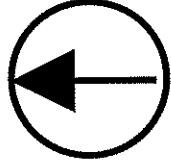


Date : 8/18/98AM 8/20/98PM

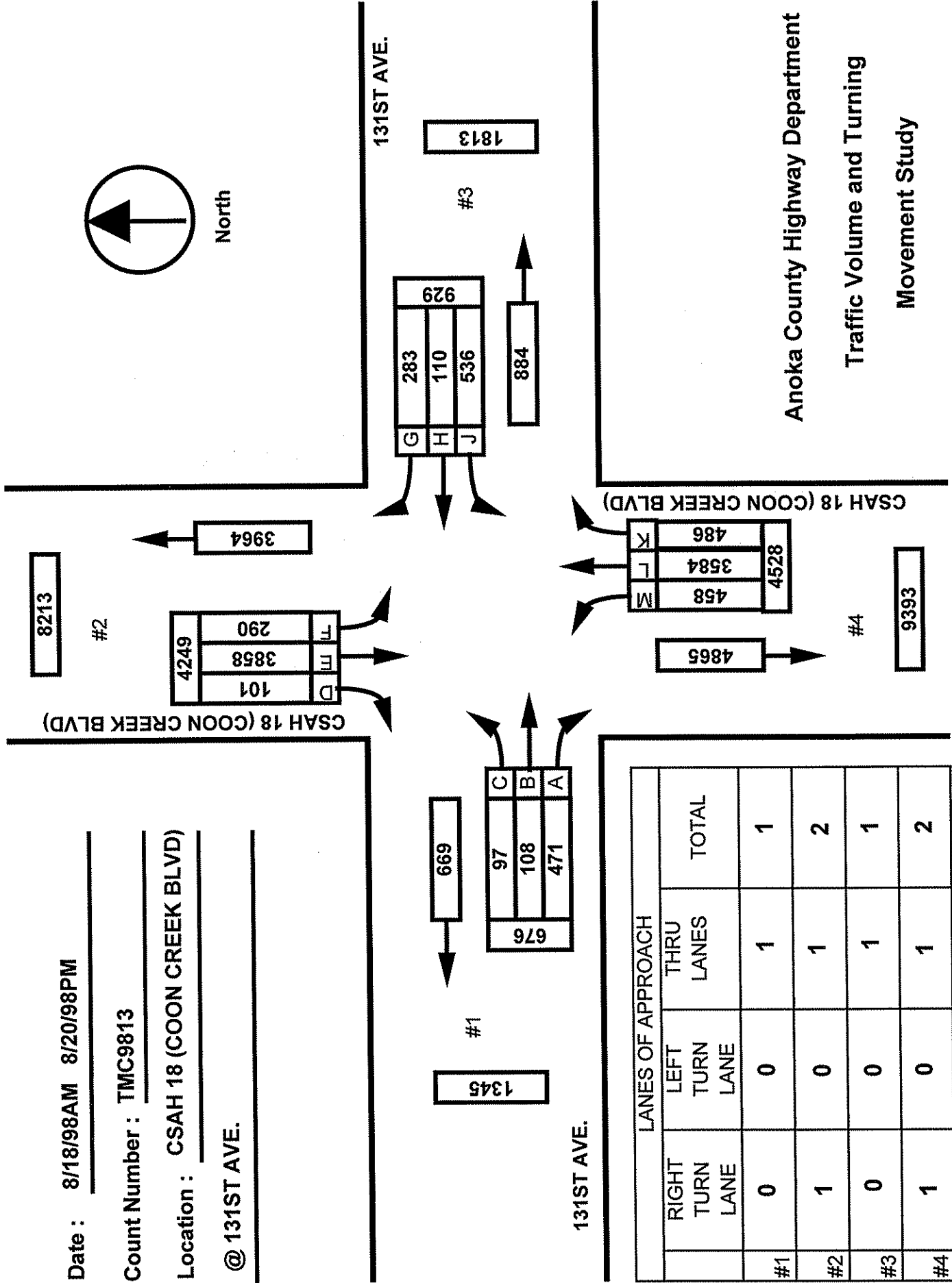
Count Number : TMC9813

Location : CSAH 18 (COON CREEK BLVD)

@ 131ST AVE.



North



	LANES OF APPROACH			TOTAL
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	
#1	0	0	1	1
#2	1	0	1	2
#3	0	0	1	1
#4	1	0	1	2

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

PETRA Software

Weather :
 Counted by: Sarah and Vallie
 Board # :
 Other :

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 Horsham, PA.

Study Name: TMC9813
 Site Code : 98130202
 Start Date: 08/18/98
 Page : 1

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL 131ST AVE. Southbound				Westbound				CSAH 18 (COON CREEK BL 131ST AVE. Northbound				Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
08/18/98																			
06:00	2	99	1	0	4	0	3	0	0	7	2	1	0	0	18	0	137	1	136
06:15	0	134	0	0	12	0	1	0	0	13	0	0	2	0	12	0	174	0	174
06:30	1	175	1	3	14	0	2	0	0	18	3	0	1	1	10	0	229	3	226
06:45	1	134	1	1	22	1	4	0	2	23	2	1	1	0	21	1	215	3	212
Hour	4	542	3	4	52	1	10	0	2	61	7	2	4	1	61	1	755	7	748
07:00	3	159	0	4	22	0	3	0	4	25	2	1	3	2	16	0	244	5	239
07:15	4	137	1	1	21	0	4	0	1	23	3	0	3	2	19	1	220	2	218
07:30	6	136	3	1	20	2	8	0	4	20	6	4	2	1	17	0	230	5	225
07:45	3	114	1	4	16	1	4	0	6	23	1	2	0	0	17	0	192	6	186
Hour	16	546	5	10	79	3	19	0	15	91	12	7	8	5	69	1	886	18	868
08:00	1	105	3	1	13	2	2	1	2	29	1	0	0	0	8	0	168	2	166
08:15	4	87	0	7	10	1	3	0	3	23	1	2	1	2	7	0	151	9	142
08:30	3	63	0	1	9	0	4	0	1	16	4	0	2	0	6	0	109	1	108
08:45	1	74	1	3	8	0	1	0	7	31	1	1	1	1	11	0	141	4	137
Hour	9	329	4	12	40	3	10	1	13	99	7	3	4	3	32	0	569	16	553
09:00	1	51	0	2	11	1	2	1	4	21	5	1	2	1	6	2	111	6	105
09:15	1	40	1	2	6	1	2	1	4	30	2	1	0	3	10	0	104	4	100
09:30	2	45	2	2	8	1	0	1	1	21	4	1	2	1	4	1	96	5	91
09:45	0	57	1	2	6	2	1	0	1	26	1	1	0	2	8	1	109	4	105
Hour	4	193	4	8	31	5	5	3	10	98	12	4	4	7	28	4	420	19	401
10:00	2	47	0	1	8	2	0	0	6	20	4	1	1	3	3	1	99	3	96
10:15	2	40	2	2	4	0	3	1	3	25	2	0	0	3	1	0	88	3	85
10:30	0	48	0	2	6	0	3	0	1	28	2	2	0	1	3	0	96	4	92
10:45	2	48	1	2	7	0	6	0	4	17	6	1	2	1	2	0	99	3	96
Hour	6	183	3	7	25	2	12	1	14	90	14	4	3	8	9	1	382	13	369
11:00	4	38	1	1	5	1	1	0	4	34	4	3	1	4	5	0	106	4	102
11:15	2	34	1	2	7	0	5	0	2	39	8	1	1	0	8	1	111	4	107
11:30	7	45	1	2	3	1	5	0	8	42	3	1	0	1	3	0	122	3	119
11:45	1	48	0	1	9	1	3	1	1	37	8	1	4	0	9	0	124	3	121
Hour	14	165	3	6	24	3	14	1	15	152	23	6	6	5	25	1	463	14	449
12:00	6	42	1	2	4	0	0	0	1	48	6	2	1	0	3	0	116	4	112
12:15	7	57	1	2	7	2	1	1	6	41	9	4	0	2	1	0	141	7	134
12:30	1	39	2	1	8	0	5	0	5	33	4	0	1	1	6	1	107	2	105
12:45	4	51	2	0	4	2	3	0	3	21	11	0	1	1	5	0	108	0	108
Hour	18	189	6	5	23	4	9	1	15	143	30	6	3	4	15	1	472	13	459

Weather :
 Counted by: Sarah and Vallie
 Board # :
 Other :

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 Horsham, PA.

Study Name: TMC9813
 Site Code : 98130202
 Start Date: 08/18/98
 Page : 2

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL 131ST AVE. Southbound				Westbound				CSAH 18 (COON CREEK BL 131ST AVE. Northbound				Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
13:00	3	47	1	2	5	2	2	0	3	47	3	1	3	0	6	0	125	3	122
13:15	3	47	0	2	12	2	3	1	5	42	4	0	2	2	3	1	129	4	125
13:30	5	39	1	4	7	3	3	2	6	34	6	2	2	0	5	1	120	9	111
13:45	4	45	1	1	6	0	8	1	2	42	2	3	2	2	6	0	125	5	120
Hour	15	178	3	9	30	7	16	4	16	165	15	6	9	4	20	2	499	21	478
14:00	4	42	0	1	5	1	3	0	8	39	10	4	1	1	5	0	124	5	119
14:15	5	51	4	3	7	3	2	1	1	47	6	0	2	2	5	0	139	4	135
14:30	5	50	2	3	4	1	8	1	9	52	7	2	0	2	8	0	154	6	148
14:45	4	47	1	0	9	4	2	0	7	56	10	0	3	2	5	0	150	0	150
Hour	18	190	7	7	25	9	15	2	25	194	33	6	6	7	23	0	567	15	552
15:00	4	41	0	0	5	1	11	0	6	73	14	3	0	2	3	0	163	3	160
15:15	5	53	3	1	8	1	3	1	14	77	11	2	1	1	1	0	182	4	178
15:30	2	47	4	3	2	1	6	0	7	88	12	3	3	1	3	0	182	6	176
15:45	7	57	3	3	10	3	6	0	15	88	18	6	2	2	8	0	228	9	219
Hour	18	198	10	7	25	6	26	1	42	326	55	14	6	6	15	0	755	22	733
16:00	5	48	3	4	9	2	3	1	7	103	22	5	2	0	6	0	220	10	210
16:15	5	44	4	5	11	4	7	3	13	133	10	5	1	2	8	0	255	13	242
16:30	8	56	3	3	14	2	11	1	18	104	16	2	2	2	8	0	250	6	244
16:45	4	61	1	2	8	1	6	0	15	107	17	0	1	3	4	0	230	2	228
Hour	22	209	11	14	42	9	27	5	53	447	65	12	6	7	26	0	955	31	924
17:00	6	41	1	0	10	2	8	1	14	138	11	3	1	4	5	0	245	4	241
17:15	2	72	4	0	10	3	7	0	19	143	13	3	2	3	10	0	291	3	288
17:30	4	49	2	1	7	3	8	0	16	150	20	1	1	3	9	0	274	2	272
17:45	12	60	0	0	4	1	3	0	15	130	18	2	3	2	9	0	259	2	257
Hour	24	222	7	1	31	9	26	1	64	561	62	9	7	12	33	0	1069	11	1058
18:00	17	64	4	0	7	0	5	1	24	125	15	2	1	2	13	0	280	3	277
18:15	7	72	3	1	10	3	9	0	16	85	13	2	1	1	9	0	232	3	229
18:30	4	59	1	1	4	4	11	0	11	88	7	2	3	3	9	0	207	3	204
18:45	14	68	3	0	6	1	8	0	12	76	8	1	6	2	9	0	214	1	213
Hour	42	263	11	2	27	8	33	1	63	374	43	7	11	8	40	0	933	10	923
19:00	8	54	2	0	15	4	10	0	12	86	7	1	2	6	4	0	211	1	210
19:15	7	56	1	1	12	2	7	0	11	68	13	1	4	2	6	0	191	2	189
19:30	6	37	5	0	5	1	7	0	10	69	6	2	0	3	8	0	159	2	157
19:45	9	34	1	0	5	2	4	0	7	74	12	1	1	2	7	1	160	2	158
Hour	30	181	9	1	37	9	28	0	40	297	38	5	7	13	25	1	721	7	714

Weather :
 Counted by: Sarah and Vallie
 Board # :
 Ther :

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Study Name: TMC9813
 Site Code : 98130202
 Start Date: 08/18/98
 Page : 3

Vehicle group 1

Start Time	CSAH 18 (COON CREEK BL 131ST AVE. Southbound				Westbound				CSAH 18 (COON CREEK BL 131ST AVE. Northbound				Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
20:00	7	37	1	1	7	9	8	0	12	75	16	0	4	3	11	0	191	1	190
20:15	4	42	1	0	5	8	3	0	7	63	11	0	2	1	5	0	152	0	152
20:30	11	36	2	0	6	2	7	0	13	59	5	1	0	3	5	0	150	1	149
20:45	6	37	2	1	6	4	1	0	10	60	8	1	3	6	7	0	152	2	150
Hour	28	152	6	2	24	23	19	0	42	257	40	2	9	13	28	0	645	4	641
21:00	9	32	2	0	1	3	5	0	6	56	4	0	1	2	7	0	128	0	128
21:15	5	28	4	0	8	2	3	0	6	66	11	0	2	1	6	1	143	1	142
21:30	2	37	0	0	6	1	3	0	12	55	7	0	1	1	7	0	132	0	132
21:45	6	21	3	0	6	3	3	0	5	52	8	0	0	1	2	0	110	0	110
Hour	22	118	9	0	21	9	14	0	29	229	30	0	4	5	22	1	513	1	512
Total	290	3858	101	95	536	110	283	21	458	3584	486	93	97	108	471	13	10604	222	10382
% Apr.	6.6	88.8	2.3	2.1	56.4	11.5	29.7	2.2	9.9	77.5	10.5	2.0	14.0	15.6	68.3	1.8	-	-	-
% Int.	2.7	36.3	0.9	0.8	5.0	1.0	2.6	0.1	4.3	33.7	4.5	0.8	0.9	1.0	4.4	0.1	-	-	-

or Street Approaches:

Northbound:

CSAH 18 (COON CREEK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9813.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/18/98
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 4528

Southbound:

CSAH 18 (COON CREEK BLVD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9813.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/18/98
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 4249

Minor Street Approaches:

Eastbound:

131ST AVE.

Data File: C:\APPS\PETRA2\DATAFILE\TMC9813.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/18/98
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 676

Westbound:

131ST AVE.

Data File: C:\APPS\PETRA2\DATAFILE\TMC9813.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/18/98
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 929

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

Hour	Main	Side	Warrant 1		Warrant 2		Warrant 8		
Begin	(Total)	Vol. Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?	Criteria
0	0	0 W	17		105		52		84
1	0	0 W	18		105		52		84
2	0	0 W	19		105		52		84
3	0	0 W	20		105		52		84
4	0	0 W	21		105		52		84
5	0	0 W	22		105		52		84
6	619	66 E	5	MAIN	105	SIDE	52	MAIN	84
7	685	101 W	1	MAIN	105	--BOTH--	52	--BOTH--	84
8	461	53 W	9	MAIN	105	SIDE	52		84
9	321	41 W	13		105		52		84
10	310	39 W	15		105		52		84
11	372	41 W	14		105		52		84
12	401	36 W	16		105		52		84
13	392	53 W	10		105	SIDE	52		84
14	467	49 W	11	MAIN	105		52		84
15	649	57 W	8	MAIN	105	--BOTH--	52	MAIN	84
16	807	78 W	2	MAIN	105	--BOTH--	52	MAIN	84
17	940	66 W	6	MAIN	105	--BOTH--	52	MAIN	84
18	796	68 W	4	MAIN	105	--BOTH--	52	MAIN	84
19	595	74 W	3	MAIN	105	SIDE	52	MAIN	84
20	525	66 W	7	MAIN	105	SIDE	52	MAIN	84
21	437	44 W	12	MAIN	105		52		84
22	0	0 W	23		105		52		84
23	0	0 W	24		105		52		84

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 5 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volumes too low. Criteria--190 Peds in peak hour, 100 peds in 4th high hour.

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

Warrant 7 - Systems Warrant

NOT SATISFIED. At least one street has no major approaches. Peak hour total entering volume: 1058.

- Approaches which are part of the principal through traffic roadway network.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 2 hours.

Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1700 hours) volume not adequate.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

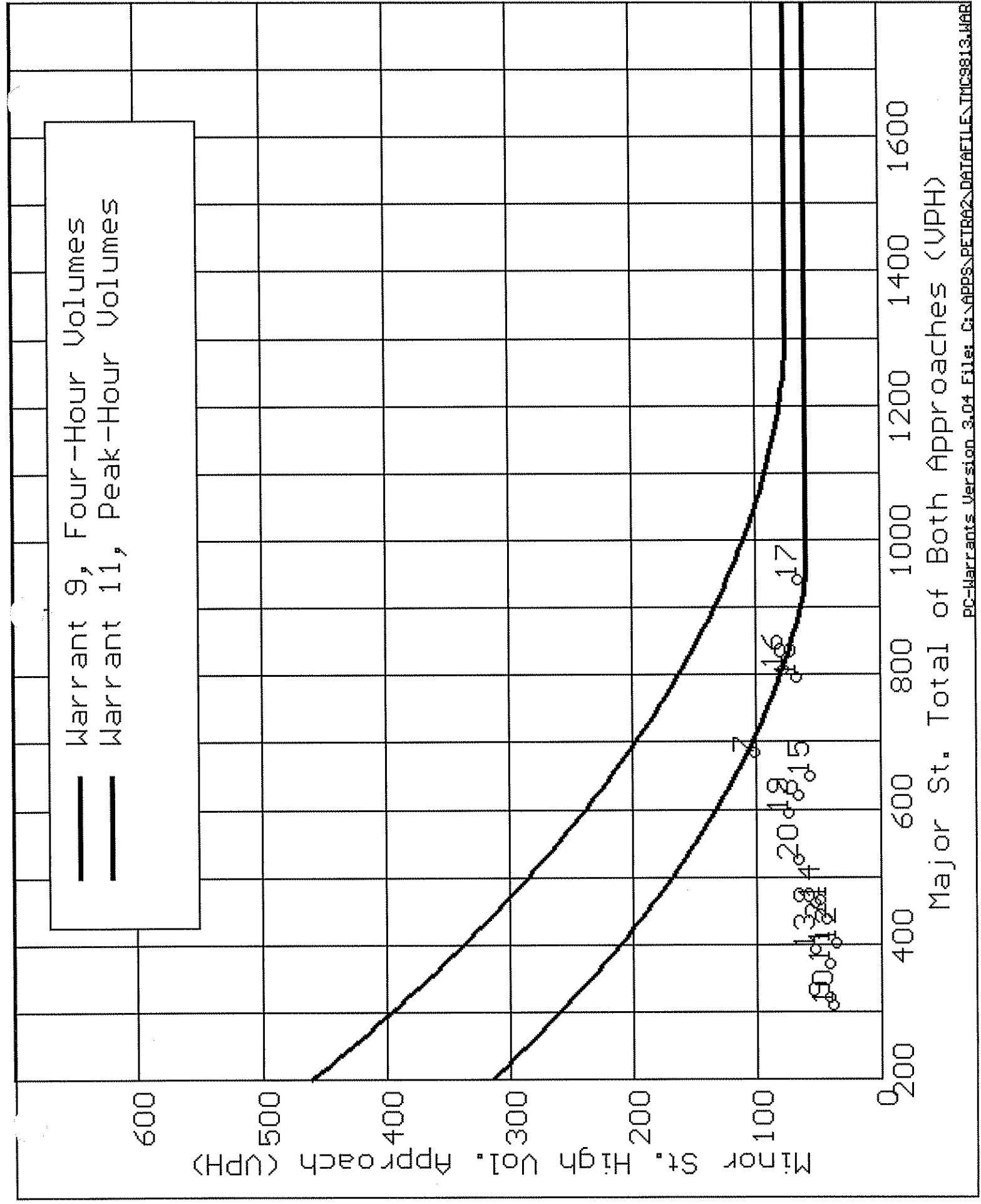
Warrant 11 - Peak Hour Volume

NOT SATISFIED.

Minor St. High Vol. Approach (VPH)

Warrant 9, Four-Hour Volumes
Warrant 11, Peak-Hour Volumes

Major St. Total of Both Approaches (VPH)





NORTH

COUNT LOCATION:

CSAH 18 (COON CREEK BLVD)
@ 131ST AVE

DATE:

8/18/98

APP. #1= WB 131ST AV.
 APP. #2 = NB CSAH 18
 COON CREEK BLVD
 APP. #3= EB 131ST AV.
 APP. #4= SB CSAH 18
 COON CREEK BLVD

APP.
#1

APP.
#2

APP.
#3

APP.
#4

- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
 - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
 - C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						1		
6:15-6:30								
6:30-6:45						3		
6:45-7:00						2		1
HOURLY TOTAL						HOURLY TOTAL		7
7:00-7:15		1			1	5		
7:15-7:30						1		1
7:30-7:45						5		
7:45-8:00						6		
HOURLY TOTAL					1	HOURLY TOTAL		18
8:00-8:15						2		
8:15-8:30						5		1
8:30-8:45						1		
8:45-9:00			1		1	4		
HOURLY TOTAL					1	HOURLY TOTAL		13
9:00-9:15						6		
9:15-9:30						4		
9:30-9:45	1				1	5		
9:45-10:00	1				1	4		
HOURLY TOTAL					2	HOURLY TOTAL		19
10:00-10:15				1	1	3		
10:15-10:30	1	4		1	6	3		
10:30-10:45		2			2	4		
10:45-11:00		2			2	3		
HOURLY TOTAL					11	HOURLY TOTAL		13
11:00-11:15		2			2	4		
11:15-11:30						4		
11:30-11:45						3		
11:45-12:00						3		
HOURLY TOTAL					2	HOURLY TOTAL		14
12:00-12:15						4		
12:15-12:30				2	2	5		
12:30-12:45		2	2		4	2		
12:45-1:00								
HOURLY TOTAL					6	HOURLY TOTAL		11
1:00-1:15						3		
1:15-1:30						4		
1:30-1:45				3	3	9		
1:45-2:00		3			3	4		
HOURLY TOTAL					6	HOURLY TOTAL		20



NORTH

COUNT LOCATION:

CSAH 18 (COON CREEK BLVD) -
@ 131ST AVE

DATE:

8/20/98

APP. #1= WB 131ST AV.

APP. #2 =NB CSAH 18
(COON CREEK BLVD)

APP. #3= EB 131ST AV.

APP. #4= SB CSAH 18
(COON CREEK BLVD)

APP.
#2

APP.
#1

APP.
#3

APP.
#4

- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
 - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
 - C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						4		
2:15-2:30			1		1	4		
2:30-2:45						5		
2:45-3:00			1		1	1		
HOURLY TOTAL						2	HOURLY TOTAL 14	
3:00-3:15						3		
3:15-3:30						3		
3:30-3:45	1		3		4	6		
3:45-4:00	2	1			3	8		
HOURLY TOTAL						7	HOURLY TOTAL 20	
4:00-4:15		3	1	1	5	7		2
4:15-4:30				5	5	13		
4:30-4:45		1			1	5		1
4:45-5:00						3		
HOURLY TOTAL						11	HOURLY TOTAL 31	
5:00-5:15						4		
5:15-5:30						3		
5:30-5:45				2	2	2		
5:45-6:00				6	6	2		
HOURLY TOTAL						8	HOURLY TOTAL 11	
6:00-6:15						4		
6:15-6:30						2		
6:30-6:45	1	1		8	10	3		
6:45-7:00				1	1	1		
HOURLY TOTAL						11	HOURLY TOTAL 10	
7:00-7:15				1	1	1		
7:15-7:30	3	1		6	10	2		
7:30-7:45				2	2	2		
7:45-8:00		2			2	2		
HOURLY TOTAL						15	HOURLY TOTAL 7	
8:00-8:15		2	1	4	7	1		
8:15-8:30		3		2	5			
8:30-8:45		2			2	1		
8:45-9:00						2		
HOURLY TOTAL						14	HOURLY TOTAL 4	
9:00-9:15								
9:15-9:30		1		2	3	1		
9:30-9:45				2	2	1		
9:45-10:00								
HOURLY TOTAL						5	HOURLY TOTAL 2	