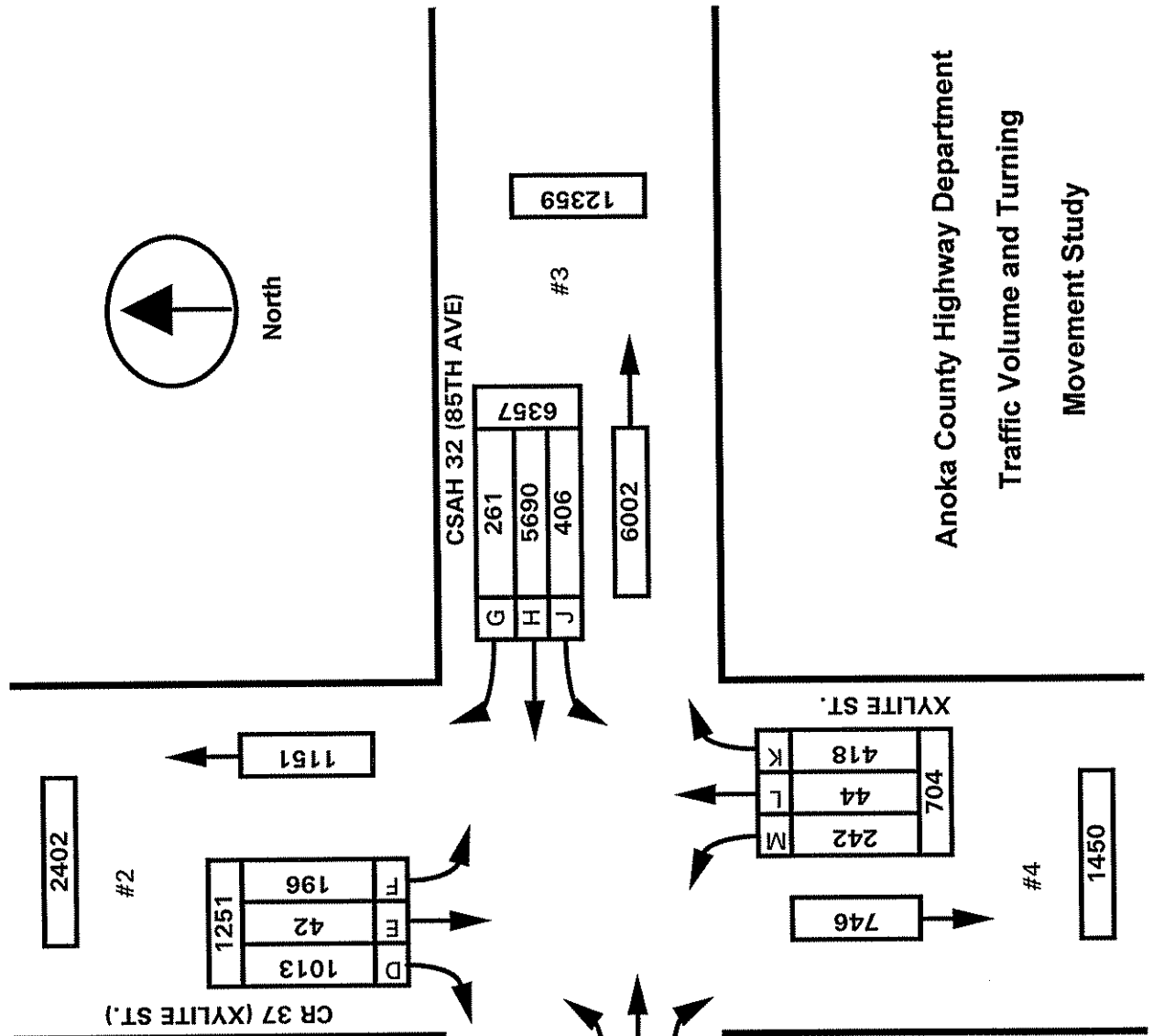


Date : 6/26/96AM 6/24/96PM

Count Number : TMC 9606

Location : CSAH 32 (85TH AVE/CR "J")

@ CR 37 (XYLITE ST.)



	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/STORM AM; CLEAR PM

TRAFFIC ENGINEERING SECTION

Study Name: TMC9606

Counted by: ANN AND GABE

TRAFFIC STUDY

Site Code : 96060202

Board # :

Start Date: 06/24/96

ther :

Page : 1

Vehicle group 1

Start Time	CR 37 (XYLITE ST) From North				CSAH 32 (CR J/85TH AVE) From East				XYLITE ST From South				CSAH 32 (CR J/85TH AVE) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
06/24/96																			
06:00	9	0	9	5	3	72	10	17	9	0	0	9	1	37	2	1	184	32	152
06:15	19	1	2	9	3	121	5	10	2	0	0	1	2	47	2	4	228	24	204
06:30	57	0	1	1	6	188	11	13	0	0	1	0	3	43	7	1	332	15	317
06:45	60	0	2	5	4	233	11	7	2	0	0	2	5	59	6	4	400	18	382
Hour	145	1	14	20	16	614	37	47	13	0	1	12	11	186	17	10	1144	89	1055
07:00	45	4	3	4	6	177	14	16	4	0	2	3	9	54	12	5	358	28	330
07:15	70	2	5	4	1	154	17	12	1	0	3	2	9	73	8	4	365	22	343
07:30	51	3	2	2	3	225	19	11	5	0	4	2	18	71	6	7	429	22	407
07:45	32	1	0	3	4	196	26	11	1	0	4	1	23	66	10	5	383	20	363
Hour	198	10	10	13	14	752	76	50	11	0	13	8	59	264	36	21	1535	92	1443
08:00	12	1	5	3	4	80	20	10	3	0	5	0	7	56	12	5	223	18	205
08:15	13	3	2	1	9	61	6	11	6	0	4	3	6	42	9	3	179	18	161
08:30	13	2	3	4	1	88	6	8	11	0	5	3	5	55	9	3	216	18	198
08:45	16	1	2	2	4	68	11	6	11	1	0	5	3	54	7	4	195	17	178
Hour	54	7	12	10	18	297	43	35	31	1	14	11	21	207	37	15	813	71	742
09:00	18	0	2	4	7	94	11	9	7	1	6	4	2	30	4	9	208	26	182
09:15	10	1	4	1	4	52	6	6	5	1	1	3	3	63	7	7	174	17	157
09:30	14	0	2	1	5	61	8	6	7	1	2	3	5	45	7	5	172	15	157
09:45	9	0	1	0	4	81	3	6	9	1	2	3	2	57	4	6	188	15	173
Hour	51	1	9	6	20	288	28	27	28	4	11	13	12	195	22	27	742	73	669
10:00	9	0	2	3	7	69	6	6	9	0	0	1	3	61	4	2	182	12	170
10:15	9	1	4	2	3	71	4	4	8	0	2	3	1	62	13	5	192	14	178
10:30	10	0	2	1	2	62	7	5	6	1	3	3	1	56	8	8	175	17	158
10:45	9	0	3	1	6	63	2	10	4	0	1	1	5	58	11	7	181	19	162
Hour	37	1	11	7	18	265	19	25	27	1	6	8	10	237	36	22	730	62	668
11:00	12	0	3	1	1	69	8	4	11	1	3	1	4	70	8	7	203	13	190
11:15	10	0	1	0	1	96	5	6	7	0	7	2	6	66	4	2	213	10	203
11:30	4	2	0	1	3	73	4	2	14	1	9	2	3	90	15	1	224	6	218
11:45	16	0	9	4	7	66	10	13	10	1	6	1	3	67	8	1	222	19	203
Hour	42	2	13	6	12	304	27	25	42	3	25	6	16	293	35	11	862	48	814
12:00	13	1	2	3	7	69	9	5	13	0	6	5	2	69	8	5	217	18	199
12:15	5	0	4	3	6	46	5	8	11	1	6	2	4	65	8	6	180	19	161
12:30	10	0	2	2	1	78	9	6	6	1	6	1	15	73	13	8	231	17	214
12:45	18	0	3	3	3	54	12	2	3	0	10	1	18	65	12	9	213	15	198
Hour	46	1	11	11	17	247	35	21	33	2	28	9	39	272	41	28	841	69	772

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather : SUNNY/STORM AM; CLEAR PM

TRAFFIC ENGINEERING SECTION

Study Name: TMC9606

Counted by: ANN AND GABE

TRAFFIC STUDY

Site Code : 96060202

Board # :

Start Date: 06/24/96

ther :

Page : 2

Vehicle group 1

Start Time	CR 37 (XYLITE ST) From North				CSAH 32 (CR J/85TH AVE) From East				XYLITE ST From South				CSAH 32 (CR J/85TH AVE) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	14	2	3	0	4	77	6	5	8	0	3	1	4	69	10	5	211	11	200
13:15	12	0	5	2	7	61	8	6	10	0	4	4	9	69	11	8	216	20	196
13:30	9	0	0	0	4	60	8	3	7	0	2	0	9	82	13	5	202	8	194
13:45	16	0	6	4	7	79	9	9	2	4	3	3	4	76	14	5	241	21	220
Hour	51	2	14	6	22	277	31	23	27	4	12	8	26	296	48	23	870	60	810
14:00	16	0	5	3	1	76	9	7	7	0	6	2	5	100	13	8	258	20	238
14:15	8	0	3	0	3	77	5	6	9	0	7	4	11	82	9	6	230	16	214
14:30	11	1	3	2	7	112	5	11	12	0	4	4	7	118	11	12	320	29	291
14:45	13	1	3	0	3	74	4	8	7	0	2	3	4	99	8	7	236	18	218
Hour	48	2	14	5	14	339	23	32	35	0	19	13	27	399	41	33	1044	83	961
15:00	15	1	4	3	5	77	8	7	6	2	6	2	1	99	9	8	253	20	233
15:15	9	1	3	3	7	98	6	6	7	3	4	0	2	120	19	9	297	18	279
15:30	7	0	7	3	5	88	4	5	7	1	0	0	3	134	29	10	303	18	285
15:45	10	1	5	2	6	106	10	10	3	0	3	0	4	131	28	11	330	23	307
Hour	41	3	19	11	23	369	28	28	23	6	13	2	10	484	85	38	1183	79	1104
16:00	14	0	8	3	2	104	5	6	11	0	10	1	4	144	22	11	345	21	324
16:15	14	1	4	5	8	85	7	6	6	1	6	0	4	181	27	7	362	18	344
16:30	11	0	2	1	6	105	1	6	17	1	5	3	3	154	27	9	351	19	332
16:45	17	0	6	2	3	112	4	3	7	1	4	0	3	165	33	5	365	10	355
Hour	56	1	20	11	19	406	17	21	41	3	25	4	14	644	109	32	1423	68	1355
17:00	17	1	5	1	11	121	3	6	38	4	21	0	5	174	33	12	452	19	433
17:15	19	1	6	0	3	109	1	6	20	0	14	0	3	171	39	4	396	10	386
17:30	11	0	3	0	4	107	2	4	12	5	6	0	0	171	31	9	365	13	352
17:45	15	0	1	0	3	118	0	6	5	3	9	1	4	153	29	14	361	21	340
Hour	62	2	15	1	21	455	6	22	75	12	50	1	12	669	132	39	1574	63	1511
18:00	19	0	5	0	6	106	2	8	4	1	3	0	0	118	26	6	304	14	290
18:15	7	1	4	0	3	84	1	4	9	0	8	1	7	84	16	4	233	9	224
18:30	13	2	4	0	4	94	4	6	9	0	0	1	4	99	24	7	271	14	257
18:45	17	0	4	2	3	93	5	3	0	0	2	0	9	83	21	4	246	9	237
Hour	56	3	17	2	16	377	12	21	22	1	13	2	20	384	87	21	1054	46	1008
19:00	16	3	1	0	4	87	8	2	2	2	2	0	5	82	13	1	228	3	225
19:15	8	0	0	0	8	71	5	8	1	0	0	0	7	65	18	4	195	12	183
19:30	15	0	1	1	6	78	1	2	1	0	2	0	2	84	8	0	201	3	198
19:45	14	0	2	1	3	56	1	1	0	0	0	0	1	68	9	0	156	2	154
Hour	53	3	4	2	21	292	15	13	4	2	4	0	15	299	48	5	780	20	760

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather : SUNNY/STORM AM; CLEAR PM  
 Counted by: ANN AND GABE  
 Board # :  
 ther :

TRAFFIC ENGINEERING SECTION  
 TRAFFIC STUDY

Study Name: TMC9606  
 Site Code : 96060202  
 Start Date: 06/24/96  
 Page : 3

Vehicle group 1

Start Time	CR 37 (XYLITE ST) From North				CSAH 32 (CR J/85TH AVE) From East				XYLITE ST From South				CSAH 32 (CR J/85TH AVE) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
20:00	6	0	2	1	1	56	1	1	0	0	0	0	1	72	9	2	152	4	148
20:15	5	0	2	1	4	69	2	0	0	0	1	0	1	77	15	2	179	3	176
20:30	15	2	1	1	1	45	2	2	1	0	1	1	2	90	10	1	175	5	170
20:45	22	0	2	0	0	48	1	2	0	1	2	0	1	85	10	0	174	2	172
Hour	48	2	7	3	6	218	6	5	1	1	4	1	5	324	44	5	680	14	666
21:00	9	0	2	0	2	51	2	1	3	0	1	0	0	69	8	2	150	3	147
21:15	6	0	0	0	2	51	1	1	1	3	3	0	0	67	10	1	146	2	144
21:30	6	0	3	0	0	45	0	1	1	1	0	1	0	62	6	0	126	2	124
21:45	4	1	1	1	0	43	0	1	0	0	0	0	1	37	4	0	93	2	91
Hour	25	1	6	1	4	190	3	4	5	4	4	1	1	235	28	3	515	9	506
Total	1013	42	196	115	261	5690	406	399	418	44	242	99	298	5388	846	333	15790	946	14844
% Apr.	74.1	3.0	14.3	8.4	3.8	84.2	6.0	5.9	52.0	5.4	30.1	12.3	4.3	78.4	12.3	4.8	-	-	-
% Int.	6.4	0.2	1.2	0.7	1.6	36.0	2.5	2.5	2.6	0.2	1.5	0.6	1.8	34.1	5.3	2.1	-	-	-

Major Street Approaches:

Eastbound:

CSAH 32 (CR J/85TH AVE)

Data File: C:\PETRA2\DATAFILE\TMC9606.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/96  
 Number of Lanes: 2  
 Approach Speed: 45  
 Total Approach Traffic: 6532

Westbound:

CSAH 32 (CR J/85TH AVE)

Data File: C:\PETRA2\DATAFILE\TMC9606.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/96  
 Number of Lanes: 2  
 Approach Speed: 45  
 Total Approach Traffic: 6357

Minor Street Approaches:

Northbound:

XYLITE ST

Data File: C:\PETRA2\DATAFILE\TMC9606.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/96  
 Number of Lanes: 1  
 Approach Speed: 10  
 Total Approach Traffic: 704

Southbound:

CR 37 (XYLITE ST)

Data File: C:\PETRA2\DATAFILE\TMC9606.PDF  
 Count Type: IMC. Channel: 0. Count Date: 6/24/96  
 Number of Lanes: 1  
 Approach Speed: 45  
 Total Approach Traffic: 1251

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 S 17	105	52	84
1	0	0 S 18	105	52	84
2	0	0 S 19	105	52	84
3	0	0 S 20	105	52	84
4	0	0 S 21	105	52	84
5	0	0 S 22	105	52	84
6	881	160 S 2	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
7	1201	218 S 1	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
8	623	73 S 6	MAIN 105	SIDE 52	MAIN 84
9	565	61 S 12	MAIN 105	SIDE 52	MAIN 84
10	585	49 S 15	MAIN 105	52	MAIN 84
11	687	70 N 7	MAIN 105	--BOTH-- 52	MAIN 84
12	651	63 N 10	MAIN 105	--BOTH-- 52	MAIN 84
13	700	67 S 8	MAIN 105	--BOTH-- 52	MAIN 84
14	843	64 S 9	MAIN 105	--BOTH-- 52	MAIN 84
15	999	63 S 11	MAIN 105	--BOTH-- 52	MAIN 84
16	1209	77 S 4	MAIN 105	--BOTH-- 52	MAIN 84
17	1295	137 N 3	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
18	896	76 S 5	MAIN 105	--BOTH-- 52	MAIN 84
19	690	60 S 13	MAIN 105	--BOTH-- 52	MAIN 84
20	603	57 S 14	MAIN 105	SIDE 52	MAIN 84
21	461	32 S 16	MAIN 105	52	84
22	0	0 S 23	105	52	84
23	0	0 S 24	105	52	84

## Warrant Summary:

Rural values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 11 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: 1511.

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

## Warrant 9 - Four Hour Volumes

SATISFIED for 6 hours.

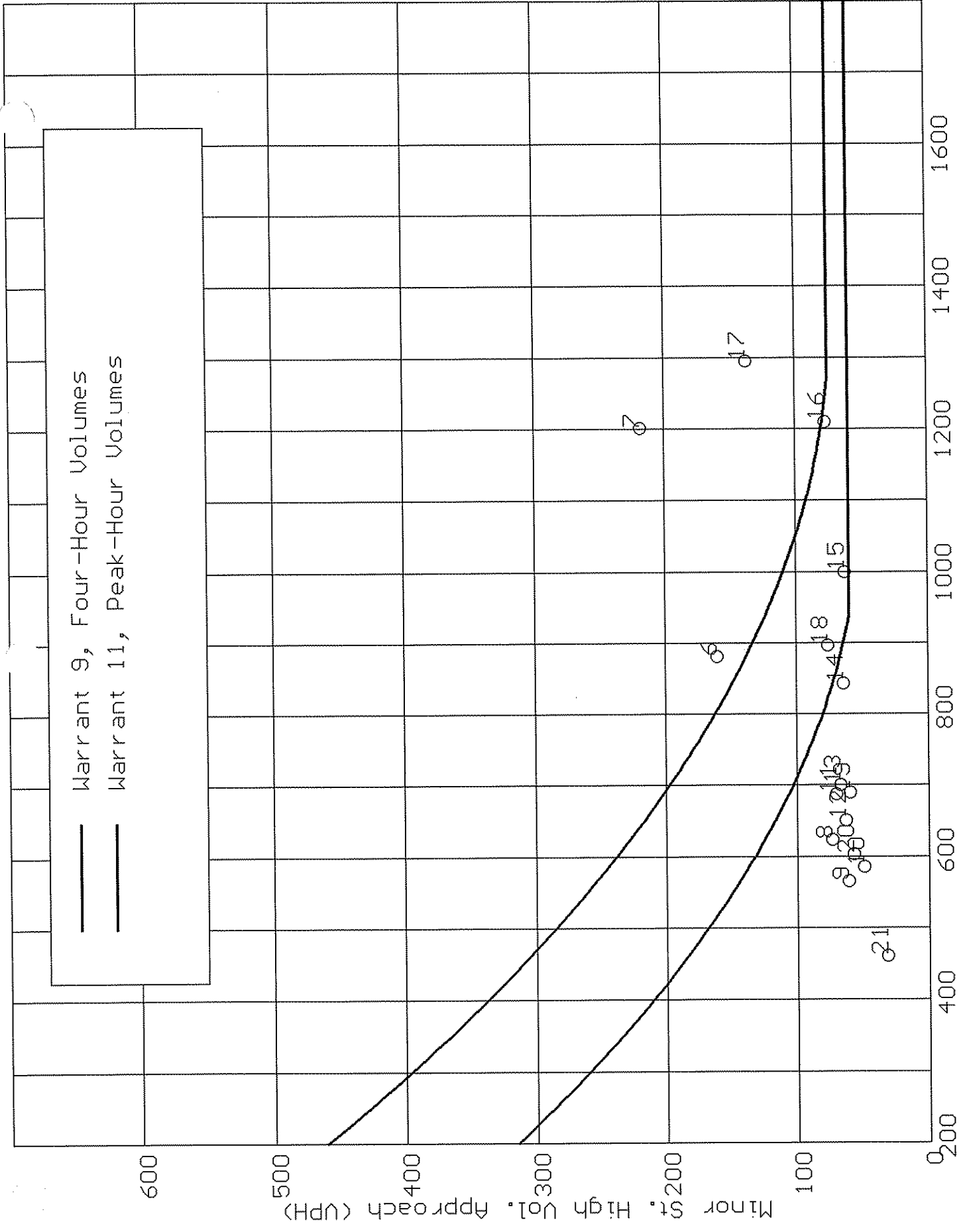
## Warrant 10 - Peak Hour Delay

NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

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

## Warrant 11 - Peak Hour Volume

SATISFIED for 4 hours.



Major St. Total of Both Approaches (UPH)



**COUNT LOCATION:** CSAH 32 (85TH AVE/CR "J") @  
CR 37 (XYLITE ST.)

**DATE:** 6/26/96

APP. #1=WB CSAH 32  
APP. #2= NB XYLITE ST.  
APP. #3=EB CSAH 32  
APP. #4= SB CR 37  
(XYLITE ST.)

APP. #2  
10MPH  
APP. #1  
45MPH  
APP. #3  
45MPH  
APP. #4  
45MPH

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						26		6
6:15-6:30						20		4
6:30-6:45						14		1
6:45-7:00						17		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>90</b>
7:00-7:15						26		2
7:15-7:30						20		2
7:30-7:45						20		2
7:45-8:00						18		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>92</b>
8:00-8:15						16		2
8:15-8:30						16		2
8:30-8:45						16		2
8:45-9:00						16		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>71</b>
9:00-9:15						24		2
9:15-9:30						16		1
9:30-9:45						15		
9:45-10:00						14		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>73</b>
10:00-10:15						12		1
10:15-10:30						12		2
10:30-10:45						15		2
10:45-11:00						16	1	3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>64</b>
11:00-11:15						13		
11:15-11:30						9		1
11:30-11:45			2		2	6		
11:45-12:00						16	1	2
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>48</b>
12:00-12:15			2		2	17	2	
12:15-12:30						19		
12:30-12:45						16		1
12:45-1:00						12		3
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>70</b>
1:00-1:15						11		
1:15-1:30						18	1	1
1:30-1:45						7		1
1:45-2:00				1	1	18		3
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>60</b>





**NORTH**

APP. #1=WB CSAH 32

APP. #2= NB XYLITE ST.

APP. #3=EB CSAH 32

APP. #4= SB CR 37  
(XYLITE ST.)

**COUNT LOCATION:** CSAH 32 (85TH AVE/CR "J") @  
CR 37 (XYLITE ST.)

**DATE:** 6/24/96

APP.  
#2  
10MPH

APP.  
#1  
45MPH

APP.  
#3  
45MPH

45MPH  
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						18		2
2:15-2:30						16		
2:30-2:45						24	3	2
2:45-3:00						17		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>83</b>
3:00-3:15						17		3
3:15-3:30						18		
3:30-3:45						15		3
3:45-4:00						21		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>79</b>
4:00-4:15						17		4
4:15-4:30						14		4
4:30-4:45						18		1
4:45-5:00						9		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>68</b>
5:00-5:15						19		
5:15-5:30						10		
5:30-5:45						12		1
5:45-6:00						17		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>63</b>
6:00-6:15						12		2
6:15-6:30						9		
6:30-6:45						10		4
6:45-7:00						8		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>46</b>
7:00-7:15						3		
7:15-7:30						11		1
7:30-7:45						1		2
7:45-8:00						1		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>20</b>
8:00-8:15						2		2
8:15-8:30						2		1
8:30-8:45						5		
8:45-9:00						2		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>14</b>
9:00-9:15						3		
9:15-9:30						1	1	1
9:30-9:45						1		
9:45-10:00						2		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>9</b>