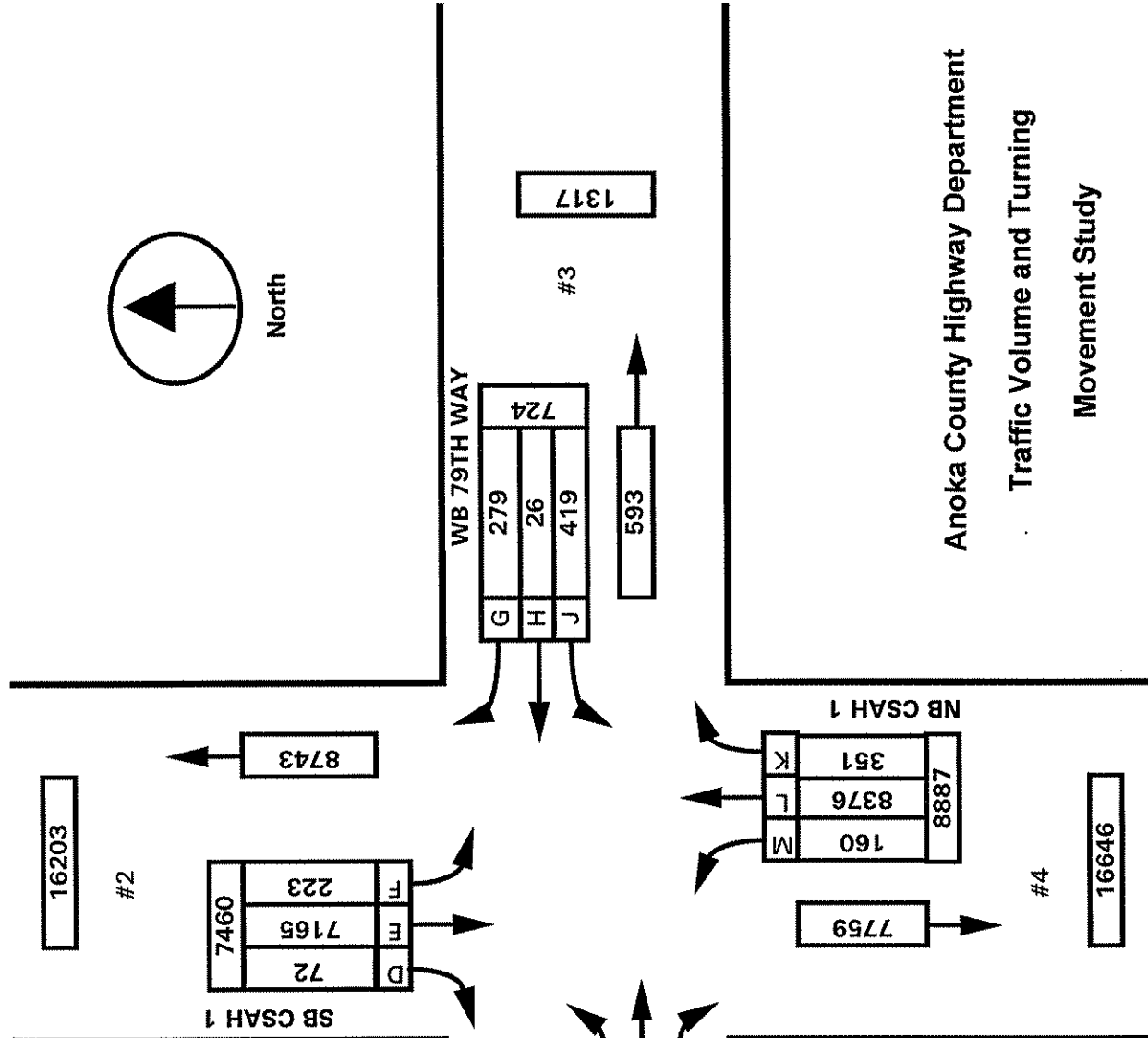


Date : 8/8/96 AM 8/6/96 PM

Count Number : TMC 9617

Location : CSAH 1 (EAST RIVER ROAD)

@ 79TH WAY



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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather : SUNNY & HOT (T-STORM 9:30PM)

TRAFFIC ENGINEERING SECTION

Study Name: TMC9617

Counted by: Ann and Gabe

TRAFFIC STUDY

Site Code : 96170202

Board # :

Start Date: 08/06/96

Other :

Page : 1

Vehicle group 1

Start Time	CSAH 1 (EAST RIVER ROA 79TH WAY From North				CSAH 1 (EAST RIVER ROA 79TH WAY From East				CSAH 1 (EAST RIVER ROA 79TH WAY From South				CSAH 1 (EAST RIVER ROA 79TH WAY From West				Intvl	Exclu	Inclu	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				Total
08/06/96																				
06:00	0	185	4	4	4	0	9	1	1	22	2	0	3	0	0	0	0	235	5	230
06:15	3	276	1	2	3	1	6	0	9	21	1	2	5	0	0	0	0	330	4	326
06:30	0	349	1	4	3	0	15	0	5	42	0	3	5	0	4	0	0	431	7	424
06:45	0	399	3	5	3	0	14	1	4	46	1	1	2	1	0	0	0	480	7	473
Hour	3	1209	9	15	13	1	44	2	19	131	4	6	15	1	4	0	0	1476	23	1453
07:00	1	337	2	3	1	0	23	0	4	45	0	3	4	1	1	0	0	425	6	419
07:15	2	334	2	5	3	0	14	1	4	68	1	6	5	0	3	0	0	448	12	436
07:30	0	305	1	8	4	0	17	0	4	54	1	4	5	0	2	1	1	406	13	393
07:45	0	255	1	5	5	1	15	1	1	71	3	7	5	1	1	0	0	372	13	359
Hour	3	1231	6	21	13	1	69	2	13	238	5	20	19	2	7	1	1	1651	44	1607
08:00	1	197	2	8	2	0	5	0	4	57	0	6	4	0	1	0	0	287	14	273
08:15	1	154	4	7	8	0	2	0	1	59	0	5	3	1	0	0	0	245	12	233
08:30	1	117	5	6	6	0	4	1	4	53	1	6	4	0	0	0	0	208	13	195
08:45	1	103	3	8	2	0	4	0	3	51	2	3	4	0	6	0	0	190	11	179
Hour	4	571	14	29	18	0	15	1	12	220	3	20	15	1	7	0	0	930	50	880
09:00	0	101	3	10	3	0	0	0	2	57	0	5	5	1	2	0	0	189	15	174
09:15	2	68	0	3	0	1	3	0	3	55	0	6	2	1	0	1	1	145	10	135
09:30	0	72	1	1	1	1	4	0	2	68	1	8	2	0	2	1	1	164	10	154
09:45	2	76	4	12	5	0	5	0	4	68	1	2	1	0	2	0	0	182	14	168
Hour	4	317	8	26	9	2	12	0	11	248	2	21	10	2	6	2	2	680	49	631
10:00	0	81	1	5	3	0	5	2	4	73	1	10	5	0	1	0	0	191	17	174
10:15	0	81	2	8	4	0	7	3	8	63	0	5	1	0	2	1	1	185	17	168
10:30	0	80	4	9	5	0	5	1	3	76	1	9	2	0	1	0	0	196	19	177
10:45	0	77	3	6	6	0	5	0	8	71	2	12	3	1	3	0	0	197	18	179
Hour	0	319	10	28	18	0	22	6	23	283	4	36	11	1	7	1	1	769	71	698
11:00	1	92	2	12	2	1	7	3	3	86	1	9	5	1	1	0	0	226	24	202
11:15	0	83	2	5	2	0	4	0	4	80	2	3	7	1	2	1	1	196	9	187
11:30	3	102	2	5	5	1	4	1	4	70	3	5	3	0	3	0	0	211	11	200
11:45	1	92	3	3	6	0	3	1	9	103	3	10	3	0	0	0	0	237	14	223
Hour	5	369	9	25	15	2	18	5	20	339	9	27	18	2	6	1	1	870	58	812
12:00	1	71	5	5	3	2	1	1	7	103	3	8	1	0	1	0	0	212	14	198
12:15	3	89	5	4	1	0	3	0	7	100	5	7	3	0	2	0	0	229	11	218
12:30	3	80	2	8	5	0	5	0	6	105	6	7	3	0	3	0	0	233	15	218
12:45	3	113	2	6	5	1	10	3	10	78	4	6	3	1	1	0	0	246	15	231
Hour	10	353	14	23	14	3	19	4	30	386	18	28	10	1	7	0	0	920	55	865

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather :SUNNY & HOT (T-STORM 9:30PM)

TRAFFIC ENGINEERING SECTION

Study Name: TMC9617

Counted by:Ann and Gabe

TRAFFIC STUDY

Site Code : 96170202

Card # :

Start Date: 08/06/96

Other :

Page : 2

Vehicle group 1

Start Time	CSAH 1 (EAST RIVER ROA 79TH WAY From North				From East				CSAH 1 (EAST RIVER ROA 79TH WAY From South				From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	1	88	8	4	4	1	5	0	3	87	5	6	2	0	2	0	216	10	206
13:15	0	92	3	4	3	0	8	2	8	100	1	13	7	0	0	0	241	19	222
13:30	2	93	7	5	2	2	6	2	5	120	3	11	4	0	0	0	262	18	244
13:45	1	95	1	5	5	0	3	0	6	103	3	8	2	0	0	0	232	13	219
Hour	4	368	19	18	14	3	22	4	22	410	12	38	15	0	2	0	951	60	891
14:00	2	81	5	7	3	1	6	1	8	86	3	4	1	0	1	0	209	12	197
14:15	2	109	5	5	2	0	6	2	4	87	2	5	3	0	0	1	233	13	220
14:30	1	101	7	5	8	0	7	2	9	154	2	8	0	0	1	0	305	15	290
14:45	0	102	4	9	5	0	5	3	2	175	6	9	1	1	1	0	323	21	302
Hour	5	393	21	26	18	1	24	8	23	502	13	26	5	1	3	1	1070	61	1009
15:00	2	86	2	1	5	3	1	0	9	191	2	7	2	0	3	0	314	8	306
15:15	2	89	1	0	8	0	7	3	6	225	2	7	4	2	2	0	358	10	348
15:30	1	95	4	5	6	2	13	2	9	232	2	5	0	1	1	0	378	12	366
15:45	1	87	2	3	3	0	11	1	5	321	4	4	1	0	0	0	443	8	435
Hour	6	357	9	9	22	5	32	6	29	969	10	23	7	3	6	0	1493	38	1455
16:00	3	78	4	1	2	2	7	1	10	331	6	8	2	1	0	0	456	10	446
16:15	2	71	1	3	7	0	9	3	7	330	5	5	2	0	1	0	446	11	435
16:30	0	91	6	4	9	0	10	1	7	460	4	4	1	1	3	0	601	9	592
16:45	1	93	3	4	4	0	14	0	7	450	8	8	3	0	6	1	602	13	589
Hour	6	333	14	12	22	2	40	5	31	1571	23	25	8	2	10	1	2105	43	2062
17:00	4	107	5	5	5	0	13	1	10	453	4	5	3	0	1	0	616	11	605
17:15	1	77	4	2	8	0	4	1	14	414	3	8	1	1	4	0	542	11	531
17:30	1	93	7	2	8	0	11	0	8	392	2	2	3	0	1	0	530	4	526
17:45	0	88	6	3	4	0	9	0	11	277	1	6	0	0	0	0	405	9	396
Hour	6	365	22	12	25	0	37	2	43	1536	10	21	7	1	6	0	2093	35	2058
18:00	1	78	7	5	3	0	7	0	8	218	6	6	2	0	1	0	342	11	331
18:15	2	69	4	1	7	0	6	0	6	146	1	2	6	0	4	0	254	3	251
18:30	0	81	2	2	5	0	7	1	5	138	1	0	3	0	1	0	246	3	243
18:45	3	73	5	2	2	1	9	0	5	91	2	3	1	0	3	0	200	5	195
Hour	6	301	18	10	17	1	29	1	24	593	10	11	12	0	9	0	1042	22	1020
19:00	0	77	6	1	5	0	3	0	3	105	0	2	3	0	0	0	205	3	202
19:15	0	73	5	0	1	1	4	0	1	81	8	2	3	0	3	0	182	2	180
19:30	1	60	7	0	7	0	5	0	3	97	3	2	1	1	0	0	187	2	185
19:45	0	71	6	2	6	0	4	0	3	72	5	3	2	0	0	0	174	5	169
Hour	1	281	24	3	19	1	16	0	10	355	16	9	9	1	3	0	748	12	736

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather :SUNNY & HOT (T-STORM 9:30PM)

TRAFFIC ENGINEERING SECTION

Study Name: TMC9617

Counted by:Ann and Gabe

TRAFFIC STUDY

Site Code : 96170202

Board # :

Start Date: 08/06/96

Other :

Page : 3

Vehicle group 1

Start Time	CSAH 1 (EAST RIVER ROA 79TH WAY From North				From East				CSAH 1 (EAST RIVER ROA 79TH WAY From South				From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
20:00	0	57	3	2	6	1	4	0	6	92	6	1	3	0	1	0	182	3	179
20:15	0	41	2	0	5	0	1	0	10	72	1	2	1	1	0	0	136	2	134
20:30	0	67	3	1	5	2	4	0	7	88	2	1	0	0	1	0	181	2	179
20:45	5	54	5	1	5	0	3	0	1	74	1	1	2	0	0	0	152	2	150
Hour	5	219	13	4	21	3	12	0	24	326	10	5	6	1	2	0	651	9	642
21:00	2	52	3	0	9	0	2	0	6	86	2	0	2	0	0	0	164	0	164
21:15	1	46	6	0	3	0	3	0	4	66	4	0	3	0	2	0	138	0	138
21:30	1	37	3	1	4	1	2	0	4	50	2	0	3	0	0	0	108	1	107
21:45	0	44	1	1	5	0	1	0	3	67	3	0	0	0	1	0	126	1	125
Hour	4	179	13	2	21	1	8	0	17	269	11	0	8	0	3	0	536	2	534
Total	72	7165	223	263	279	26	419	46	351	8376	160	316	175	19	88	7	17985	632	17353
% Apr.	0.9	92.7	2.8	3.4	36.2	3.3	54.4	5.9	3.8	91.0	1.7	3.4	60.5	6.5	30.4	2.4	-	-	-
% Int.	0.4	39.8	1.2	1.4	1.5	0.1	2.3	0.2	1.9	46.5	0.8	1.7	0.9	0.1	0.4	-	-	-	-

Major Street Approaches:

Northbound:

CSAH 1 (EAST RIVER ROAD)

Data File: C:\PETRA2\DATAFILE\TMC9617.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/96
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 8887

Southbound:

CSAH 1 (EAST RIVER ROAD)

Data File: C:\PETRA2\DATAFILE\TMC9617.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/96
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 7460

Minor Street Approaches:

Eastbound:

79TH WAY

Data File: C:\PETRA2\DATAFILE\TMC9617.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/96
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 282

Westbound:

79TH WAY

Data File: C:\PETRA2\DATAFILE\TMC9617.PDF
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/96
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 724

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	1375	58 W 5	MAIN 105	--BOTH-- 52	MAIN 84
7	1496	83 W 1	MAIN 105	--BOTH-- 52	MAIN 84
8	824	33 W 14	MAIN 105	MAIN 52	MAIN 84
9	590	23 W 16	MAIN 105	52	MAIN 84
10	639	40 W 8	MAIN 105	MAIN 52	MAIN 84
11	751	35 W 13	MAIN 105	MAIN 52	MAIN 84
12	811	36 W 10	MAIN 105	MAIN 52	MAIN 84
13	835	39 W 9	MAIN 105	MAIN 52	MAIN 84
14	957	43 W 7	MAIN 105	MAIN 52	MAIN 84
15	1380	59 W 4	MAIN 105	--BOTH-- 52	MAIN 84
16	1978	64 W 2	MAIN 105	--BOTH-- 52	MAIN 84
17	1982	62 W 3	MAIN 105	--BOTH-- 52	MAIN 84
18	952	47 W 6	MAIN 105	MAIN 52	MAIN 84
19	687	36 W 11	MAIN 105	MAIN 52	MAIN 84
20	597	36 W 12	MAIN 105	52	MAIN 84
21	493	30 W 15	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: 2062.

- 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 0 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 3 hours.

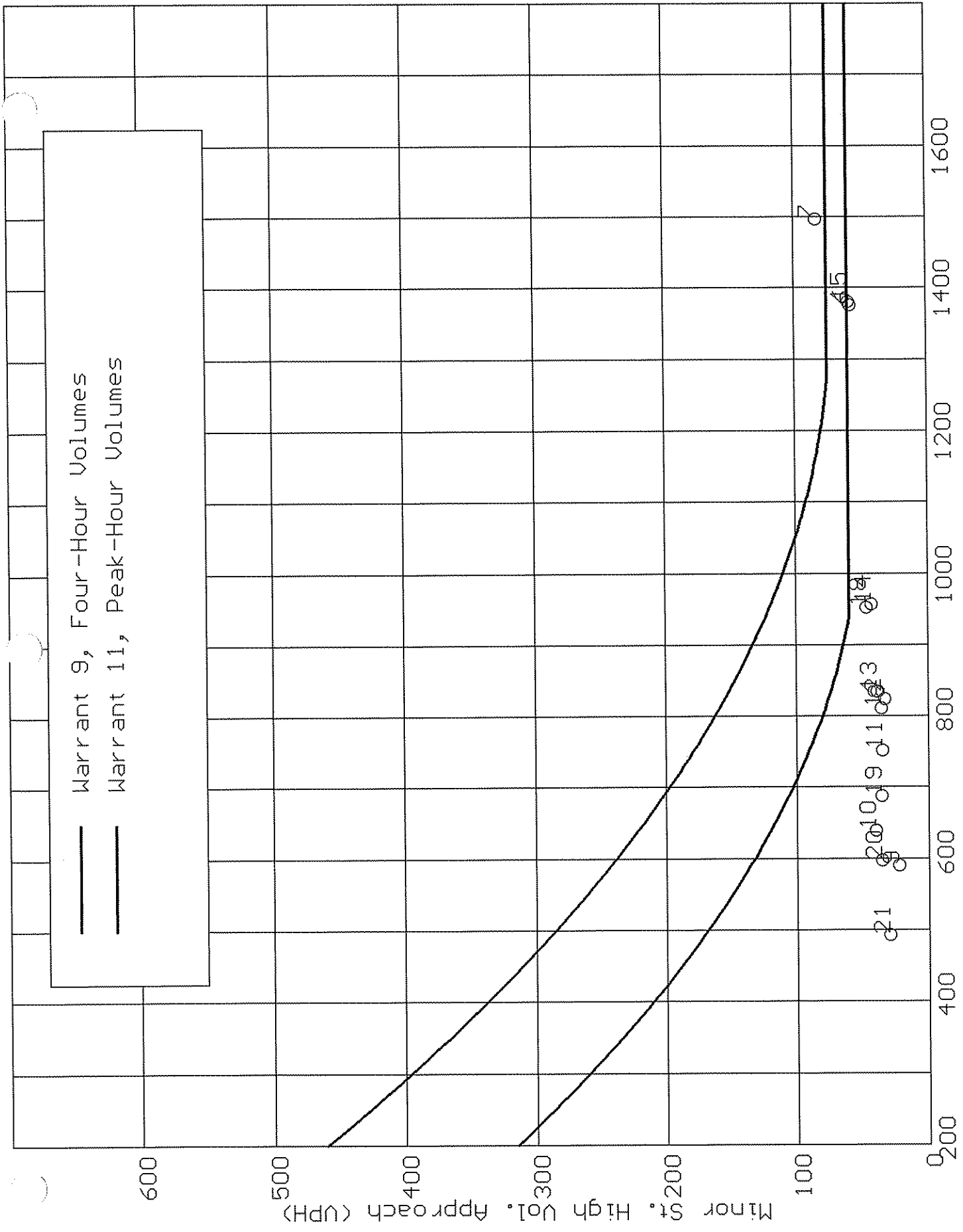
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1600 hours) volume not adequate.

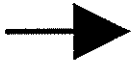
Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

Warrant 11 - Peak Hour Volume

SATISFIED for 1 hours.



Major St. Total of Both Approaches (UPH)

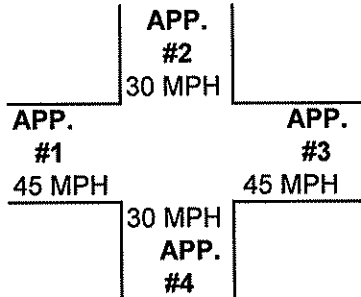


NORTH

COUNT LOCATION: CSAH 1 (EAST RIVER ROAD) @ 79TH WAY


DATE: 8/8/96

- APP. #1= NB CSAH 1
- APP. #2 = EB 79TH WAY
- APP. #3= SB CSAH 1
- APP. #4= WB 79TH WAY



- 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	1	2	4		2
6:15-6:30						3		1
6:30-6:45						5		2
6:45-7:00						6		1
HOURLY TOTAL					2	HOURLY TOTAL		24
7:00-7:15						4		2
7:15-7:30				1	1	10		2
7:30-7:45						12		1
7:45-8:00						12		1
HOURLY TOTAL					1	HOURLY TOTAL		44
8:00-8:15						13		1
8:15-8:30						11		1
8:30-8:45						11		2
8:45-9:00						11		
HOURLY TOTAL						HOURLY TOTAL		50
9:00-9:15						14		1
9:15-9:30						9		1
9:30-9:45						10		
9:45-10:00						13		1
HOURLY TOTAL						HOURLY TOTAL		49
10:00-10:15						16		1
10:15-10:30						17		
10:30-10:45						17	1	1
10:45-11:00						15		3
HOURLY TOTAL						HOURLY TOTAL		71
11:00-11:15						23		1
11:15-11:30						9		
11:30-11:45						11		
11:45-12:00		2		2	4	14		
HOURLY TOTAL					4	HOURLY TOTAL		58
12:00-12:15						13		
12:15-12:30						10		1
12:30-12:45						14		1
12:45-1:00				1	1	15		
HOURLY TOTAL					1	HOURLY TOTAL		54
1:00-1:15						10		
1:15-1:30						17		2
1:30-1:45	2				2	17		1
1:45-2:00	2				2	12		1
HOURLY TOTAL					4	HOURLY TOTAL		60


NORTH

APP. #1= NB CSAH 1

APP. #2 = EB 79TH WAY

APP. #3= SB CSAH 1

APP. #4=WB 79TH WAY

COUNT LOCATION: CSAH 1 (EAST RIVER ROAD) @
79TH WAY

DATE: 8/6/96

APP. #2 30 MPH	APP. #3 45 MPH
APP. #1 45 MPH	APP. #4 30 MPH

- 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			1		1	11		1
2:15-2:30						12		1
2:30-2:45						14		1
2:45-3:00						18		3
HOURLY TOTAL					1	HOURLY TOTAL		61
3:00-3:15						6		2
3:15-3:30		1			1	9		1
3:30-3:45						12		
3:45-4:00	1		1		2	6		2
HOURLY TOTAL					3	HOURLY TOTAL		38
4:00-4:15						10		
4:15-4:30			2	2	4	9		2
4:30-4:45						9		
4:45-5:00			1		1	12		1
HOURLY TOTAL					5	HOURLY TOTAL		43
5:00-5:15						9		2
5:15-5:30						8	1	2
5:30-5:45						3		1
5:45-6:00						8	1	
HOURLY TOTAL						HOURLY TOTAL		35
6:00-6:15						10		1
6:15-6:30			2		2	3		
6:30-6:45			1		1	3		
6:45-7:00			1		1	4		1
HOURLY TOTAL					4	HOURLY TOTAL		22
7:00-7:15						2		1
7:15-7:30	1	1	1		3	2		
7:30-7:45						2		
7:45-8:00						4		1
HOURLY TOTAL					3	HOURLY TOTAL		12
8:00-8:15						2	1	
8:15-8:30			1		1	1		1
8:30-8:45						2		
8:45-9:00						1		1
HOURLY TOTAL					1	HOURLY TOTAL		9
9:00-9:15	2		1		3			
9:15-9:30	1				1			
9:30-9:45						1		
9:45-10:00								1
HOURLY TOTAL					4	HOURLY TOTAL		2