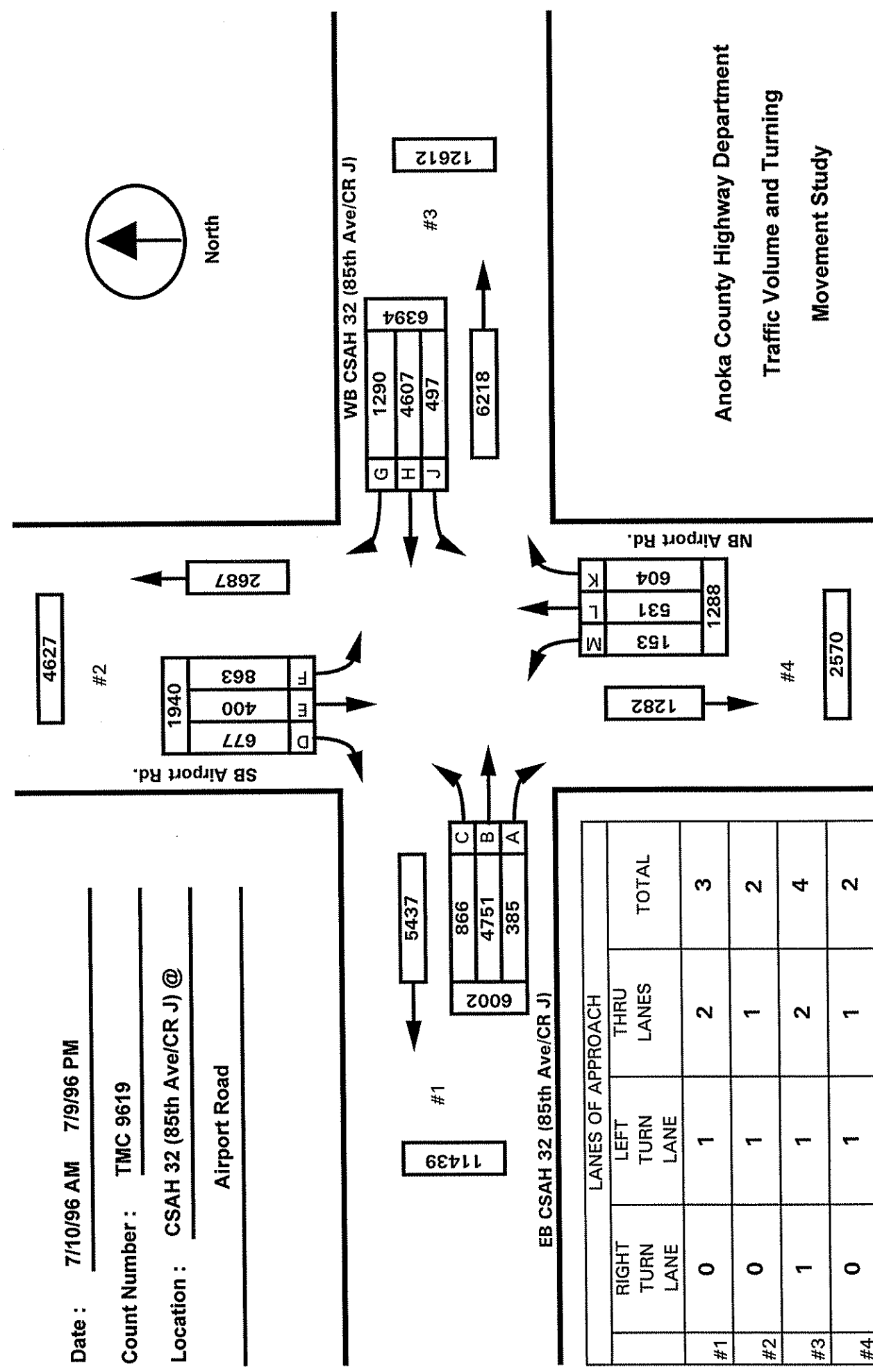
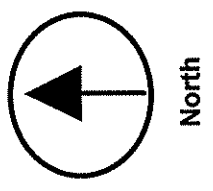


Date : 7/10/96 AM 7/9/96 PM
 Count Number : TMC 9619
 Location : CSAH 32 (85th Ave/CR J) @
 Airport Road



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather : Pt Cloudy AM/ Sunny PM

TRAFFIC ENGINEERING SECTION

Study Name: TMC9619

Counted by: Ann and Michelle

TRAFFIC STUDY

Site Code : 96190202

Board # :

Start Date: 07/09/96

Character :

Page : 1

Vehicle group 1

Start Time	Airport Rd. From North				CSAH 32 (85th Ave/CR J) From East				Airport Rd. From South				CSAH 32 (85th Ave/CR J) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
07/09/96																			
06:00	2	1	8	0	13	51	1	9	3	6	4	1	1	23	14	1	138	11	127
06:15	6	2	6	1	15	46	10	4	7	19	1	0	1	35	22	2	177	7	170
06:30	1	6	7	3	58	91	19	16	2	16	1	0	3	27	25	4	279	23	256
06:45	8	7	10	3	58	131	20	7	2	14	2	0	5	46	24	5	342	15	327
Hour	17	16	31	7	144	319	50	36	14	55	8	1	10	131	85	12	936	56	880
07:00	10	12	12	7	44	112	9	9	9	15	0	0	5	54	21	3	322	19	303
07:15	8	1	13	5	67	98	18	6	13	13	2	0	5	43	26	5	323	16	307
07:30	10	5	12	2	52	102	16	6	8	14	0	1	4	66	16	8	322	17	305
07:45	6	3	18	0	74	117	22	6	13	19	0	0	4	77	17	2	378	8	370
Hour	34	21	55	14	237	429	65	27	43	61	2	1	18	240	80	18	1345	60	1285
08:00	9	6	14	4	26	87	11	10	6	9	2	0	1	65	23	4	277	18	259
08:15	12	5	9	3	19	76	12	14	6	9	3	0	3	35	16	8	230	25	205
08:30	8	1	14	4	11	69	5	10	4	4	0	0	4	42	25	8	209	22	187
08:45	3	3	10	1	18	88	2	4	8	9	4	0	4	47	9	3	213	8	205
Hour	32	15	47	12	74	320	30	38	24	31	9	0	12	189	73	23	929	73	856
09:00	8	7	18	5	14	66	3	8	4	8	1	0	1	28	8	5	184	18	166
09:15	8	5	14	6	9	64	3	4	6	2	3	0	3	36	12	8	183	18	165
09:30	5	7	9	2	7	81	9	7	3	8	2	0	7	50	10	6	213	15	198
09:45	7	8	12	3	15	69	6	6	4	1	2	0	5	39	8	7	192	16	176
Hour	28	27	53	16	45	280	21	25	17	19	8	0	16	153	38	26	772	67	705
10:00	6	5	15	2	13	66	9	5	10	6	1	0	8	48	10	6	210	13	197
10:15	11	8	11	2	10	70	3	4	7	9	1	0	1	34	8	6	185	12	173
10:30	8	3	15	3	10	59	6	5	8	4	0	1	4	58	8	9	201	18	183
10:45	6	6	16	4	20	91	5	11	5	2	6	1	2	47	13	7	242	23	219
Hour	31	22	57	11	53	286	23	25	30	21	8	2	15	187	39	28	838	66	772
11:00	10	6	8	2	12	64	4	4	4	2	3	0	3	55	12	6	195	12	183
11:15	10	6	13	2	11	60	6	4	12	4	2	0	4	53	9	6	202	12	190
11:30	12	6	12	2	16	61	5	7	3	9	1	0	5	56	10	12	217	21	196
11:45	17	5	16	3	13	85	7	5	0	8	1	1	4	76	11	5	257	14	243
Hour	49	23	49	9	52	270	22	20	19	23	7	1	16	240	42	29	871	59	812
12:00	9	5	13	2	23	91	4	5	11	7	1	2	8	66	10	7	264	16	248
12:15	7	8	15	1	12	69	7	8	10	4	1	0	6	84	16	5	253	14	239
12:30	15	6	23	0	16	70	8	5	11	4	3	1	4	52	14	11	243	17	226
12:45	18	5	19	2	11	82	6	4	9	10	8	3	2	83	15	9	286	18	268
Hour	49	24	70	5	62	312	25	22	41	25	13	6	20	285	55	32	1046	65	981

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather : Pt Cloudy AM/ Sunny PM

Counted by: Ann and Michelle

Board # :

Character :

Study Name: TMC9619

Site Code : 96190202

Start Date: 07/09/96

Page : 2

Vehicle group 1

Start Time	Airport Rd. From North				CSAH 32 (85th Ave/CR J) From East				Airport Rd. From South				CSAH 32 (85th Ave/CR J) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	6	6	19	3	8	52	5	3	3	8	3	1	6	60	15	3	201	10	191
13:15	8	4	10	2	15	70	4	2	2	6	3	0	2	55	9	3	195	7	188
13:30	6	2	14	3	13	58	5	2	4	2	1	0	5	69	11	4	199	9	190
13:45	6	2	11	1	16	74	3	8	8	5	1	0	3	91	10	8	247	17	230
Hour	26	14	54	9	52	254	17	15	17	21	8	1	16	275	45	18	842	43	799
14:00	10	1	11	3	12	70	7	8	8	5	1	0	8	83	19	6	252	17	235
14:15	11	4	19	2	21	70	2	12	7	3	2	0	8	81	11	7	260	21	239
14:30	10	4	22	4	27	92	6	7	8	6	3	1	9	83	18	5	305	17	288
14:45	12	3	18	1	18	71	6	3	8	6	2	1	7	105	15	6	282	11	271
Hour	43	12	70	10	78	303	21	30	31	20	8	2	32	352	63	24	1099	66	1033
15:00	14	5	9	4	16	56	7	2	10	6	1	1	7	73	12	8	231	15	216
15:15	19	5	13	6	17	79	7	11	9	12	2	3	4	107	13	17	324	37	287
15:30	17	7	22	2	28	84	7	7	18	8	1	2	7	122	16	7	355	18	337
15:45	15	10	22	4	18	72	9	6	20	11	5	0	16	126	14	5	353	15	338
Hour	65	27	66	16	79	291	30	26	57	37	9	6	34	428	55	37	1263	85	1178
16:00	26	9	26	4	31	73	12	7	23	16	8	3	10	117	15	1	381	15	366
16:15	22	13	21	0	25	64	11	3	22	8	5	0	10	151	17	8	380	11	369
16:30	25	11	14	1	23	92	6	3	18	11	3	2	7	128	20	8	372	14	358
16:45	26	13	23	4	33	95	10	10	30	16	3	1	9	175	31	5	484	20	464
Hour	99	46	84	9	112	324	39	23	93	51	19	6	36	571	83	22	1617	60	1557
17:00	19	5	19	5	39	73	10	3	33	16	2	0	12	165	16	5	422	13	409
17:15	23	11	23	1	21	88	16	8	22	16	3	0	8	165	15	4	424	13	411
17:30	15	9	19	1	21	97	12	5	20	7	3	0	4	132	15	4	364	10	354
17:45	16	9	11	0	24	95	10	4	21	16	1	0	6	141	20	5	379	9	370
Hour	73	34	72	7	105	353	48	20	96	55	9	0	30	603	66	18	1589	45	1544
18:00	15	11	14	2	15	81	10	4	12	8	7	1	14	112	14	3	323	10	313
18:15	6	8	11	2	19	75	5	3	11	14	0	0	10	76	23	3	266	8	258
18:30	11	8	12	0	19	72	8	5	9	6	2	1	10	73	11	4	251	10	241
18:45	9	11	10	2	9	79	6	0	14	4	3	0	9	79	15	8	258	10	248
Hour	41	38	47	6	62	307	29	12	46	32	12	2	43	340	63	18	1098	38	1060
19:00	13	9	10	0	16	75	9	2	6	13	3	0	9	60	9	2	236	4	232
19:15	8	7	7	0	13	65	3	1	8	10	0	0	7	76	6	1	212	2	210
19:30	6	6	8	0	9	63	8	2	6	6	2	0	5	55	14	0	190	2	188
19:45	3	5	10	0	13	52	4	3	5	5	2	0	8	67	4	4	185	7	178
Hour	30	27	35	0	51	255	24	8	25	34	7	0	29	258	33	7	823	15	808

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather : Pt Cloudy AM/ Sunny PM

Counted by: Ann and Michelle

Board # :

Checker :

Study Name: TMC9619

Site Code : 96190202

Start Date: 07/09/96

Page : 3

Vehicle group 1

Start Time	Airport Rd. From North				CSAH 32 (85th Ave/CR J) From East				Airport Rd. From South				CSAH 32 (85th Ave/CR J) From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
20:00	5	3	3	0	8	50	7	1	3	13	1	0	6	63	8	0	171	1	170
20:15	6	8	8	0	13	52	7	1	8	6	4	0	9	61	7	4	194	5	189
20:30	10	4	9	0	9	42	4	0	8	4	3	0	6	51	7	0	157	0	157
20:45	10	11	11	0	10	39	8	0	5	6	2	0	5	71	4	2	184	2	182
Hour	31	26	31	0	40	183	26	2	24	29	10	0	26	246	26	6	706	8	698
21:00	10	8	15	1	17	24	10	0	7	5	2	0	10	76	7	0	192	1	191
21:15	7	8	10	0	5	39	10	0	3	2	6	0	5	66	7	0	168	0	168
21:30	6	5	5	0	13	36	5	2	8	5	4	0	9	56	4	1	159	3	156
21:45	6	7	12	0	9	22	2	1	9	5	4	1	8	55	2	2	145	4	141
Hour	29	28	42	1	44	121	27	3	27	17	16	1	32	253	20	3	664	8	656
Total	677	400	863	132	1290	4607	497	332	604	531	153	29	385	4751	866	321	16438	814	15624
% Apr.	32.6	19.3	41.6	6.3	19.1	68.4	7.3	4.9	45.8	40.3	11.6	2.2	6.0	75.1	13.6	5.0	-	-	-
% Int.	4.1	2.4	5.2	0.8	7.8	28.0	3.0	2.0	3.6	3.2	0.9	0.1	2.3	28.9	5.2	1.9	-	-	-

Major Street Approaches:

Eastbound:

CSAH 32 (85th Ave/CR J)

Data File: C:\PETRA2\DATAFILE\TMC9619.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/ 9/96
 Number of Lanes: 2
 Approach Speed: 40
 Total Approach Traffic: 6002

Westbound:

CSAH 32 (85th Ave/CR J)

Data File: C:\PETRA2\DATAFILE\TMC9619.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/ 9/96
 Number of Lanes: 2
 Approach Speed: 40
 Total Approach Traffic: 6394

Minor Street Approaches:

Northbound:

Airport Rd.

Data File: C:\PETRA2\DATAFILE\TMC9619.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/ 9/96
 Number of Lanes: 2
 Approach Speed: 0
 Total Approach Traffic: 1288

Southbound:

Airport Rd.

Data File: C:\PETRA2\DATAFILE\TMC9619.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/ 9/96
 Number of Lanes: 2
 Approach Speed: 0
 Total Approach Traffic: 1940

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	200	100	160
1	0	0 S 18	200	100	160
2	0	0 S 19	200	100	160
3	0	0 S 20	200	100	160
4	0	0 S 21	200	100	160
5	0	0 S 22	200	100	160
6	739	77 N 16	MAIN 200	100	MAIN 160
7	1069	110 S 8	MAIN 200	--BOTH-- 100	MAIN 160
8	698	94 S 12	MAIN 200	100	160
9	553	108 S 10	200	SIDE 100	160
10	603	110 S 9	MAIN 200	SIDE 100	160
11	642	121 S 7	MAIN 200	SIDE 100	160
12	759	143 S 4	MAIN 200	SIDE 100	MAIN 160
13	659	94 S 13	MAIN 200	100	160
14	849	125 S 6	MAIN 200	SIDE 100	MAIN 160
15	917	158 S 3	MAIN 200	--BOTH-- 100	MAIN 160
16	1165	229 S 1	--BOTH-- 200	--BOTH-- 100	--BOTH-- 160
17	1205	179 S 2	MAIN 200	--BOTH-- 100	--BOTH-- 160
18	844	126 S 5	MAIN 200	SIDE 100	MAIN 160
19	650	92 S 14	MAIN 200	100	160
20	547	88 S 15	200	100	160
21	497	99 S 11	200	100	160
22	0	0 S 23	200	100	160
23	0	0 S 24	200	100	160

Warrant Summary:

Urban values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main St.: 600; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 900; 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: 1557.

- 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 2 hours. Criteria--Main: 720; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 2 hours.

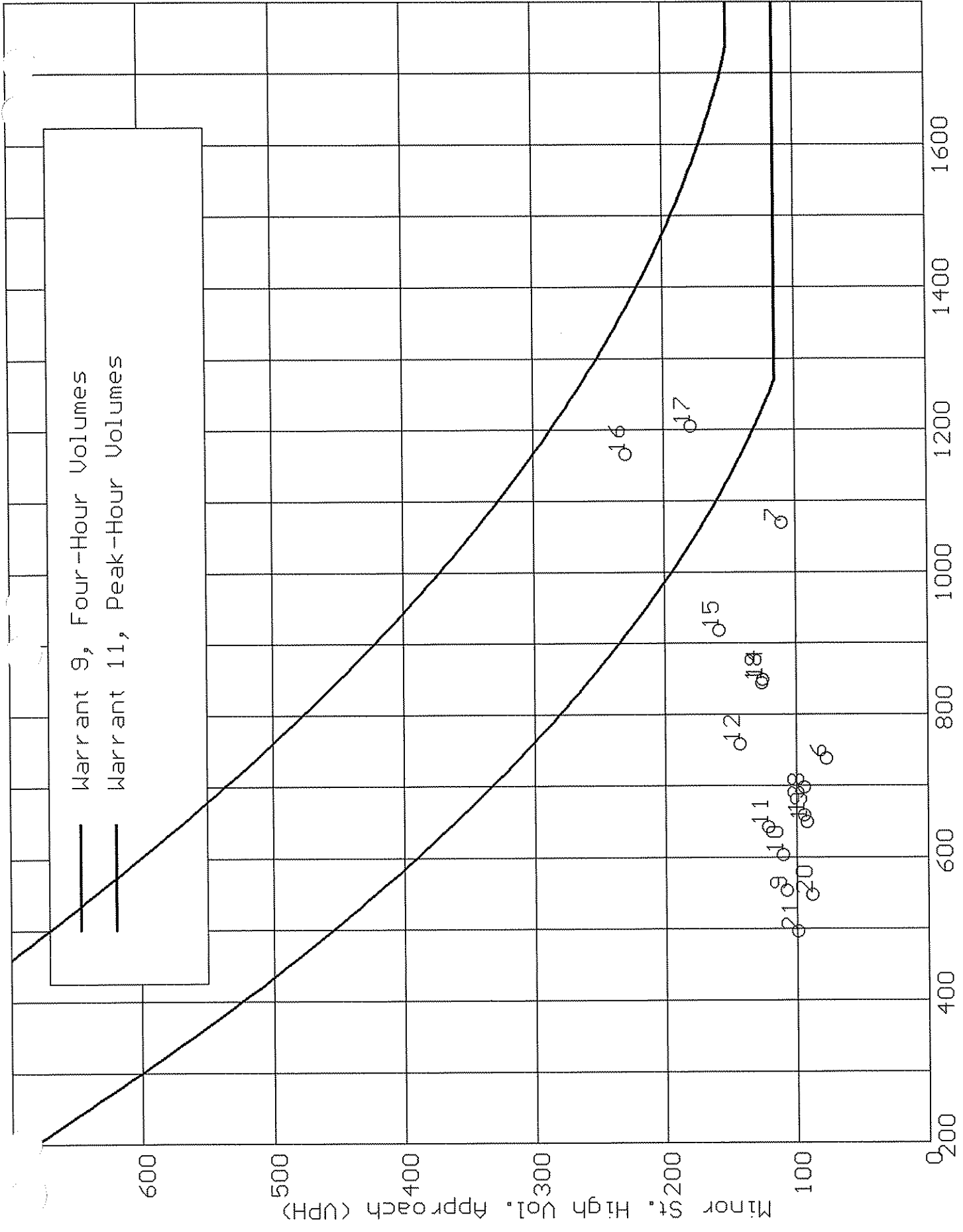
Warrant 10 - Peak Hour Delay

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

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

Warrant 11 - Peak Hour Volume

NOT SATISFIED.



Major St. Total of Both Approaches (UPH)



NORTH

COUNT LOCATION: CSAH 32 (85TH AVE./CR J) @
AIRPORT ROAD

DATE: 7/10/96

APP. #1= EB CSAH 32 (85TH AVE.)
APP. #2 = SB AIRPORT ROAD
APP. #3= WB CSAH 32 (85TH AVE.)
APP. #4= NB AIRPORT ROAD

APP. #2
APP. #1 40 MPH
APP. #3 40MPH
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						10		1
6:15-6:30						7		
6:30-6:45						18	1	4
6:45-7:00						14		1
HOURLY TOTAL						HOURLY TOTAL		56
7:00-7:15						17		2
7:15-7:30						12		3
7:30-7:45						15		1
7:45-8:00						7		1
HOURLY TOTAL						HOURLY TOTAL		58
8:00-8:15						17		1
8:15-8:30						23		2
8:30-8:45						20		2
8:45-9:00						8		
HOURLY TOTAL						HOURLY TOTAL		73
9:00-9:15						18		
9:15-9:30			3		3	20		
9:30-9:45						15		
9:45-10:00						16		
HOURLY TOTAL					3	HOURLY TOTAL		69
10:00-10:15						12		1
10:15-10:30						12		
10:30-10:45						18		
10:45-11:00						23		
HOURLY TOTAL						HOURLY TOTAL		66
11:00-11:15						12		
11:15-11:30						11		1
11:30-11:45						20		1
11:45-12:00						12		2
HOURLY TOTAL						HOURLY TOTAL		59
12:00-12:15						16		
12:15-12:30						14		
12:30-12:45						16		1
12:45-1:00						14		3
HOURLY TOTAL						HOURLY TOTAL		64
1:00-1:15						8		1
1:15-1:30						7		1
1:30-1:45						8		1
1:45-2:00						15	2	
HOURLY TOTAL						HOURLY TOTAL		43



NORTH

APP. #1= EB CSAH 32
(85TH AVE.)

APP. #2=
SB AIRPORT ROAD

APP. #3=WB CSAH 32
(85TH AVE.)

APP. #4=
NB AIRPORT ROAD

COUNT LOCATION: CSAH 32 (85TH AVE./CR J) @
AIRPORT ROAD

DATE: 7/9/96

APP.
#2

APP.
#1
40 MPH

APP.
#3
40MPH

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						17		
2:15-2:30						21		
2:30-2:45						15		2
2:45-3:00						10		1
HOURLY TOTAL						HOURLY TOTAL		66
3:00-3:15						15		
3:15-3:30						34		3
3:30-3:45						18		
3:45-4:00						14		1
HOURLY TOTAL						HOURLY TOTAL		85
4:00-4:15				1	1	15		
4:15-4:30						11		
4:30-4:45						13		1
4:45-5:00						19		1
HOURLY TOTAL					1	HOURLY TOTAL		60
5:00-5:15						13		
5:15-5:30						13		
5:30-5:45						10		
5:45-6:00						9		1
HOURLY TOTAL						HOURLY TOTAL		46
6:00-6:15						9	1	
6:15-6:30						6		2
6:30-6:45						10		
6:45-7:00						10		
HOURLY TOTAL						HOURLY TOTAL		38
7:00-7:15						4		
7:15-7:30						1		1
7:30-7:45						2		
7:45-8:00						7		
HOURLY TOTAL						HOURLY TOTAL		15
8:00-8:15	1				1	1		
8:15-8:30						5		
8:30-8:45								
8:45-9:00						2		
HOURLY TOTAL					1	HOURLY TOTAL		8
9:00-9:15						1		
9:15-9:30								
9:30-9:45						3		
9:45-10:00						4		
HOURLY TOTAL						HOURLY TOTAL		8