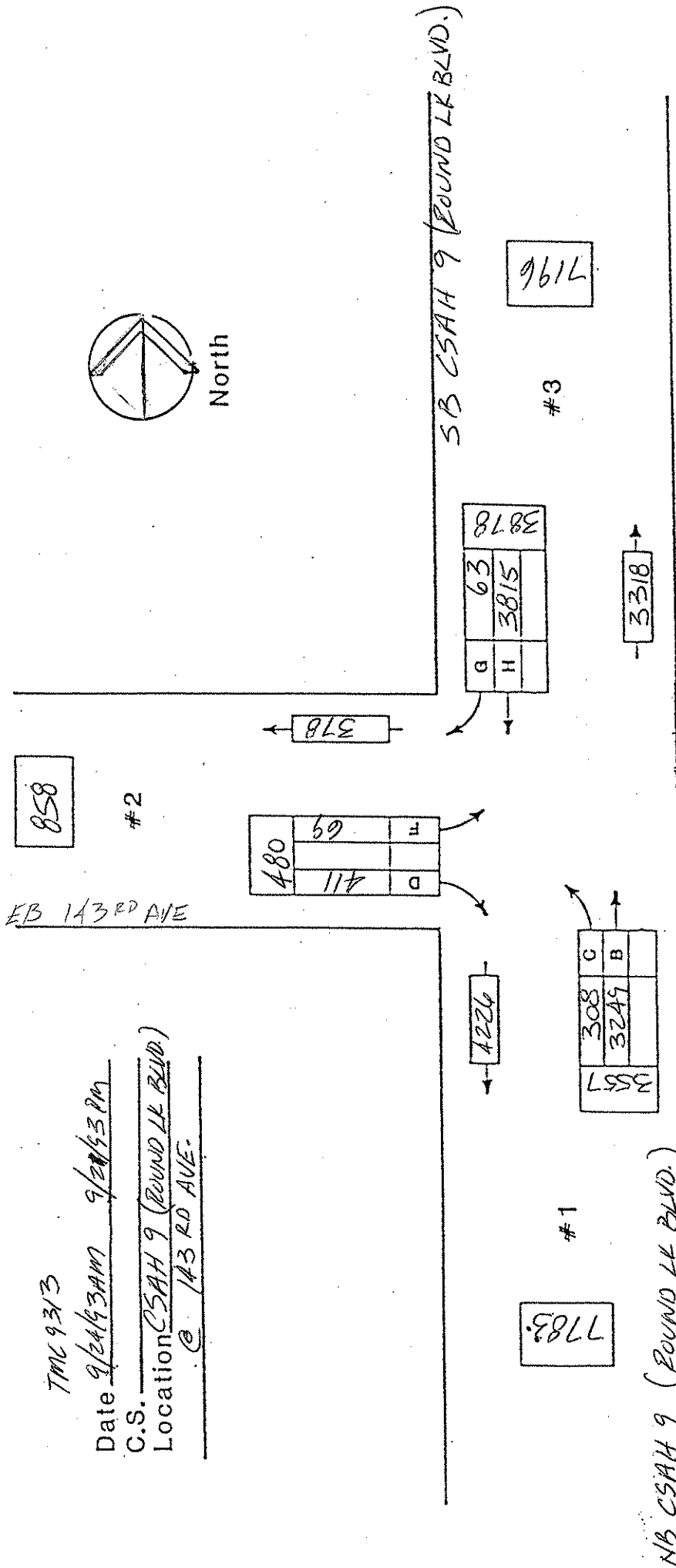
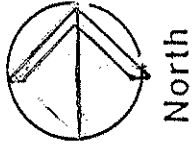


TMC 9313

Date 9/24/3AM 9/24/3PM

C.S. CSAH 9 (ROUND LK BLVD.)  
 @ 143 RD AVE.



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

Anoka County Highway Dept.  
 Traffic Volume and Turning  
 Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT  
 TRAFFIC ENGINEERING SECTION  
 TRAFFIC VOLUME AND  
 TURNING MOVEMENT STUDY

Site Code : 93130201  
 Start Date: 09/24/93  
 File I.D. : 9313CH1A  
 Page : 1

WEATHER: CLEAR/70 CLEAR/75  
 Counter : TDC EIGHT  
 Counted by Naomi/Eileen

Vehicle group 1

Date	Southbound				Westbound				Northbound				Eastbound				Vehicle Total	Other Total
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left		
06:00	1	0	108	0	0	0	0	0	0	0	13	1	0	8	0	1	131	1
06:15	3	1	137	0	0	0	0	0	0	0	16	0	0	8	0	0	162	3
06:30	7	0	133	0	0	0	0	0	0	2	24	1	0	11	0	1	170	9
06:45	7	2	127	0	0	0	0	0	0	5	35	3	1	21	0	0	188	13
Hr Total	18	3	505	0	0	0	0	0	0	7	88	5	1	48	0	2	651	26
07:00	13	1	147	0	0	0	0	0	3	0	38	9	1	15	0	1	211	17
07:15	11	2	148	0	0	0	0	0	1	0	31	4	1	11	0	2	198	13
07:30	6	1	127	0	0	0	0	0	0	0	36	3	2	12	0	4	183	8
07:45	7	1	106	0	0	0	0	0	3	0	40	1	1	12	0	5	165	11
Hr Total	37	5	528	0	0	0	0	0	7	0	145	17	5	50	0	12	757	49
08:00	8	3	94	0	0	0	0	0	3	0	31	5	0	7	0	0	140	11
08:15	4	0	72	0	0	0	0	0	10	0	30	2	0	15	0	0	119	14
08:30	6	2	103	0	0	0	0	0	6	0	37	10	0	6	0	0	158	12
08:45	5	1	104	0	0	0	0	0	8	0	37	7	2	14	0	1	164	15
Hr Total	23	6	373	0	0	0	0	0	27	0	135	24	2	42	0	1	581	52
09:00	7	3	76	0	0	0	0	0	5	0	40	5	0	6	0	0	130	12
09:15	6	0	81	0	0	0	0	0	3	0	37	3	0	8	0	2	131	9
09:30	6	0	88	0	0	0	0	0	10	0	46	5	1	14	0	1	154	17
09:45	4	3	67	0	0	0	0	0	6	0	44	6	0	7	0	0	127	10
Hr Total	23	6	312	0	0	0	0	0	24	0	167	19	1	35	0	3	542	48
10:00	4	2	78	0	0	0	0	0	4	0	43	2	1	8	1	1	135	9
10:15	3	1	66	0	0	0	0	0	3	0	48	2	1	11	0	1	129	7
10:30	2	0	51	0	0	0	0	0	3	0	47	4	1	10	0	0	112	6
10:45	5	1	58	0	0	0	0	0	4	0	47	8	3	5	0	2	121	11
Hr Total	14	4	253	0	0	0	0	0	14	0	185	16	6	34	1	4	497	34
11:00	0	0	66	0	0	0	0	0	2	0	58	6	1	3	0	1	134	8
11:15	6	6	62	0	0	0	0	0	0	0	62	12	0	9	0	1	152	14
11:30	3	0	63	0	0	0	0	0	8	0	53	7	2	7	0	3	133	11
11:45	2	1	47	0	0	0	0	0	2	0	54	4	1	5	0	0	111	8
Hr Total	11	7	238	0	0	0	0	0	12	0	227	29	4	24	0	5	530	27
12:00	5	1	56	0	0	0	0	0	3	0	62	3	2	5	0	1	128	10
12:15	1	0	61	0	0	0	0	0	9	0	79	7	0	2	0	0	149	14
12:30	6	1	65	0	0	0	0	0	2	0	65	9	0	3	0	2	145	14
12:45	4	1	63	0	0	0	0	0	6	0	55	4	1	3	0	1	127	11
Hr Total	16	3	245	0	0	0	0	0	20	0	261	23	3	13	0	4	549	39

WEATHER: CLEAR/70 CLEAR/75  
 Counter : TDC EIGHT  
 Counted by Naomi/Eileen

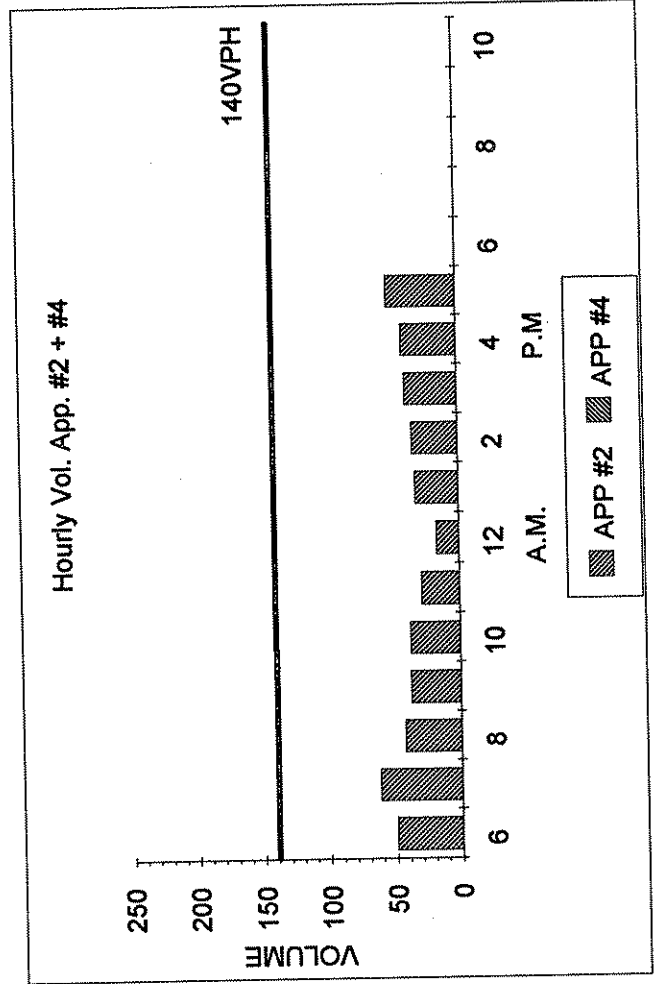
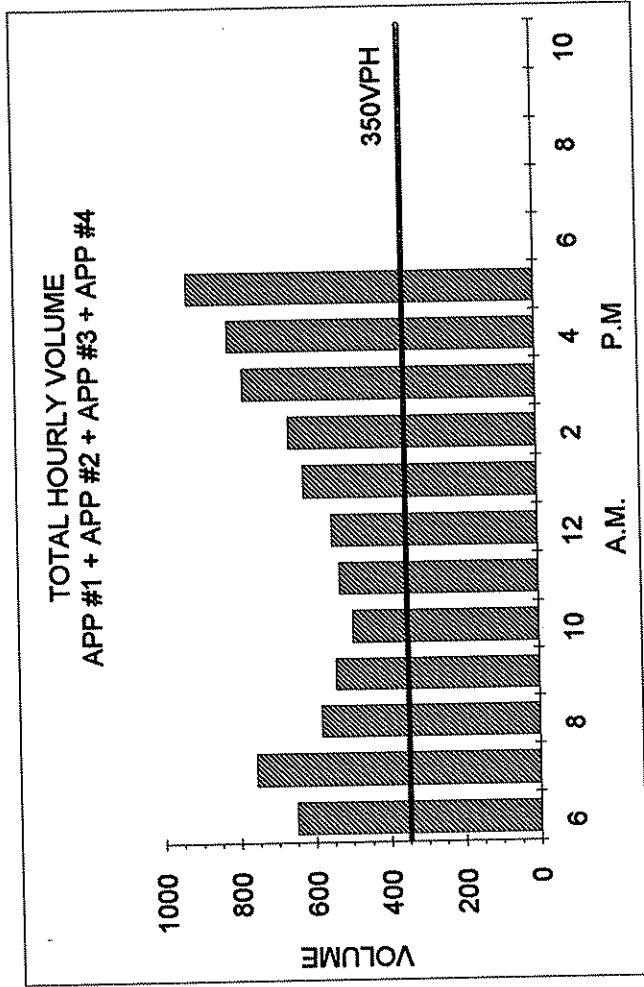
ANOKA COUNTY HIGHWAY DEPARTMENT  
 TRAFFIC ENGINEERING SECTION  
 TRAFFIC VOLUME AND  
 TURNING MOVEMENT STUDY

Site Code : 93130201  
 Start Date: 09/24/93  
 File I.D. : 9313CH1A  
 Page : 2

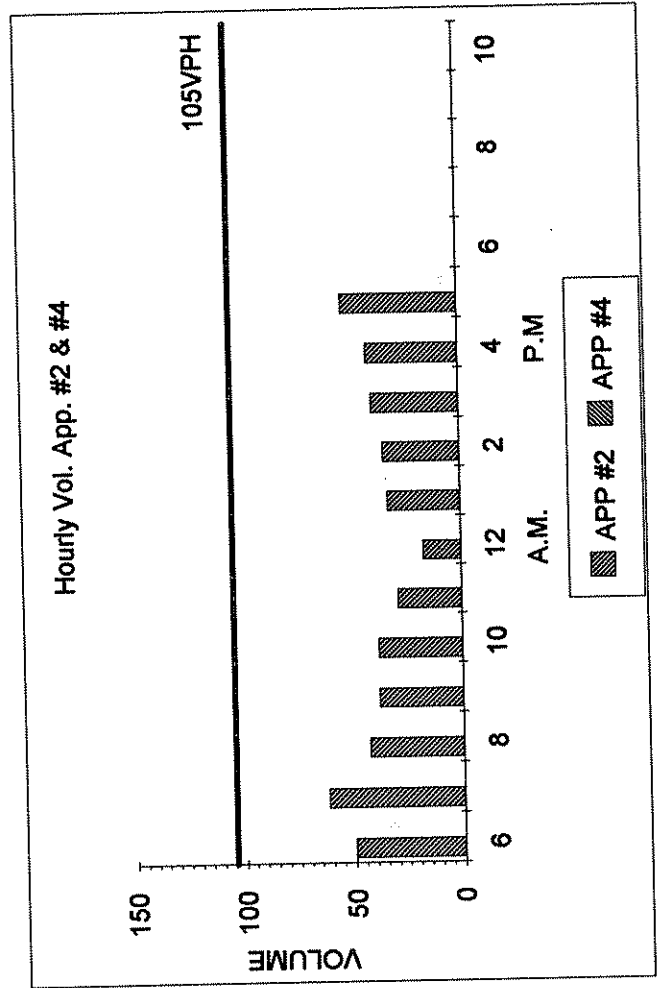
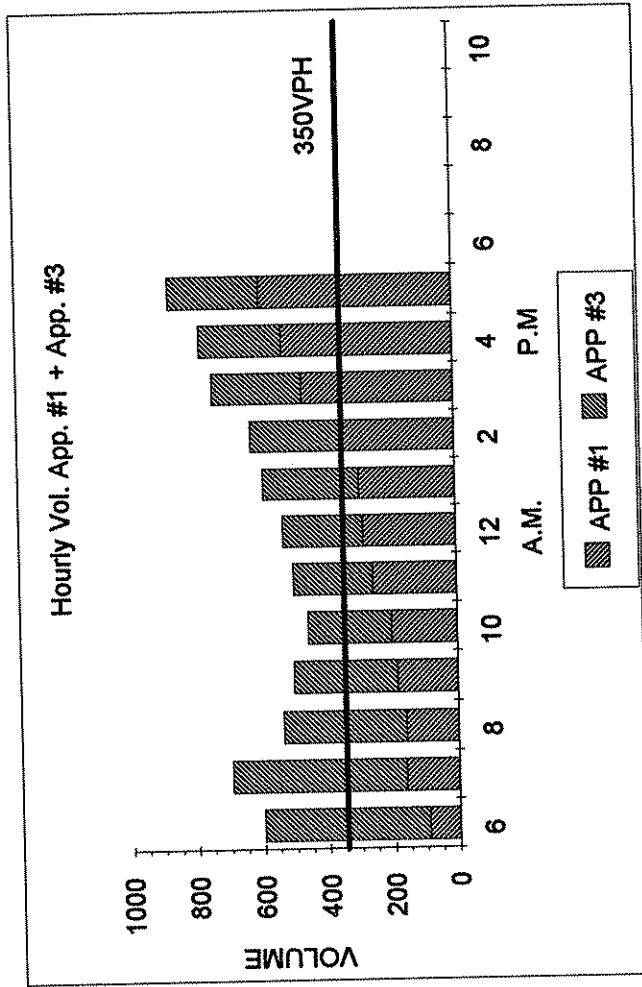
Vehicle group 1

Date	Southbound			Westbound			Northbound			Eastbound			Vehicle Total	Other Total				
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left						
09/24/93																		
13:00	6	0	73	0	0	0	0	0	8	0	63	8	0	11	0	1	156	14
13:15	5	1	85	0	0	0	0	0	3	0	62	4	1	9	0	0	161	9
13:30	7	1	65	0	0	0	0	0	4	0	70	8	0	4	0	1	149	11
13:45	4	1	72	0	0	0	0	0	3	1	69	8	1	5	0	2	158	8
Hr Total	22	3	295	0	0	0	0	0	18	1	264	28	2	29	0	4	624	42
14:00	2	0	53	0	0	0	0	0	6	0	80	3	1	6	0	4	146	9
14:15	4	1	66	0	0	0	0	0	3	0	77	10	0	4	0	1	159	7
14:30	3	0	89	0	0	0	0	0	8	0	63	10	0	10	0	1	173	11
14:45	4	3	73	0	0	0	0	0	3	0	87	11	0	9	0	0	183	7
Hr Total	13	4	281	0	0	0	0	0	20	0	307	34	1	29	0	6	661	34
15:00	4	2	55	0	0	0	0	0	4	0	100	8	0	12	0	4	181	8
15:15	2	1	63	0	0	0	0	0	6	0	93	13	1	5	0	2	177	9
15:30	3	3	72	0	0	0	0	0	4	0	115	7	0	9	0	4	210	7
15:45	7	0	79	0	0	0	0	0	3	0	125	5	1	3	0	1	213	11
Hr Total	16	6	269	0	0	0	0	0	17	0	433	33	2	29	0	11	781	35
16:00	4	1	54	0	0	0	0	1	7	0	114	6	3	7	0	3	186	14
16:15	4	4	59	0	0	0	0	0	4	0	125	8	1	8	0	4	208	9
16:30	2	1	50	0	0	0	0	0	2	1	136	7	0	5	0	1	201	4
16:45	0	2	82	0	0	0	0	0	2	0	116	12	0	11	0	3	226	7
Hr Total	10	8	245	0	0	0	0	1	15	1	491	33	4	31	0	11	821	29
17:00	2	1	59	0	0	0	0	0	1	0	140	12	0	6	0	1	219	11
17:15	2	4	72	0	0	1	0	0	3	0	129	11	1	11	0	2	230	11
17:30	0	1	74	0	0	0	0	0	4	0	127	21	1	13	0	2	238	11
17:45	1	2	66	0	0	0	0	0	2	0	150	3	1	17	0	1	239	11
Hr Total	5	8	271	0	0	1	0	0	10	0	546	47	3	47	0	6	926	18
*TOTAL*	208	63	3815	0	0	1	0	1	191	2	3249	308	34	411	1	69	7920	433

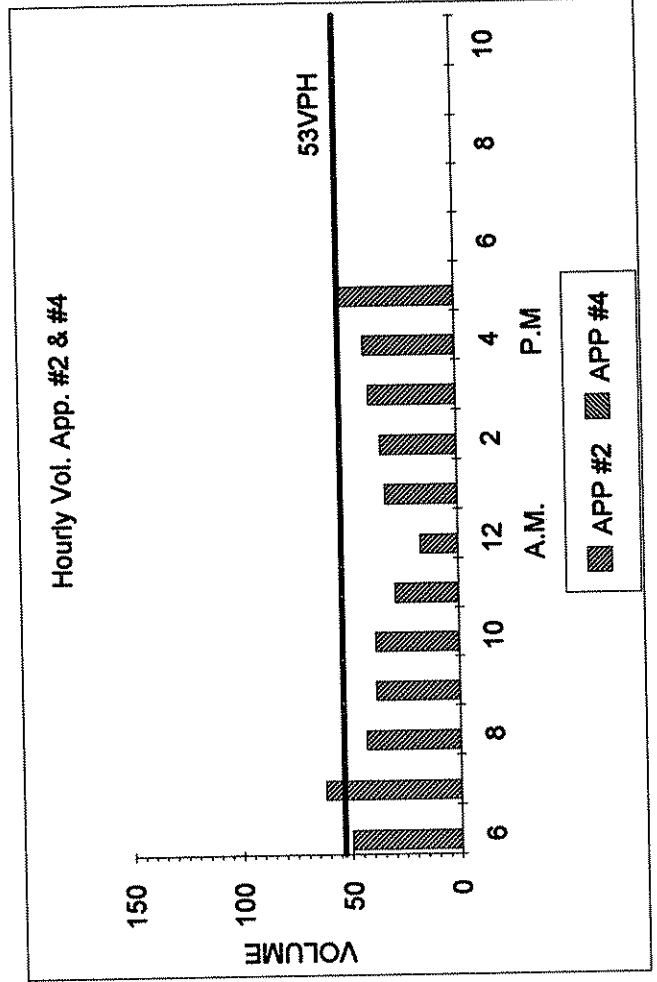
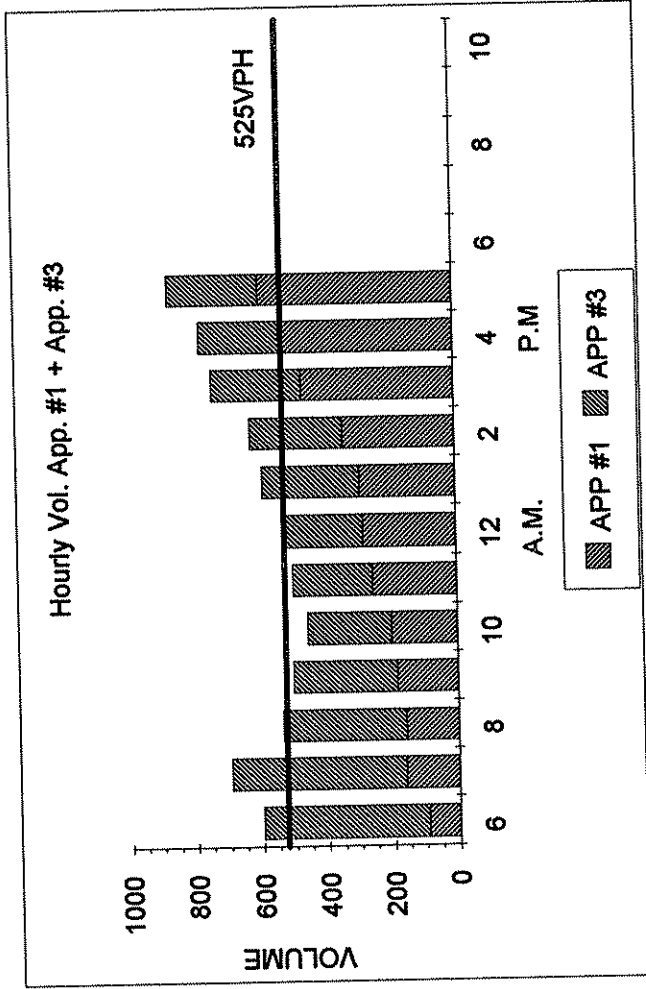
TMC9313 STOP WARRANT STUDY



TMC9313 SIGNAL WARRANT 1 STUDY

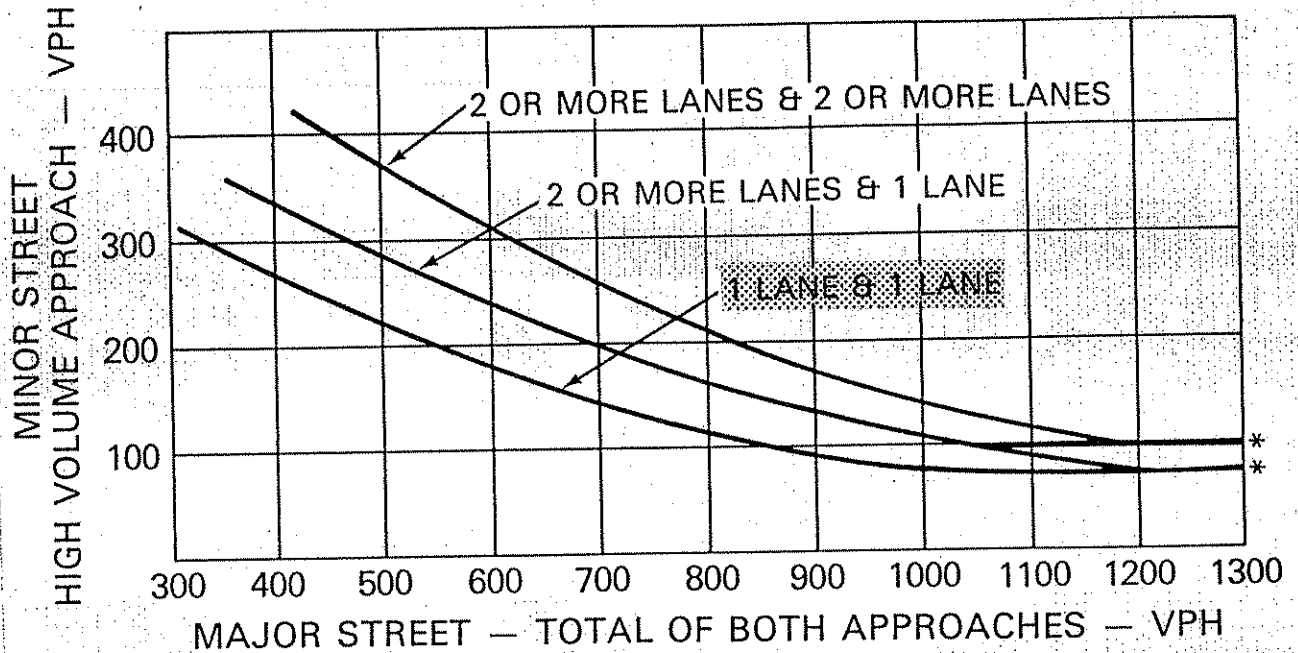


TMC9313 SIGNAL WARRANT 2 STUDY



# FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

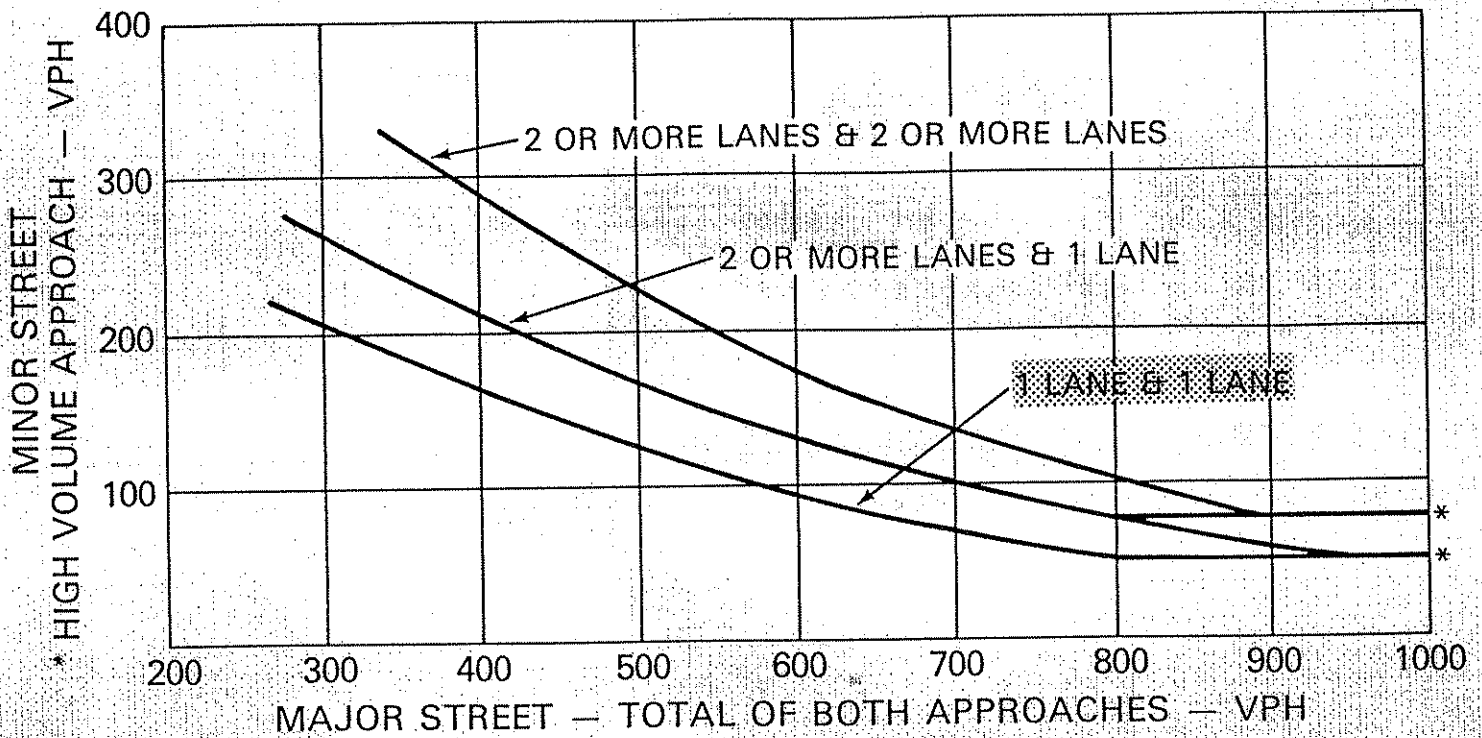
★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	601	50
7-8 am	695	62
8-9 am	538	43
9-10 am	504	38
10-11 am	458	38
11-12 pm	501	29
12-1 pm	532	17
1-2 pm	590	33
2-3 pm	626	35
3-4 pm	741	40
4-5 pm	777	42
5-6 pm	872	53
6-7 pm	0	0
7-8 pm	0	0
8-9 pm	0	0
9-10 pm	0	0

CSAH 9 (ROUND LK BLVD) @ 143RD AVE.

# FIGURE 4-8. FOUR HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	601	50
7-8 am	695	62
8-9 am	538	43
9-10 am	504	38
10-11 am	458	38
11-12 pm	501	29
12-1 pm	532	17
1-2 pm	590	33
2-3 pm	626	35
3-4 pm	741	40
4-5 pm	777	42
5-6 pm	872	53
6-7 pm	0	0
7-8 pm	0	0
8-9 pm	0	0
9-10 pm	0	0



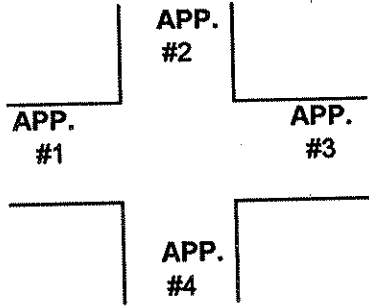


**NORTH**

APP. #1=NB CSAH 9  
(ROUND LK BLVD)  
APP. #2=  
EB 143RD AVE.  
APP. #3=SB CSAH 9  
(ROUND LK BLVD)  
APP. #4=


**COUNT LOCATION:** CSAH 9 (ROUND LK BLVD) @  
143 RD AVE.

**DATE:** 4/24/93



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						3		
6:30-6:45						6	1	2
6:45-7:00						9		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>26</b>
7:00-7:15						13		4
7:15-7:30						7		1
7:30-7:45		1			1	6		2
7:45-8:00			1		1	11		1
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>45</b>
8:00-8:15						10		
8:15-8:30						12		2
8:30-8:45						8		4
8:45-9:00						13		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>52</b>
9:00-9:15						9		3
9:15-9:30						11		
9:30-9:45						14	1	
9:45-10:00						10		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>48</b>
10:00-10:15						9		
10:15-10:30						7		
10:30-10:45						5		1
10:45-11:00						7		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>29</b>
11:00-11:15						3		
11:15-11:30						6		
11:30-11:45						12		1
11:45-12:00						5		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>27</b>
12:00-12:15						9		1
12:15-12:30						10		
12:30-12:45						4	1	3
12:45-1:00						11		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>39</b>
1:00-1:15						13		1
1:15-1:30						10		
1:30-1:45						11		
1:45-2:00						8		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>43</b>



**NORTH**

APP. #1=NB CSAH 9  
(ROUND LK BLVD)

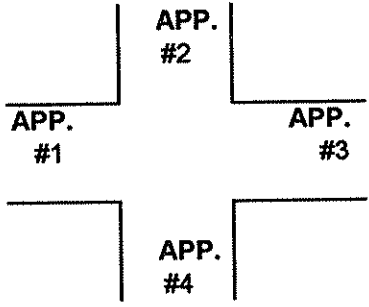
APP. #2=  
EB 143 RD AVE.

APP. #3=SB CSAH 9  
(ROUND LK BLVD)

APP. #4=

**COUNT LOCATION:** CSAH 9 (ROUND LK BLVD) @  
143 RD AVE.

**DATE:** 9/21/93



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						10		
2:15-2:30						9	1	1
2:30-2:45						7		2
2:45-3:00						5		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>37</b>
3:00-3:15						6		2
3:15-3:30		2			2	4		4
3:30-3:45		1		1	2	3		4
3:45-4:00		2			2	9		3
<b>HOURLY TOTAL</b>					<b>6</b>	<b>HOURLY TOTAL</b>		<b>35</b>
4:00-4:15						9		4
4:15-4:30						5		4
4:30-4:45				1	1	3		1
4:45-5:00						2		
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>28</b>
5:00-5:15						2		1
5:15-5:30				1	1	6		
5:30-5:45				4	4	4		1
5:45-6:00	2				2	2		2
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>18</b>
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
7:00-7:15								
7:15-7:30								
7:30-7:45								
7:45-8:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		