet from Roadway Edge	3.2	3.1	1.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

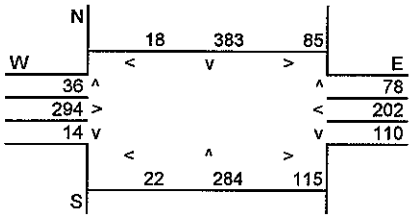
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

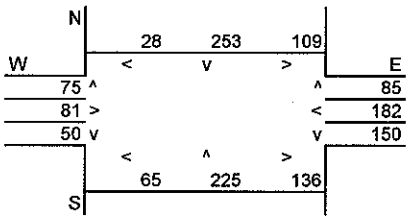
Intersection: 60th Street West/Avenue L
Analysis Condition: Existing (2008) Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	928	N-S Road:	879
E-W Road:	884	E-W Road:	743

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	928	5.39	0.70	0.38	0.29	0.20
East-West Road	3.3	2.6	2.2	1.7	884	5.39	0.16	0.12	0.10	0.08
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	879	5.39	0.66	0.36	0.27	0.19
East-West Road	3.3	2.6	2.2	1.7	743	5.39	0.13	0.10	0.09	0.07

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.8	3.7	1.8
25 Feet from Roadway Edge	3.4	3.4	1.5
50 Feet from Roadway Edge	3.3	3.3	1.5
100 Feet from Roadway Edge	3.2	3.2	1.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

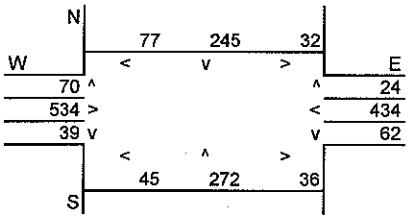
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

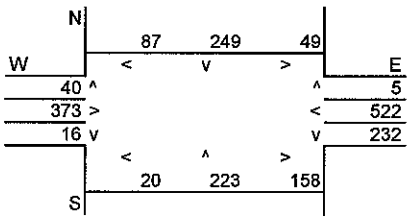
Intersection: 50th Street West/Avenue L
Analysis Condition: Existing (2008) Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	50th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	720	N-S Road:	898
E-W Road:	1,199	E-W Road:	1,339

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	720	5.39	0.14	0.10	0.09	0.07
East-West Road	14.0	7.6	5.7	4.0	1,199	5.39	0.90	0.49	0.37	0.26
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	898	5.39	0.18	0.13	0.11	0.08
East-West Road	14.0	7.6	5.7	4.0	1,339	5.39	1.01	0.55	0.41	0.29

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.9	4.1	2.0
25 Feet from Roadway Edge	3.5	3.6	1.7
50 Feet from Roadway Edge	3.4	3.4	1.5
100 Feet from Roadway Edge	3.2	3.3	1.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

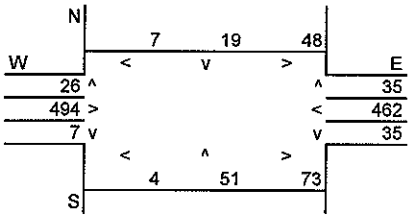
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

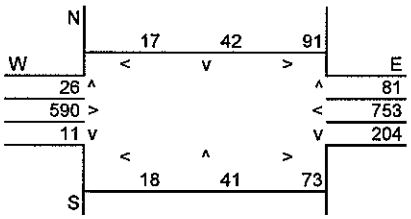
Intersection: 45th Street West/Avenue L
Analysis Condition: Existing (2008) Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	45th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	189	N-S Road:	389
E-W Road:	1,147	E-W Road:	1,792

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	189	5.39	0.04	0.03	0.02	0.02
East-West Road	14.0	7.6	5.7	4.0	1,147	5.39	0.87	0.47	0.35	0.25
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	389	5.39	0.08	0.06	0.05	0.04
East-West Road	14.0	7.6	5.7	4.0	1,792	5.39	1.35	0.73	0.55	0.39

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.8	4.3	2.2
25 Feet from Roadway Edge	3.4	3.7	1.7
50 Feet from Roadway Edge	3.3	3.5	1.6
100 Feet from Roadway Edge	3.2	3.3	1.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

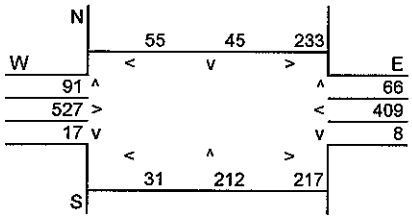
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

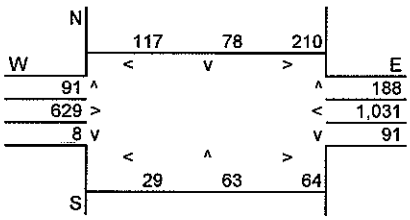
Intersection: 40th Street West/Avenue L
Analysis Condition: Existing (2008) Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	40th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	702	N-S Road:	747
E-W Road:	1,460	E-W Road:	2,213

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	702	5.39	0.14	0.10	0.08	0.06
East-West Road	14.0	7.6	5.7	4.0	1,460	5.39	1.10	0.60	0.45	0.31
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	747	5.39	0.15	0.11	0.09	0.07
East-West Road	14.0	7.6	5.7	4.0	2,213	5.39	1.67	0.91	0.68	0.48

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	4.1	4.7	2.5
25 Feet from Roadway Edge	3.6	3.9	1.9
50 Feet from Roadway Edge	3.4	3.7	1.7
100 Feet from Roadway Edge	3.3	3.4	1.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

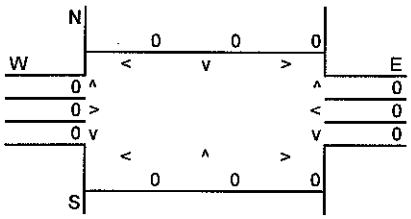
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

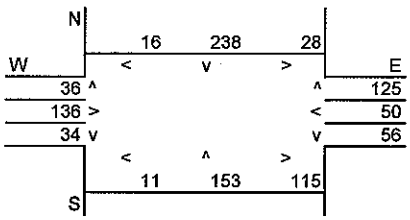
Intersection: 60th Street West/Avenue K
Analysis Condition: Existing (2008) - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	20	20
East-West Roadway:	Avenue K	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	607
E-W Road:	0	E-W Road:	510

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.39	0.00	0.00	0.00	0.00
East-West Road	3.3	2.6	2.2	1.7	0	5.39	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	607	5.39	0.46	0.25	0.19	0.13
East-West Road	3.3	2.6	2.2	1.7	510	5.39	0.09	0.07	0.06	0.05

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	3.4	1.6
25 Feet from Roadway Edge	2.9	3.2	1.4
50 Feet from Roadway Edge	2.9	3.1	1.4
100 Feet from Roadway Edge	2.9	3.1	1.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

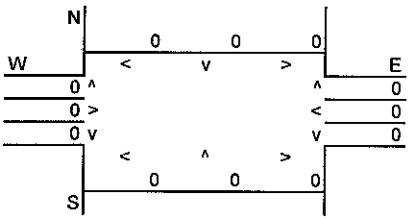
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

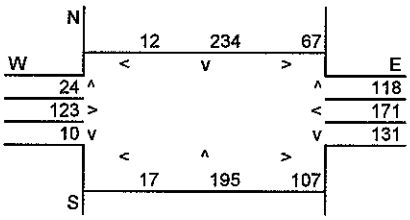
Intersection: 60th Street West/Avenue L
Analysis Condition: Existing (2008) - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	4	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	694
E-W Road:	0	E-W Road:	717

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.39	0.00	0.00	0.00	0.00
East-West Road	3.3	2.6	2.2	1.7	0	5.39	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	694	5.39	0.14	0.10	0.08	0.06
East-West Road	11.9	7.0	5.4	3.8	717	5.39	0.46	0.27	0.21	0.15

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	3.5	1.6
25 Feet from Roadway Edge	2.9	3.3	1.4
50 Feet from Roadway Edge	2.9	3.2	1.4
100 Feet from Roadway Edge	2.9	3.1	1.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

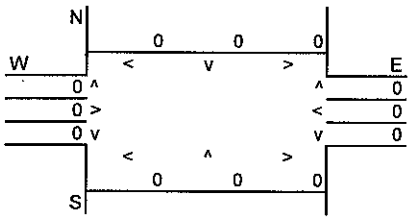
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

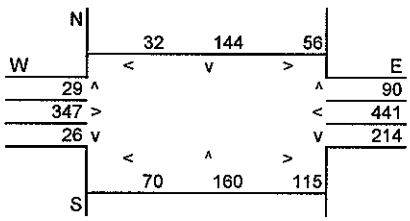
Intersection: 50th Street West/Avenue L
Analysis Condition: Existing (2008) - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	50th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	729
E-W Road:	0	E-W Road:	1,263

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 E.O.R.	A_2 25 Feet	A_3 50 Feet	A_4 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations E.O.R.	25 Feet	50 Feet	100 Feet
	Reference CO Concentrations									
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.39	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	5.39	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	729	5.39	0.15	0.11	0.09	0.07
East-West Road	14.0	7.6	5.7	4.0	1,263	5.39	0.95	0.52	0.39	0.27

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	4.0	1.9
25 Feet from Roadway Edge	2.9	3.5	1.6
50 Feet from Roadway Edge	2.9	3.4	1.5
100 Feet from Roadway Edge	2.9	3.2	1.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

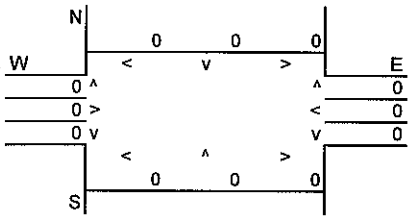
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

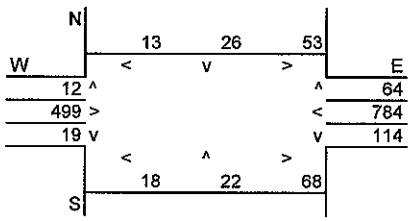
Intersection: 45th Street West/Avenue L
Analysis Condition: Existing (2008) - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	45th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	267
E-W Road:	0	E-W Road:	1,582

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.39	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	5.39	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	267	5.39	0.05	0.04	0.03	0.02
East-West Road	14.0	7.6	5.7	4.0	1,582	5.39	1.19	0.65	0.49	0.34

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	4.1	2.1
25 Feet from Roadway Edge	2.9	3.6	1.7
50 Feet from Roadway Edge	2.9	3.4	1.5
100 Feet from Roadway Edge	2.9	3.3	1.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

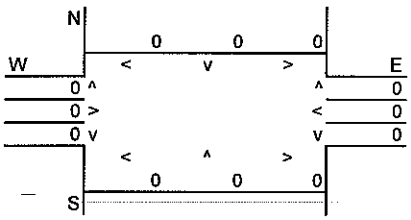
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2008

Roadway Data

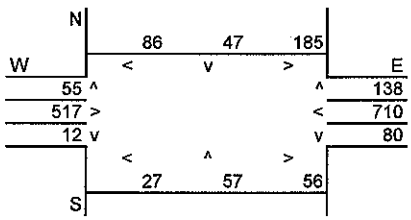
Intersection: 40th Street West/Avenue L
Analysis Condition: Existing (2008) - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	40th Street	At Grade	2	20	20
East-West Roadway:	Avenue L	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	568
E-W Road:	0	E-W Road:	1,686

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.39	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	5.39	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	568	5.39	0.11	0.08	0.07	0.05
East-West Road	14.0	7.6	5.7	4.0	1,686	5.39	1.27	0.69	0.52	0.36

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	4.3	2.1
25 Feet from Roadway Edge	2.9	3.7	1.7
50 Feet from Roadway Edge	2.9	3.5	1.6
100 Feet from Roadway Edge	2.9	3.3	1.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

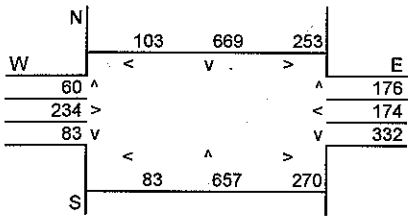
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

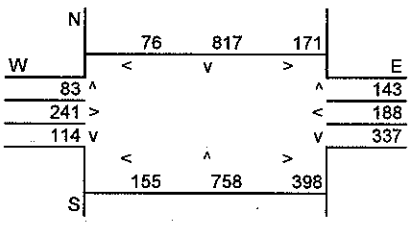
Intersection: 60th Street West/Avenue K
Analysis Condition: Future (2012) Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	10	5
East-West Roadway:	Avenue K	At Grade	4	10	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,094	N-S Road:	2,579
E-W Road:	1,439	E-W Road:	1,478

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	2,094	5.15	1.51	0.82	0.61	0.43
East-West Road	3.3	2.6	2.2	1.7	1,439	5.15	0.24	0.19	0.16	0.13
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	2,579	6.35	2.29	1.24	0.93	0.66
East-West Road	3.3	2.6	2.2	1.7	1,478	6.35	0.31	0.24	0.21	0.16

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	4.7	5.5	3.0
25 Feet from Roadway Edge	3.9	4.4	2.2
50 Feet from Roadway Edge	3.7	4.0	2.0
100 Feet from Roadway Edge	3.5	3.7	1.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

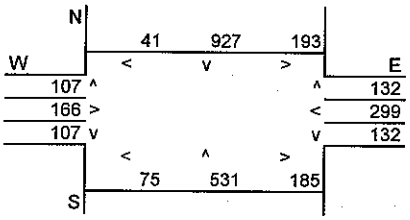
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

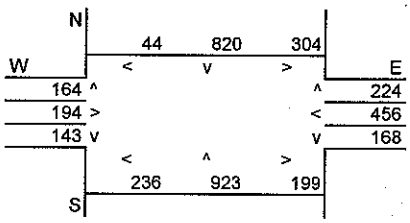
Intersection: 60th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	20	10
East-West Roadway:	Avenue L	At Grade	4	20	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,957	N-S Road:	2,489
E-W Road:	1,107	E-W Road:	1,545

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	1,957	3.73	1.02	0.55	0.42	0.29
East-West Road	3.3	2.6	2.2	1.7	1,107	3.73	0.14	0.11	0.09	0.07
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	2,489	5.15	1.80	0.97	0.73	0.51
East-West Road	3.3	2.6	2.2	1.7	1,545	5.15	0.26	0.21	0.18	0.14

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	4.1	5.0	2.6
25 Feet from Roadway Edge	3.6	4.1	2.0
50 Feet from Roadway Edge	3.4	3.8	1.8
100 Feet from Roadway Edge	3.3	3.5	1.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

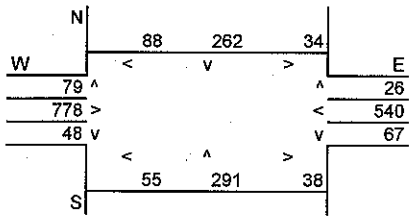
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

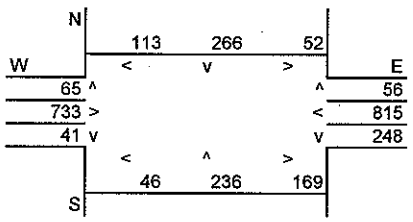
Intersection: 50th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	50th Street	At Grade	2	5	5
East-West Roadway:	Avenue L	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	780	N-S Road:	1,006
E-W Road:	1,588	E-W Road:	2,073

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	780	6.35	0.18	0.13	0.11	0.08
East-West Road	14.0	7.6	5.7	4.0	1,588	6.35	1.41	0.77	0.57	0.40
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1,006	6.35	0.24	0.17	0.14	0.11
East-West Road	14.0	7.6	5.7	4.0	2,073	6.35	1.84	1.00	0.75	0.53

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	4.5	5.0	2.6
25 Feet from Roadway Edge	3.8	4.1	2.0
50 Feet from Roadway Edge	3.6	3.8	1.8
100 Feet from Roadway Edge	3.4	3.5	1.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

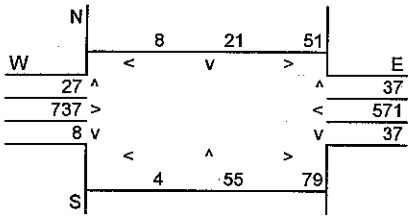
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

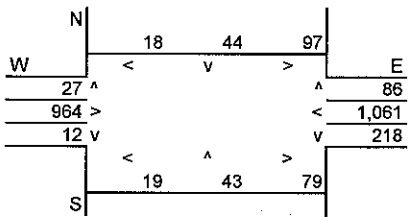
Intersection: 45th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	45th Street	At Grade	2	20	5
East-West Roadway:	Avenue L	At Grade	2	20	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	204	N-S Road:	415
E-W Road:	1,512	E-W Road:	2,505

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	204	3.73	0.03	0.02	0.02	0.01
East-West Road	14.0	7.6	5.7	4.0	1,512	3.73	0.79	0.43	0.32	0.23
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	415	6.35	0.10	0.07	0.06	0.04
East-West Road	14.0	7.6	5.7	4.0	2,505	6.35	2.23	1.21	0.91	0.64

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	3.7	5.2	2.8
25 Feet from Roadway Edge	3.3	4.2	2.1
50 Feet from Roadway Edge	3.2	3.9	1.9
100 Feet from Roadway Edge	3.1	3.6	1.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

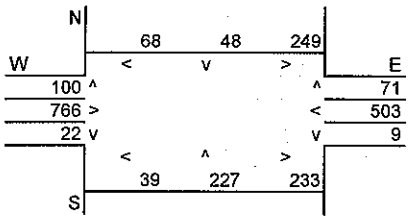
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

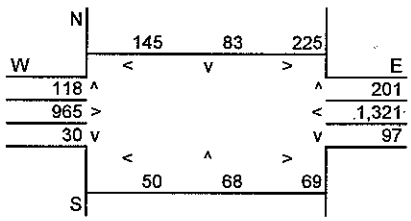
Intersection: 40th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	40th Street	At Grade	2	10	5
East-West Roadway:	Avenue L	At Grade	2	10	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	763	N-S Road:	840
E-W Road:	1,831	E-W Road:	2,878

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	763	5.15	0.15	0.11	0.09	0.07
East-West Road	14.0	7.6	5.7	4.0	1,831	5.15	1.32	0.72	0.54	0.38
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	840	6.35	0.20	0.14	0.12	0.09
East-West Road	14.0	7.6	5.7	4.0	2,878	6.35	2.56	1.39	1.04	0.73

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	4.4	5.7	3.1
25 Feet from Roadway Edge	3.7	4.4	2.3
50 Feet from Roadway Edge	3.5	4.1	2.0
100 Feet from Roadway Edge	3.3	3.7	1.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

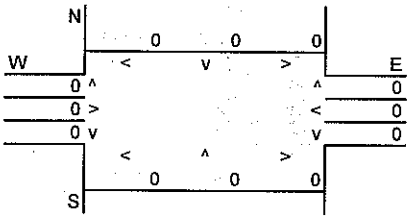
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

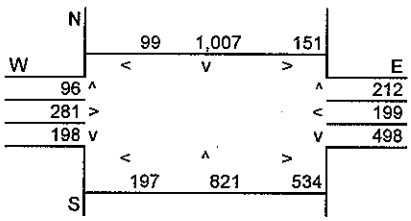
Intersection: 60th Street West/Avenue K
Analysis Condition: Future (2012) Plus Project - Saturday -Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	5	5
East-West Roadway:	Avenue K	At Grade	4	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	3,255
E-W Road:	0	E-W Road:	1,875

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	6.35	0.00	0.00	0.00	0.00
East-West Road	3.3	2.6	2.2	1.7	0	6.35	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	3,255	6.35	2.89	1.57	1.18	0.83
East-West Road	3.3	2.6	2.2	1.7	1,875	6.35	0.39	0.31	0.26	0.20

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	6.2	3.5
25 Feet from Roadway Edge	2.9	4.8	2.5
50 Feet from Roadway Edge	2.9	4.3	2.2
100 Feet from Roadway Edge	2.9	3.9	1.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

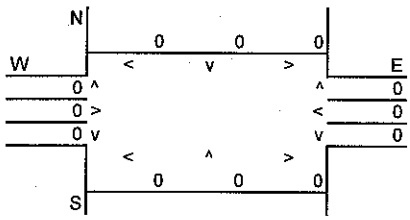
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

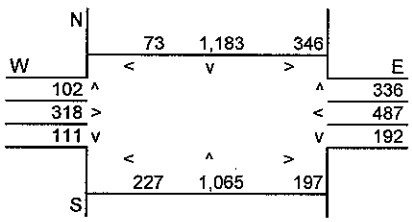
Intersection: 60th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	60th Street	At Grade	2	5	5
East-West Roadway:	Avenue L	At Grade	4	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	3,105
E-W Road:	0	E-W Road:	1,876

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	6.35	0.00	0.00	0.00	0.00
East-West Road	3.3	2.6	2.2	1.7	0	6.35	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	3,105	6.35	2.76	1.50	1.12	0.79
East-West Road	3.3	2.6	2.2	1.7	1,876	6.35	0.39	0.31	0.26	0.20

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	6.1	3.4
25 Feet from Roadway Edge	2.9	4.7	2.4
50 Feet from Roadway Edge	2.9	4.3	2.2
100 Feet from Roadway Edge	2.9	3.9	1.9

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

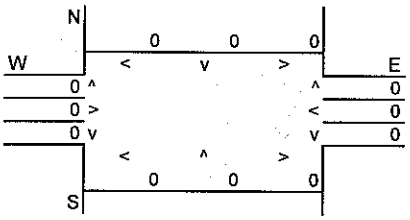
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

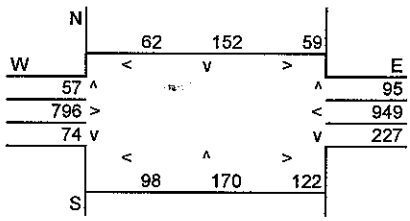
Intersection: 50th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project - Saturday -Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	50th Street	At Grade	2	5	5
East-West Roadway:	Avenue L	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	843
E-W Road:	0	E-W Road:	2,248

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	6.35	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	6.35	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	843	6.35	0.20	0.14	0.12	0.09
East-West Road	14.0	7.6	5.7	4.0	2,248	6.35	2.00	1.09	0.81	0.57

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	5.1	2.7
25 Feet from Roadway Edge	2.9	4.1	2.0
50 Feet from Roadway Edge	2.9	3.8	1.8
100 Feet from Roadway Edge	2.9	3.6	1.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

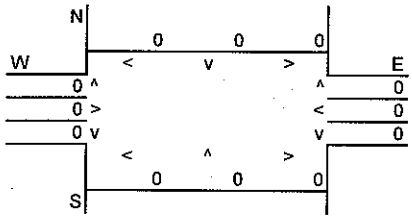
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

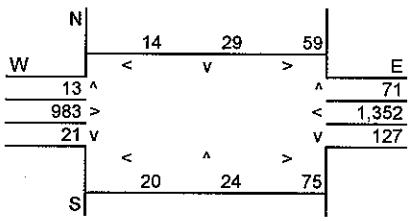
Intersection: 45th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	45th Street	At Grade	2	5	5
East-West Roadway:	Avenue L	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	296
E-W Road:	0	E-W Road:	2,667

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

	A_1	A_2	A_3	A_4	B	C				
	Reference CO Concentrations				Traffic	Emission	Estimated CO Concentrations			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors[2]	E.O.R.	25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	6.35	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	6.35	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	296	6.35	0.07	0.05	0.04	0.03
East-West Road	14.0	7.6	5.7	4.0	2,667	6.35	2.37	1.29	0.97	0.68

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	5.3	2.9
25 Feet from Roadway Edge	2.9	4.2	2.1
50 Feet from Roadway Edge	2.9	3.9	1.9
100 Feet from Roadway Edge	2.9	3.6	1.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Title: The Commons

Background Information

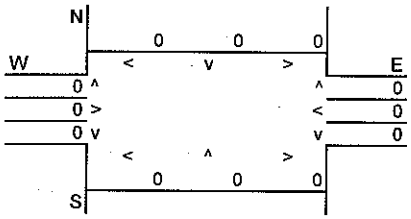
Nearest Air Monitoring Station measuring CO:	43301 Division Street
Background 1-hour CO Concentration (ppm):	2.9
Background 8-hour CO Concentration (ppm):	1.2
Persistence Factor:	0.7
Analysis Year:	2012

Roadway Data

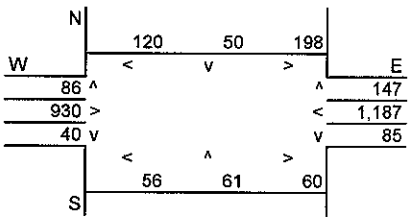
Intersection: 40th Street West/Avenue L
Analysis Condition: Future (2012) Plus Project - Saturday - Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	40th Street	At Grade	2	10	10
East-West Roadway:	Avenue L	At Grade	2	10	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	662
E-W Road:	0	E-W Road:	2,607

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 E.O.R.	A_2 25 Feet	A_3 50 Feet	A_4 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations E.O.R.	25 Feet	50 Feet	100 Feet
	Reference CO Concentrations									
A.M. Peak Traffic Hour										
North-South Road	14.0	7.6	5.7	4.0	0	5.15	0.00	0.00	0.00	0.00
East-West Road	3.7	2.7	2.2	1.7	0	5.15	0.00	0.00	0.00	0.00
P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	662	5.15	0.13	0.09	0.08	0.06
East-West Road	14.0	7.6	5.7	4.0	2,607	5.15	1.88	1.02	0.77	0.54

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
Roadway Edge	2.9	4.9	2.6
25 Feet from Roadway Edge	2.9	4.0	2.0
50 Feet from Roadway Edge	2.9	3.7	1.8
100 Feet from Roadway Edge	2.9	3.5	1.6

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

Construction Activity

Grading 1,748,934 Square Feet[a]

Grading Schedule - **20 days**[a]

Equipment Type[a,b]	No. of Equipment	hr/day	Crew Size
			12
Crawler Tractors	2	8.0	
Graders	2	8.0	
Scrapers	6	8.0	

Construction Equipment Emission Factors

Equipment Type[c]	CO lb/hr	NOx lb/hr	PM10 lb/hr	SOx lb/hr	VOC lb/hr
Crawler Tractors	0.616	1.480	0.099	0.232	0.156
Graders	0.540	1.331	0.069	0.276	0.112
Scrapers	0.748	2.625	0.105	0.496	0.190

Fugitive Dust Grading Parameters

Vehicle Speed (mph)[d]	Vehicle Miles Traveled[e]
3	1.51

Fugitive Dust Stockpiling Parameters

Silt Content[f]	Precipitation Days[g]	Mean Wind Speed Percent[h]	TSP Fraction	Area[i] (acres)
6.9	10	100	0.5	0.1

Fugitive Dust Material Handling

Aerodynamic Particle Size Multiplier[j]	Mean Wind Speed[k] mph	Moisture Content[f]	Dirt Handled[a] cy	Dirt Handled[d] lb/day
0.35	5.52	7.9	15,000	1,875,000

Construction Vehicle (Mobile Source) Emission Factors

	CO lb/mile	NOx lb/mile	PM10 lb/mile	SOx lb/mile	VOC lb/mile	PM2.5 lb/mile
Heavy-Duty Truck[m]	0.020161	0.022366	0.000806	0.00002679	0.00278899	0.000692

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One WayTrip Length (miles)
Haul Truck[n]	1	0.1
Water Truck[o]	3	6.4

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/day	VOC lb/day
Crawler Tractors	9.86	23.68	1.58	3.71	2.50
Graders	8.64	21.30	1.10	4.42	1.79
Scrapers	35.90	126.00	5.04	23.81	9.12
Total	**54.4**	**171.0**	**7.7**	**31.9**	**13.4**

Incremental Increase in Fugitive Dust Emissions from Construction Operations

Equations:

Gradingp: PM10 Emissions (lb/day) = 0.60 x 0.051 x mean vehicle speed$^{2.0}$ x VMT x (1 - control efficiency)

Storage Piles[q]: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling[r]: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)$^{1.3}$/(moisture content/2)$^{1.4}$ x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

Description	Control Efficiency %	Unmitigated PM10[s] lb/day
Earthmoving	68	0.13
Storage Piles	68	1.26
Material Handling	68	0.06
Total		**1.45**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/day	VOC lb/day	PM2.5 lb/day
Haul Truck	0.00	0.00	0.00	0.00	0.00	0.00
Water Truck	0.77	0.86	0.03	0	0.11	0.03

Total	**0.77**	**0.86**	**0.03**	**0.00**	**0.11**	**0.03**

Total Incremental Localized Emissions from Construction Activities

	CO	**NOx**	**PM10**	**SOx**	**VOC**
Sources	lb/day	lb/day	lb/day	lb/day	lb/day
On-site Emissions	**55.2**	**171.8**	**9.2**	**31.9**	**13.5**

Combustion and Fugitive Summary	**PM2.5 Fraction[u]**	**PM10**	**PM2.5**
		lb/day	lb/day
Combustion	0.92	7.8	7.2
Fugitive	0.21	1.5	0.3
Total		**9.2**	**7.5**

Notes:

a) Based on builders general construction schedule.
b) Equipment Emission Factors (EFs) from "Off-Road Model EF" worksheet equipment name might be modified to match sheet to look up EFs automatically
c) SCAB values provided by the ARB, Aug 2004. Assumed all equipment is diesel fueled.
d) Caterpillar Performance Handbook, Edition 33, October 2003 Operating Speeds, p 2-3.
e) Assuming 15,000 cubic yards of dirt handled [(15,000 cyd x 2,500 lb/cyd)/20 days = 1,875,000 lb/day]
f) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Corection Factors Applicable to the Predictive Emission Factor Equations
g) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993
h) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph. At least one meteorological site recorded wind speeds greater than 12 mph over a 24-hour period in 1981.
i) Assumed storage piles are 0.1 acres in size
j) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggretate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm
k) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.
l) Assuming 15,000 cubic yards of dirt handled [(15,000 cyd x 2,500 lb/cyd)/20 days = 1,875,000 lb/day]
m) CARB, EMFAC2002 (version 2.2) Burden Model, Winter 2005, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT
n) No net import or export of material
o) Assumed six foot wide water truck traverses over 1,748,934 square feet of disturbed area
p) USEPA, AP-42, July 1998, Table 11.9-1, Equation for Site Grading ≤ 10 µm
q) USEPA, AP-42, Jan 1995, Section 13.2.4 Aggretate Handling and Storage Piles, Equation 1
r) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12
s) Includes watering at least three times a day per Rule 403 (68% control efficiency).
t) AVAQMD significant emissions thresholds
u) ARB's CEIDARS database PM2.5 fractions - contruction dust category for fugitive and diesel vehicle exhaust category for combustion.

Construction Activity		
Site Preparation	395,000	Square Feet[a]

Site Preparation Schedule - **80** **days**[a]

Crew Size
14

Equipment Type[a,b]	No. of Equipment	hr/day
Bore/Drill Rigs	1	8.0
Excavators	2	8.0
Rubber Tired Loaders	2	8.0
Skid Steer Loaders	2	8.0
Tractors/Loaders/Backhoes	4	8.0
Trenchers	2	8.0

Construction Equipment Emission Factors

Equipment Type[c]	CO lb/hr	NOx lb/hr	PM10 lb/hr	SOx lb/hr	VOC lb/hr
Bore/Drill Rigs	0.472	1.099	0.043	0.329	0.056
Excavators	0.469	1.029	0.055	0.243	0.086
Rubber Tired Loaders	0.421	1.022	0.059	0.221	0.090
Skid Steer Loaders	0.194	0.270	0.022	0.067	0.034
Tractors/Loaders/Backhoes	0.420	0.799	0.083	0.115	0.122
Trenchers	0.357	0.556	0.045	0.127	0.071

Fugitive Dust Clearing Parameters

Silt Content[d]	Moisture Content[d]
6.9	7.9

Fugitive Dust Stockpiling Parameters

Silt Content[d]	Precipitation Days[e]	Mean Wind Speed Percen	TSP Fraction	Area[g] (acres)
6.9	10	100	0.5	0.1

Fugitive Dust Material Handling

Aerodynamic Particle Size Multiplier[h]	Mean Wind Speed[i] mph	Moisture Content[d]	Dirt Handled[a] cy	Debris Handled[a] cy	Dirt Handled[j] lb/day
0.35	5.52	7.9	15,000	0	468,750

Construction Vehicle (Mobile Source) Emission Factors

	CO lb/mile	NOx lb/mile	PM10 lb/mile	SOx	VOC	PM2.5 lb/mile
Heavy-Duty Truck[k]	0.020161	0.022366	0.000806	0.00002679	0.00278899	0.000692

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	One WayTrip Length (miles)
Haul Truck[l]	1	0.00
Water Truck[m]	3	12.5

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/hr	VOC lb/hr
Bore/Drill Rigs	3.78	8.79	0.34	2.63	0.45
Excavators	7.50	16.46	0.88	3.89	1.38
Rubber Tired Loaders	6.74	16.35	0.94	3.54	1.44
Skid Steer Loaders	3.10	4.32	0.35	1.07	0.54
Tractors/Loaders/Backhoes	13.44	25.57	2.66	3.68	3.90
Trenchers	5.71	8.90	0.72	2.03	1.14
Total	**40.3**	**80.4**	**5.9**	**16.8**	**8.8**

Incremental Increase in Fugitive Dust Emissions from Construction Operations

Equations:

Clearing[n]: PM10 Emissions (lb/day) = 0.75 x (silt content$^{1.5}$)/(moisture content$^{1.4}$) x hours operated (hr/day) x (1 - control efficiency)

Storage Piles[o]: PM10 Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)

Material Handling[p]: PM10 Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5) $^{1.3}$/(moisture content/2)$^{1.4}$ x dirt handled (lb/day)/2,000 (lb/ton) (1 - control efficiency)

Description	Control Efficiency %	PM10[q] lb/day
Clearing	68	1.93

Storage Piles	68	1.26
Material Handling	68	0.01
Total		**3.20**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

	CO	**NOx**	**PM10**	**SOx**	**VOC**	**PM2.5**
Vehicle	lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Haul Truck	0.00	0.00	0.00	0.00	0.00	0.00
Water Truck	1.51	1.68	0.06	0	0.21	0.05
Total	**1.51**	**1.68**	**0.06**	**0.00**	**0.21**	**0.05**

Total Incremental Localized Emissions from Construction Activities

	CO	**NOx**	**PM10**	**SOx**	**VOC**
Sources	lb/day	lb/day	lb/day	lb/day	lb/day
On-site Emissions	**41.8**	**82.1**	**9.2**	**16.8**	**9.1**

Combustion and Fugitive Summary	**PM2.5 Fraction[s]**	**PM10**	**PM2.5**
		lb/day	lb/day
Combustion	0.92	6.0	5.5
Fugitive	0.21	3.2	0.7
Total		**9.2**	**6.1**

Notes:

a) Based on builders general construction schedule.

b) Equipment Emission Factors (EFs) from "Off-Road Model EF" worksheet equipment name might be modified to match sheet to look up EFs automatically

c) SCAB values provided by the ARB, Aug 2004. Assumed all equipment is diesel fueled.

d) USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Corection Factors Applicable to the Predictive Emission Factor Equations

e) Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993

f) Mean wind speed percent - percent of time mean wind speed exceeds 12 mph

g) Assumed storage piles are 0.21 acres in size

h) USEPA, AP-42, Nov 2006, Section 13.2.4 Aggretate Handling and Storage Piles, p 13.2.4-3 Aerodynamic particle size multiplier for < 10 µm

i) Mean wind speed - maximum of daily average wind speeds reported in 1981 meteorological data.

j) Assuming 15,000 cubic yards of dirt handled [(15,000 cyd x 2,500 lb/cyd)/80 days = 468,750 lb/day]

k) CARB, EMFAC2007 (version 2.3) Burden Model, Winter 2008, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT

l) No net import or export of material from site

m) Assumed six foot wide water truck traverses over 395,000 square feet of disturbed area

n) USEPA, AP-42, July 1998, Table 11.9-1, Equation for bulldozer, overburden,≤ 10 µm

o) USEPA, AP-42, Nov 2006, Section 13.2.4 Aggretate Handling and Storage Piles, Equation 1

p) USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12

q) Includes watering at least three times a day per Rule 403 (68% control efficiency).

r) AVAQMD significance thresholds

s) ARB's CEIDARS database PM2.5 fractions - contruction dust category for fugitive and diesel vehicle exhaust category for combustion.

Construction Activity			
Building	395,000	Square Foot Structure[a]	
Construction Schedule	120		

Crew Size
16

Equipment Type[a,b]	No. of Equipment	hr/day
Cranes	1	8.0
Forklifts	2	8.0
Rough Terrain Forklifts	1	8.0
Tractors/Loaders/Backhoes	1	8.0
Welders	3	8.0

Construction Equipment Combustion Emission Factors

Equipment Type[c]	CO lb/hr	NOx lb/hr	PM10 lb/hr	SOx lb/hr	VOC lb/hr
Cranes	0.350	0.941	0.049	0.196	0.080
Forklifts	0.254	0.432	0.048	0.000	0.074
Rough Terrain Forklifts	0.442	0.754	0.067	0.150	0.090
Tractors/Loaders/Backhoes	0.420	0.799	0.083	0.115	0.122
Welders	0.230	0.311	0.033	0.000	0.077

Construction Vehicle (Mobile Source) Emission Factors

	CO lb/mile	NOx lb/mile	PM10 lb/mile	SOx lb/mile	VOC lb/mile	PM2.5 lb/mile
Heavy-Duty Truck[d]	0.020161	0.022366	0.000806	0.00002679	0.00278899	0.000692

Construction Worker Number of Trips and Trip Length

Vehicle	No. of One-Way Trips/Day	Trip Length (miles)
Haul Truck[a]	10	0.24
Flatbed Truck[a,e]	10	0.24
Water Truck[f]	3	6.4

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)

Equipment Type	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/day	VOC lb/day
Cranes	2.80	7.53	0.39	1.57	0.64
Forklifts	4.06	6.91	0.77	0.00	1.18
Rough Terrain Forklifts	3.54	6.03	0.54	1.20	0.72
Tractors/Loaders/Backhoes	3.36	6.39	0.66	0.92	0.98
Welders	5.52	7.46	0.79	0.00	1.85
Total	**19.3**	**34.3**	**3.2**	**3.7**	**5.4**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/day	VOC lb/day	PM2.5 lb/day
Haul Truck	0.10	0.11	0.00	0.00	0.01	0.00
Flatbed Truck	0.10	0.11	0.00	0.00	0.00	0.00
Water Truck	0.77	0.86	0.03	0.00	0.00	0.03
Total	**0.87**	**0.97**	**0.03**	**0.00**	**0.00**	**0.03**

Total Incremental Combustion Emissions from Construction Activities

Sources	CO lb/day	NOx lb/day	PM10 lb/day	SOx lb/day	VOC lb/day
On-Site Emissions	**20.1**	**35.3**	**3.2**	**3.7**	**5.4**

Combustion and Fugitive Summary	PM2.5 Fraction[h]	PM10 lb/day	PM2.5 lb/day
Combustion	0.92	3.2	2.9
Fugitive	0.21	0	0
Total		**3.2**	**2.9**

Notes:

a) Based on builders general construction schedule.

b) Equipment Emission Factors (EFs) from "Off-Road Model EF" worksheet equipment name might be modified to match sheet to look up EFs automatically

c) SCAB values provided by the ARB, Aug 2004. Assumed all equipment is diesel fueled.

d) CARB, EMFAC2002 (version 2.2) Burden Model, Winter 2005, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT

e) Assumed haul truck travels 0.29 miles through facility

f) Assumed six foot wide water truck traverses over 200,000 square feet of disturbed area

g) AVAQMD significance thresholds

h) ARB's CEIDARS database PM2.5 fractions - contruction dust category for fugitive and diesel vehicle exhaust category for combustion.

	Construction Activity	
	Asphalt Paving/finishing	
		972250 Square feet to be paved
Construction Schedule -	**38 days**[a]	
		Crew Size
		10

Equipment Type[a,b]	**No. of Equipment**	**hr/day**
Graders	2	8.0
Pavers	1	8.0
Paving Equipment	4	8.0
Rubber Tired Loaders	2	8.0

Construction Equipment Combustion Emission Factors

	CO	**NOx**	**PM10**	**SOx**	**VOC**
Equipment Type[c]	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
Graders	0.540	1.331	0.069	0.276	0.112
Pavers	0.429	0.745	0.053	0.165	0.086
Paving Equipment	0.408	0.885	0.065	0.144	0.104
Rubber Tired Loaders	0.421	1.022	0.059	0.221	0.090

Construction Vehicle (Mobile Source) Emission Factors

	CO	**NOx**	**PM10**	**SOx**	**VOC**	**PM2.5**
	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile	lb/mile
Heavy-Duty Truck[d]	0.020161	0.022366	0.000806	0.00002679	0.00278899	0.000692

Construction Worker Number of Trips and Trip Length

Vehicle	**No. of One-Way Trips/Day**	**Trip Length (miles)**
Delivery Truck[e]	4	0.1
Water Truck[f]	0	6.4

Incremental Increase in Onsite Combustion Emissions from Construction Equipment

Equation: Emission Factor (lb/BHP-hr) x No. of Equipment x Work Day (hr/day) x Equipment rating (hp) x Load Factor (%/100) = Onsite Construction Emissions (lb/day)

Equipment Type	**CO** lb/day	**NOx** lb/day	**PM10** lb/day	**SOx** lb/day	**VOC** lb/day
Graders	8.64	21.30	1.10	4.42	1.79
Pavers	3.43	5.96	0.42	1.32	0.69
Paving Equipment	13.06	28.32	2.08	4.61	3.33
Rubber Tired Loaders	6.74	16.35	0.94	3.54	1.44
Total	**31.9**	**71.9**	**4.6**	**13.9**	**7.2**

Incremental Increase in Onsite Combustion Emissions from Onroad Mobile Vehicles

Equation: Emission Factor (lb/mile) x No. of One-Way Trips/Day x 2 x Trip length (mile) = Mobile Emissions (lb/day)

Vehicle	**CO** lb/day	**NOx** lb/day	**PM10** lb/day	**SOx** lb/day	**VOC** lb/day	**PM2.5** lb/day
Delivery Truck	0.02	0.02	0.00	0.00	0.00	0.00
Water Truck	0.00	0	0	0.00	0.00	0
Total	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**

Total Incremental Combustion Emissions from Construction Activities

Sources	**CO** lb/day	**NOx** lb/day	**PM10** lb/day	**SOx** lb/day	**VOC** lb/day
On-Site Emissions	**31.9**	**71.9**	**4.6**	**13.9**	**7.3**

Combustion and Fugitive Summary	**PM2.5 Fraction**[h]	**PM10** lb/day	**PM2.5** lb/day
Combustion	0.92	4.6	4.2
Fugitive	0.21	0	0
Total		**4.6**	**4.2**

Notes:

a) Based on builders general construction schedule.

b) Equipment Emission Factors (EFs) from "Off-Road Model EF" worksheet equipment name might be modified to match sheet to look up EFs automatically

c) SCAB values provided by the ARB, Aug 2004. Assumed all equipment is diesel fueled.

d) CARB, EMFAC2002 (version 2.2) Burden Model, Winter 2005, 75 F, 40% RH: EF, lb/yr = (EF, ton/yr x 2,000 lb/ton)/VMT

e) Assumed haul truck travels 0.1 miles through facility

f) Assumed six foot wide water truck traverses over 200,000 square feet of disturbed area

g) Illustration purpose showing the most stringent LSTs. Please consult App. C of the Methodology Paper for applicable LSTs.

h) ARB's CEIDARS database PM2.5 fractions - contruction dust category for fugitive and diesel vehicle exhaust category for combustion.

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: \\.host\Shared Folders\Bryan On My Mac\Desktop\Current Projects\The Commons at Quartz Hill\Operational 2012 v2.urb924

Project Name: Commons at Quartz Hill

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.55	0.62	2.26	0.00	0.01	0.01	719.12

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	23.60	25.39	251.52	0.23	42.16	8.04	22,934.80
TOTALS (tons/year, mitigated)	23.12	24.87	246.30	0.22	41.28	7.87	22,459.78
Percent Reduction	2.03	2.05	2.08	4.35	2.09	2.11	2.07

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	24.15	26.01	253.78	0.23	42.17	8.05	23,653.92

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.04	0.60	0.50	0.00	0.00	0.00	716.11
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.14	0.02	1.76	0.00	0.01	0.01	3.01
Consumer Products	0.00						

Architectural Coatings	0.37						
TOTALS (tons/year, unmitigated)	0.55	0.62	2.26	0.00	0.01	0.01	719.12

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
High turnover (sit-down) rest.	2.18	2.25	22.38	0.02	3.67	0.70	2,001.01
Fast food rest. w/ drive thru	1.55	1.50	14.99	0.01	2.39	0.46	1,310.39
Free-standing discount superstore	8.08	8.44	83.60	0.08	13.91	2.65	7,576.82
Strip mall	10.87	12.29	121.53	0.11	20.72	3.95	11,245.78
Bank (with drive-through)	0.21	0.19	1.85	0.00	0.29	0.06	158.45
Pharmacy/drugstore with drive through	0.71	0.72	7.17	0.01	1.18	0.22	642.35
TOTALS (tons/year, unmitigated)	23.60	25.39	251.52	0.23	42.16	8.04	22,934.80

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
High turnover (sit-down) rest.		192.43	1000 sq ft	11.10	2,135.97	11,688.48
Fast food rest. w/ drive thru		378.93	1000 sq ft	4.20	1,591.51	7,624.93
Free-standing discount superstore		38.81	1000 sq ft	195.90	7,602.88	44,377.52
Strip mall		86.53	1000 sq ft	113.11	9,787.41	66,086.36
Bank (with drive-through)		40.09	1000 sq ft	5.50	220.50	919.01
Pharmacy/drugstore with drive through		47.12	1000 sq ft	14.74	694.55	3,754.89

			22,032.82	134,451.19

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.3	1.2	98.6	0.2
Light Truck < 3750 lbs	16.4	2.7	94.6	2.7
Light Truck 3751-5750 lbs	17.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	1.3	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.2	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.1	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.2	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.2	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.2	0.0	0.0	100.0
Motorcycle	1.9	67.9	32.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Fast food rest. w/ drive thru				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: \\.host\Shared Folders\Bryan On My Mac\Desktop\Current Projects\The Commons at Quartz Hill\Operational 2012 Local v2.urb924

Project Name: Commons at Quartz Hill

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.04	3.38	12.37	0.00	0.04	0.04	3,940.41

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	30.06	21.78	220.80	0.03	2.89	0.79	4,383.45
TOTALS (lbs/day, mitigated)	29.50	21.34	216.19	0.03	2.84	0.78	4,292.06
Percent Reduction	1.86	2.02	2.09	0.00	1.73	1.27	2.08

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	33.10	25.16	233.17	0.03	2.93	0.83	8,323.86

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.24	3.27	2.75	0.00	0.01	0.01	3,923.92
Hearth - No Summer Emissions							
Landscape	0.78	0.11	9.62	0.00	0.03	0.03	16.49
Consumer Products	0.00						

Architectural Coatings	2.02						
TOTALS (lbs/day, unmitigated)	3.04	3.38	12.37	0.00	0.04	0.04	3,940.41

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
High turnover (sit-down) rest.	2.77	2.11	21.76	0.00	0.25	0.07	419.16
Fast food rest. w/ drive thru	2.03	1.56	16.11	0.00	0.17	0.05	301.05
Free-standing discount superstore	10.93	7.49	75.64	0.01	0.96	0.27	1,485.25
Strip mall	13.05	9.73	98.25	0.02	1.41	0.37	2,006.26
Bank (with drive-through)	0.31	0.21	2.16	0.00	0.02	0.01	39.20
Pharmacy/drugstore with drive through	0.97	0.68	6.88	0.00	0.08	0.02	132.53
TOTALS (lbs/day, unmitigated)	30.06	21.78	220.80	0.03	2.89	0.79	4,383.45

Operational Settings:

Includes correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2010 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
High turnover (sit-down) rest.		192.43	1000 sq ft	11.10	2,135.97	128.69
Fast food rest. w/ drive thru		378.93	1000 sq ft	4.20	1,591.51	83.95
Free-standing discount superstore		38.81	1000 sq ft	195.90	7,602.88	494.57
Strip mall		86.53	1000 sq ft	113.11	9,787.41	736.50
Bank (with drive-through)		40.09	1000 sq ft	5.50	220.50	10.24
Pharmacy/drugstore with drive through		47.12	1000 sq ft	14.74	694.55	41.85

			22,032.82	1,495.80

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.3	1.2	98.6	0.2
Light Truck < 3750 lbs	16.4	2.7	94.6	2.7
Light Truck 3751-5750 lbs	17.8	0.4	99.6	0.0
Med Truck 5751-8500 lbs	1.3	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.2	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.1	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.2	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.2	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.2	0.0	0.0	100.0
Motorcycle	1.9	67.9	32.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	1.3	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	0.1	0.1	0.1	0.1	0.1	0.1
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
High turnover (sit-down) rest.				5.0	2.5	92.5
Fast food rest. w/ drive thru				5.0	2.5	92.5
Free-standing discount superstore				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
Bank (with drive-through)				2.0	1.0	97.0
Pharmacy/drugstore with drive through				2.0	1.0	97.0

Control Pathway

ISCST3

Dispersion Options

Titles

The Commons at Quartz Hill - CO
NOX and CO

Dispersion Options

- [ ] Regulatory Default
- [x] Non-Default Options

- [ ] No stack-tip downwash
- [ ] Missing data processing routine
- [x] By-pass the calms prosessing routine
- [ ] Gradual plume rise
- [ ] No buoyancy-included dispersion
- [ ] Vertical term adjustment if HE > ZI
- [ ] TOXICS

- [ ] SCIM (Sampled Chronological Input Model)
- [ ] Gas Dry Deposition
- [ ] Optimized Area Source and Dry Depletion Algorithms
- [ ] Season by Hour-of-Day Output Option

Dispersion Coefficient

Urban

Output Type

- [x] Concentration
- [ ] Total Deposition (Dry & Wet)
- [ ] Dry Deposition
- [ ] Wet Deposition

Plume Depletion

- [ ] Dry Removal
- [ ] Wet Removal

Pollutant / Averaging Time / Terrain Options

Pollutant Type

OTHER - 'NOX_CO

Exponential Decay

- [ ] Yes
- [x] No

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
■	☐	☐	☐	☐	■	☐	☐

- [ ] Month
- [ ] Period
- [ ] Annual

Terrain Height Options

- [ ] Flat
- [x] Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

- [ ] Yes
- [x] No

Default Height = 0.00 m

Terrain Calculation Algorithms

Simple + Complex Terrain

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\LANCASTR.ASC

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

ISCST3

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
ALL	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
1	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
8	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Output Pathway

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: COMGAS.IS

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
8	ALL	1st	08H1GALL.PLT

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Uniform Cartesian Grid

Option not in use

Non-Uniform Cartesian Grid

Option not in use

Uniform Polar Grid

Option not in use

Non-Uniform Polar Grid

Option not in use

Discrete Receptors

Discrete Cartesian Receptors

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936652.42	3845689.61	FENCEGRD	738.61	Option not Selected
2	936603.29	3845687.17	FENCEGRD	738.44	
3	936554.17	3845684.72	FENCEGRD	737.95	
4	936505.04	3845682.27	FENCEGRD	737.68	
5	936455.91	3845679.82	FENCEGRD	737.52	
6	936406.79	3845677.38	FENCEGRD	737.39	
7	936357.66	3845674.93	FENCEGRD	737.65	
8	936308.54	3845672.48	FENCEGRD	737.69	
9	936259.41	3845670.04	FENCEGRD	738.07	
10	936680.93	3845652.06	FENCEGRD	739.01	
11	936716.50	3845691.63	FENCEGRD	738.63	
12	936654.90	3845639.67	FENCEGRD	739.12	
13	936605.78	3845637.23	FENCEGRD	739.12	
14	936556.65	3845634.78	FENCEGRD	738.79	
15	936507.53	3845632.33	FENCEGRD	738.73	
16	936458.40	3845629.89	FENCEGRD	738.54	
17	936409.28	3845627.44	FENCEGRD	738.41	
18	936360.15	3845624.99	FENCEGRD	738.43	
19	936311.02	3845622.55	FENCEGRD	738.71	
20	936261.90	3845620.10	FENCEGRD	739.09	

21	936700.36	3845559.06	FENCEGRD	739.96	Option not Selected
22	936740.84	3845578.33	FENCEGRD	739.79	
23	936796.18	3845639.89	FENCEGRD	739.20	
24	936811.04	3845682.18	FENCEGRD	738.79	
25	936659.88	3845539.80	FENCEGRD	740.13	
26	936610.75	3845537.35	FENCEGRD	740.13	
27	936561.63	3845534.90	FENCEGRD	740.12	
28	936512.50	3845532.46	FENCEGRD	740.04	
29	936463.38	3845530.01	FENCEGRD	739.81	
30	936414.25	3845527.56	FENCEGRD	739.91	
31	936365.12	3845525.12	FENCEGRD	740.11	
32	936316.00	3845522.67	FENCEGRD	740.13	
33	936266.87	3845520.22	FENCEGRD	740.47	
34	936713.20	3845360.69	FENCEGRD	742.69	
35	936756.57	3845381.33	FENCEGRD	742.41	
36	936799.94	3845401.97	FENCEGRD	741.95	
37	936843.32	3845422.61	FENCEGRD	741.74	
38	936886.69	3845443.25	FENCEGRD	741.53	
39	936945.98	3845509.20	FENCEGRD	740.62	
40	936961.90	3845554.52	FENCEGRD	740.17	
41	936977.82	3845599.84	FENCEGRD	739.72	
42	936993.74	3845645.16	FENCEGRD	739.27	
43	937009.65	3845690.48	FENCEGRD	738.82	
44	936669.83	3845340.05	FENCEGRD	743.05	
45	936620.70	3845337.60	FENCEGRD	743.04	
46	936571.58	3845335.15	FENCEGRD	742.90	
47	936522.45	3845332.71	FENCEGRD	742.75	
48	936473.33	3845330.26	FENCEGRD	742.71	
49	936424.20	3845327.81	FENCEGRD	742.82	
50	936375.07	3845325.36	FENCEGRD	742.99	
51	936325.95	3845322.92	FENCEGRD	743.21	
52	936276.82	3845320.47	FENCEGRD	743.34	
53	936738.08	3844861.31	FENCEGRD	751.25	
54	936781.45	3844881.95	FENCEGRD	750.05	
55	936824.82	3844902.59	FENCEGRD	749.34	
56	936868.19	3844923.23	FENCEGRD	748.80	
57	936911.56	3844943.87	FENCEGRD	748.31	
58	936954.93	3844964.51	FENCEGRD	747.95	
59	936998.31	3844985.15	FENCEGRD	747.48	

60	937041.68	3845005.79	FENCEGRD	747.11	Option not Selected
61	937085.05	3845026.43	FENCEGRD	746.81	
62	937128.42	3845047.07	FENCEGRD	746.19	
63	937171.79	3845067.71	FENCEGRD	745.56	
64	937215.16	3845088.35	FENCEGRD	745.34	
65	937258.54	3845108.99	FENCEGRD	745.16	
66	937317.83	3845174.95	FENCEGRD	744.93	
67	937333.74	3845220.26	FENCEGRD	744.69	
68	937349.66	3845265.58	FENCEGRD	744.55	
69	937365.58	3845310.90	FENCEGRD	744.28	
70	937381.50	3845356.22	FENCEGRD	744.09	
71	937397.42	3845401.53	FENCEGRD	743.81	
72	937413.34	3845446.85	FENCEGRD	743.39	
73	937429.26	3845492.17	FENCEGRD	743.22	
74	937445.18	3845537.49	FENCEGRD	743.04	
75	937461.10	3845582.80	FENCEGRD	742.78	
76	937477.02	3845628.12	FENCEGRD	742.54	
77	937492.93	3845673.44	FENCEGRD	742.46	
78	937508.85	3845718.76	FENCEGRD	742.19	
79	936694.71	3844840.67	FENCEGRD	751.31	
80	936645.58	3844838.22	FENCEGRD	751.49	
81	936596.45	3844835.77	FENCEGRD	751.39	
82	936547.33	3844833.32	FENCEGRD	751.09	
83	936498.20	3844830.88	FENCEGRD	750.87	
84	936449.08	3844828.43	FENCEGRD	750.86	
85	936399.95	3844825.98	FENCEGRD	751.19	
86	936350.82	3844823.54	FENCEGRD	751.55	
87	936301.70	3844821.09	FENCEGRD	751.86	
88	936233.21	3845693.60	FENCEGRD	738.02	
89	936230.47	3845742.13	FENCEGRD	737.22	
90	936227.74	3845790.67	FENCEGRD	736.73	
91	936225.00	3845839.20	FENCEGRD	736.23	
92	936222.27	3845887.74	FENCEGRD	735.74	
93	936219.53	3845936.27	FENCEGRD	735.25	
94	936216.80	3845984.81	FENCEGRD	735.06	
95	936214.06	3846033.34	FENCEGRD	734.57	
96	936211.33	3846081.88	FENCEGRD	734.26	
97	936195.65	3845665.01	FENCEGRD	738.72	
98	936234.96	3845629.67	FENCEGRD	739.12	

99	936183.29	3845690.79	FENCEGRD	738.31	Option not Selected
100	936180.55	3845739.32	FENCEGRD	737.49	
101	936177.82	3845787.85	FENCEGRD	736.93	
102	936175.08	3845836.39	FENCEGRD	736.32	
103	936172.35	3845884.92	FENCEGRD	735.79	
104	936169.61	3845933.46	FENCEGRD	735.55	
105	936166.88	3845981.99	FENCEGRD	735.06	
106	936164.14	3846030.53	FENCEGRD	734.57	
107	936161.40	3846079.06	FENCEGRD	734.38	
108	936102.68	3845645.06	FENCEGRD	739.24	
109	936121.92	3845604.97	FENCEGRD	739.76	
110	936183.06	3845549.99	FENCEGRD	740.34	
111	936224.97	3845535.11	FENCEGRD	740.39	
112	936083.44	3845685.16	FENCEGRD	738.62	
113	936080.71	3845733.69	FENCEGRD	738.03	
114	936077.97	3845782.23	FENCEGRD	737.33	
115	936075.24	3845830.76	FENCEGRD	736.84	
116	936072.50	3845879.30	FENCEGRD	736.34	
117	936069.77	3845927.83	FENCEGRD	735.85	
118	936067.03	3845976.37	FENCEGRD	735.36	
119	936064.30	3846024.90	FENCEGRD	734.87	
120	936061.56	3846073.44	FENCEGRD	734.57	
121	935904.37	3845630.95	FENCEGRD	740.21	
122	935924.98	3845587.99	FENCEGRD	740.63	
123	935945.60	3845545.03	FENCEGRD	741.16	
124	935966.21	3845502.07	FENCEGRD	741.94	
125	935986.82	3845459.12	FENCEGRD	742.27	
126	936052.33	3845400.21	FENCEGRD	742.58	
127	936097.23	3845384.26	FENCEGRD	742.68	
128	936142.13	3845368.31	FENCEGRD	742.78	
129	936187.03	3845352.37	FENCEGRD	743.00	
130	936231.92	3845336.42	FENCEGRD	743.19	
131	935883.76	3845673.91	FENCEGRD	739.58	
132	935881.03	3845722.44	FENCEGRD	739.04	
133	935878.29	3845770.98	FENCEGRD	738.25	
134	935875.56	3845819.51	FENCEGRD	737.74	
135	935872.82	3845868.05	FENCEGRD	737.23	
136	935870.09	3845916.58	FENCEGRD	736.65	
137	935867.35	3845965.11	FENCEGRD	736.15	

138	935864.62	3846013.65	FENCEGRD	735.65	Option not Selected
139	935861.88	3846062.18	FENCEGRD	734.98	
140	935405.16	3845602.82	FENCEGRD	740.57	
141	935425.78	3845559.86	FENCEGRD	741.67	
142	935446.39	3845516.90	FENCEGRD	742.47	
143	935467.00	3845473.94	FENCEGRD	743.13	
144	935487.61	3845430.98	FENCEGRD	743.62	
145	935508.22	3845388.03	FENCEGRD	744.55	
146	935528.83	3845345.07	FENCEGRD	745.40	
147	935549.45	3845302.11	FENCEGRD	746.12	
148	935570.06	3845259.15	FENCEGRD	746.70	
149	935590.67	3845216.19	FENCEGRD	747.66	
150	935611.28	3845173.23	FENCEGRD	748.81	
151	935631.89	3845130.28	FENCEGRD	749.72	
152	935652.50	3845087.32	FENCEGRD	750.75	
153	935718.01	3845028.41	FENCEGRD	751.70	
154	935762.91	3845012.46	FENCEGRD	751.63	
155	935807.81	3844996.52	FENCEGRD	751.86	
156	935852.71	3844980.57	FENCEGRD	751.86	
157	935897.61	3844964.62	FENCEGRD	751.93	
158	935942.51	3844948.67	FENCEGRD	751.66	
159	935987.41	3844932.72	FENCEGRD	751.71	
160	936032.31	3844916.78	FENCEGRD	751.83	
161	936077.20	3844900.83	FENCEGRD	751.86	
162	936122.10	3844884.88	FENCEGRD	751.99	
163	936167.00	3844868.93	FENCEGRD	751.93	
164	936211.90	3844852.98	FENCEGRD	751.86	
165	936256.80	3844837.04	FENCEGRD	751.80	
166	935384.55	3845645.78	FENCEGRD	740.12	
167	935381.82	3845694.31	FENCEGRD	739.71	
168	935379.08	3845742.84	FENCEGRD	739.22	
169	935376.35	3845791.38	FENCEGRD	738.72	
170	935373.61	3845839.91	FENCEGRD	738.15	
171	935370.88	3845888.45	FENCEGRD	737.66	
172	935368.14	3845936.98	FENCEGRD	736.94	
173	935365.41	3845985.52	FENCEGRD	736.37	
174	935362.67	3846034.05	FENCEGRD	735.87	
175	936235.02	3846108.25	FENCEGRD	734.13	
176	936284.13	3846110.74	FENCEGRD	734.13	

177	936333.24	3846113.23	FENCEGRD	734.13	Option not Selected
178	936382.35	3846115.71	FENCEGRD	734.23	
179	936431.46	3846118.20	FENCEGRD	734.45	
180	936480.57	3846120.69	FENCEGRD	734.58	
181	936529.67	3846123.18	FENCEGRD	734.76	
182	936578.78	3846125.67	FENCEGRD	734.94	
183	936627.89	3846128.16	FENCEGRD	735.08	
184	936206.49	3846145.80	FENCEGRD	733.96	
185	936170.95	3846106.23	FENCEGRD	734.11	
186	936232.49	3846158.19	FENCEGRD	733.69	
187	936281.60	3846160.67	FENCEGRD	733.80	
188	936330.71	3846163.16	FENCEGRD	733.93	
189	936379.82	3846165.65	FENCEGRD	733.94	
190	936428.93	3846168.14	FENCEGRD	733.95	
191	936478.04	3846170.63	FENCEGRD	734.25	
192	936527.14	3846173.12	FENCEGRD	734.47	
193	936576.25	3846175.60	FENCEGRD	734.57	
194	936625.36	3846178.09	FENCEGRD	734.57	
195	936186.99	3846238.78	FENCEGRD	733.21	
196	936146.55	3846219.51	FENCEGRD	733.35	
197	936091.26	3846157.97	FENCEGRD	733.84	
198	936076.41	3846115.70	FENCEGRD	734.26	
199	936227.43	3846258.06	FENCEGRD	732.92	
200	936276.54	3846260.55	FENCEGRD	733.04	
201	936325.65	3846263.03	FENCEGRD	733.22	
202	936374.76	3846265.52	FENCEGRD	733.23	
203	936423.87	3846268.01	FENCEGRD	733.23	
204	936472.98	3846270.50	FENCEGRD	733.37	
205	936522.08	3846272.99	FENCEGRD	733.55	
206	936571.19	3846275.48	FENCEGRD	733.73	
207	936620.30	3846277.96	FENCEGRD	733.86	
208	936173.98	3846437.15	FENCEGRD	731.52	
209	936130.65	3846416.50	FENCEGRD	731.55	
210	936087.32	3846395.85	FENCEGRD	731.93	
211	936043.99	3846375.20	FENCEGRD	732.13	
212	936000.66	3846354.55	FENCEGRD	732.41	
213	935941.42	3846288.61	FENCEGRD	733.04	
214	935925.51	3846243.33	FENCEGRD	733.37	
215	935909.61	3846198.04	FENCEGRD	733.86	

216	935893.70	3846152.76	FENCEGRD	734.19	Option not Selected
217	935877.79	3846107.47	FENCEGRD	734.57	
218	936217.31	3846457.80	FENCEGRD	731.49	
219	936266.42	3846460.29	FENCEGRD	731.50	
220	936315.53	3846462.78	FENCEGRD	731.50	
221	936364.64	3846465.27	FENCEGRD	731.52	
222	936413.75	3846467.75	FENCEGRD	731.81	
223	936462.86	3846470.24	FENCEGRD	731.86	
224	936511.96	3846472.73	FENCEGRD	732.13	
225	936561.07	3846475.22	FENCEGRD	732.26	
226	936610.18	3846477.71	FENCEGRD	732.46	
227	936148.68	3846936.51	FENCEGRD	727.85	
228	936105.35	3846915.86	FENCEGRD	727.86	
229	936062.02	3846895.21	FENCEGRD	727.89	
230	936018.69	3846874.56	FENCEGRD	728.07	
231	935975.36	3846853.91	FENCEGRD	728.11	
232	935932.03	3846833.26	FENCEGRD	728.13	
233	935888.70	3846812.61	FENCEGRD	728.31	
234	935845.37	3846791.96	FENCEGRD	728.47	
235	935802.04	3846771.31	FENCEGRD	728.47	
236	935758.71	3846750.66	FENCEGRD	728.56	
237	935715.38	3846730.01	FENCEGRD	728.74	
238	935672.05	3846709.36	FENCEGRD	728.92	
239	935628.72	3846688.71	FENCEGRD	729.10	
240	935569.48	3846622.77	FENCEGRD	729.74	
241	935553.58	3846577.49	FENCEGRD	730.18	
242	935537.67	3846532.20	FENCEGRD	730.63	
243	935521.76	3846486.91	FENCEGRD	731.08	
244	935505.85	3846441.63	FENCEGRD	731.53	
245	935489.94	3846396.34	FENCEGRD	731.98	
246	935474.03	3846351.05	FENCEGRD	732.43	
247	935458.12	3846305.77	FENCEGRD	732.88	
248	935442.22	3846260.48	FENCEGRD	733.32	
249	935426.31	3846215.20	FENCEGRD	733.77	
250	935410.40	3846169.91	FENCEGRD	734.33	
251	935394.49	3846124.62	FENCEGRD	734.78	
252	935378.58	3846079.34	FENCEGRD	735.33	
253	936192.01	3846957.16	FENCEGRD	727.86	
254	936241.12	3846959.65	FENCEGRD	727.93	

255	936290.23	3846962.14	FENCEGRD	728.04	Option not Selected
256	936339.34	3846964.63	FENCEGRD	728.27	
257	936388.45	3846967.11	FENCEGRD	728.54	
258	936437.56	3846969.60	FENCEGRD	728.94	
259	936486.66	3846972.09	FENCEGRD	729.08	
260	936535.77	3846974.58	FENCEGRD	729.30	
261	936584.88	3846977.07	FENCEGRD	729.69	
262	936654.12	3846104.60	FENCEGRD	735.33	
263	936656.87	3846056.03	FENCEGRD	735.72	
264	936659.62	3846007.45	FENCEGRD	736.01	
265	936662.37	3845958.87	FENCEGRD	736.48	
266	936665.13	3845910.30	FENCEGRD	736.70	
267	936667.88	3845861.72	FENCEGRD	737.19	
268	936670.63	3845813.15	FENCEGRD	737.66	
269	936673.38	3845764.57	FENCEGRD	737.91	
270	936676.13	3845716.00	FENCEGRD	738.36	
271	936691.66	3846133.21	FENCEGRD	735.07	
272	936652.32	3846168.54	FENCEGRD	734.68	
273	936704.04	3846107.43	FENCEGRD	735.33	
274	936706.79	3846058.85	FENCEGRD	735.79	
275	936709.54	3846010.28	FENCEGRD	736.01	
276	936712.29	3845961.70	FENCEGRD	736.51	
277	936715.05	3845913.13	FENCEGRD	737.00	
278	936717.80	3845864.55	FENCEGRD	737.24	
279	936720.55	3845815.98	FENCEGRD	737.68	
280	936723.30	3845767.40	FENCEGRD	738.17	
281	936726.05	3845718.82	FENCEGRD	738.36	
282	936784.62	3846153.19	FENCEGRD	735.27	
283	936765.35	3846193.28	FENCEGRD	735.02	
284	936704.16	3846248.24	FENCEGRD	734.45	
285	936662.23	3846263.10	FENCEGRD	734.12	
286	936803.88	3846113.09	FENCEGRD	735.64	
287	936806.63	3846064.51	FENCEGRD	735.83	
288	936809.38	3846015.93	FENCEGRD	736.26	
289	936812.13	3845967.36	FENCEGRD	736.51	
290	936814.89	3845918.78	FENCEGRD	737.00	
291	936817.64	3845870.21	FENCEGRD	737.50	
292	936820.39	3845821.63	FENCEGRD	737.68	
293	936823.14	3845773.06	FENCEGRD	738.18	

294	936825.89	3845724.48	FENCEGRD	738.37	Option not Selected
295	936982.92	3846167.36	FENCEGRD	736.36	
296	936962.28	3846210.33	FENCEGRD	736.06	
297	936941.65	3846253.29	FENCEGRD	735.79	
298	936921.01	3846296.25	FENCEGRD	735.49	
299	936900.37	3846339.22	FENCEGRD	735.30	
300	936834.81	3846398.10	FENCEGRD	734.58	
301	936789.88	3846414.02	FENCEGRD	734.09	
302	936744.96	3846429.94	FENCEGRD	733.75	
303	936700.03	3846445.86	FENCEGRD	733.12	
304	936655.11	3846461.79	FENCEGRD	732.84	
305	937003.56	3846124.40	FENCEGRD	736.83	
306	937006.31	3846075.82	FENCEGRD	737.03	
307	937009.06	3846027.25	FENCEGRD	737.27	
308	937011.81	3845978.67	FENCEGRD	737.43	
309	937014.57	3845930.10	FENCEGRD	737.43	
310	937017.32	3845881.52	FENCEGRD	737.43	
311	937020.07	3845832.94	FENCEGRD	737.64	
312	937022.82	3845784.37	FENCEGRD	737.89	
313	937025.57	3845735.79	FENCEGRD	738.43	
314	937482.12	3846195.64	FENCEGRD	737.04	
315	937461.48	3846238.61	FENCEGRD	736.60	
316	937440.85	3846281.57	FENCEGRD	736.34	
317	937420.21	3846324.53	FENCEGRD	736.01	
318	937399.57	3846367.50	FENCEGRD	735.55	
319	937378.93	3846410.46	FENCEGRD	735.11	
320	937358.30	3846453.42	FENCEGRD	734.71	
321	937337.66	3846496.39	FENCEGRD	734.45	
322	937317.02	3846539.35	FENCEGRD	734.07	
323	937296.38	3846582.32	FENCEGRD	733.63	
324	937275.75	3846625.28	FENCEGRD	733.35	
325	937255.11	3846668.24	FENCEGRD	733.30	
326	937234.47	3846711.21	FENCEGRD	732.89	
327	937168.91	3846770.09	FENCEGRD	732.05	
328	937123.98	3846786.01	FENCEGRD	732.15	
329	937079.06	3846801.93	FENCEGRD	732.23	
330	937034.13	3846817.85	FENCEGRD	732.14	
331	936989.21	3846833.78	FENCEGRD	731.81	
332	936944.28	3846849.70	FENCEGRD	731.82	

333	936899.36	3846865.62	FENCEGRD	731.74	Option not Selected
334	936854.43	3846881.54	FENCEGRD	731.55	
335	936809.51	3846897.46	FENCEGRD	731.36	
336	936764.58	3846913.38	FENCEGRD	730.92	
337	936719.66	3846929.30	FENCEGRD	730.65	
338	936674.73	3846945.22	FENCEGRD	730.32	
339	936629.81	3846961.15	FENCEGRD	729.90	
340	937502.76	3846152.68	FENCEGRD	737.49	
341	937505.51	3846104.10	FENCEGRD	737.98	
342	937508.26	3846055.53	FENCEGRD	738.48	
343	937511.01	3846006.95	FENCEGRD	738.97	
344	937513.76	3845958.38	FENCEGRD	739.77	
345	937516.52	3845909.80	FENCEGRD	740.26	
346	937519.27	3845861.23	FENCEGRD	740.75	
347	937522.02	3845812.65	FENCEGRD	741.25	
348	937524.77	3845764.07	FENCEGRD	741.88	

Discrete Polar Receptors

Option not in use

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936629.16	3846103.19	FENCEPRI	735.32	Option not Selected
2	936651.17	3845714.58	FENCEPRI	738.34	
3	936258.17	3845695.01	FENCEPRI	737.77	
4	936236.29	3846083.28	FENCEPRI	734.26	

Intermediate

Option not in use

Polar Plant Boundary

Option not in use

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid

Source Pathway - Source Inputs

Point Sources

No Point Sources Specified

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

No Polygon Area Sources Specified

Flare Sources

No Flare Sources Specified

Source Pathway - Source Inputs

ISCST3

Line Sources

Source Type	Source ID	Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
LINE	SLINE1	50.00	0.20000		936261.19	3846085.15	0.00	0.00
			0.20000		936292.11	3845698.65	0.00	0.00
	SLINE2	50.00	0.20000		936347.36	3846089.36	0.00	0.00
			0.20000		936378.28	3845702.86	0.00	0.00
	SLINE3	50.00	0.20000		936431.98	3846092.33	0.00	0.00
			0.20000		936462.90	3845705.83	0.00	0.00
	SLINE4	50.00	0.20000		936517.17	3846095.05	0.00	0.00
			0.20000		936548.09	3845708.55	0.00	0.00
	SLINE5	50.00	0.20000		936596.25	3846099.85	0.00	0.00
			0.20000		936627.17	3845713.35	0.00	0.00

Source Pathway - Source Inputs

ISCST3

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000321	936263.18	3846060.33	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000322	936269.92	3845976.16	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000323	936276.66	3845892.00	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000324	936283.39	3845807.84	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000325	936290.13	3845723.67	0.00	0.00	0.04000	50.00		39.27	2.33
SLINE2	L0000326	936349.37	3846064.33	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000327	936356.09	3845980.16	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000328	936362.81	3845896.00	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000329	936369.54	3845811.84	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000330	936376.26	3845727.67	0.00	0.00	0.04000	50.00		39.27	2.33
SLINE3	L0000331	936433.99	3846067.33	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000332	936440.71	3845983.16	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000333	936447.44	3845899.00	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000334	936454.16	3845814.84	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000335	936460.88	3845730.67	0.00	0.00	0.04000	50.00		39.27	2.33
SLINE4	L0000336	936519.18	3846070.08	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000337	936525.90	3845985.91	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000338	936532.63	3845901.75	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000339	936539.35	3845817.59	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000340	936546.07	3845733.42	0.00	0.00	0.04000	50.00		39.27	2.33
SLINE5	L0000341	936598.24	3846074.83	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000342	936604.98	3845990.66	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000343	936611.72	3845906.50	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000344	936618.46	3845822.34	0.00	0.00	0.04000	50.00		39.27	2.33
	L0000345	936625.19	3845738.17	0.00	0.00	0.04000	50.00		39.27	2.33

Source Pathway - Source Inputs

ISCST3

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Data for Gases

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\LANCASTR.ASC

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

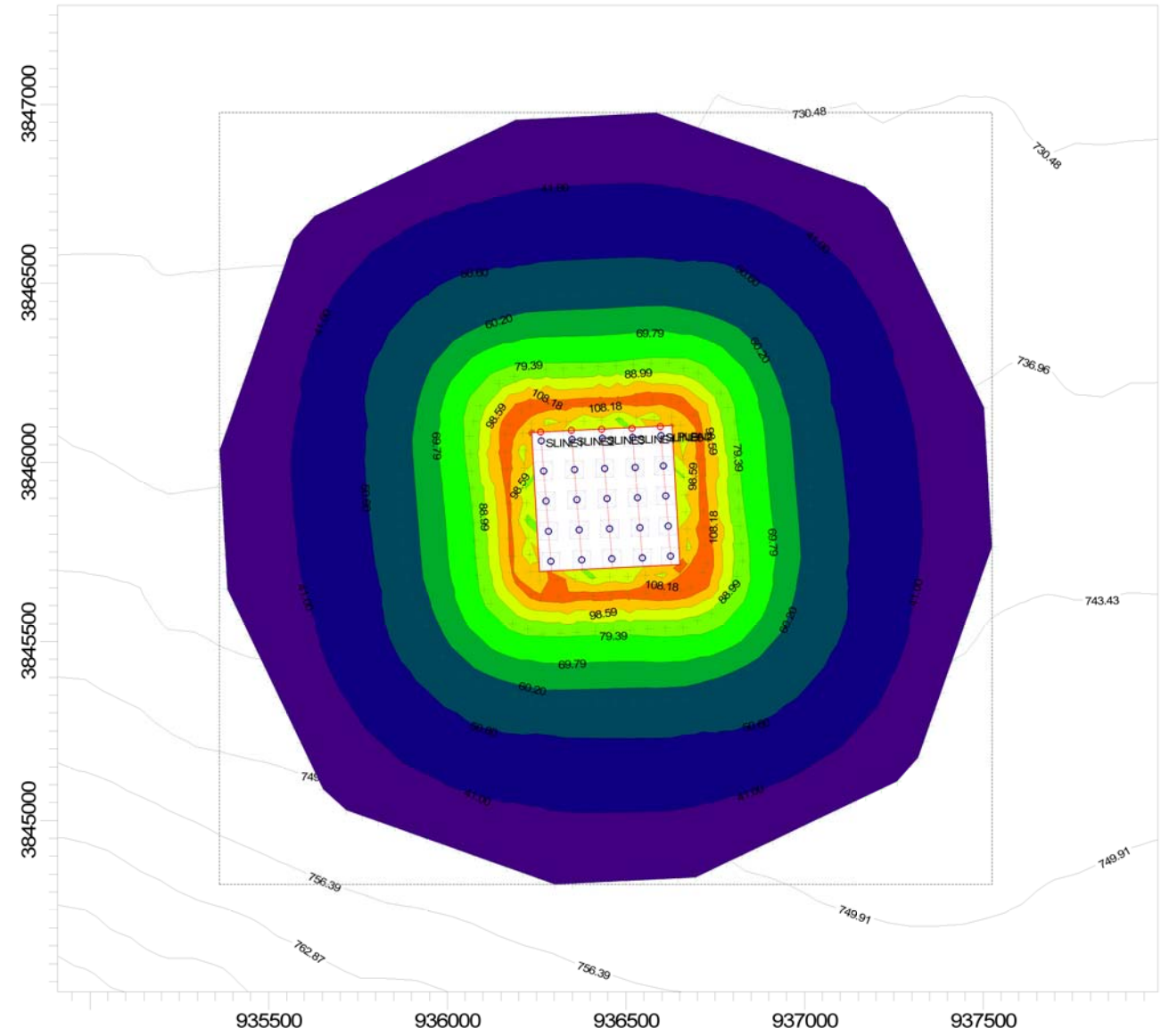
☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

PROJECT TITLE:

The Commons at Quartz Hill
NOx and CO - 1HR



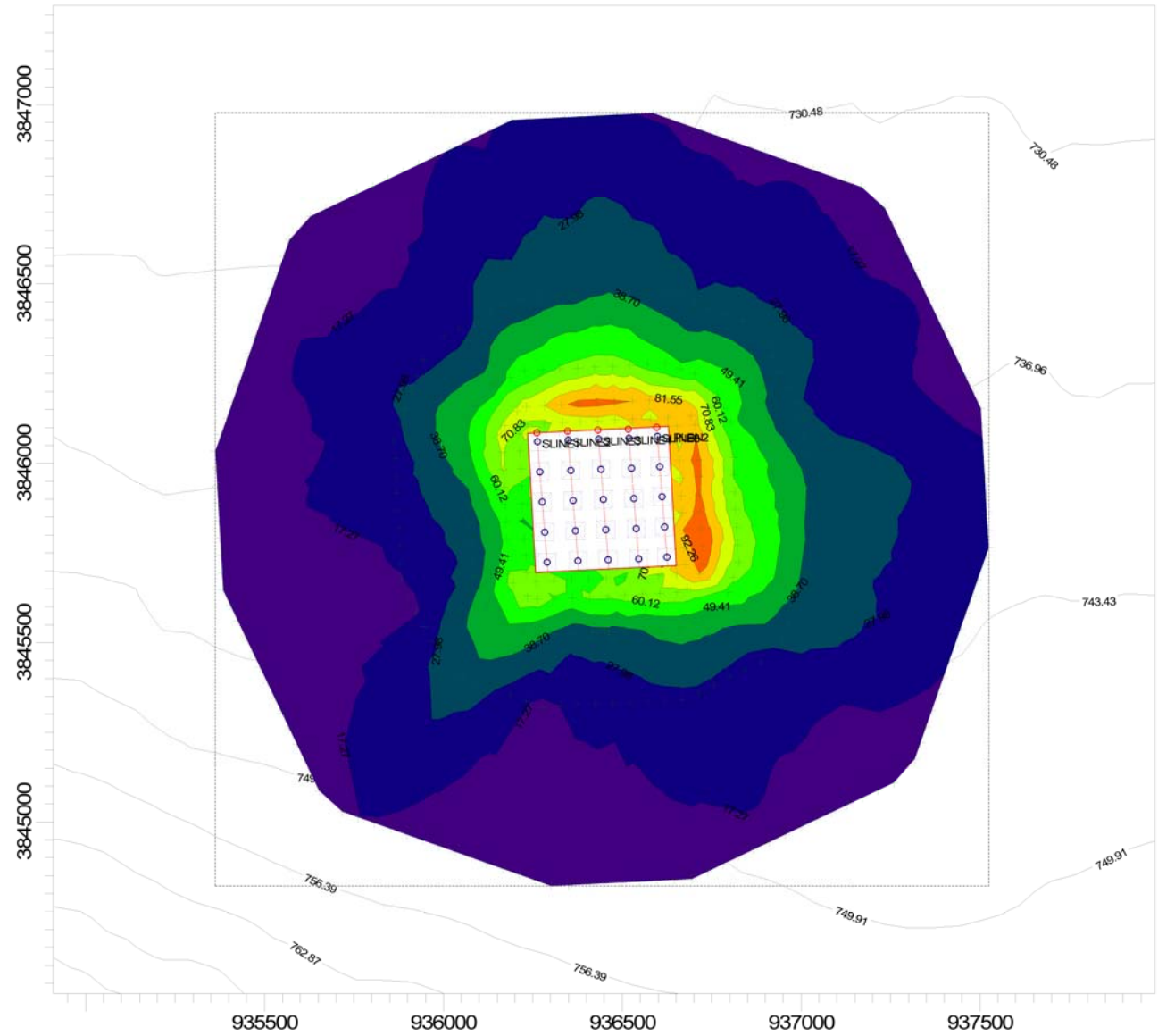
PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

31.405 41.002 50.600 60.197 69.795 79.392 88.990 98.587 108.184 117.782

COMMENTS:	SOURCES:	COMPANY NAME:	
Unit Emission Factor (1 g/s)	**5**		
	RECEPTORS:	MODELER:	
	352		
	OUTPUT TYPE:	SCALE: 1:18,793	
	Concentration	0 0.5 km	
	MAX:	DATE:	PROJECT NO.:
	117.78194 ug/m^3	**11/14/2008**	

PROJECT TITLE:

The Commons at Quartz Hill
NOx and CO - 8HR



PLOT FILE OF HIGH 1ST HIGH 8-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

6.561 17.273 27.985 38.697 49.409 60.121 70.833 81.545 92.257 102.969

COMMENTS: Unit Emission Factor (1 g/s)	SOURCES: **5**	COMPANY NAME:	
	RECEPTORS: **352**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:18,793 0 0.5 km	
	MAX: **102.96929 ug/m^3**	DATE: **11/14/2008**	PROJECT NO.:

Control Pathway

ISCST3

Dispersion Options

Titles

The Commons at Quartz Hill - PM10
PM10 - 24hr Combustion

Dispersion Options

☐ Regulatory Default ☒ Non-Default Options

☐ No stack-tip downwash
☐ Missing data processing routine
☒ By-pass the calms prosessing routine
☐ Gradual plume rise
☐ No buoyancy-included dispersion
☐ Vertical term adjustment if HE > ZI
☐ TOXICS

☐ SCIM (Sampled Chronological Input Model)
☐ Gas Dry Deposition
☐ Optimized Area Source and Dry Depletion Algorithms
☐ Season by Hour-of-Day Output Option

Dispersion Coefficient

Urban

Output Type

☒ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☒ Dry Removal
☐ Wet Removal

Pollutant / Averaging Time / Terrain Options

Pollutant Type

OTHER - `PM10

Exponential Decay

☐ Yes ☒ No

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☒ 24

☐ Month ☐ Period ☒ Annual

Terrain Height Options

☐ Flat ☒ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☒ No

Default Height = 0.00 m

Terrain Calculation Algorithms

Simple + Complex Terrain

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\DryDep\Deposition MET\lancastr.dep

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

ISCST3

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
ALL	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Output Pathway

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: COMPM10V.IS

Averaging Period	Source Group ID	High Value	File Name
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Uniform Cartesian Grid

Option not in use

Non-Uniform Cartesian Grid

Option not in use

Uniform Polar Grid

Option not in use

Non-Uniform Polar Grid

Option not in use

Discrete Receptors

Discrete Cartesian Receptors

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936652.42	3845689.61	FENCEGRD	738.61	Option not Selected
2	936603.29	3845687.17	FENCEGRD	738.44	
3	936554.17	3845684.72	FENCEGRD	737.95	
4	936505.04	3845682.27	FENCEGRD	737.68	
5	936455.91	3845679.82	FENCEGRD	737.52	
6	936406.79	3845677.38	FENCEGRD	737.39	
7	936357.66	3845674.93	FENCEGRD	737.65	
8	936308.54	3845672.48	FENCEGRD	737.69	
9	936259.41	3845670.04	FENCEGRD	738.07	
10	936680.93	3845652.06	FENCEGRD	739.01	
11	936716.50	3845691.63	FENCEGRD	738.63	
12	936654.90	3845639.67	FENCEGRD	739.12	
13	936605.78	3845637.23	FENCEGRD	739.12	
14	936556.65	3845634.78	FENCEGRD	738.79	
15	936507.53	3845632.33	FENCEGRD	738.73	
16	936458.40	3845629.89	FENCEGRD	738.54	
17	936409.28	3845627.44	FENCEGRD	738.41	
18	936360.15	3845624.99	FENCEGRD	738.43	
19	936311.02	3845622.55	FENCEGRD	738.71	
20	936261.90	3845620.10	FENCEGRD	739.09	

21	936700.36	3845559.06	FENCEGRD	739.96	Option not Selected
22	936740.84	3845578.33	FENCEGRD	739.79	
23	936796.18	3845639.89	FENCEGRD	739.20	
24	936811.04	3845682.18	FENCEGRD	738.79	
25	936659.88	3845539.80	FENCEGRD	740.13	
26	936610.75	3845537.35	FENCEGRD	740.13	
27	936561.63	3845534.90	FENCEGRD	740.12	
28	936512.50	3845532.46	FENCEGRD	740.04	
29	936463.38	3845530.01	FENCEGRD	739.81	
30	936414.25	3845527.56	FENCEGRD	739.91	
31	936365.12	3845525.12	FENCEGRD	740.11	
32	936316.00	3845522.67	FENCEGRD	740.13	
33	936266.87	3845520.22	FENCEGRD	740.47	
34	936713.20	3845360.69	FENCEGRD	742.69	
35	936756.57	3845381.33	FENCEGRD	742.41	
36	936799.94	3845401.97	FENCEGRD	741.95	
37	936843.32	3845422.61	FENCEGRD	741.74	
38	936886.69	3845443.25	FENCEGRD	741.53	
39	936945.98	3845509.20	FENCEGRD	740.62	
40	936961.90	3845554.52	FENCEGRD	740.17	
41	936977.82	3845599.84	FENCEGRD	739.72	
42	936993.74	3845645.16	FENCEGRD	739.27	
43	937009.65	3845690.48	FENCEGRD	738.82	
44	936669.83	3845340.05	FENCEGRD	743.05	
45	936620.70	3845337.60	FENCEGRD	743.04	
46	936571.58	3845335.15	FENCEGRD	742.90	
47	936522.45	3845332.71	FENCEGRD	742.75	
48	936473.33	3845330.26	FENCEGRD	742.71	
49	936424.20	3845327.81	FENCEGRD	742.82	
50	936375.07	3845325.36	FENCEGRD	742.99	
51	936325.95	3845322.92	FENCEGRD	743.21	
52	936276.82	3845320.47	FENCEGRD	743.34	
53	936738.08	3844861.31	FENCEGRD	751.25	
54	936781.45	3844881.95	FENCEGRD	750.05	
55	936824.82	3844902.59	FENCEGRD	749.34	
56	936868.19	3844923.23	FENCEGRD	748.80	
57	936911.56	3844943.87	FENCEGRD	748.31	
58	936954.93	3844964.51	FENCEGRD	747.95	
59	936998.31	3844985.15	FENCEGRD	747.48	

60	937041.68	3845005.79	FENCEGRD	747.11	Option not Selected
61	937085.05	3845026.43	FENCEGRD	746.81	
62	937128.42	3845047.07	FENCEGRD	746.19	
63	937171.79	3845067.71	FENCEGRD	745.56	
64	937215.16	3845088.35	FENCEGRD	745.34	
65	937258.54	3845108.99	FENCEGRD	745.16	
66	937317.83	3845174.95	FENCEGRD	744.93	
67	937333.74	3845220.26	FENCEGRD	744.69	
68	937349.66	3845265.58	FENCEGRD	744.55	
69	937365.58	3845310.90	FENCEGRD	744.28	
70	937381.50	3845356.22	FENCEGRD	744.09	
71	937397.42	3845401.53	FENCEGRD	743.81	
72	937413.34	3845446.85	FENCEGRD	743.39	
73	937429.26	3845492.17	FENCEGRD	743.22	
74	937445.18	3845537.49	FENCEGRD	743.04	
75	937461.10	3845582.80	FENCEGRD	742.78	
76	937477.02	3845628.12	FENCEGRD	742.54	
77	937492.93	3845673.44	FENCEGRD	742.46	
78	937508.85	3845718.76	FENCEGRD	742.19	
79	936694.71	3844840.67	FENCEGRD	751.31	
80	936645.58	3844838.22	FENCEGRD	751.49	
81	936596.45	3844835.77	FENCEGRD	751.39	
82	936547.33	3844833.32	FENCEGRD	751.09	
83	936498.20	3844830.88	FENCEGRD	750.87	
84	936449.08	3844828.43	FENCEGRD	750.86	
85	936399.95	3844825.98	FENCEGRD	751.19	
86	936350.82	3844823.54	FENCEGRD	751.55	
87	936301.70	3844821.09	FENCEGRD	751.86	
88	936233.21	3845693.60	FENCEGRD	738.02	
89	936230.47	3845742.13	FENCEGRD	737.22	
90	936227.74	3845790.67	FENCEGRD	736.73	
91	936225.00	3845839.20	FENCEGRD	736.23	
92	936222.27	3845887.74	FENCEGRD	735.74	
93	936219.53	3845936.27	FENCEGRD	735.25	
94	936216.80	3845984.81	FENCEGRD	735.06	
95	936214.06	3846033.34	FENCEGRD	734.57	
96	936211.33	3846081.88	FENCEGRD	734.26	
97	936195.65	3845665.01	FENCEGRD	738.72	
98	936234.96	3845629.67	FENCEGRD	739.12	

99	936183.29	3845690.79	FENCEGRD	738.31	Option not Selected
100	936180.55	3845739.32	FENCEGRD	737.49	
101	936177.82	3845787.85	FENCEGRD	736.93	
102	936175.08	3845836.39	FENCEGRD	736.32	
103	936172.35	3845884.92	FENCEGRD	735.79	
104	936169.61	3845933.46	FENCEGRD	735.55	
105	936166.88	3845981.99	FENCEGRD	735.06	
106	936164.14	3846030.53	FENCEGRD	734.57	
107	936161.40	3846079.06	FENCEGRD	734.38	
108	936102.68	3845645.06	FENCEGRD	739.24	
109	936121.92	3845604.97	FENCEGRD	739.76	
110	936183.06	3845549.99	FENCEGRD	740.34	
111	936224.97	3845535.11	FENCEGRD	740.39	
112	936083.44	3845685.16	FENCEGRD	738.62	
113	936080.71	3845733.69	FENCEGRD	738.03	
114	936077.97	3845782.23	FENCEGRD	737.33	
115	936075.24	3845830.76	FENCEGRD	736.84	
116	936072.50	3845879.30	FENCEGRD	736.34	
117	936069.77	3845927.83	FENCEGRD	735.85	
118	936067.03	3845976.37	FENCEGRD	735.36	
119	936064.30	3846024.90	FENCEGRD	734.87	
120	936061.56	3846073.44	FENCEGRD	734.57	
121	935904.37	3845630.95	FENCEGRD	740.21	
122	935924.98	3845587.99	FENCEGRD	740.63	
123	935945.60	3845545.03	FENCEGRD	741.16	
124	935966.21	3845502.07	FENCEGRD	741.94	
125	935986.82	3845459.12	FENCEGRD	742.27	
126	936052.33	3845400.21	FENCEGRD	742.58	
127	936097.23	3845384.26	FENCEGRD	742.68	
128	936142.13	3845368.31	FENCEGRD	742.78	
129	936187.03	3845352.37	FENCEGRD	743.00	
130	936231.92	3845336.42	FENCEGRD	743.19	
131	935883.76	3845673.91	FENCEGRD	739.58	
132	935881.03	3845722.44	FENCEGRD	739.04	
133	935878.29	3845770.98	FENCEGRD	738.25	
134	935875.56	3845819.51	FENCEGRD	737.74	
135	935872.82	3845868.05	FENCEGRD	737.23	
136	935870.09	3845916.58	FENCEGRD	736.65	
137	935867.35	3845965.11	FENCEGRD	736.15	

138	935864.62	3846013.65	FENCEGRD	735.65	Option not Selected
139	935861.88	3846062.18	FENCEGRD	734.98	
140	935405.16	3845602.82	FENCEGRD	740.57	
141	935425.78	3845559.86	FENCEGRD	741.67	
142	935446.39	3845516.90	FENCEGRD	742.47	
143	935467.00	3845473.94	FENCEGRD	743.13	
144	935487.61	3845430.98	FENCEGRD	743.62	
145	935508.22	3845388.03	FENCEGRD	744.55	
146	935528.83	3845345.07	FENCEGRD	745.40	
147	935549.45	3845302.11	FENCEGRD	746.12	
148	935570.06	3845259.15	FENCEGRD	746.70	
149	935590.67	3845216.19	FENCEGRD	747.66	
150	935611.28	3845173.23	FENCEGRD	748.81	
151	935631.89	3845130.28	FENCEGRD	749.72	
152	935652.50	3845087.32	FENCEGRD	750.75	
153	935718.01	3845028.41	FENCEGRD	751.70	
154	935762.91	3845012.46	FENCEGRD	751.63	
155	935807.81	3844996.52	FENCEGRD	751.86	
156	935852.71	3844980.57	FENCEGRD	751.86	
157	935897.61	3844964.62	FENCEGRD	751.93	
158	935942.51	3844948.67	FENCEGRD	751.66	
159	935987.41	3844932.72	FENCEGRD	751.71	
160	936032.31	3844916.78	FENCEGRD	751.83	
161	936077.20	3844900.83	FENCEGRD	751.86	
162	936122.10	3844884.88	FENCEGRD	751.99	
163	936167.00	3844868.93	FENCEGRD	751.93	
164	936211.90	3844852.98	FENCEGRD	751.86	
165	936256.80	3844837.04	FENCEGRD	751.80	
166	935384.55	3845645.78	FENCEGRD	740.12	
167	935381.82	3845694.31	FENCEGRD	739.71	
168	935379.08	3845742.84	FENCEGRD	739.22	
169	935376.35	3845791.38	FENCEGRD	738.72	
170	935373.61	3845839.91	FENCEGRD	738.15	
171	935370.88	3845888.45	FENCEGRD	737.66	
172	935368.14	3845936.98	FENCEGRD	736.94	
173	935365.41	3845985.52	FENCEGRD	736.37	
174	935362.67	3846034.05	FENCEGRD	735.87	
175	936235.02	3846108.25	FENCEGRD	734.13	
176	936284.13	3846110.74	FENCEGRD	734.13	

177	936333.24	3846113.23	FENCEGRD	734.13	Option not Selected
178	936382.35	3846115.71	FENCEGRD	734.23	
179	936431.46	3846118.20	FENCEGRD	734.45	
180	936480.57	3846120.69	FENCEGRD	734.58	
181	936529.67	3846123.18	FENCEGRD	734.76	
182	936578.78	3846125.67	FENCEGRD	734.94	
183	936627.89	3846128.16	FENCEGRD	735.08	
184	936206.49	3846145.80	FENCEGRD	733.96	
185	936170.95	3846106.23	FENCEGRD	734.11	
186	936232.49	3846158.19	FENCEGRD	733.69	
187	936281.60	3846160.67	FENCEGRD	733.80	
188	936330.71	3846163.16	FENCEGRD	733.93	
189	936379.82	3846165.65	FENCEGRD	733.94	
190	936428.93	3846168.14	FENCEGRD	733.95	
191	936478.04	3846170.63	FENCEGRD	734.25	
192	936527.14	3846173.12	FENCEGRD	734.47	
193	936576.25	3846175.60	FENCEGRD	734.57	
194	936625.36	3846178.09	FENCEGRD	734.57	
195	936186.99	3846238.78	FENCEGRD	733.21	
196	936146.55	3846219.51	FENCEGRD	733.35	
197	936091.26	3846157.97	FENCEGRD	733.84	
198	936076.41	3846115.70	FENCEGRD	734.26	
199	936227.43	3846258.06	FENCEGRD	732.92	
200	936276.54	3846260.55	FENCEGRD	733.04	
201	936325.65	3846263.03	FENCEGRD	733.22	
202	936374.76	3846265.52	FENCEGRD	733.23	
203	936423.87	3846268.01	FENCEGRD	733.23	
204	936472.98	3846270.50	FENCEGRD	733.37	
205	936522.08	3846272.99	FENCEGRD	733.55	
206	936571.19	3846275.48	FENCEGRD	733.73	
207	936620.30	3846277.96	FENCEGRD	733.86	
208	936173.98	3846437.15	FENCEGRD	731.52	
209	936130.65	3846416.50	FENCEGRD	731.55	
210	936087.32	3846395.85	FENCEGRD	731.93	
211	936043.99	3846375.20	FENCEGRD	732.13	
212	936000.66	3846354.55	FENCEGRD	732.41	
213	935941.42	3846288.61	FENCEGRD	733.04	
214	935925.51	3846243.33	FENCEGRD	733.37	
215	935909.61	3846198.04	FENCEGRD	733.86	

216	935893.70	3846152.76	FENCEGRD	734.19	Option not Selected
217	935877.79	3846107.47	FENCEGRD	734.57	
218	936217.31	3846457.80	FENCEGRD	731.49	
219	936266.42	3846460.29	FENCEGRD	731.50	
220	936315.53	3846462.78	FENCEGRD	731.50	
221	936364.64	3846465.27	FENCEGRD	731.52	
222	936413.75	3846467.75	FENCEGRD	731.81	
223	936462.86	3846470.24	FENCEGRD	731.86	
224	936511.96	3846472.73	FENCEGRD	732.13	
225	936561.07	3846475.22	FENCEGRD	732.26	
226	936610.18	3846477.71	FENCEGRD	732.46	
227	936148.68	3846936.51	FENCEGRD	727.85	
228	936105.35	3846915.86	FENCEGRD	727.86	
229	936062.02	3846895.21	FENCEGRD	727.89	
230	936018.69	3846874.56	FENCEGRD	728.07	
231	935975.36	3846853.91	FENCEGRD	728.11	
232	935932.03	3846833.26	FENCEGRD	728.13	
233	935888.70	3846812.61	FENCEGRD	728.31	
234	935845.37	3846791.96	FENCEGRD	728.47	
235	935802.04	3846771.31	FENCEGRD	728.47	
236	935758.71	3846750.66	FENCEGRD	728.56	
237	935715.38	3846730.01	FENCEGRD	728.74	
238	935672.05	3846709.36	FENCEGRD	728.92	
239	935628.72	3846688.71	FENCEGRD	729.10	
240	935569.48	3846622.77	FENCEGRD	729.74	
241	935553.58	3846577.49	FENCEGRD	730.18	
242	935537.67	3846532.20	FENCEGRD	730.63	
243	935521.76	3846486.91	FENCEGRD	731.08	
244	935505.85	3846441.63	FENCEGRD	731.53	
245	935489.94	3846396.34	FENCEGRD	731.98	
246	935474.03	3846351.05	FENCEGRD	732.43	
247	935458.12	3846305.77	FENCEGRD	732.88	
248	935442.22	3846260.48	FENCEGRD	733.32	
249	935426.31	3846215.20	FENCEGRD	733.77	
250	935410.40	3846169.91	FENCEGRD	734.33	
251	935394.49	3846124.62	FENCEGRD	734.78	
252	935378.58	3846079.34	FENCEGRD	735.33	
253	936192.01	3846957.16	FENCEGRD	727.86	
254	936241.12	3846959.65	FENCEGRD	727.93	

255	936290.23	3846962.14	FENCEGRD	728.04	Option not Selected
256	936339.34	3846964.63	FENCEGRD	728.27	
257	936388.45	3846967.11	FENCEGRD	728.54	
258	936437.56	3846969.60	FENCEGRD	728.94	
259	936486.66	3846972.09	FENCEGRD	729.08	
260	936535.77	3846974.58	FENCEGRD	729.30	
261	936584.88	3846977.07	FENCEGRD	729.69	
262	936654.12	3846104.60	FENCEGRD	735.33	
263	936656.87	3846056.03	FENCEGRD	735.72	
264	936659.62	3846007.45	FENCEGRD	736.01	
265	936662.37	3845958.87	FENCEGRD	736.48	
266	936665.13	3845910.30	FENCEGRD	736.70	
267	936667.88	3845861.72	FENCEGRD	737.19	
268	936670.63	3845813.15	FENCEGRD	737.66	
269	936673.38	3845764.57	FENCEGRD	737.91	
270	936676.13	3845716.00	FENCEGRD	738.36	
271	936691.66	3846133.21	FENCEGRD	735.07	
272	936652.32	3846168.54	FENCEGRD	734.68	
273	936704.04	3846107.43	FENCEGRD	735.33	
274	936706.79	3846058.85	FENCEGRD	735.79	
275	936709.54	3846010.28	FENCEGRD	736.01	
276	936712.29	3845961.70	FENCEGRD	736.51	
277	936715.05	3845913.13	FENCEGRD	737.00	
278	936717.80	3845864.55	FENCEGRD	737.24	
279	936720.55	3845815.98	FENCEGRD	737.68	
280	936723.30	3845767.40	FENCEGRD	738.17	
281	936726.05	3845718.82	FENCEGRD	738.36	
282	936784.62	3846153.19	FENCEGRD	735.27	
283	936765.35	3846193.28	FENCEGRD	735.02	
284	936704.16	3846248.24	FENCEGRD	734.45	
285	936662.23	3846263.10	FENCEGRD	734.12	
286	936803.88	3846113.09	FENCEGRD	735.64	
287	936806.63	3846064.51	FENCEGRD	735.83	
288	936809.38	3846015.93	FENCEGRD	736.26	
289	936812.13	3845967.36	FENCEGRD	736.51	
290	936814.89	3845918.78	FENCEGRD	737.00	
291	936817.64	3845870.21	FENCEGRD	737.50	
292	936820.39	3845821.63	FENCEGRD	737.68	
293	936823.14	3845773.06	FENCEGRD	738.18	

294	936825.89	3845724.48	FENCEGRD	738.37	Option not Selected
295	936982.92	3846167.36	FENCEGRD	736.36	
296	936962.28	3846210.33	FENCEGRD	736.06	
297	936941.65	3846253.29	FENCEGRD	735.79	
298	936921.01	3846296.25	FENCEGRD	735.49	
299	936900.37	3846339.22	FENCEGRD	735.30	
300	936834.81	3846398.10	FENCEGRD	734.58	
301	936789.88	3846414.02	FENCEGRD	734.09	
302	936744.96	3846429.94	FENCEGRD	733.75	
303	936700.03	3846445.86	FENCEGRD	733.12	
304	936655.11	3846461.79	FENCEGRD	732.84	
305	937003.56	3846124.40	FENCEGRD	736.83	
306	937006.31	3846075.82	FENCEGRD	737.03	
307	937009.06	3846027.25	FENCEGRD	737.27	
308	937011.81	3845978.67	FENCEGRD	737.43	
309	937014.57	3845930.10	FENCEGRD	737.43	
310	937017.32	3845881.52	FENCEGRD	737.43	
311	937020.07	3845832.94	FENCEGRD	737.64	
312	937022.82	3845784.37	FENCEGRD	737.89	
313	937025.57	3845735.79	FENCEGRD	738.43	
314	937482.12	3846195.64	FENCEGRD	737.04	
315	937461.48	3846238.61	FENCEGRD	736.60	
316	937440.85	3846281.57	FENCEGRD	736.34	
317	937420.21	3846324.53	FENCEGRD	736.01	
318	937399.57	3846367.50	FENCEGRD	735.55	
319	937378.93	3846410.46	FENCEGRD	735.11	
320	937358.30	3846453.42	FENCEGRD	734.71	
321	937337.66	3846496.39	FENCEGRD	734.45	
322	937317.02	3846539.35	FENCEGRD	734.07	
323	937296.38	3846582.32	FENCEGRD	733.63	
324	937275.75	3846625.28	FENCEGRD	733.35	
325	937255.11	3846668.24	FENCEGRD	733.30	
326	937234.47	3846711.21	FENCEGRD	732.89	
327	937168.91	3846770.09	FENCEGRD	732.05	
328	937123.98	3846786.01	FENCEGRD	732.15	
329	937079.06	3846801.93	FENCEGRD	732.23	
330	937034.13	3846817.85	FENCEGRD	732.14	
331	936989.21	3846833.78	FENCEGRD	731.81	
332	936944.28	3846849.70	FENCEGRD	731.82	

333	936899.36	3846865.62	FENCEGRD	731.74	Option not Selected
334	936854.43	3846881.54	FENCEGRD	731.55	
335	936809.51	3846897.46	FENCEGRD	731.36	
336	936764.58	3846913.38	FENCEGRD	730.92	
337	936719.66	3846929.30	FENCEGRD	730.65	
338	936674.73	3846945.22	FENCEGRD	730.32	
339	936629.81	3846961.15	FENCEGRD	729.90	
340	937502.76	3846152.68	FENCEGRD	737.49	
341	937505.51	3846104.10	FENCEGRD	737.98	
342	937508.26	3846055.53	FENCEGRD	738.48	
343	937511.01	3846006.95	FENCEGRD	738.97	
344	937513.76	3845958.38	FENCEGRD	739.77	
345	937516.52	3845909.80	FENCEGRD	740.26	
346	937519.27	3845861.23	FENCEGRD	740.75	
347	937522.02	3845812.65	FENCEGRD	741.25	
348	937524.77	3845764.07	FENCEGRD	741.88	

Discrete Polar Receptors

Option not in use

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936629.16	3846103.19	FENCEPRI	735.32	Option not Selected
2	936651.17	3845714.58	FENCEPRI	738.34	
3	936258.17	3845695.01	FENCEPRI	737.77	
4	936236.29	3846083.28	FENCEPRI	734.26	

Intermediate

Option not in use

Polar Plant Boundary

Option not in use

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid

Source Pathway - Source Inputs

Point Sources

No Point Sources Specified

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

No Polygon Area Sources Specified

Flare Sources

No Flare Sources Specified

Source Pathway - Source Inputs

ISCST3

Line Sources

Source Type	Source ID	Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
LINE	SLINE1	50.00	0.20000		936271.26	3846085.15	734.26	5.00
			0.20000		936302.18	3845698.65	737.57	5.00
	SLINE2	50.00	0.20000		936351.23	3846087.81	734.40	5.00
			0.20000		936382.15	3845701.31	737.31	5.00
	SLINE3	50.00	0.20000		936431.21	3846091.55	734.62	5.00
			0.20000		936462.13	3845705.05	737.38	5.00
	SLINE4	50.00	0.20000		936513.30	3846095.82	734.85	5.00
			0.20000		936544.22	3845709.32	737.72	5.00
	SLINE5	50.00	0.20000		936590.06	3846100.62	735.12	5.00
			0.20000		936620.98	3845714.12	738.11	5.00

Source Pathway - Source Inputs

ISCST3

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000196	936273.24	3846060.33	734.47	5.00	0.04000	50.00		39.27	2.33
	L0000197	936279.98	3845976.16	735.19	5.00	0.04000	50.00		39.27	2.33
	L0000198	936286.72	3845892.00	735.92	5.00	0.04000	50.00		39.27	2.33
	L0000199	936293.46	3845807.84	736.64	5.00	0.04000	50.00		39.27	2.33
	L0000200	936300.19	3845723.67	737.36	5.00	0.04000	50.00		39.27	2.33
SLINE2	L0000201	936353.24	3846062.83	734.59	5.00	0.04000	50.00		39.27	2.33
	L0000202	936359.96	3845978.66	735.22	5.00	0.04000	50.00		39.27	2.33
	L0000203	936366.69	3845894.50	735.86	5.00	0.04000	50.00		39.27	2.33
	L0000204	936373.41	3845810.34	736.49	5.00	0.04000	50.00		39.27	2.33
	L0000205	936380.13	3845726.17	737.12	5.00	0.04000	50.00		39.27	2.33
SLINE3	L0000206	936433.18	3846066.58	734.80	5.00	0.04000	50.00		39.27	2.33
	L0000207	936439.92	3845982.41	735.40	5.00	0.04000	50.00		39.27	2.33
	L0000208	936446.66	3845898.25	736.00	5.00	0.04000	50.00		39.27	2.33
	L0000209	936453.39	3845814.09	736.60	5.00	0.04000	50.00		39.27	2.33
	L0000210	936460.13	3845729.92	737.20	5.00	0.04000	50.00		39.27	2.33
SLINE4	L0000211	936515.31	3846070.83	735.04	5.00	0.04000	50.00		39.27	2.33
	L0000212	936522.04	3845986.66	735.66	5.00	0.04000	50.00		39.27	2.33
	L0000213	936528.78	3845902.50	736.28	5.00	0.04000	50.00		39.27	2.33
	L0000214	936535.52	3845818.34	736.91	5.00	0.04000	50.00		39.27	2.33
	L0000215	936542.26	3845734.17	737.53	5.00	0.04000	50.00		39.27	2.33
SLINE5	L0000216	936592.06	3846075.58	735.31	5.00	0.04000	50.00		39.27	2.33
	L0000217	936598.79	3845991.41	735.96	5.00	0.04000	50.00		39.27	2.33
	L0000218	936605.53	3845907.25	736.61	5.00	0.04000	50.00		39.27	2.33
	L0000219	936612.27	3845823.09	737.27	5.00	0.04000	50.00		39.27	2.33
	L0000220	936619.01	3845738.92	737.92	5.00	0.04000	50.00		39.27	2.33

Source Pathway - Source Inputs

ISCST3

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

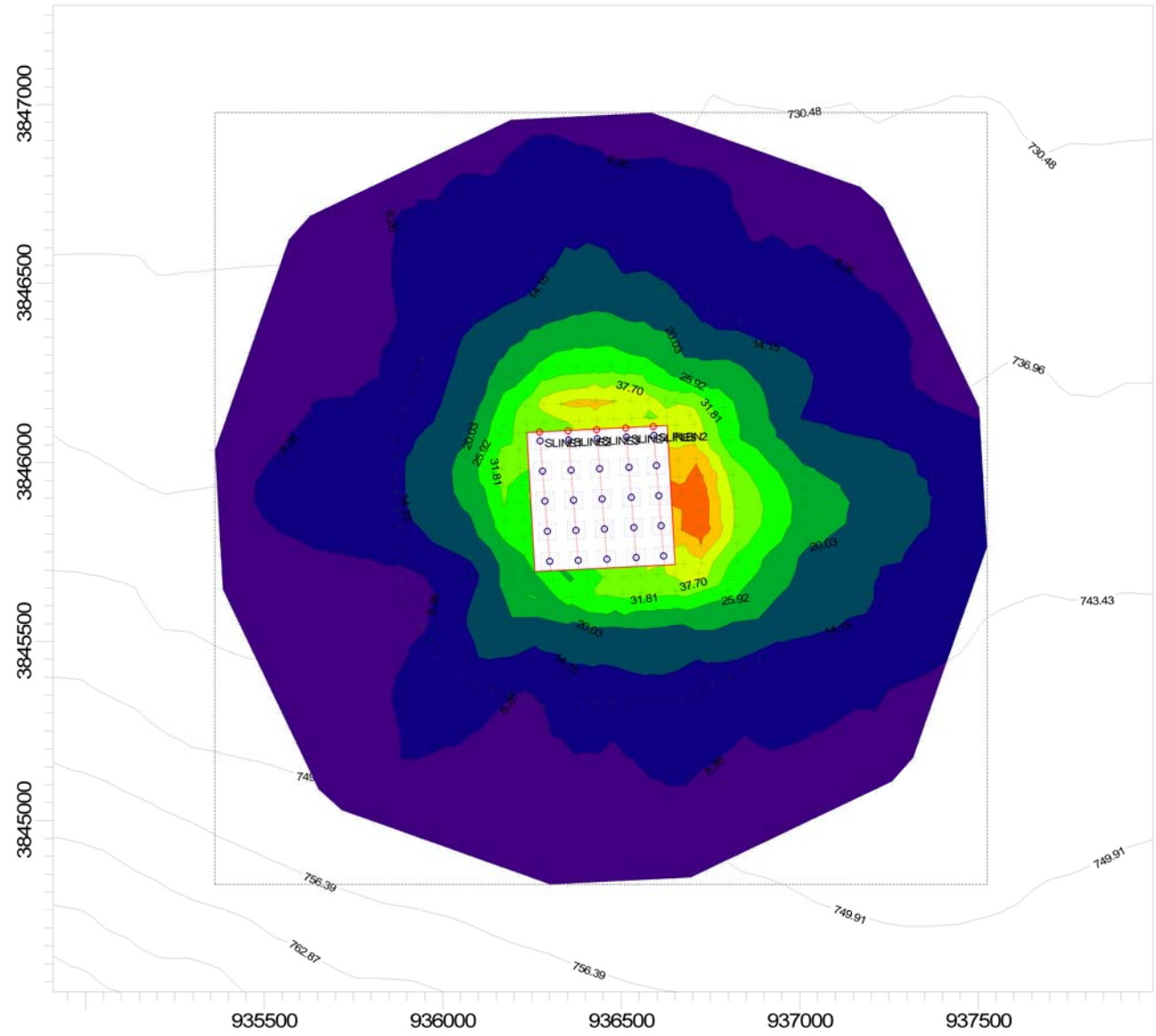
Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

PROJECT TITLE:

The Commons at Quartz Hill - PM10
PM10 - 24hr Combustion



PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

2.370 8.258 14.146 20.034 25.922 31.810 37.699 43.587 49.475 55.363

COMMENTS:	SOURCES:	COMPANY NAME:	
Unit Emission Factor (1 g/s)	**5**		
	RECEPTORS:	MODELER:	
	352		
	OUTPUT TYPE:	SCALE: 1:18,793	
	Concentration	0 0.5 km	
	MAX:	DATE:	PROJECT NO.:
	55.36295 ug/m^3	**11/14/2008**	

Control Pathway

ISCST3

Dispersion Options

Titles

The Commons at Quartz Hill
PM10 - 24hr Fugitive

Dispersion Options

- [ ] Regulatory Default
- [x] Non-Default Options

- [ ] No stack-tip downwash
- [ ] Missing data processing routine
- [x] By-pass the calms prosessing routine
- [ ] Gradual plume rise
- [ ] No buoyancy-included dispersion
- [ ] Vertical term adjustment if HE > ZI
- [ ] TOXICS

- [ ] SCIM (Sampled Chronological Input Model)
- [ ] Gas Dry Deposition
- [ ] Optimized Area Source and Dry Depletion Algorithms
- [ ] Season by Hour-of-Day Output Option

Dispersion Coefficient

Urban

Output Type

- [x] Concentration
- [ ] Total Deposition (Dry & Wet)
- [ ] Dry Deposition
- [ ] Wet Deposition

Plume Depletion

- [x] Dry Removal
- [ ] Wet Removal

Pollutant / Averaging Time / Terrain Options

Pollutant Type

OTHER - `PM10

Exponential Decay

- [ ] Yes
- [x] No

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☐	☐	☐	☐	☐	☐	☐	☑

- [ ] Month
- [ ] Period
- [x] Annual

Terrain Height Options

- [ ] Flat
- [x] Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

- [ ] Yes
- [x] No

Default Height = 0.00 m

Terrain Calculation Algorithms

Simple + Complex Terrain

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\DryDep\Deposition MET\lancastr.dep

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

ISCST3

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
ALL	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Output Pathway

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: COMPM10A.IS

Averaging Period	Source Group ID	High Value	File Name
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Uniform Cartesian Grid

Option not in use

Non-Uniform Cartesian Grid

Option not in use

Uniform Polar Grid

Option not in use

Non-Uniform Polar Grid

Option not in use

Discrete Receptors

Discrete Cartesian Receptors

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936652.42	3845689.61	FENCEGRD	738.61	Option not Selected
2	936603.29	3845687.17	FENCEGRD	738.44	
3	936554.17	3845684.72	FENCEGRD	737.95	
4	936505.04	3845682.27	FENCEGRD	737.68	
5	936455.91	3845679.82	FENCEGRD	737.52	
6	936406.79	3845677.38	FENCEGRD	737.39	
7	936357.66	3845674.93	FENCEGRD	737.65	
8	936308.54	3845672.48	FENCEGRD	737.69	
9	936259.41	3845670.04	FENCEGRD	738.07	
10	936680.93	3845652.06	FENCEGRD	739.01	
11	936716.50	3845691.63	FENCEGRD	738.63	
12	936654.90	3845639.67	FENCEGRD	739.12	
13	936605.78	3845637.23	FENCEGRD	739.12	
14	936556.65	3845634.78	FENCEGRD	738.79	
15	936507.53	3845632.33	FENCEGRD	738.73	
16	936458.40	3845629.89	FENCEGRD	738.54	
17	936409.28	3845627.44	FENCEGRD	738.41	
18	936360.15	3845624.99	FENCEGRD	738.43	
19	936311.02	3845622.55	FENCEGRD	738.71	
20	936261.90	3845620.10	FENCEGRD	739.09	

21	936700.36	3845559.06	FENCEGRD	739.96	Option not Selected
22	936740.84	3845578.33	FENCEGRD	739.79	
23	936796.18	3845639.89	FENCEGRD	739.20	
24	936811.04	3845682.18	FENCEGRD	738.79	
25	936659.88	3845539.80	FENCEGRD	740.13	
26	936610.75	3845537.35	FENCEGRD	740.13	
27	936561.63	3845534.90	FENCEGRD	740.12	
28	936512.50	3845532.46	FENCEGRD	740.04	
29	936463.38	3845530.01	FENCEGRD	739.81	
30	936414.25	3845527.56	FENCEGRD	739.91	
31	936365.12	3845525.12	FENCEGRD	740.11	
32	936316.00	3845522.67	FENCEGRD	740.13	
33	936266.87	3845520.22	FENCEGRD	740.47	
34	936713.20	3845360.69	FENCEGRD	742.69	
35	936756.57	3845381.33	FENCEGRD	742.41	
36	936799.94	3845401.97	FENCEGRD	741.95	
37	936843.32	3845422.61	FENCEGRD	741.74	
38	936886.69	3845443.25	FENCEGRD	741.53	
39	936945.98	3845509.20	FENCEGRD	740.62	
40	936961.90	3845554.52	FENCEGRD	740.17	
41	936977.82	3845599.84	FENCEGRD	739.72	
42	936993.74	3845645.16	FENCEGRD	739.27	
43	937009.65	3845690.48	FENCEGRD	738.82	
44	936669.83	3845340.05	FENCEGRD	743.05	
45	936620.70	3845337.60	FENCEGRD	743.04	
46	936571.58	3845335.15	FENCEGRD	742.90	
47	936522.45	3845332.71	FENCEGRD	742.75	
48	936473.33	3845330.26	FENCEGRD	742.71	
49	936424.20	3845327.81	FENCEGRD	742.82	
50	936375.07	3845325.36	FENCEGRD	742.99	
51	936325.95	3845322.92	FENCEGRD	743.21	
52	936276.82	3845320.47	FENCEGRD	743.34	
53	936738.08	3844861.31	FENCEGRD	751.25	
54	936781.45	3844881.95	FENCEGRD	750.05	
55	936824.82	3844902.59	FENCEGRD	749.34	
56	936868.19	3844923.23	FENCEGRD	748.80	
57	936911.56	3844943.87	FENCEGRD	748.31	
58	936954.93	3844964.51	FENCEGRD	747.95	
59	936998.31	3844985.15	FENCEGRD	747.48	

60	937041.68	3845005.79	FENCEGRD	747.11	Option not Selected
61	937085.05	3845026.43	FENCEGRD	746.81	
62	937128.42	3845047.07	FENCEGRD	746.19	
63	937171.79	3845067.71	FENCEGRD	745.56	
64	937215.16	3845088.35	FENCEGRD	745.34	
65	937258.54	3845108.99	FENCEGRD	745.16	
66	937317.83	3845174.95	FENCEGRD	744.93	
67	937333.74	3845220.26	FENCEGRD	744.69	
68	937349.66	3845265.58	FENCEGRD	744.55	
69	937365.58	3845310.90	FENCEGRD	744.28	
70	937381.50	3845356.22	FENCEGRD	744.09	
71	937397.42	3845401.53	FENCEGRD	743.81	
72	937413.34	3845446.85	FENCEGRD	743.39	
73	937429.26	3845492.17	FENCEGRD	743.22	
74	937445.18	3845537.49	FENCEGRD	743.04	
75	937461.10	3845582.80	FENCEGRD	742.78	
76	937477.02	3845628.12	FENCEGRD	742.54	
77	937492.93	3845673.44	FENCEGRD	742.46	
78	937508.85	3845718.76	FENCEGRD	742.19	
79	936694.71	3844840.67	FENCEGRD	751.31	
80	936645.58	3844838.22	FENCEGRD	751.49	
81	936596.45	3844835.77	FENCEGRD	751.39	
82	936547.33	3844833.32	FENCEGRD	751.09	
83	936498.20	3844830.88	FENCEGRD	750.87	
84	936449.08	3844828.43	FENCEGRD	750.86	
85	936399.95	3844825.98	FENCEGRD	751.19	
86	936350.82	3844823.54	FENCEGRD	751.55	
87	936301.70	3844821.09	FENCEGRD	751.86	
88	936233.21	3845693.60	FENCEGRD	738.02	
89	936230.47	3845742.13	FENCEGRD	737.22	
90	936227.74	3845790.67	FENCEGRD	736.73	
91	936225.00	3845839.20	FENCEGRD	736.23	
92	936222.27	3845887.74	FENCEGRD	735.74	
93	936219.53	3845936.27	FENCEGRD	735.25	
94	936216.80	3845984.81	FENCEGRD	735.06	
95	936214.06	3846033.34	FENCEGRD	734.57	
96	936211.33	3846081.88	FENCEGRD	734.26	
97	936195.65	3845665.01	FENCEGRD	738.72	
98	936234.96	3845629.67	FENCEGRD	739.12	

99	936183.29	3845690.79	FENCEGRD	738.31	Option not Selected
100	936180.55	3845739.32	FENCEGRD	737.49	
101	936177.82	3845787.85	FENCEGRD	736.93	
102	936175.08	3845836.39	FENCEGRD	736.32	
103	936172.35	3845884.92	FENCEGRD	735.79	
104	936169.61	3845933.46	FENCEGRD	735.55	
105	936166.88	3845981.99	FENCEGRD	735.06	
106	936164.14	3846030.53	FENCEGRD	734.57	
107	936161.40	3846079.06	FENCEGRD	734.38	
108	936102.68	3845645.06	FENCEGRD	739.24	
109	936121.92	3845604.97	FENCEGRD	739.76	
110	936183.06	3845549.99	FENCEGRD	740.34	
111	936224.97	3845535.11	FENCEGRD	740.39	
112	936083.44	3845685.16	FENCEGRD	738.62	
113	936080.71	3845733.69	FENCEGRD	738.03	
114	936077.97	3845782.23	FENCEGRD	737.33	
115	936075.24	3845830.76	FENCEGRD	736.84	
116	936072.50	3845879.30	FENCEGRD	736.34	
117	936069.77	3845927.83	FENCEGRD	735.85	
118	936067.03	3845976.37	FENCEGRD	735.36	
119	936064.30	3846024.90	FENCEGRD	734.87	
120	936061.56	3846073.44	FENCEGRD	734.57	
121	935904.37	3845630.95	FENCEGRD	740.21	
122	935924.98	3845587.99	FENCEGRD	740.63	
123	935945.60	3845545.03	FENCEGRD	741.16	
124	935966.21	3845502.07	FENCEGRD	741.94	
125	935986.82	3845459.12	FENCEGRD	742.27	
126	936052.33	3845400.21	FENCEGRD	742.58	
127	936097.23	3845384.26	FENCEGRD	742.68	
128	936142.13	3845368.31	FENCEGRD	742.78	
129	936187.03	3845352.37	FENCEGRD	743.00	
130	936231.92	3845336.42	FENCEGRD	743.19	
131	935883.76	3845673.91	FENCEGRD	739.58	
132	935881.03	3845722.44	FENCEGRD	739.04	
133	935878.29	3845770.98	FENCEGRD	738.25	
134	935875.56	3845819.51	FENCEGRD	737.74	
135	935872.82	3845868.05	FENCEGRD	737.23	
136	935870.09	3845916.58	FENCEGRD	736.65	
137	935867.35	3845965.11	FENCEGRD	736.15	

138	935864.62	3846013.65	FENCEGRD	735.65	Option not Selected
139	935861.88	3846062.18	FENCEGRD	734.98	
140	935405.16	3845602.82	FENCEGRD	740.57	
141	935425.78	3845559.86	FENCEGRD	741.67	
142	935446.39	3845516.90	FENCEGRD	742.47	
143	935467.00	3845473.94	FENCEGRD	743.13	
144	935487.61	3845430.98	FENCEGRD	743.62	
145	935508.22	3845388.03	FENCEGRD	744.55	
146	935528.83	3845345.07	FENCEGRD	745.40	
147	935549.45	3845302.11	FENCEGRD	746.12	
148	935570.06	3845259.15	FENCEGRD	746.70	
149	935590.67	3845216.19	FENCEGRD	747.66	
150	935611.28	3845173.23	FENCEGRD	748.81	
151	935631.89	3845130.28	FENCEGRD	749.72	
152	935652.50	3845087.32	FENCEGRD	750.75	
153	935718.01	3845028.41	FENCEGRD	751.70	
154	935762.91	3845012.46	FENCEGRD	751.63	
155	935807.81	3844996.52	FENCEGRD	751.86	
156	935852.71	3844980.57	FENCEGRD	751.86	
157	935897.61	3844964.62	FENCEGRD	751.93	
158	935942.51	3844948.67	FENCEGRD	751.66	
159	935987.41	3844932.72	FENCEGRD	751.71	
160	936032.31	3844916.78	FENCEGRD	751.83	
161	936077.20	3844900.83	FENCEGRD	751.86	
162	936122.10	3844884.88	FENCEGRD	751.99	
163	936167.00	3844868.93	FENCEGRD	751.93	
164	936211.90	3844852.98	FENCEGRD	751.86	
165	936256.80	3844837.04	FENCEGRD	751.80	
166	935384.55	3845645.78	FENCEGRD	740.12	
167	935381.82	3845694.31	FENCEGRD	739.71	
168	935379.08	3845742.84	FENCEGRD	739.22	
169	935376.35	3845791.38	FENCEGRD	738.72	
170	935373.61	3845839.91	FENCEGRD	738.15	
171	935370.88	3845888.45	FENCEGRD	737.66	
172	935368.14	3845936.98	FENCEGRD	736.94	
173	935365.41	3845985.52	FENCEGRD	736.37	
174	935362.67	3846034.05	FENCEGRD	735.87	
175	936235.02	3846108.25	FENCEGRD	734.13	
176	936284.13	3846110.74	FENCEGRD	734.13	

177	936333.24	3846113.23	FENCEGRD	734.13	Option not Selected
178	936382.35	3846115.71	FENCEGRD	734.23	
179	936431.46	3846118.20	FENCEGRD	734.45	
180	936480.57	3846120.69	FENCEGRD	734.58	
181	936529.67	3846123.18	FENCEGRD	734.76	
182	936578.78	3846125.67	FENCEGRD	734.94	
183	936627.89	3846128.16	FENCEGRD	735.08	
184	936206.49	3846145.80	FENCEGRD	733.96	
185	936170.95	3846106.23	FENCEGRD	734.11	
186	936232.49	3846158.19	FENCEGRD	733.69	
187	936281.60	3846160.67	FENCEGRD	733.80	
188	936330.71	3846163.16	FENCEGRD	733.93	
189	936379.82	3846165.65	FENCEGRD	733.94	
190	936428.93	3846168.14	FENCEGRD	733.95	
191	936478.04	3846170.63	FENCEGRD	734.25	
192	936527.14	3846173.12	FENCEGRD	734.47	
193	936576.25	3846175.60	FENCEGRD	734.57	
194	936625.36	3846178.09	FENCEGRD	734.57	
195	936186.99	3846238.78	FENCEGRD	733.21	
196	936146.55	3846219.51	FENCEGRD	733.35	
197	936091.26	3846157.97	FENCEGRD	733.84	
198	936076.41	3846115.70	FENCEGRD	734.26	
199	936227.43	3846258.06	FENCEGRD	732.92	
200	936276.54	3846260.55	FENCEGRD	733.04	
201	936325.65	3846263.03	FENCEGRD	733.22	
202	936374.76	3846265.52	FENCEGRD	733.23	
203	936423.87	3846268.01	FENCEGRD	733.23	
204	936472.98	3846270.50	FENCEGRD	733.37	
205	936522.08	3846272.99	FENCEGRD	733.55	
206	936571.19	3846275.48	FENCEGRD	733.73	
207	936620.30	3846277.96	FENCEGRD	733.86	
208	936173.98	3846437.15	FENCEGRD	731.52	
209	936130.65	3846416.50	FENCEGRD	731.55	
210	936087.32	3846395.85	FENCEGRD	731.93	
211	936043.99	3846375.20	FENCEGRD	732.13	
212	936000.66	3846354.55	FENCEGRD	732.41	
213	935941.42	3846288.61	FENCEGRD	733.04	
214	935925.51	3846243.33	FENCEGRD	733.37	
215	935909.61	3846198.04	FENCEGRD	733.86	

216	935893.70	3846152.76	FENCEGRD	734.19	Option not Selected
217	935877.79	3846107.47	FENCEGRD	734.57	
218	936217.31	3846457.80	FENCEGRD	731.49	
219	936266.42	3846460.29	FENCEGRD	731.50	
220	936315.53	3846462.78	FENCEGRD	731.50	
221	936364.64	3846465.27	FENCEGRD	731.52	
222	936413.75	3846467.75	FENCEGRD	731.81	
223	936462.86	3846470.24	FENCEGRD	731.86	
224	936511.96	3846472.73	FENCEGRD	732.13	
225	936561.07	3846475.22	FENCEGRD	732.26	
226	936610.18	3846477.71	FENCEGRD	732.46	
227	936148.68	3846936.51	FENCEGRD	727.85	
228	936105.35	3846915.86	FENCEGRD	727.86	
229	936062.02	3846895.21	FENCEGRD	727.89	
230	936018.69	3846874.56	FENCEGRD	728.07	
231	935975.36	3846853.91	FENCEGRD	728.11	
232	935932.03	3846833.26	FENCEGRD	728.13	
233	935888.70	3846812.61	FENCEGRD	728.31	
234	935845.37	3846791.96	FENCEGRD	728.47	
235	935802.04	3846771.31	FENCEGRD	728.47	
236	935758.71	3846750.66	FENCEGRD	728.56	
237	935715.38	3846730.01	FENCEGRD	728.74	
238	935672.05	3846709.36	FENCEGRD	728.92	
239	935628.72	3846688.71	FENCEGRD	729.10	
240	935569.48	3846622.77	FENCEGRD	729.74	
241	935553.58	3846577.49	FENCEGRD	730.18	
242	935537.67	3846532.20	FENCEGRD	730.63	
243	935521.76	3846486.91	FENCEGRD	731.08	
244	935505.85	3846441.63	FENCEGRD	731.53	
245	935489.94	3846396.34	FENCEGRD	731.98	
246	935474.03	3846351.05	FENCEGRD	732.43	
247	935458.12	3846305.77	FENCEGRD	732.88	
248	935442.22	3846260.48	FENCEGRD	733.32	
249	935426.31	3846215.20	FENCEGRD	733.77	
250	935410.40	3846169.91	FENCEGRD	734.33	
251	935394.49	3846124.62	FENCEGRD	734.78	
252	935378.58	3846079.34	FENCEGRD	735.33	
253	936192.01	3846957.16	FENCEGRD	727.86	
254	936241.12	3846959.65	FENCEGRD	727.93	

255	936290.23	3846962.14	FENCEGRD	728.04	Option not Selected
256	936339.34	3846964.63	FENCEGRD	728.27	
257	936388.45	3846967.11	FENCEGRD	728.54	
258	936437.56	3846969.60	FENCEGRD	728.94	
259	936486.66	3846972.09	FENCEGRD	729.08	
260	936535.77	3846974.58	FENCEGRD	729.30	
261	936584.88	3846977.07	FENCEGRD	729.69	
262	936654.12	3846104.60	FENCEGRD	735.33	
263	936656.87	3846056.03	FENCEGRD	735.72	
264	936659.62	3846007.45	FENCEGRD	736.01	
265	936662.37	3845958.87	FENCEGRD	736.48	
266	936665.13	3845910.30	FENCEGRD	736.70	
267	936667.88	3845861.72	FENCEGRD	737.19	
268	936670.63	3845813.15	FENCEGRD	737.66	
269	936673.38	3845764.57	FENCEGRD	737.91	
270	936676.13	3845716.00	FENCEGRD	738.36	
271	936691.66	3846133.21	FENCEGRD	735.07	
272	936652.32	3846168.54	FENCEGRD	734.68	
273	936704.04	3846107.43	FENCEGRD	735.33	
274	936706.79	3846058.85	FENCEGRD	735.79	
275	936709.54	3846010.28	FENCEGRD	736.01	
276	936712.29	3845961.70	FENCEGRD	736.51	
277	936715.05	3845913.13	FENCEGRD	737.00	
278	936717.80	3845864.55	FENCEGRD	737.24	
279	936720.55	3845815.98	FENCEGRD	737.68	
280	936723.30	3845767.40	FENCEGRD	738.17	
281	936726.05	3845718.82	FENCEGRD	738.36	
282	936784.62	3846153.19	FENCEGRD	735.27	
283	936765.35	3846193.28	FENCEGRD	735.02	
284	936704.16	3846248.24	FENCEGRD	734.45	
285	936662.23	3846263.10	FENCEGRD	734.12	
286	936803.88	3846113.09	FENCEGRD	735.64	
287	936806.63	3846064.51	FENCEGRD	735.83	
288	936809.38	3846015.93	FENCEGRD	736.26	
289	936812.13	3845967.36	FENCEGRD	736.51	
290	936814.89	3845918.78	FENCEGRD	737.00	
291	936817.64	3845870.21	FENCEGRD	737.50	
292	936820.39	3845821.63	FENCEGRD	737.68	
293	936823.14	3845773.06	FENCEGRD	738.18	

294	936825.89	3845724.48	FENCEGRD	738.37	Option not Selected
295	936982.92	3846167.36	FENCEGRD	736.36	
296	936962.28	3846210.33	FENCEGRD	736.06	
297	936941.65	3846253.29	FENCEGRD	735.79	
298	936921.01	3846296.25	FENCEGRD	735.49	
299	936900.37	3846339.22	FENCEGRD	735.30	
300	936834.81	3846398.10	FENCEGRD	734.58	
301	936789.88	3846414.02	FENCEGRD	734.09	
302	936744.96	3846429.94	FENCEGRD	733.75	
303	936700.03	3846445.86	FENCEGRD	733.12	
304	936655.11	3846461.79	FENCEGRD	732.84	
305	937003.56	3846124.40	FENCEGRD	736.83	
306	937006.31	3846075.82	FENCEGRD	737.03	
307	937009.06	3846027.25	FENCEGRD	737.27	
308	937011.81	3845978.67	FENCEGRD	737.43	
309	937014.57	3845930.10	FENCEGRD	737.43	
310	937017.32	3845881.52	FENCEGRD	737.43	
311	937020.07	3845832.94	FENCEGRD	737.64	
312	937022.82	3845784.37	FENCEGRD	737.89	
313	937025.57	3845735.79	FENCEGRD	738.43	
314	937482.12	3846195.64	FENCEGRD	737.04	
315	937461.48	3846238.61	FENCEGRD	736.60	
316	937440.85	3846281.57	FENCEGRD	736.34	
317	937420.21	3846324.53	FENCEGRD	736.01	
318	937399.57	3846367.50	FENCEGRD	735.55	
319	937378.93	3846410.46	FENCEGRD	735.11	
320	937358.30	3846453.42	FENCEGRD	734.71	
321	937337.66	3846496.39	FENCEGRD	734.45	
322	937317.02	3846539.35	FENCEGRD	734.07	
323	937296.38	3846582.32	FENCEGRD	733.63	
324	937275.75	3846625.28	FENCEGRD	733.35	
325	937255.11	3846668.24	FENCEGRD	733.30	
326	937234.47	3846711.21	FENCEGRD	732.89	
327	937168.91	3846770.09	FENCEGRD	732.05	
328	937123.98	3846786.01	FENCEGRD	732.15	
329	937079.06	3846801.93	FENCEGRD	732.23	
330	937034.13	3846817.85	FENCEGRD	732.14	
331	936989.21	3846833.78	FENCEGRD	731.81	
332	936944.28	3846849.70	FENCEGRD	731.82	

333	936899.36	3846865.62	FENCEGRD	731.74	Option not Selected
334	936854.43	3846881.54	FENCEGRD	731.55	
335	936809.51	3846897.46	FENCEGRD	731.36	
336	936764.58	3846913.38	FENCEGRD	730.92	
337	936719.66	3846929.30	FENCEGRD	730.65	
338	936674.73	3846945.22	FENCEGRD	730.32	
339	936629.81	3846961.15	FENCEGRD	729.90	
340	937502.76	3846152.68	FENCEGRD	737.49	
341	937505.51	3846104.10	FENCEGRD	737.98	
342	937508.26	3846055.53	FENCEGRD	738.48	
343	937511.01	3846006.95	FENCEGRD	738.97	
344	937513.76	3845958.38	FENCEGRD	739.77	
345	937516.52	3845909.80	FENCEGRD	740.26	
346	937519.27	3845861.23	FENCEGRD	740.75	
347	937522.02	3845812.65	FENCEGRD	741.25	
348	937524.77	3845764.07	FENCEGRD	741.88	

Discrete Polar Receptors

Option not in use

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936629.16	3846103.19	FENCEPRI	735.32	Option not Selected
2	936651.17	3845714.58	FENCEPRI	738.34	
3	936258.17	3845695.01	FENCEPRI	737.77	
4	936236.29	3846083.28	FENCEPRI	734.26	

Intermediate

Option not in use

Polar Plant Boundary

Option not in use

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid

Source Pathway - Source Inputs

ISCST3

Point Sources

No Point Sources Specified

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

Source Type	Source ID	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
AREA POLY	AREA	735.32	5.00	6.53E-6		4	936629.16	3846103.19
				6.53E-6			936651.17	3845714.58
				6.53E-6			936258.17	3845695.01
				6.53E-6			936236.29	3846083.28

Flare Sources

No Flare Sources Specified

Line Sources

No Line Sources Specified

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

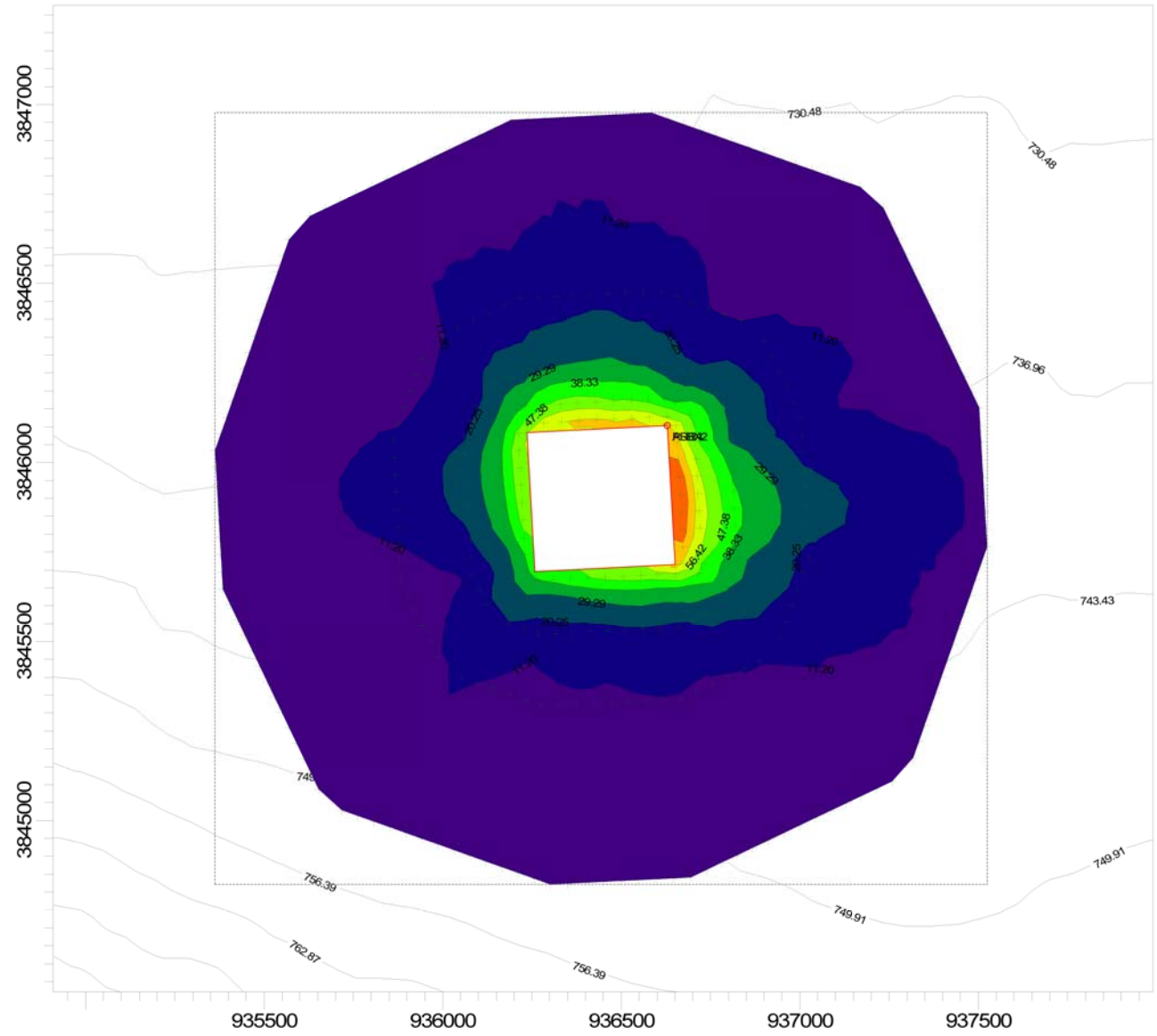
Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

PROJECT TITLE:

The Commons at Quartz Hill
PM10 - 24hr Fugitive



PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

2.159 11.203 20.246 29.290 38.333 47.377 56.420 65.464 74.507 83.550

COMMENTS:	SOURCES:	COMPANY NAME:	
Unit Emission Factor (1 g/s)	**1**		
	RECEPTORS: **352**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:18,793 — 0 — 0.5 km	
	MAX: **83.55042 ug/m^3**	DATE: **11/14/2008**	PROJECT NO.:

Control Pathway

ISCST3

Dispersion Options

Titles

The Commons at Quartz Hill
PM2.5 - 24hr Combustion

Dispersion Options

- [ ] Regulatory Default
- [x] Non-Default Options

- [ ] No stack-tip downwash
- [ ] Missing data processing routine
- [x] By-pass the calms prosessing routine
- [ ] Gradual plume rise
- [ ] No buoyancy-included dispersion
- [ ] Vertical term adjustment if HE > ZI
- [ ] TOXICS

- [ ] SCIM (Sampled Chronological Input Model)
- [ ] Gas Dry Deposition
- [ ] Optimized Area Source and Dry Depletion Algorithms
- [ ] Season by Hour-of-Day Output Option

Dispersion Coefficient

Urban

Output Type

- [x] Concentration
- [ ] Total Deposition (Dry & Wet)
- [ ] Dry Deposition
- [ ] Wet Deposition

Plume Depletion

- [x] Dry Removal
- [ ] Wet Removal

Pollutant / Averaging Time / Terrain Options

Pollutant Type

OTHER - `PM2.5

Exponential Decay

- [ ] Yes
- [x] No

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☐	☐	☐	☐	☐	☐	☐	☑

- [ ] Month
- [ ] Period
- [x] Annual

Terrain Height Options

- [ ] Flat
- [x] Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

- [ ] Yes
- [x] No

Default Height = 0.00 m

Terrain Calculation Algorithms

Simple + Complex Terrain

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\DryDep\Deposition MET\lancastr.dep

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

ISCST3

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
ALL	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Output Pathway

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: COMPM2V.IS

Averaging Period	Source Group ID	High Value	File Name
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Uniform Cartesian Grid

Option not in use

Non-Uniform Cartesian Grid

Option not in use

Uniform Polar Grid

Option not in use

Non-Uniform Polar Grid

Option not in use

Discrete Receptors

Discrete Cartesian Receptors

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936652.42	3845689.61	FENCEGRD	738.61	Option not Selected
2	936603.29	3845687.17	FENCEGRD	738.44	
3	936554.17	3845684.72	FENCEGRD	737.95	
4	936505.04	3845682.27	FENCEGRD	737.68	
5	936455.91	3845679.82	FENCEGRD	737.52	
6	936406.79	3845677.38	FENCEGRD	737.39	
7	936357.66	3845674.93	FENCEGRD	737.65	
8	936308.54	3845672.48	FENCEGRD	737.69	
9	936259.41	3845670.04	FENCEGRD	738.07	
10	936680.93	3845652.06	FENCEGRD	739.01	
11	936716.50	3845691.63	FENCEGRD	738.63	
12	936654.90	3845639.67	FENCEGRD	739.12	
13	936605.78	3845637.23	FENCEGRD	739.12	
14	936556.65	3845634.78	FENCEGRD	738.79	
15	936507.53	3845632.33	FENCEGRD	738.73	
16	936458.40	3845629.89	FENCEGRD	738.54	
17	936409.28	3845627.44	FENCEGRD	738.41	
18	936360.15	3845624.99	FENCEGRD	738.43	
19	936311.02	3845622.55	FENCEGRD	738.71	
20	936261.90	3845620.10	FENCEGRD	739.09	

21	936700.36	3845559.06	FENCEGRD	739.96	Option not Selected
22	936740.84	3845578.33	FENCEGRD	739.79	
23	936796.18	3845639.89	FENCEGRD	739.20	
24	936811.04	3845682.18	FENCEGRD	738.79	
25	936659.88	3845539.80	FENCEGRD	740.13	
26	936610.75	3845537.35	FENCEGRD	740.13	
27	936561.63	3845534.90	FENCEGRD	740.12	
28	936512.50	3845532.46	FENCEGRD	740.04	
29	936463.38	3845530.01	FENCEGRD	739.81	
30	936414.25	3845527.56	FENCEGRD	739.91	
31	936365.12	3845525.12	FENCEGRD	740.11	
32	936316.00	3845522.67	FENCEGRD	740.13	
33	936266.87	3845520.22	FENCEGRD	740.47	
34	936713.20	3845360.69	FENCEGRD	742.69	
35	936756.57	3845381.33	FENCEGRD	742.41	
36	936799.94	3845401.97	FENCEGRD	741.95	
37	936843.32	3845422.61	FENCEGRD	741.74	
38	936886.69	3845443.25	FENCEGRD	741.53	
39	936945.98	3845509.20	FENCEGRD	740.62	
40	936961.90	3845554.52	FENCEGRD	740.17	
41	936977.82	3845599.84	FENCEGRD	739.72	
42	936993.74	3845645.16	FENCEGRD	739.27	
43	937009.65	3845690.48	FENCEGRD	738.82	
44	936669.83	3845340.05	FENCEGRD	743.05	
45	936620.70	3845337.60	FENCEGRD	743.04	
46	936571.58	3845335.15	FENCEGRD	742.90	
47	936522.45	3845332.71	FENCEGRD	742.75	
48	936473.33	3845330.26	FENCEGRD	742.71	
49	936424.20	3845327.81	FENCEGRD	742.82	
50	936375.07	3845325.36	FENCEGRD	742.99	
51	936325.95	3845322.92	FENCEGRD	743.21	
52	936276.82	3845320.47	FENCEGRD	743.34	
53	936738.08	3844861.31	FENCEGRD	751.25	
54	936781.45	3844881.95	FENCEGRD	750.05	
55	936824.82	3844902.59	FENCEGRD	749.34	
56	936868.19	3844923.23	FENCEGRD	748.80	
57	936911.56	3844943.87	FENCEGRD	748.31	
58	936954.93	3844964.51	FENCEGRD	747.95	
59	936998.31	3844985.15	FENCEGRD	747.48	

60	937041.68	3845005.79	FENCEGRD	747.11	Option not Selected
61	937085.05	3845026.43	FENCEGRD	746.81	
62	937128.42	3845047.07	FENCEGRD	746.19	
63	937171.79	3845067.71	FENCEGRD	745.56	
64	937215.16	3845088.35	FENCEGRD	745.34	
65	937258.54	3845108.99	FENCEGRD	745.16	
66	937317.83	3845174.95	FENCEGRD	744.93	
67	937333.74	3845220.26	FENCEGRD	744.69	
68	937349.66	3845265.58	FENCEGRD	744.55	
69	937365.58	3845310.90	FENCEGRD	744.28	
70	937381.50	3845356.22	FENCEGRD	744.09	
71	937397.42	3845401.53	FENCEGRD	743.81	
72	937413.34	3845446.85	FENCEGRD	743.39	
73	937429.26	3845492.17	FENCEGRD	743.22	
74	937445.18	3845537.49	FENCEGRD	743.04	
75	937461.10	3845582.80	FENCEGRD	742.78	
76	937477.02	3845628.12	FENCEGRD	742.54	
77	937492.93	3845673.44	FENCEGRD	742.46	
78	937508.85	3845718.76	FENCEGRD	742.19	
79	936694.71	3844840.67	FENCEGRD	751.31	
80	936645.58	3844838.22	FENCEGRD	751.49	
81	936596.45	3844835.77	FENCEGRD	751.39	
82	936547.33	3844833.32	FENCEGRD	751.09	
83	936498.20	3844830.88	FENCEGRD	750.87	
84	936449.08	3844828.43	FENCEGRD	750.86	
85	936399.95	3844825.98	FENCEGRD	751.19	
86	936350.82	3844823.54	FENCEGRD	751.55	
87	936301.70	3844821.09	FENCEGRD	751.86	
88	936233.21	3845693.60	FENCEGRD	738.02	
89	936230.47	3845742.13	FENCEGRD	737.22	
90	936227.74	3845790.67	FENCEGRD	736.73	
91	936225.00	3845839.20	FENCEGRD	736.23	
92	936222.27	3845887.74	FENCEGRD	735.74	
93	936219.53	3845936.27	FENCEGRD	735.25	
94	936216.80	3845984.81	FENCEGRD	735.06	
95	936214.06	3846033.34	FENCEGRD	734.57	
96	936211.33	3846081.88	FENCEGRD	734.26	
97	936195.65	3845665.01	FENCEGRD	738.72	
98	936234.96	3845629.67	FENCEGRD	739.12	

99	936183.29	3845690.79	FENCEGRD	738.31	Option not Selected
100	936180.55	3845739.32	FENCEGRD	737.49	
101	936177.82	3845787.85	FENCEGRD	736.93	
102	936175.08	3845836.39	FENCEGRD	736.32	
103	936172.35	3845884.92	FENCEGRD	735.79	
104	936169.61	3845933.46	FENCEGRD	735.55	
105	936166.88	3845981.99	FENCEGRD	735.06	
106	936164.14	3846030.53	FENCEGRD	734.57	
107	936161.40	3846079.06	FENCEGRD	734.38	
108	936102.68	3845645.06	FENCEGRD	739.24	
109	936121.92	3845604.97	FENCEGRD	739.76	
110	936183.06	3845549.99	FENCEGRD	740.34	
111	936224.97	3845535.11	FENCEGRD	740.39	
112	936083.44	3845685.16	FENCEGRD	738.62	
113	936080.71	3845733.69	FENCEGRD	738.03	
114	936077.97	3845782.23	FENCEGRD	737.33	
115	936075.24	3845830.76	FENCEGRD	736.84	
116	936072.50	3845879.30	FENCEGRD	736.34	
117	936069.77	3845927.83	FENCEGRD	735.85	
118	936067.03	3845976.37	FENCEGRD	735.36	
119	936064.30	3846024.90	FENCEGRD	734.87	
120	936061.56	3846073.44	FENCEGRD	734.57	
121	935904.37	3845630.95	FENCEGRD	740.21	
122	935924.98	3845587.99	FENCEGRD	740.63	
123	935945.60	3845545.03	FENCEGRD	741.16	
124	935966.21	3845502.07	FENCEGRD	741.94	
125	935986.82	3845459.12	FENCEGRD	742.27	
126	936052.33	3845400.21	FENCEGRD	742.58	
127	936097.23	3845384.26	FENCEGRD	742.68	
128	936142.13	3845368.31	FENCEGRD	742.78	
129	936187.03	3845352.37	FENCEGRD	743.00	
130	936231.92	3845336.42	FENCEGRD	743.19	
131	935883.76	3845673.91	FENCEGRD	739.58	
132	935881.03	3845722.44	FENCEGRD	739.04	
133	935878.29	3845770.98	FENCEGRD	738.25	
134	935875.56	3845819.51	FENCEGRD	737.74	
135	935872.82	3845868.05	FENCEGRD	737.23	
136	935870.09	3845916.58	FENCEGRD	736.65	
137	935867.35	3845965.11	FENCEGRD	736.15	

138	935864.62	3846013.65	FENCEGRD	735.65	Option not Selected
139	935861.88	3846062.18	FENCEGRD	734.98	
140	935405.16	3845602.82	FENCEGRD	740.57	
141	935425.78	3845559.86	FENCEGRD	741.67	
142	935446.39	3845516.90	FENCEGRD	742.47	
143	935467.00	3845473.94	FENCEGRD	743.13	
144	935487.61	3845430.98	FENCEGRD	743.62	
145	935508.22	3845388.03	FENCEGRD	744.55	
146	935528.83	3845345.07	FENCEGRD	745.40	
147	935549.45	3845302.11	FENCEGRD	746.12	
148	935570.06	3845259.15	FENCEGRD	746.70	
149	935590.67	3845216.19	FENCEGRD	747.66	
150	935611.28	3845173.23	FENCEGRD	748.81	
151	935631.89	3845130.28	FENCEGRD	749.72	
152	935652.50	3845087.32	FENCEGRD	750.75	
153	935718.01	3845028.41	FENCEGRD	751.70	
154	935762.91	3845012.46	FENCEGRD	751.63	
155	935807.81	3844996.52	FENCEGRD	751.86	
156	935852.71	3844980.57	FENCEGRD	751.86	
157	935897.61	3844964.62	FENCEGRD	751.93	
158	935942.51	3844948.67	FENCEGRD	751.66	
159	935987.41	3844932.72	FENCEGRD	751.71	
160	936032.31	3844916.78	FENCEGRD	751.83	
161	936077.20	3844900.83	FENCEGRD	751.86	
162	936122.10	3844884.88	FENCEGRD	751.99	
163	936167.00	3844868.93	FENCEGRD	751.93	
164	936211.90	3844852.98	FENCEGRD	751.86	
165	936256.80	3844837.04	FENCEGRD	751.80	
166	935384.55	3845645.78	FENCEGRD	740.12	
167	935381.82	3845694.31	FENCEGRD	739.71	
168	935379.08	3845742.84	FENCEGRD	739.22	
169	935376.35	3845791.38	FENCEGRD	738.72	
170	935373.61	3845839.91	FENCEGRD	738.15	
171	935370.88	3845888.45	FENCEGRD	737.66	
172	935368.14	3845936.98	FENCEGRD	736.94	
173	935365.41	3845985.52	FENCEGRD	736.37	
174	935362.67	3846034.05	FENCEGRD	735.87	
175	936235.02	3846108.25	FENCEGRD	734.13	
176	936284.13	3846110.74	FENCEGRD	734.13	

177	936333.24	3846113.23	FENCEGRD	734.13	Option not Selected
178	936382.35	3846115.71	FENCEGRD	734.23	
179	936431.46	3846118.20	FENCEGRD	734.45	
180	936480.57	3846120.69	FENCEGRD	734.58	
181	936529.67	3846123.18	FENCEGRD	734.76	
182	936578.78	3846125.67	FENCEGRD	734.94	
183	936627.89	3846128.16	FENCEGRD	735.08	
184	936206.49	3846145.80	FENCEGRD	733.96	
185	936170.95	3846106.23	FENCEGRD	734.11	
186	936232.49	3846158.19	FENCEGRD	733.69	
187	936281.60	3846160.67	FENCEGRD	733.80	
188	936330.71	3846163.16	FENCEGRD	733.93	
189	936379.82	3846165.65	FENCEGRD	733.94	
190	936428.93	3846168.14	FENCEGRD	733.95	
191	936478.04	3846170.63	FENCEGRD	734.25	
192	936527.14	3846173.12	FENCEGRD	734.47	
193	936576.25	3846175.60	FENCEGRD	734.57	
194	936625.36	3846178.09	FENCEGRD	734.57	
195	936186.99	3846238.78	FENCEGRD	733.21	
196	936146.55	3846219.51	FENCEGRD	733.35	
197	936091.26	3846157.97	FENCEGRD	733.84	
198	936076.41	3846115.70	FENCEGRD	734.26	
199	936227.43	3846258.06	FENCEGRD	732.92	
200	936276.54	3846260.55	FENCEGRD	733.04	
201	936325.65	3846263.03	FENCEGRD	733.22	
202	936374.76	3846265.52	FENCEGRD	733.23	
203	936423.87	3846268.01	FENCEGRD	733.23	
204	936472.98	3846270.50	FENCEGRD	733.37	
205	936522.08	3846272.99	FENCEGRD	733.55	
206	936571.19	3846275.48	FENCEGRD	733.73	
207	936620.30	3846277.96	FENCEGRD	733.86	
208	936173.98	3846437.15	FENCEGRD	731.52	
209	936130.65	3846416.50	FENCEGRD	731.55	
210	936087.32	3846395.85	FENCEGRD	731.93	
211	936043.99	3846375.20	FENCEGRD	732.13	
212	936000.66	3846354.55	FENCEGRD	732.41	
213	935941.42	3846288.61	FENCEGRD	733.04	
214	935925.51	3846243.33	FENCEGRD	733.37	
215	935909.61	3846198.04	FENCEGRD	733.86	

216	935893.70	3846152.76	FENCEGRD	734.19	Option not Selected
217	935877.79	3846107.47	FENCEGRD	734.57	
218	936217.31	3846457.80	FENCEGRD	731.49	
219	936266.42	3846460.29	FENCEGRD	731.50	
220	936315.53	3846462.78	FENCEGRD	731.50	
221	936364.64	3846465.27	FENCEGRD	731.52	
222	936413.75	3846467.75	FENCEGRD	731.81	
223	936462.86	3846470.24	FENCEGRD	731.86	
224	936511.96	3846472.73	FENCEGRD	732.13	
225	936561.07	3846475.22	FENCEGRD	732.26	
226	936610.18	3846477.71	FENCEGRD	732.46	
227	936148.68	3846936.51	FENCEGRD	727.85	
228	936105.35	3846915.86	FENCEGRD	727.86	
229	936062.02	3846895.21	FENCEGRD	727.89	
230	936018.69	3846874.56	FENCEGRD	728.07	
231	935975.36	3846853.91	FENCEGRD	728.11	
232	935932.03	3846833.26	FENCEGRD	728.13	
233	935888.70	3846812.61	FENCEGRD	728.31	
234	935845.37	3846791.96	FENCEGRD	728.47	
235	935802.04	3846771.31	FENCEGRD	728.47	
236	935758.71	3846750.66	FENCEGRD	728.56	
237	935715.38	3846730.01	FENCEGRD	728.74	
238	935672.05	3846709.36	FENCEGRD	728.92	
239	935628.72	3846688.71	FENCEGRD	729.10	
240	935569.48	3846622.77	FENCEGRD	729.74	
241	935553.58	3846577.49	FENCEGRD	730.18	
242	935537.67	3846532.20	FENCEGRD	730.63	
243	935521.76	3846486.91	FENCEGRD	731.08	
244	935505.85	3846441.63	FENCEGRD	731.53	
245	935489.94	3846396.34	FENCEGRD	731.98	
246	935474.03	3846351.05	FENCEGRD	732.43	
247	935458.12	3846305.77	FENCEGRD	732.88	
248	935442.22	3846260.48	FENCEGRD	733.32	
249	935426.31	3846215.20	FENCEGRD	733.77	
250	935410.40	3846169.91	FENCEGRD	734.33	
251	935394.49	3846124.62	FENCEGRD	734.78	
252	935378.58	3846079.34	FENCEGRD	735.33	
253	936192.01	3846957.16	FENCEGRD	727.86	
254	936241.12	3846959.65	FENCEGRD	727.93	

255	936290.23	3846962.14	FENCEGRD	728.04	Option not Selected
256	936339.34	3846964.63	FENCEGRD	728.27	
257	936388.45	3846967.11	FENCEGRD	728.54	
258	936437.56	3846969.60	FENCEGRD	728.94	
259	936486.66	3846972.09	FENCEGRD	729.08	
260	936535.77	3846974.58	FENCEGRD	729.30	
261	936584.88	3846977.07	FENCEGRD	729.69	
262	936654.12	3846104.60	FENCEGRD	735.33	
263	936656.87	3846056.03	FENCEGRD	735.72	
264	936659.62	3846007.45	FENCEGRD	736.01	
265	936662.37	3845958.87	FENCEGRD	736.48	
266	936665.13	3845910.30	FENCEGRD	736.70	
267	936667.88	3845861.72	FENCEGRD	737.19	
268	936670.63	3845813.15	FENCEGRD	737.66	
269	936673.38	3845764.57	FENCEGRD	737.91	
270	936676.13	3845716.00	FENCEGRD	738.36	
271	936691.66	3846133.21	FENCEGRD	735.07	
272	936652.32	3846168.54	FENCEGRD	734.68	
273	936704.04	3846107.43	FENCEGRD	735.33	
274	936706.79	3846058.85	FENCEGRD	735.79	
275	936709.54	3846010.28	FENCEGRD	736.01	
276	936712.29	3845961.70	FENCEGRD	736.51	
277	936715.05	3845913.13	FENCEGRD	737.00	
278	936717.80	3845864.55	FENCEGRD	737.24	
279	936720.55	3845815.98	FENCEGRD	737.68	
280	936723.30	3845767.40	FENCEGRD	738.17	
281	936726.05	3845718.82	FENCEGRD	738.36	
282	936784.62	3846153.19	FENCEGRD	735.27	
283	936765.35	3846193.28	FENCEGRD	735.02	
284	936704.16	3846248.24	FENCEGRD	734.45	
285	936662.23	3846263.10	FENCEGRD	734.12	
286	936803.88	3846113.09	FENCEGRD	735.64	
287	936806.63	3846064.51	FENCEGRD	735.83	
288	936809.38	3846015.93	FENCEGRD	736.26	
289	936812.13	3845967.36	FENCEGRD	736.51	
290	936814.89	3845918.78	FENCEGRD	737.00	
291	936817.64	3845870.21	FENCEGRD	737.50	
292	936820.39	3845821.63	FENCEGRD	737.68	
293	936823.14	3845773.06	FENCEGRD	738.18	

294	936825.89	3845724.48	FENCEGRD	738.37	Option not Selected
295	936982.92	3846167.36	FENCEGRD	736.36	
296	936962.28	3846210.33	FENCEGRD	736.06	
297	936941.65	3846253.29	FENCEGRD	735.79	
298	936921.01	3846296.25	FENCEGRD	735.49	
299	936900.37	3846339.22	FENCEGRD	735.30	
300	936834.81	3846398.10	FENCEGRD	734.58	
301	936789.88	3846414.02	FENCEGRD	734.09	
302	936744.96	3846429.94	FENCEGRD	733.75	
303	936700.03	3846445.86	FENCEGRD	733.12	
304	936655.11	3846461.79	FENCEGRD	732.84	
305	937003.56	3846124.40	FENCEGRD	736.83	
306	937006.31	3846075.82	FENCEGRD	737.03	
307	937009.06	3846027.25	FENCEGRD	737.27	
308	937011.81	3845978.67	FENCEGRD	737.43	
309	937014.57	3845930.10	FENCEGRD	737.43	
310	937017.32	3845881.52	FENCEGRD	737.43	
311	937020.07	3845832.94	FENCEGRD	737.64	
312	937022.82	3845784.37	FENCEGRD	737.89	
313	937025.57	3845735.79	FENCEGRD	738.43	
314	937482.12	3846195.64	FENCEGRD	737.04	
315	937461.48	3846238.61	FENCEGRD	736.60	
316	937440.85	3846281.57	FENCEGRD	736.34	
317	937420.21	3846324.53	FENCEGRD	736.01	
318	937399.57	3846367.50	FENCEGRD	735.55	
319	937378.93	3846410.46	FENCEGRD	735.11	
320	937358.30	3846453.42	FENCEGRD	734.71	
321	937337.66	3846496.39	FENCEGRD	734.45	
322	937317.02	3846539.35	FENCEGRD	734.07	
323	937296.38	3846582.32	FENCEGRD	733.63	
324	937275.75	3846625.28	FENCEGRD	733.35	
325	937255.11	3846668.24	FENCEGRD	733.30	
326	937234.47	3846711.21	FENCEGRD	732.89	
327	937168.91	3846770.09	FENCEGRD	732.05	
328	937123.98	3846786.01	FENCEGRD	732.15	
329	937079.06	3846801.93	FENCEGRD	732.23	
330	937034.13	3846817.85	FENCEGRD	732.14	
331	936989.21	3846833.78	FENCEGRD	731.81	
332	936944.28	3846849.70	FENCEGRD	731.82	

333	936899.36	3846865.62	FENCEGRD	731.74	Option not Selected
334	936854.43	3846881.54	FENCEGRD	731.55	
335	936809.51	3846897.46	FENCEGRD	731.36	
336	936764.58	3846913.38	FENCEGRD	730.92	
337	936719.66	3846929.30	FENCEGRD	730.65	
338	936674.73	3846945.22	FENCEGRD	730.32	
339	936629.81	3846961.15	FENCEGRD	729.90	
340	937502.76	3846152.68	FENCEGRD	737.49	
341	937505.51	3846104.10	FENCEGRD	737.98	
342	937508.26	3846055.53	FENCEGRD	738.48	
343	937511.01	3846006.95	FENCEGRD	738.97	
344	937513.76	3845958.38	FENCEGRD	739.77	
345	937516.52	3845909.80	FENCEGRD	740.26	
346	937519.27	3845861.23	FENCEGRD	740.75	
347	937522.02	3845812.65	FENCEGRD	741.25	
348	937524.77	3845764.07	FENCEGRD	741.88	

Discrete Polar Receptors

Option not in use

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936629.16	3846103.19	FENCEPRI	735.32	Option not Selected
2	936651.17	3845714.58	FENCEPRI	738.34	
3	936258.17	3845695.01	FENCEPRI	737.77	
4	936236.29	3846083.28	FENCEPRI	734.26	

Intermediate

Option not in use

Polar Plant Boundary

Option not in use

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid

Source Pathway - Source Inputs

Point Sources

No Point Sources Specified

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

No Polygon Area Sources Specified

Flare Sources

No Flare Sources Specified

Source Pathway - Source Inputs

ISCST3

Line Sources

Source Type	Source ID	Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
LINE	SLINE1	50.00	0.20000		936271.26	3846085.15	734.26	5.00
			0.20000		936302.18	3845698.65	737.57	5.00
	SLINE2	50.00	0.20000		936351.23	3846087.81	734.40	5.00
			0.20000		936382.15	3845701.31	737.31	5.00
	SLINE3	50.00	0.20000		936431.21	3846091.55	734.62	5.00
			0.20000		936462.13	3845705.05	737.38	5.00
	SLINE4	50.00	0.20000		936513.30	3846095.82	734.85	5.00
			0.20000		936544.22	3845709.32	737.72	5.00
	SLINE5	50.00	0.20000		936590.06	3846100.62	735.12	5.00
			0.20000		936620.98	3845714.12	738.11	5.00

Source Pathway - Source Inputs

ISCST3

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000196	936273.24	3846060.33	734.47	5.00	0.04000	50.00		39.27	2.33
	L0000197	936279.98	3845976.16	735.19	5.00	0.04000	50.00		39.27	2.33
	L0000198	936286.72	3845892.00	735.92	5.00	0.04000	50.00		39.27	2.33
	L0000199	936293.46	3845807.84	736.64	5.00	0.04000	50.00		39.27	2.33
	L0000200	936300.19	3845723.67	737.36	5.00	0.04000	50.00		39.27	2.33
SLINE2	L0000201	936353.24	3846062.83	734.59	5.00	0.04000	50.00		39.27	2.33
	L0000202	936359.96	3845978.66	735.22	5.00	0.04000	50.00		39.27	2.33
	L0000203	936366.69	3845894.50	735.86	5.00	0.04000	50.00		39.27	2.33
	L0000204	936373.41	3845810.34	736.49	5.00	0.04000	50.00		39.27	2.33
	L0000205	936380.13	3845726.17	737.12	5.00	0.04000	50.00		39.27	2.33
SLINE3	L0000206	936433.18	3846066.58	734.80	5.00	0.04000	50.00		39.27	2.33
	L0000207	936439.92	3845982.41	735.40	5.00	0.04000	50.00		39.27	2.33
	L0000208	936446.66	3845898.25	736.00	5.00	0.04000	50.00		39.27	2.33
	L0000209	936453.39	3845814.09	736.60	5.00	0.04000	50.00		39.27	2.33
	L0000210	936460.13	3845729.92	737.20	5.00	0.04000	50.00		39.27	2.33
SLINE4	L0000211	936515.31	3846070.83	735.04	5.00	0.04000	50.00		39.27	2.33
	L0000212	936522.04	3845986.66	735.66	5.00	0.04000	50.00		39.27	2.33
	L0000213	936528.78	3845902.50	736.28	5.00	0.04000	50.00		39.27	2.33
	L0000214	936535.52	3845818.34	736.91	5.00	0.04000	50.00		39.27	2.33
	L0000215	936542.26	3845734.17	737.53	5.00	0.04000	50.00		39.27	2.33
SLINE5	L0000216	936592.06	3846075.58	735.31	5.00	0.04000	50.00		39.27	2.33
	L0000217	936598.79	3845991.41	735.96	5.00	0.04000	50.00		39.27	2.33
	L0000218	936605.53	3845907.25	736.61	5.00	0.04000	50.00		39.27	2.33
	L0000219	936612.27	3845823.09	737.27	5.00	0.04000	50.00		39.27	2.33
	L0000220	936619.01	3845738.92	737.92	5.00	0.04000	50.00		39.27	2.33

Source Pathway - Source Inputs

ISCST3

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

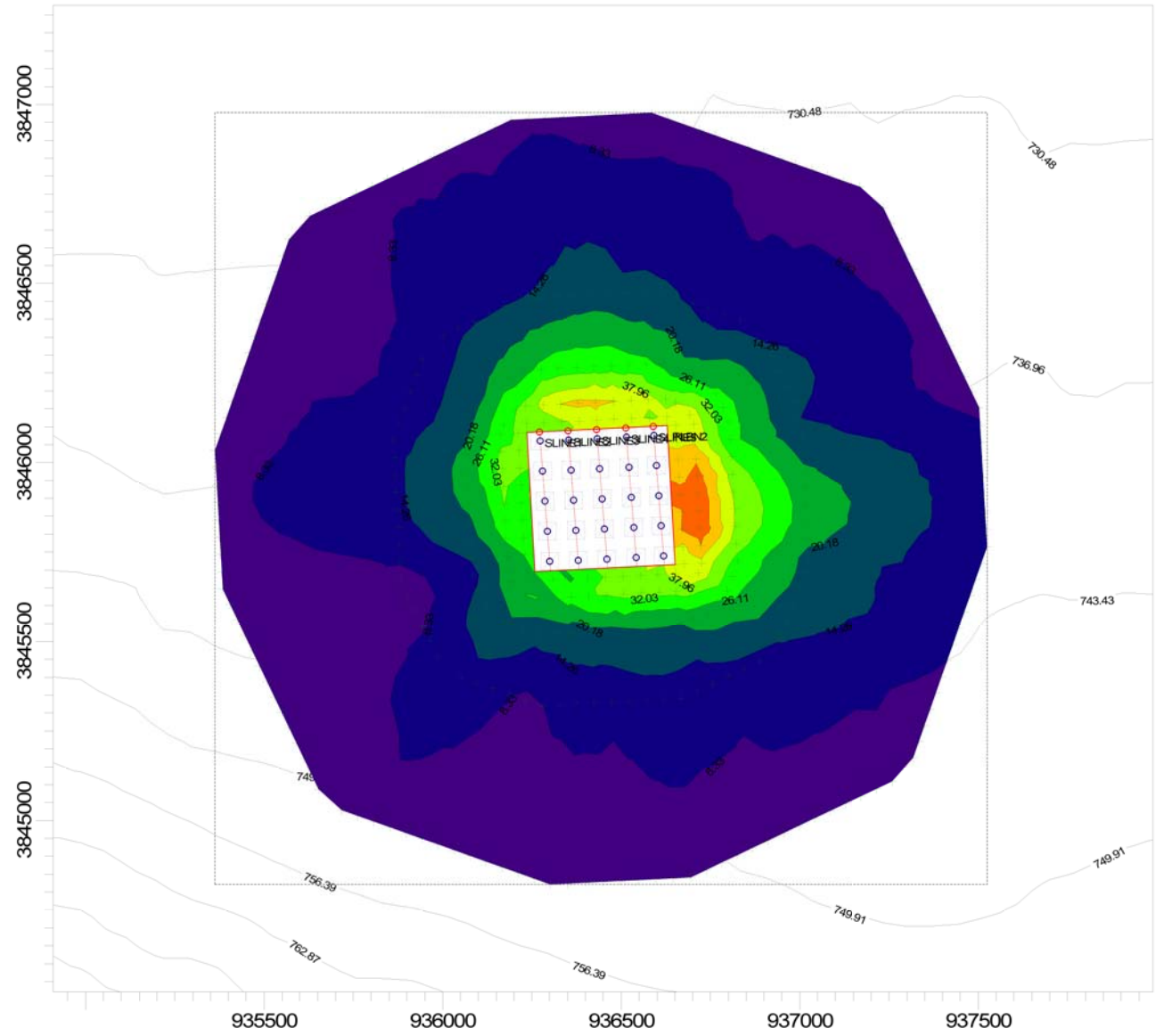
Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

PROJECT TITLE:

The Commons at Quartz Hill
PM2.5 - 24hr Combustion



PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

2.409 8.334 14.258 20.183 26.108 32.032 37.957 43.882 49.807 55.731

COMMENTS: Unit Emission Factor (1 g/s)	SOURCES: **5**	COMPANY NAME:
	RECEPTORS: **352**	MODELER:
	OUTPUT TYPE: **Concentration**	SCALE: 1:18,793 — 0 — 0.5 km
	MAX: **55.73138 ug/m^3**	DATE: **11/14/2008**
		PROJECT NO.:

Control Pathway

ISCST3

Dispersion Options

Titles

The Commons at Quartz Hill - PM2.5
PM2.5 - 24hr fugitive

Dispersion Options

☐ Regulatory Default ☒ Non-Default Options

☐ No stack-tip downwash
☐ Missing data processing routine
☒ By-pass the calms prosessing routine
☐ Gradual plume rise
☐ No buoyancy-included dispersion
☐ Vertical term adjustment if HE > ZI
☐ TOXICS

☐ SCIM (Sampled Chronological Input Model)
☐ Gas Dry Deposition
☐ Optimized Area Source and Dry Depletion Algorithms
☐ Season by Hour-of-Day Output Option

Dispersion Coefficient

Urban

Output Type

☒ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☒ Dry Removal
☐ Wet Removal

Pollutant / Averaging Time / Terrain Options

Pollutant Type

OTHER - `PM2.5

Exponential Decay

☐ Yes ☒ No

Averaging Time Options

Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☒ 24

☐ Month ☐ Period ☒ Annual

Terrain Height Options

☐ Flat ☒ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☒ No

Default Height = 0.00 m

Terrain Calculation Algorithms

Simple + Complex Terrain

Meteorology Pathway

ISCST3

Met Input Data

Meteorological Input Data File and Format

Filename: C:\Data\Met\DryDep\Deposition MET\lancastr.dep

Format Type: Default ASCII Format

Anemometer Height

Height = 10.00 [m]

Optional Wind Direction

Rotation [deg]:

Surface Meteorological Station

Station No.: 51117

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Upper Air Meteorological Station

Station No.: 99999

Year: 1981

Station Name:

Location [m] (Optional):

X Coord.:

Y Coord.:

Data Period

Read All Met. File?

☑ Yes ☐ No

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Output Pathway

ISCST3

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
ALL	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	■	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Output Pathway

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: COMPM2A.IS

Averaging Period	Source Group ID	High Value	File Name
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Uniform Cartesian Grid

Option not in use

Non-Uniform Cartesian Grid

Option not in use

Uniform Polar Grid

Option not in use

Non-Uniform Polar Grid

Option not in use

Discrete Receptors

Discrete Cartesian Receptors

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936652.42	3845689.61	FENCEGRD	738.61	Option not Selected
2	936603.29	3845687.17	FENCEGRD	738.44	
3	936554.17	3845684.72	FENCEGRD	737.95	
4	936505.04	3845682.27	FENCEGRD	737.68	
5	936455.91	3845679.82	FENCEGRD	737.52	
6	936406.79	3845677.38	FENCEGRD	737.39	
7	936357.66	3845674.93	FENCEGRD	737.65	
8	936308.54	3845672.48	FENCEGRD	737.69	
9	936259.41	3845670.04	FENCEGRD	738.07	
10	936680.93	3845652.06	FENCEGRD	739.01	
11	936716.50	3845691.63	FENCEGRD	738.63	
12	936654.90	3845639.67	FENCEGRD	739.12	
13	936605.78	3845637.23	FENCEGRD	739.12	
14	936556.65	3845634.78	FENCEGRD	738.79	
15	936507.53	3845632.33	FENCEGRD	738.73	
16	936458.40	3845629.89	FENCEGRD	738.54	
17	936409.28	3845627.44	FENCEGRD	738.41	
18	936360.15	3845624.99	FENCEGRD	738.43	
19	936311.02	3845622.55	FENCEGRD	738.71	
20	936261.90	3845620.10	FENCEGRD	739.09	

21	936700.36	3845559.06	FENCEGRD	739.96	Option not Selected
22	936740.84	3845578.33	FENCEGRD	739.79	
23	936796.18	3845639.89	FENCEGRD	739.20	
24	936811.04	3845682.18	FENCEGRD	738.79	
25	936659.88	3845539.80	FENCEGRD	740.13	
26	936610.75	3845537.35	FENCEGRD	740.13	
27	936561.63	3845534.90	FENCEGRD	740.12	
28	936512.50	3845532.46	FENCEGRD	740.04	
29	936463.38	3845530.01	FENCEGRD	739.81	
30	936414.25	3845527.56	FENCEGRD	739.91	
31	936365.12	3845525.12	FENCEGRD	740.11	
32	936316.00	3845522.67	FENCEGRD	740.13	
33	936266.87	3845520.22	FENCEGRD	740.47	
34	936713.20	3845360.69	FENCEGRD	742.69	
35	936756.57	3845381.33	FENCEGRD	742.41	
36	936799.94	3845401.97	FENCEGRD	741.95	
37	936843.32	3845422.61	FENCEGRD	741.74	
38	936886.69	3845443.25	FENCEGRD	741.53	
39	936945.98	3845509.20	FENCEGRD	740.62	
40	936961.90	3845554.52	FENCEGRD	740.17	
41	936977.82	3845599.84	FENCEGRD	739.72	
42	936993.74	3845645.16	FENCEGRD	739.27	
43	937009.65	3845690.48	FENCEGRD	738.82	
44	936669.83	3845340.05	FENCEGRD	743.05	
45	936620.70	3845337.60	FENCEGRD	743.04	
46	936571.58	3845335.15	FENCEGRD	742.90	
47	936522.45	3845332.71	FENCEGRD	742.75	
48	936473.33	3845330.26	FENCEGRD	742.71	
49	936424.20	3845327.81	FENCEGRD	742.82	
50	936375.07	3845325.36	FENCEGRD	742.99	
51	936325.95	3845322.92	FENCEGRD	743.21	
52	936276.82	3845320.47	FENCEGRD	743.34	
53	936738.08	3844861.31	FENCEGRD	751.25	
54	936781.45	3844881.95	FENCEGRD	750.05	
55	936824.82	3844902.59	FENCEGRD	749.34	
56	936868.19	3844923.23	FENCEGRD	748.80	
57	936911.56	3844943.87	FENCEGRD	748.31	
58	936954.93	3844964.51	FENCEGRD	747.95	
59	936998.31	3844985.15	FENCEGRD	747.48	

60	937041.68	3845005.79	FENCEGRD	747.11	Option not Selected
61	937085.05	3845026.43	FENCEGRD	746.81	
62	937128.42	3845047.07	FENCEGRD	746.19	
63	937171.79	3845067.71	FENCEGRD	745.56	
64	937215.16	3845088.35	FENCEGRD	745.34	
65	937258.54	3845108.99	FENCEGRD	745.16	
66	937317.83	3845174.95	FENCEGRD	744.93	
67	937333.74	3845220.26	FENCEGRD	744.69	
68	937349.66	3845265.58	FENCEGRD	744.55	
69	937365.58	3845310.90	FENCEGRD	744.28	
70	937381.50	3845356.22	FENCEGRD	744.09	
71	937397.42	3845401.53	FENCEGRD	743.81	
72	937413.34	3845446.85	FENCEGRD	743.39	
73	937429.26	3845492.17	FENCEGRD	743.22	
74	937445.18	3845537.49	FENCEGRD	743.04	
75	937461.10	3845582.80	FENCEGRD	742.78	
76	937477.02	3845628.12	FENCEGRD	742.54	
77	937492.93	3845673.44	FENCEGRD	742.46	
78	937508.85	3845718.76	FENCEGRD	742.19	
79	936694.71	3844840.67	FENCEGRD	751.31	
80	936645.58	3844838.22	FENCEGRD	751.49	
81	936596.45	3844835.77	FENCEGRD	751.39	
82	936547.33	3844833.32	FENCEGRD	751.09	
83	936498.20	3844830.88	FENCEGRD	750.87	
84	936449.08	3844828.43	FENCEGRD	750.86	
85	936399.95	3844825.98	FENCEGRD	751.19	
86	936350.82	3844823.54	FENCEGRD	751.55	
87	936301.70	3844821.09	FENCEGRD	751.86	
88	936233.21	3845693.60	FENCEGRD	738.02	
89	936230.47	3845742.13	FENCEGRD	737.22	
90	936227.74	3845790.67	FENCEGRD	736.73	
91	936225.00	3845839.20	FENCEGRD	736.23	
92	936222.27	3845887.74	FENCEGRD	735.74	
93	936219.53	3845936.27	FENCEGRD	735.25	
94	936216.80	3845984.81	FENCEGRD	735.06	
95	936214.06	3846033.34	FENCEGRD	734.57	
96	936211.33	3846081.88	FENCEGRD	734.26	
97	936195.65	3845665.01	FENCEGRD	738.72	
98	936234.96	3845629.67	FENCEGRD	739.12	

99	936183.29	3845690.79	FENCEGRD	738.31	Option not Selected
100	936180.55	3845739.32	FENCEGRD	737.49	
101	936177.82	3845787.85	FENCEGRD	736.93	
102	936175.08	3845836.39	FENCEGRD	736.32	
103	936172.35	3845884.92	FENCEGRD	735.79	
104	936169.61	3845933.46	FENCEGRD	735.55	
105	936166.88	3845981.99	FENCEGRD	735.06	
106	936164.14	3846030.53	FENCEGRD	734.57	
107	936161.40	3846079.06	FENCEGRD	734.38	
108	936102.68	3845645.06	FENCEGRD	739.24	
109	936121.92	3845604.97	FENCEGRD	739.76	
110	936183.06	3845549.99	FENCEGRD	740.34	
111	936224.97	3845535.11	FENCEGRD	740.39	
112	936083.44	3845685.16	FENCEGRD	738.62	
113	936080.71	3845733.69	FENCEGRD	738.03	
114	936077.97	3845782.23	FENCEGRD	737.33	
115	936075.24	3845830.76	FENCEGRD	736.84	
116	936072.50	3845879.30	FENCEGRD	736.34	
117	936069.77	3845927.83	FENCEGRD	735.85	
118	936067.03	3845976.37	FENCEGRD	735.36	
119	936064.30	3846024.90	FENCEGRD	734.87	
120	936061.56	3846073.44	FENCEGRD	734.57	
121	935904.37	3845630.95	FENCEGRD	740.21	
122	935924.98	3845587.99	FENCEGRD	740.63	
123	935945.60	3845545.03	FENCEGRD	741.16	
124	935966.21	3845502.07	FENCEGRD	741.94	
125	935986.82	3845459.12	FENCEGRD	742.27	
126	936052.33	3845400.21	FENCEGRD	742.58	
127	936097.23	3845384.26	FENCEGRD	742.68	
128	936142.13	3845368.31	FENCEGRD	742.78	
129	936187.03	3845352.37	FENCEGRD	743.00	
130	936231.92	3845336.42	FENCEGRD	743.19	
131	935883.76	3845673.91	FENCEGRD	739.58	
132	935881.03	3845722.44	FENCEGRD	739.04	
133	935878.29	3845770.98	FENCEGRD	738.25	
134	935875.56	3845819.51	FENCEGRD	737.74	
135	935872.82	3845868.05	FENCEGRD	737.23	
136	935870.09	3845916.58	FENCEGRD	736.65	
137	935867.35	3845965.11	FENCEGRD	736.15	

138	935864.62	3846013.65	FENCEGRD	735.65	Option not Selected
139	935861.88	3846062.18	FENCEGRD	734.98	
140	935405.16	3845602.82	FENCEGRD	740.57	
141	935425.78	3845559.86	FENCEGRD	741.67	
142	935446.39	3845516.90	FENCEGRD	742.47	
143	935467.00	3845473.94	FENCEGRD	743.13	
144	935487.61	3845430.98	FENCEGRD	743.62	
145	935508.22	3845388.03	FENCEGRD	744.55	
146	935528.83	3845345.07	FENCEGRD	745.40	
147	935549.45	3845302.11	FENCEGRD	746.12	
148	935570.06	3845259.15	FENCEGRD	746.70	
149	935590.67	3845216.19	FENCEGRD	747.66	
150	935611.28	3845173.23	FENCEGRD	748.81	
151	935631.89	3845130.28	FENCEGRD	749.72	
152	935652.50	3845087.32	FENCEGRD	750.75	
153	935718.01	3845028.41	FENCEGRD	751.70	
154	935762.91	3845012.46	FENCEGRD	751.63	
155	935807.81	3844996.52	FENCEGRD	751.86	
156	935852.71	3844980.57	FENCEGRD	751.86	
157	935897.61	3844964.62	FENCEGRD	751.93	
158	935942.51	3844948.67	FENCEGRD	751.66	
159	935987.41	3844932.72	FENCEGRD	751.71	
160	936032.31	3844916.78	FENCEGRD	751.83	
161	936077.20	3844900.83	FENCEGRD	751.86	
162	936122.10	3844884.88	FENCEGRD	751.99	
163	936167.00	3844868.93	FENCEGRD	751.93	
164	936211.90	3844852.98	FENCEGRD	751.86	
165	936256.80	3844837.04	FENCEGRD	751.80	
166	935384.55	3845645.78	FENCEGRD	740.12	
167	935381.82	3845694.31	FENCEGRD	739.71	
168	935379.08	3845742.84	FENCEGRD	739.22	
169	935376.35	3845791.38	FENCEGRD	738.72	
170	935373.61	3845839.91	FENCEGRD	738.15	
171	935370.88	3845888.45	FENCEGRD	737.66	
172	935368.14	3845936.98	FENCEGRD	736.94	
173	935365.41	3845985.52	FENCEGRD	736.37	
174	935362.67	3846034.05	FENCEGRD	735.87	
175	936235.02	3846108.25	FENCEGRD	734.13	
176	936284.13	3846110.74	FENCEGRD	734.13	

177	936333.24	3846113.23	FENCEGRD	734.13	Option not Selected
178	936382.35	3846115.71	FENCEGRD	734.23	
179	936431.46	3846118.20	FENCEGRD	734.45	
180	936480.57	3846120.69	FENCEGRD	734.58	
181	936529.67	3846123.18	FENCEGRD	734.76	
182	936578.78	3846125.67	FENCEGRD	734.94	
183	936627.89	3846128.16	FENCEGRD	735.08	
184	936206.49	3846145.80	FENCEGRD	733.96	
185	936170.95	3846106.23	FENCEGRD	734.11	
186	936232.49	3846158.19	FENCEGRD	733.69	
187	936281.60	3846160.67	FENCEGRD	733.80	
188	936330.71	3846163.16	FENCEGRD	733.93	
189	936379.82	3846165.65	FENCEGRD	733.94	
190	936428.93	3846168.14	FENCEGRD	733.95	
191	936478.04	3846170.63	FENCEGRD	734.25	
192	936527.14	3846173.12	FENCEGRD	734.47	
193	936576.25	3846175.60	FENCEGRD	734.57	
194	936625.36	3846178.09	FENCEGRD	734.57	
195	936186.99	3846238.78	FENCEGRD	733.21	
196	936146.55	3846219.51	FENCEGRD	733.35	
197	936091.26	3846157.97	FENCEGRD	733.84	
198	936076.41	3846115.70	FENCEGRD	734.26	
199	936227.43	3846258.06	FENCEGRD	732.92	
200	936276.54	3846260.55	FENCEGRD	733.04	
201	936325.65	3846263.03	FENCEGRD	733.22	
202	936374.76	3846265.52	FENCEGRD	733.23	
203	936423.87	3846268.01	FENCEGRD	733.23	
204	936472.98	3846270.50	FENCEGRD	733.37	
205	936522.08	3846272.99	FENCEGRD	733.55	
206	936571.19	3846275.48	FENCEGRD	733.73	
207	936620.30	3846277.96	FENCEGRD	733.86	
208	936173.98	3846437.15	FENCEGRD	731.52	
209	936130.65	3846416.50	FENCEGRD	731.55	
210	936087.32	3846395.85	FENCEGRD	731.93	
211	936043.99	3846375.20	FENCEGRD	732.13	
212	936000.66	3846354.55	FENCEGRD	732.41	
213	935941.42	3846288.61	FENCEGRD	733.04	
214	935925.51	3846243.33	FENCEGRD	733.37	
215	935909.61	3846198.04	FENCEGRD	733.86	

216	935893.70	3846152.76	FENCEGRD	734.19	Option not Selected
217	935877.79	3846107.47	FENCEGRD	734.57	
218	936217.31	3846457.80	FENCEGRD	731.49	
219	936266.42	3846460.29	FENCEGRD	731.50	
220	936315.53	3846462.78	FENCEGRD	731.50	
221	936364.64	3846465.27	FENCEGRD	731.52	
222	936413.75	3846467.75	FENCEGRD	731.81	
223	936462.86	3846470.24	FENCEGRD	731.86	
224	936511.96	3846472.73	FENCEGRD	732.13	
225	936561.07	3846475.22	FENCEGRD	732.26	
226	936610.18	3846477.71	FENCEGRD	732.46	
227	936148.68	3846936.51	FENCEGRD	727.85	
228	936105.35	3846915.86	FENCEGRD	727.86	
229	936062.02	3846895.21	FENCEGRD	727.89	
230	936018.69	3846874.56	FENCEGRD	728.07	
231	935975.36	3846853.91	FENCEGRD	728.11	
232	935932.03	3846833.26	FENCEGRD	728.13	
233	935888.70	3846812.61	FENCEGRD	728.31	
234	935845.37	3846791.96	FENCEGRD	728.47	
235	935802.04	3846771.31	FENCEGRD	728.47	
236	935758.71	3846750.66	FENCEGRD	728.56	
237	935715.38	3846730.01	FENCEGRD	728.74	
238	935672.05	3846709.36	FENCEGRD	728.92	
239	935628.72	3846688.71	FENCEGRD	729.10	
240	935569.48	3846622.77	FENCEGRD	729.74	
241	935553.58	3846577.49	FENCEGRD	730.18	
242	935537.67	3846532.20	FENCEGRD	730.63	
243	935521.76	3846486.91	FENCEGRD	731.08	
244	935505.85	3846441.63	FENCEGRD	731.53	
245	935489.94	3846396.34	FENCEGRD	731.98	
246	935474.03	3846351.05	FENCEGRD	732.43	
247	935458.12	3846305.77	FENCEGRD	732.88	
248	935442.22	3846260.48	FENCEGRD	733.32	
249	935426.31	3846215.20	FENCEGRD	733.77	
250	935410.40	3846169.91	FENCEGRD	734.33	
251	935394.49	3846124.62	FENCEGRD	734.78	
252	935378.58	3846079.34	FENCEGRD	735.33	
253	936192.01	3846957.16	FENCEGRD	727.86	
254	936241.12	3846959.65	FENCEGRD	727.93	

255	936290.23	3846962.14	FENCEGRD	728.04	Option not Selected
256	936339.34	3846964.63	FENCEGRD	728.27	
257	936388.45	3846967.11	FENCEGRD	728.54	
258	936437.56	3846969.60	FENCEGRD	728.94	
259	936486.66	3846972.09	FENCEGRD	729.08	
260	936535.77	3846974.58	FENCEGRD	729.30	
261	936584.88	3846977.07	FENCEGRD	729.69	
262	936654.12	3846104.60	FENCEGRD	735.33	
263	936656.87	3846056.03	FENCEGRD	735.72	
264	936659.62	3846007.45	FENCEGRD	736.01	
265	936662.37	3845958.87	FENCEGRD	736.48	
266	936665.13	3845910.30	FENCEGRD	736.70	
267	936667.88	3845861.72	FENCEGRD	737.19	
268	936670.63	3845813.15	FENCEGRD	737.66	
269	936673.38	3845764.57	FENCEGRD	737.91	
270	936676.13	3845716.00	FENCEGRD	738.36	
271	936691.66	3846133.21	FENCEGRD	735.07	
272	936652.32	3846168.54	FENCEGRD	734.68	
273	936704.04	3846107.43	FENCEGRD	735.33	
274	936706.79	3846058.85	FENCEGRD	735.79	
275	936709.54	3846010.28	FENCEGRD	736.01	
276	936712.29	3845961.70	FENCEGRD	736.51	
277	936715.05	3845913.13	FENCEGRD	737.00	
278	936717.80	3845864.55	FENCEGRD	737.24	
279	936720.55	3845815.98	FENCEGRD	737.68	
280	936723.30	3845767.40	FENCEGRD	738.17	
281	936726.05	3845718.82	FENCEGRD	738.36	
282	936784.62	3846153.19	FENCEGRD	735.27	
283	936765.35	3846193.28	FENCEGRD	735.02	
284	936704.16	3846248.24	FENCEGRD	734.45	
285	936662.23	3846263.10	FENCEGRD	734.12	
286	936803.88	3846113.09	FENCEGRD	735.64	
287	936806.63	3846064.51	FENCEGRD	735.83	
288	936809.38	3846015.93	FENCEGRD	736.26	
289	936812.13	3845967.36	FENCEGRD	736.51	
290	936814.89	3845918.78	FENCEGRD	737.00	
291	936817.64	3845870.21	FENCEGRD	737.50	
292	936820.39	3845821.63	FENCEGRD	737.68	
293	936823.14	3845773.06	FENCEGRD	738.18	

294	936825.89	3845724.48	FENCEGRD	738.37	Option not Selected
295	936982.92	3846167.36	FENCEGRD	736.36	
296	936962.28	3846210.33	FENCEGRD	736.06	
297	936941.65	3846253.29	FENCEGRD	735.79	
298	936921.01	3846296.25	FENCEGRD	735.49	
299	936900.37	3846339.22	FENCEGRD	735.30	
300	936834.81	3846398.10	FENCEGRD	734.58	
301	936789.88	3846414.02	FENCEGRD	734.09	
302	936744.96	3846429.94	FENCEGRD	733.75	
303	936700.03	3846445.86	FENCEGRD	733.12	
304	936655.11	3846461.79	FENCEGRD	732.84	
305	937003.56	3846124.40	FENCEGRD	736.83	
306	937006.31	3846075.82	FENCEGRD	737.03	
307	937009.06	3846027.25	FENCEGRD	737.27	
308	937011.81	3845978.67	FENCEGRD	737.43	
309	937014.57	3845930.10	FENCEGRD	737.43	
310	937017.32	3845881.52	FENCEGRD	737.43	
311	937020.07	3845832.94	FENCEGRD	737.64	
312	937022.82	3845784.37	FENCEGRD	737.89	
313	937025.57	3845735.79	FENCEGRD	738.43	
314	937482.12	3846195.64	FENCEGRD	737.04	
315	937461.48	3846238.61	FENCEGRD	736.60	
316	937440.85	3846281.57	FENCEGRD	736.34	
317	937420.21	3846324.53	FENCEGRD	736.01	
318	937399.57	3846367.50	FENCEGRD	735.55	
319	937378.93	3846410.46	FENCEGRD	735.11	
320	937358.30	3846453.42	FENCEGRD	734.71	
321	937337.66	3846496.39	FENCEGRD	734.45	
322	937317.02	3846539.35	FENCEGRD	734.07	
323	937296.38	3846582.32	FENCEGRD	733.63	
324	937275.75	3846625.28	FENCEGRD	733.35	
325	937255.11	3846668.24	FENCEGRD	733.30	
326	937234.47	3846711.21	FENCEGRD	732.89	
327	937168.91	3846770.09	FENCEGRD	732.05	
328	937123.98	3846786.01	FENCEGRD	732.15	
329	937079.06	3846801.93	FENCEGRD	732.23	
330	937034.13	3846817.85	FENCEGRD	732.14	
331	936989.21	3846833.78	FENCEGRD	731.81	
332	936944.28	3846849.70	FENCEGRD	731.82	

333	936899.36	3846865.62	FENCEGRD	731.74	Option not Selected
334	936854.43	3846881.54	FENCEGRD	731.55	
335	936809.51	3846897.46	FENCEGRD	731.36	
336	936764.58	3846913.38	FENCEGRD	730.92	
337	936719.66	3846929.30	FENCEGRD	730.65	
338	936674.73	3846945.22	FENCEGRD	730.32	
339	936629.81	3846961.15	FENCEGRD	729.90	
340	937502.76	3846152.68	FENCEGRD	737.49	
341	937505.51	3846104.10	FENCEGRD	737.98	
342	937508.26	3846055.53	FENCEGRD	738.48	
343	937511.01	3846006.95	FENCEGRD	738.97	
344	937513.76	3845958.38	FENCEGRD	739.77	
345	937516.52	3845909.80	FENCEGRD	740.26	
346	937519.27	3845861.23	FENCEGRD	740.75	
347	937522.02	3845812.65	FENCEGRD	741.25	
348	937524.77	3845764.07	FENCEGRD	741.88	

Discrete Polar Receptors

Option not in use

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations (Optional)	Flagpole Heights [m] (Optional)
1	936629.16	3846103.19	FENCEPRI	735.32	Option not Selected
2	936651.17	3845714.58	FENCEPRI	738.34	
3	936258.17	3845695.01	FENCEPRI	737.77	
4	936236.29	3846083.28	FENCEPRI	734.26	

Intermediate

Option not in use

Polar Plant Boundary

Option not in use

Receptor Pathway

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid

Source Pathway - Source Inputs

ISCST3

Point Sources

No Point Sources Specified

Volume Sources

No Volume Sources Specified

Area Sources

No Area Sources Specified

Open Pit Sources

No Open Pit Sources Specified

Circular Area Sources

No Circular Area Sources Specified

Polygon Area Sources

Source Type	Source ID	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
AREA POLY	AREA	735.32	5.00	6.53E-6		4	936629.16	3846103.19
				6.53E-6			936651.17	3845714.58
				6.53E-6			936258.17	3845695.01
				6.53E-6			936236.29	3846083.28

Flare Sources

No Flare Sources Specified

Line Sources

No Line Sources Specified

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Data for Particulates

Option not in use

Variable Emission Rate

Seasonally Emission Rate Variation

Option not in use

Monthly Emission Rate Variation

Option not in use

Hourly Emission Rate Variation

Option not in use

Wind Speed / Stability Category Emission Rate Variation

Option not in use

Season / Hour-of-Day Emission Rate Variation

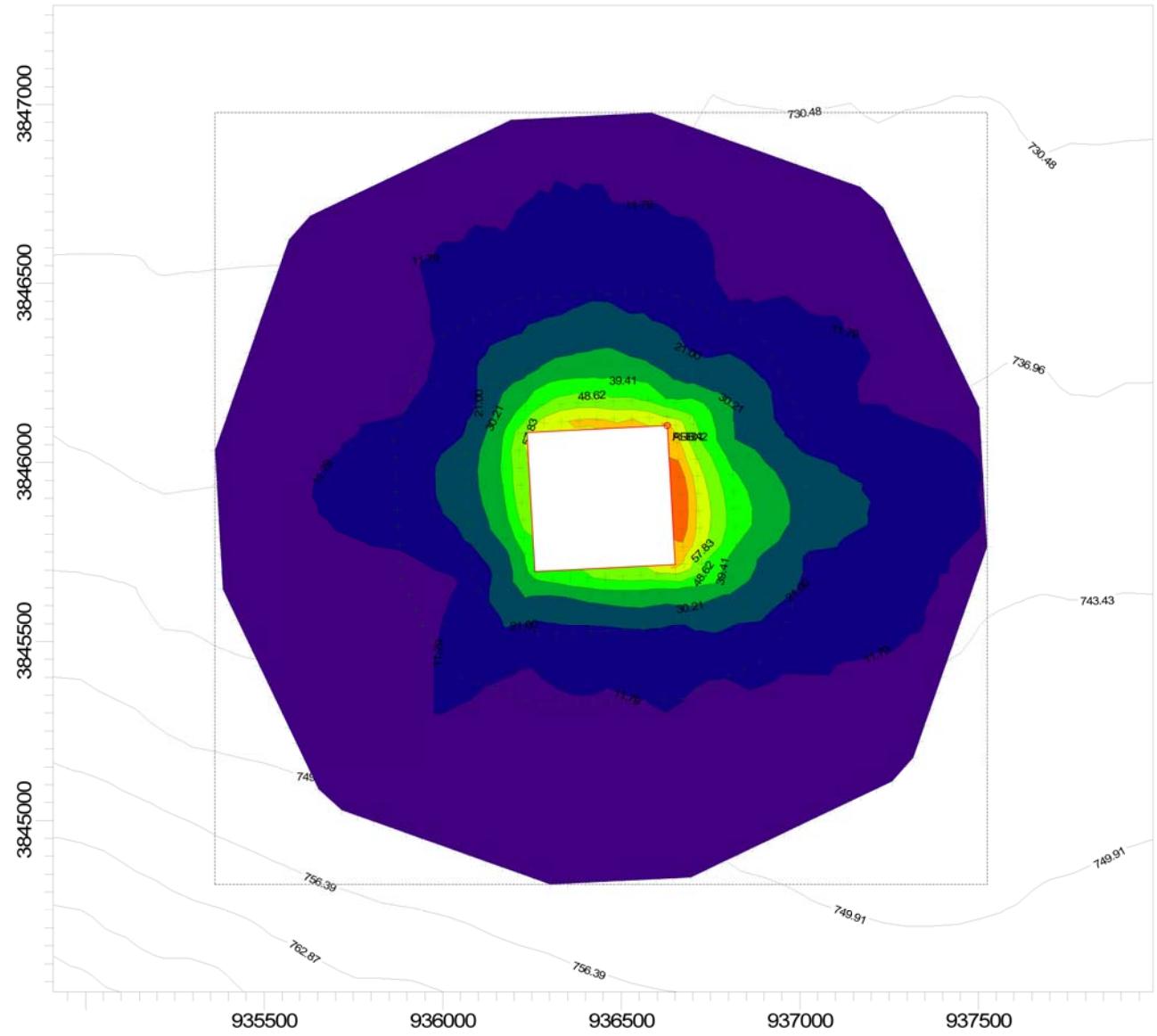
Option not in use

Season / Hour-of-Day / Day-of-Week Emission Rate Variation

Option not in use

PROJECT TITLE:

The Commons at Quartz Hill - PM2.5
PM2.5 - 24hr fugitive



PLOT FILE OF HIGH 1ST HIGH 24-HR VALUES FOR SOURCE GROUP: ALL ug/m^3

2.583 11.791 20.999 30.206 39.414 48.621 57.829 67.037 76.244 85.452

COMMENTS: Unit Emission Factor (1 g/s)	SOURCES: **1**	COMPANY NAME:	
	RECEPTORS: **352**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:18,793 0 0.5 km	
	MAX: **85.4519 ug/m^3**	DATE: **11/14/2008**	PROJECT NO.:

Unit Emission Factors			
Avg Time	x/Q ug/m3/(g/s)	Pollutants	Source
1-HR	117.78	NOX and CO	Combustion
8-HR	102.97	CO	Combustion
24-HR	83.55	PM10	Fugitive
24-HR	55.36	PM10	Combustion
24-HR	85.45	PM2.5	Fugitive
24-HR	55.73	PM2.5	Combustion

Construction Emission Rates						
			PM10		PM2.5	
	Nox	CO	Fugitive	Combustion	Fugitive	Combustion
Phase	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
Grading	171.84	55.17	1.45	7.76	0.30	7.17
Site Prep	82.07	41.78	3.20	5.96	0.67	5.47
Building	35.30	20.15	0.00	3.19	0.00	2.93
Asphalt	71.95	31.88	0.00	4.55	0.00	4.19

Operational Emission Rates						
			PM10		PM2.5	
	Nox	CO	Fugitive	Combustion	Fugitive	Combustion
Phase	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
Operations	25.16	233.17	0.04	2.89	0.04	0.79

Construction Air Concentration														
	Nitrogen Dioxide			Carbon Monoxide					Particulate Matter 10			Particulate Matter 2.5		
Construction	ER	1-Hr Site	1-Hr Total	ER	1-Hr Site	1-Hr Total	8-Hr Site	8-Hr Total	ER-Fug	ER-Comb	24-hr	ER-Fug	ER-Comb	24-HR
Phase	g/s	ug/m3	ppm	g/s	ug/m3	ppm	ug/m3	ppm	g/s	g/s	ug/m3	g/s	g/s	ug/m3
Grading	2.71	319	0.170	0.87	103	0.089	25	0.022	0.008	0.041	2.90	0.002	0.038	2.24

Operational Air Concentration														
	Nitrogen Dioxide			Carbon Monoxide					Particulate Matter 10			Particulate Matter 2.5		
	ER	1-Hr Site	1-Hr Total	ER	1-Hr Site	1-Hr Total	8-Hr Site	8-Hr Total	ER-Fug	ER-Comb	24-hr	ER-Fug	ER-Comb	24-HR
Phase	g/s	ug/m3	ppm	g/s	ug/m3	ppm	ug/m3	ppm	g/s	g/s	ug/m3	g/s	g/s	ug/m3
Operations	0.13	16	0.0083	1.23	144	0.126	35	0.031	0.0002	0.0152	0.86	0.0002	0.0042	0.25