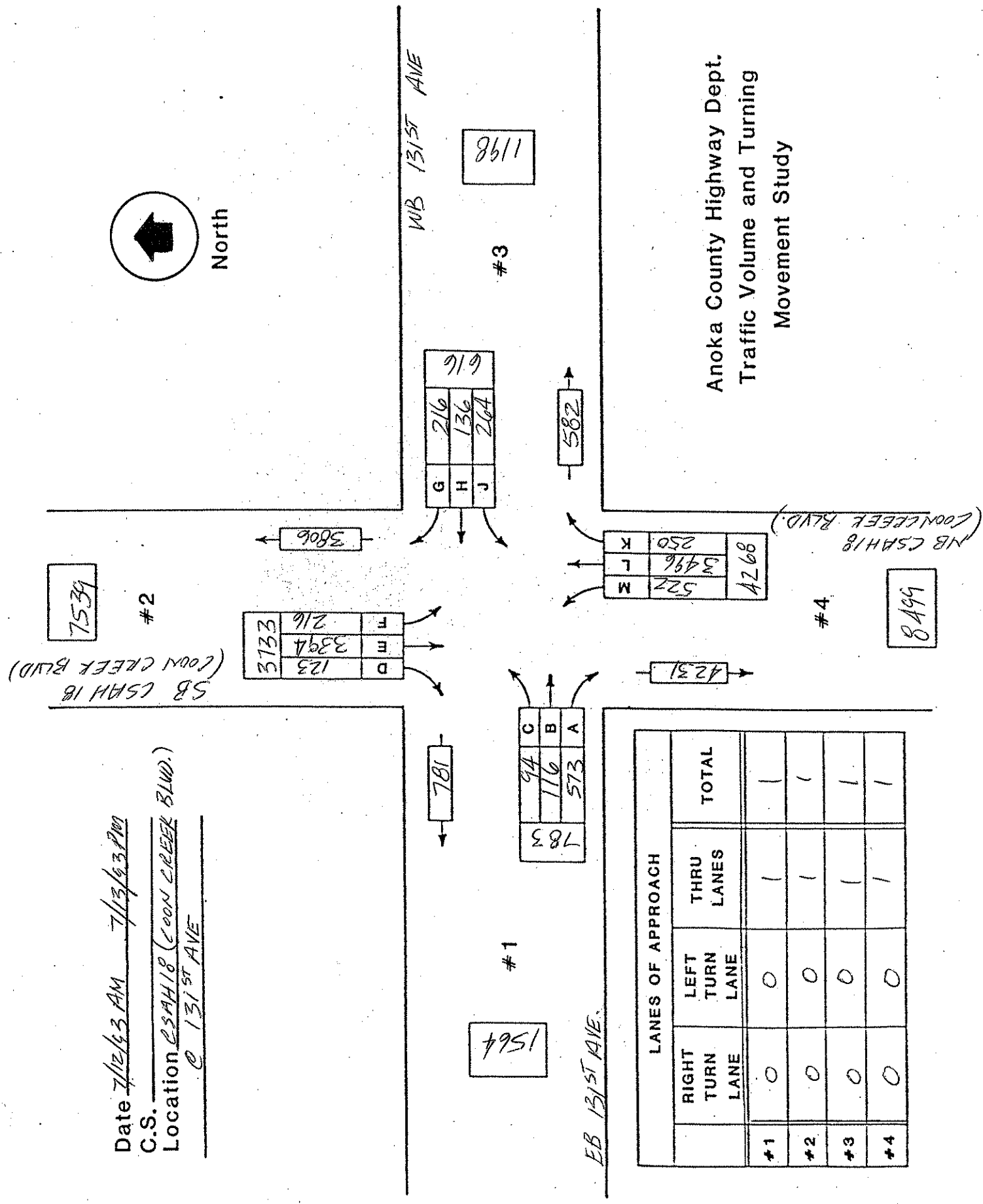
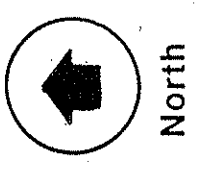


Date 7/12/63 AM 7/13/63 PM
 C.S. CSAH 18 (COON CREEK BLVD.)
 Location @ 131ST AVE



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

Anoka County Highway Dept.
 Traffic Volume and Turning
 Movement Study

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 : 93
 Start Date: 07
 File I.D. : TM
 Page : 1

Vehicle group 1

Date	SB CSAH 18 Southbound				WB 131ST AVE Westbound				NB CSAH 18 Northbound				EB 131ST AVE Eastbound				Vehicle Total
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	
07/12/93	-----																
06:00	2	0	98	0	0	1	0	7	0	0	11	0	0	11	0	2	130
06:15	4	1	118	1	0	0	1	14	2	2	11	2	0	19	1	0	170
06:30	0	2	136	1	0	1	0	6	0	0	16	1	1	20	0	3	186
06:45	0	0	129	1	0	0	1	10	0	1	24	2	0	29	0	0	197
Hr Total	6	3	481	3	0	2	2	37	2	3	62	5	1	79	1	5	683
07:00	1	0	134	0	0	4	2	8	1	0	28	3	0	24	1	3	207
07:15	0	4	122	1	1	1	1	4	2	0	28	2	0	14	0	2	179
07:30	4	2	109	2	1	2	0	11	1	0	25	4	0	17	1	2	175
07:45	0	1	102	3	0	6	1	9	1	0	24	2	0	15	1	0	164
Hr Total	5	7	467	6	2	13	4	32	5	0	105	11	0	70	3	7	725
08:00	1	0	71	2	0	2	1	4	4	1	23	4	0	11	1	0	120
08:15	1	0	61	3	0	1	1	3	3	1	27	1	0	2	0	1	101
08:30	4	1	74	2	0	3	1	5	2	2	21	1	2	4	0	4	118
08:45	5	3	56	2	0	0	4	3	1	0	23	2	0	7	0	1	101
Hr Total	11	4	262	9	0	6	7	15	10	4	94	8	2	24	1	6	440
09:00	1	1	40	1	0	3	4	3	0	1	21	1	1	12	0	2	89
09:15	2	1	52	1	0	1	1	5	1	3	27	0	2	10	0	1	102
09:30	6	2	37	1	1	1	0	4	4	3	24	4	1	7	2	1	86
09:45	1	1	50	1	0	4	2	6	2	4	24	3	0	9	1	0	105
Hr Total	10	5	179	4	1	9	7	18	7	11	96	8	4	38	3	4	382
10:00	2	1	36	0	0	3	1	3	2	1	20	2	1	6	3	0	76
10:15	3	3	41	2	0	4	0	2	2	0	29	3	0	10	2	2	98
10:30	1	1	47	1	1	2	5	5	3	3	32	3	0	5	0	0	104
10:45	1	1	30	2	0	4	2	2	5	0	37	4	0	5	2	1	90
Hr Total	7	6	154	5	1	13	8	12	12	4	118	12	1	26	7	3	368
11:00	1	1	39	3	0	2	3	0	1	0	27	4	0	11	1	0	91
11:15	1	0	40	3	0	4	2	3	2	2	29	6	1	4	3	0	96
11:30	2	1	49	2	0	1	1	3	0	6	30	6	0	10	2	0	111
11:45	4	1	43	1	0	0	1	2	0	3	36	4	0	11	1	2	105
Hr Total	8	3	171	9	0	7	7	8	3	11	122	20	1	36	7	2	403
12:00	1	2	47	2	0	5	0	1	6	4	61	8	0	10	0	0	140
12:15	1	0	35	3	1	5	2	1	2	2	53	10	1	6	0	0	117
12:30	3	0	41	5	0	2	3	5	3	1	36	6	0	4	3	2	108
12:45	2	5	45	2	0	5	3	1	3	2	50	7	0	6	4	1	131
Hr Total	7	7	168	12	1	17	8	8	14	9	200	31	1	26	7	3	496

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC VOLUME AND
TURNING MOVEMENT STUDY

Site Code : 93
Start Date: 07
File I.D. : TM
Page : 2

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

Vehicle group 1

Date	SB CSAH 18 Southbound				WB 131ST AVE Westbound				NB CSAH 18 Northbound				EB 131ST AVE Eastbound				Vehicle Total
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	
07/12/93																	
13:00	3	1	46	5	0	2	2	2	0	6	34	9	0	7	2	1	117
13:15	2	1	51	3	0	2	2	2	2	4	43	2	0	8	0	2	120
13:30	0	1	45	1	0	2	3	4	2	4	41	4	0	6	3	1	115
13:45	1	4	39	2	0	2	2	8	3	4	46	7	1	10	1	4	129
Hr Total	6	7	181	11	0	8	9	16	7	18	164	22	1	31	6	8	481
14:00	2	0	36	2	1	1	3	2	2	6	39	4	1	7	0	1	101
14:15	0	3	39	4	1	5	6	4	1	7	37	7	1	10	1	1	124
14:30	3	3	45	5	1	2	2	6	1	1	40	3	2	10	4	1	122
14:45	0	1	39	2	1	3	0	2	0	3	49	3	0	5	1	1	109
Hr Total	5	7	159	13	4	11	11	14	4	17	165	17	4	32	6	4	456
15:00	1	4	42	2	0	2	1	2	2	3	67	8	0	7	1	0	139
15:15	1	0	44	3	0	2	1	0	1	1	75	10	0	0	1	0	137
15:30	3	3	48	5	1	2	2	3	3	7	103	17	1	3	3	0	196
15:45	0	2	48	5	0	2	2	5	1	7	103	13	1	6	3	1	197
Hr Total	5	9	182	15	1	8	6	10	7	18	348	48	2	16	8	1	669
16:00	1	1	52	3	0	1	4	4	2	6	93	16	0	8	2	4	194
16:15	0	4	30	6	0	4	2	3	0	8	102	14	0	3	3	1	180
16:30	3	2	43	4	0	6	2	4	1	8	137	18	0	13	3	2	242
16:45	1	4	40	5	0	7	1	10	2	14	150	29	1	6	7	2	275
Hr Total	5	11	165	18	0	18	9	21	5	36	482	77	1	30	15	9	891
17:00	0	5	56	5	0	9	2	6	6	5	158	19	2	12	5	4	286
17:15	0	2	65	5	0	6	3	7	1	11	153	24	0	10	3	2	291
17:30	1	1	59	8	0	6	4	4	3	10	135	21	0	6	2	4	260
17:45	1	7	66	9	0	10	4	7	1	6	110	26	0	17	3	2	267
Hr Total	2	15	246	27	0	31	13	24	11	32	556	90	2	45	13	12	1104
18:00	0	5	55	7	0	4	5	0	2	4	123	17	0	8	3	3	234
18:15	1	2	53	6	0	9	4	6	4	5	99	17	0	14	3	3	221
18:30	0	0	58	7	0	7	2	8	1	7	81	13	1	14	2	3	202
18:45	0	2	53	5	0	7	2	5	1	7	50	7	0	8	3	2	151
Hr Total	1	9	219	25	0	27	13	19	8	23	353	54	1	44	11	11	808
19:00	0	3	61	7	0	4	4	2	1	7	62	8	0	9	2	2	171
19:15	0	1	41	3	0	1	1	1	0	10	48	12	0	7	5	4	134
19:30	1	3	38	9	0	6	4	0	1	5	66	14	0	7	8	2	162
19:45	0	1	29	4	0	4	1	3	0	5	54	14	0	6	0	1	122
Hr Total	1	8	169	23	0	15	10	6	2	27	230	48	0	29	15	9	589

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

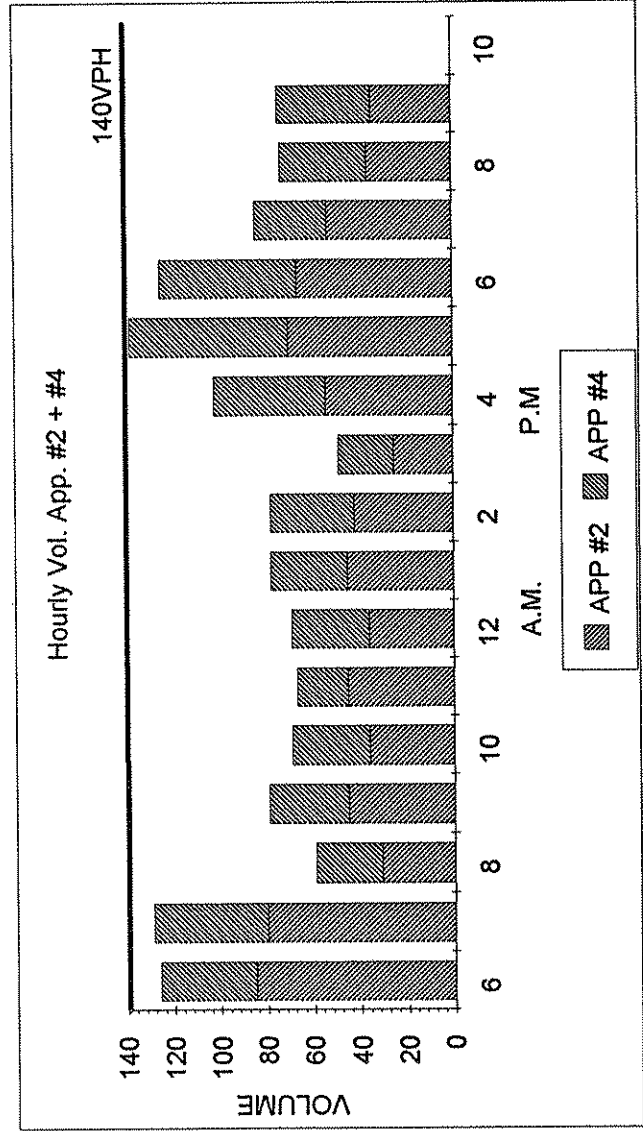
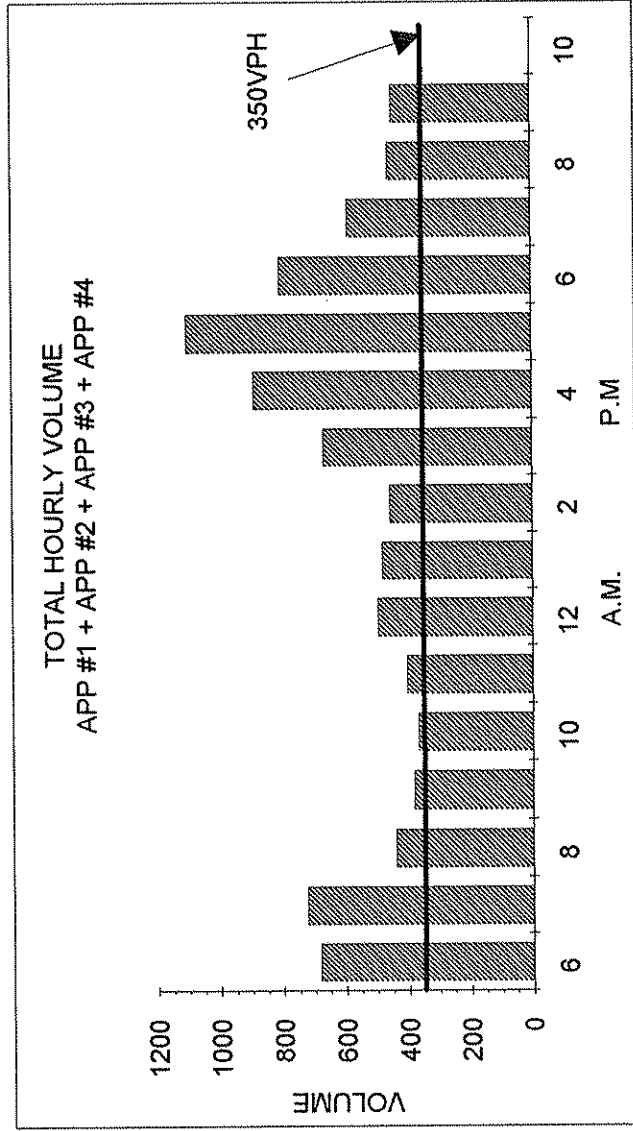
ANOKA COUNTY HIGHWAY DEPARTMENT
 TRAFFIC ENGINEERING SECTION
 TRAFFIC VOLUME AND
 TURNING MOVEMENT STUDY

Site Code : 93
 Start Date: 07
 File I.D. : TM
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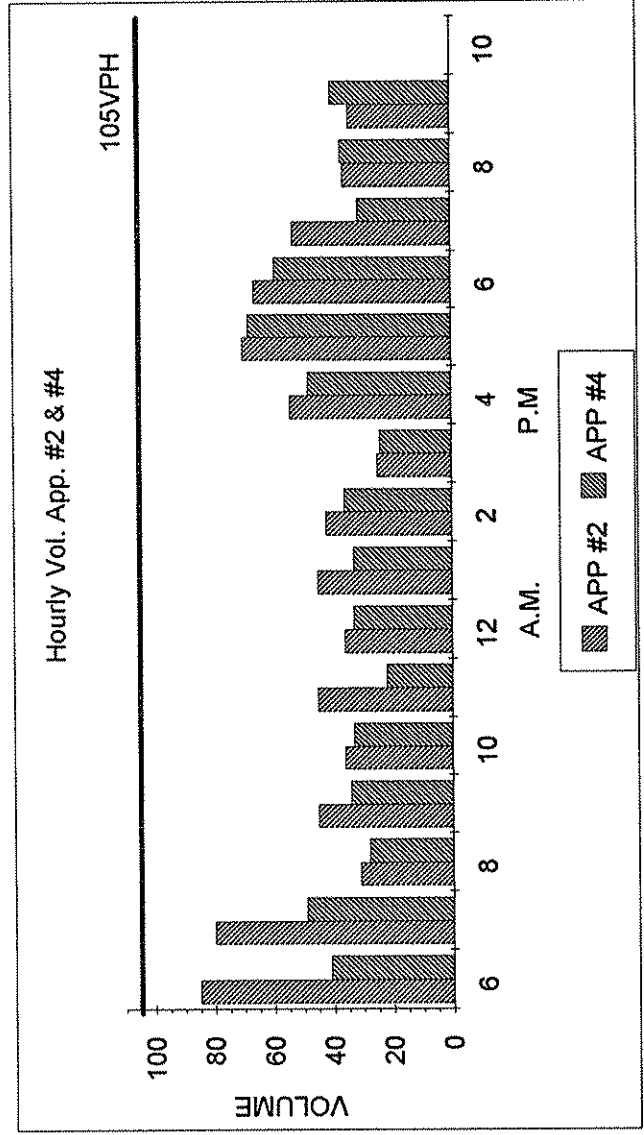
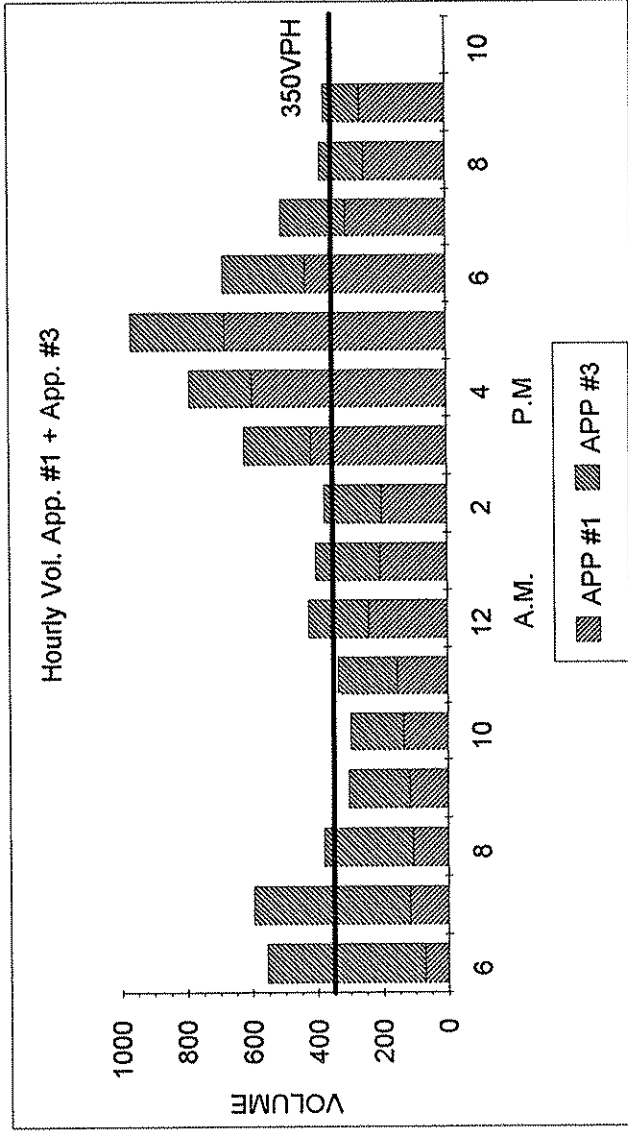
Vehicle group 1

Date	SB CSAH 18 Southbound				WB 131ST AVE Westbound				NB CSAH 18 Northbound				EB 131ST AVE Eastbound				Vehicle Total
	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	Other	Right	Thru	Left	
07/12/93																	
20:00	0	3	19	4	0	5	1	4	0	3	41	14	0	8	0	1	103
20:15	0	5	28	8	0	1	1	4	0	4	49	11	0	9	2	0	122
20:30	0	1	24	2	0	5	3	3	1	7	48	7	0	4	3	2	109
20:45	1	2	30	10	0	4	1	5	0	4	49	12	0	0	5	2	124
Hr Total	1	11	101	24	0	15	6	16	1	18	187	44	0	21	10	5	458
21:00	0	1	25	5	0	6	7	1	0	5	51	9	0	10	2	3	125
21:15	0	4	19	1	0	7	5	3	0	5	54	9	0	8	1	2	118
21:30	2	2	20	3	0	3	4	2	1	3	57	6	0	5	0	0	105
21:45	0	4	26	3	0	0	0	2	0	6	52	3	0	3	0	0	99
Hr Total	2	11	90	12	0	16	16	8	1	19	214	27	0	26	3	5	447
TOTAL	82	123	3394	216	10	216	136	264	99	250	3496	522	21	573	116	94	9400

TMC9312 STOP WARRANT STUDY



TMC9312 SIGNAL WARRANT 1 STUDY



TMC9312 SIGNAL WARRANT 2 STUDY

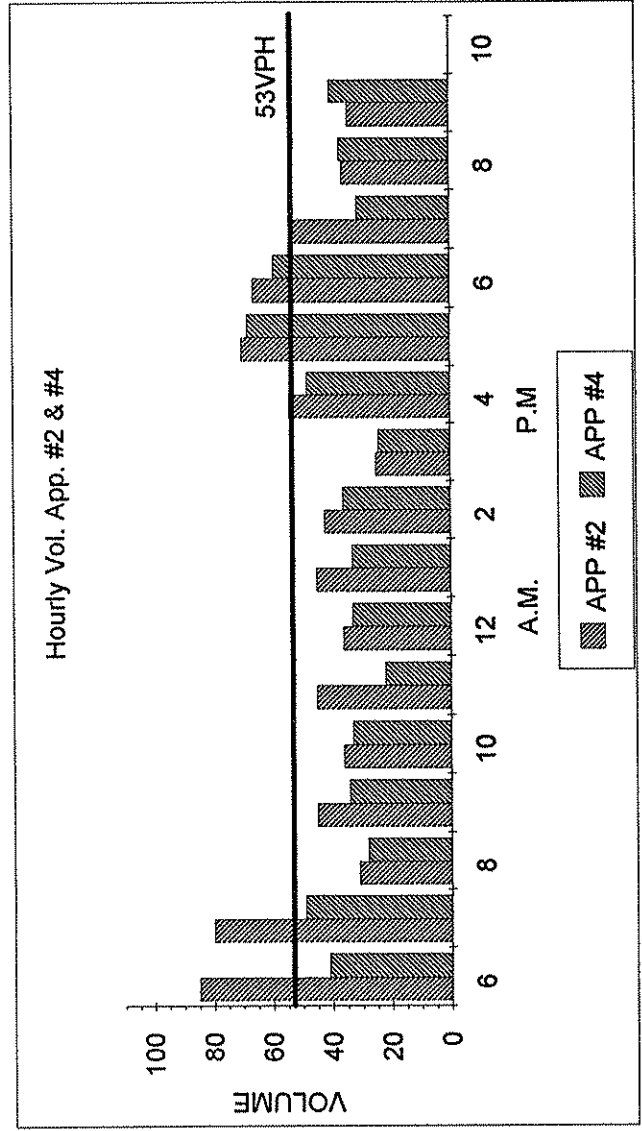
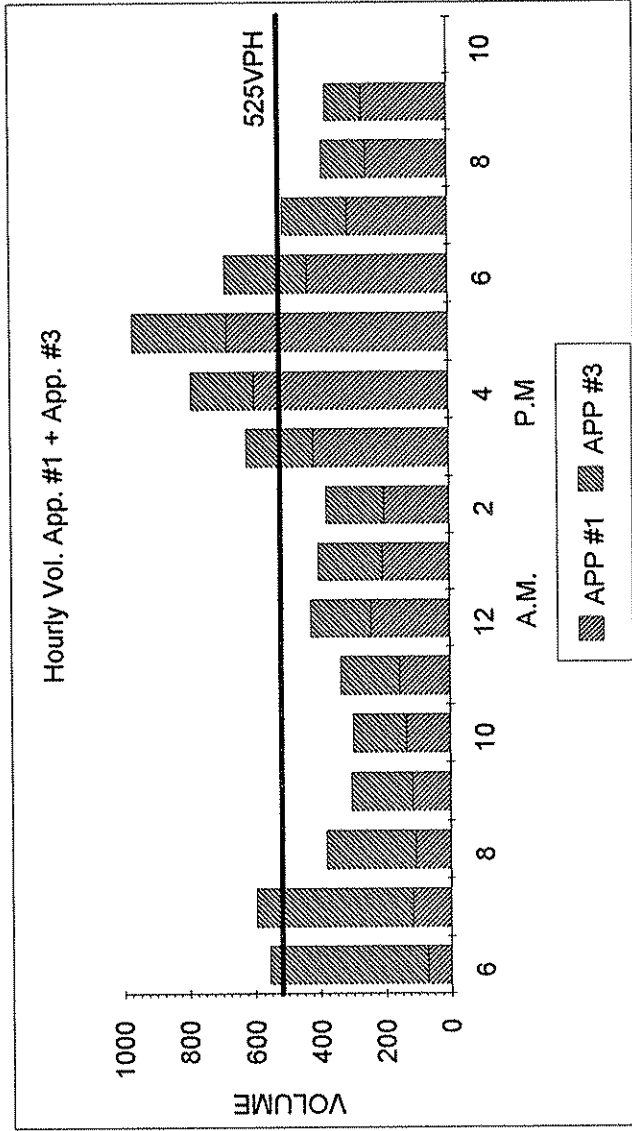
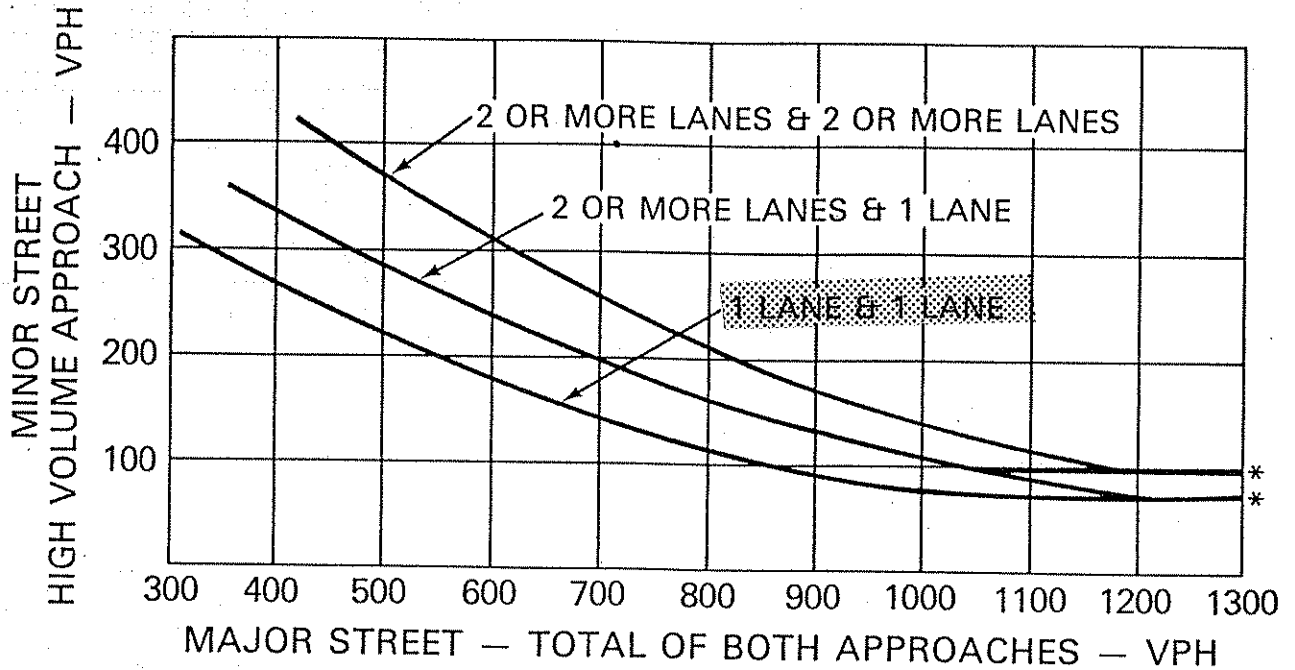


FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(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.

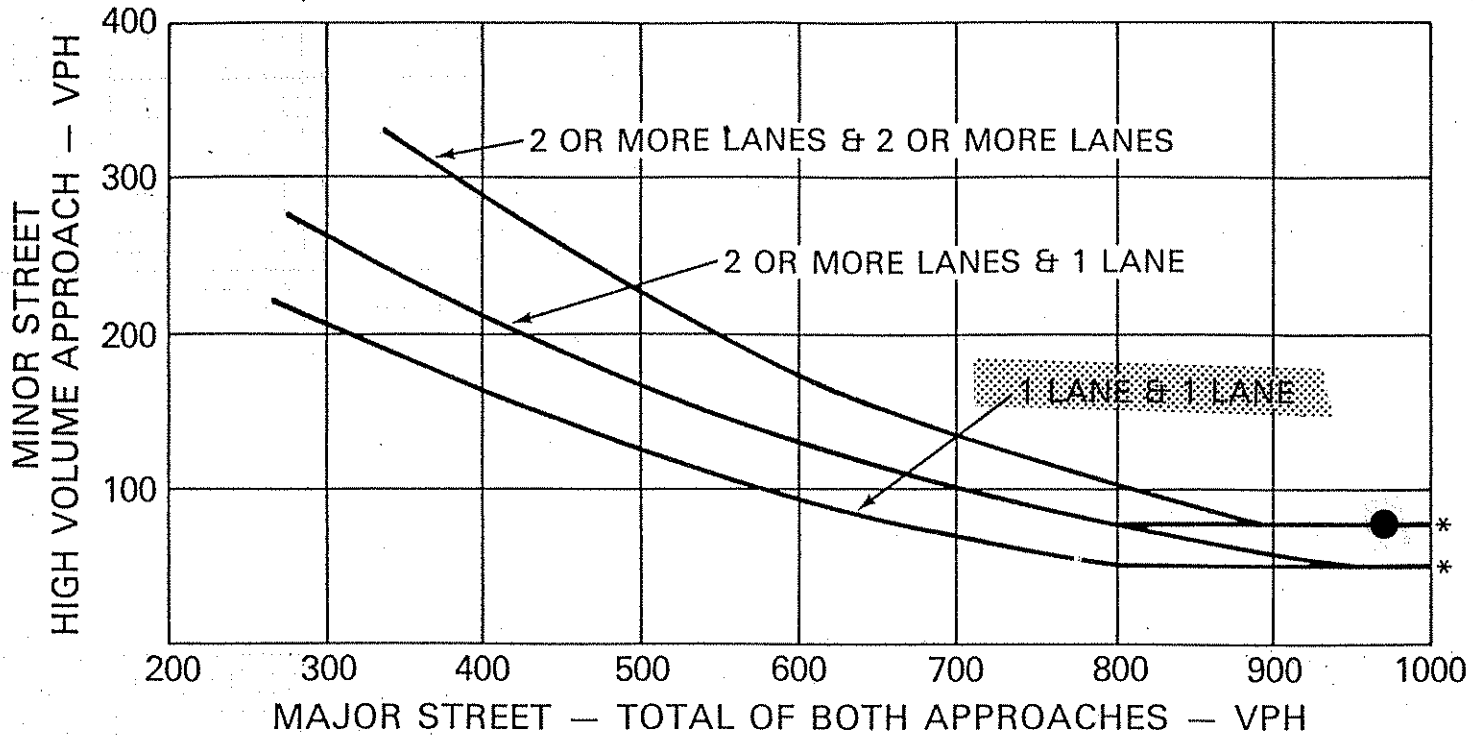
● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

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

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	557	85
7-8 am	596	80
8-9 am	381	31
9-10 am	303	45
10-11 am	299	36
11-12 pm	336	45
12-1 pm	427	36
1-2 pm	403	45
2-3 pm	378	42
3-4 pm	620	25
4-5 pm	789	54
5-6 pm	966	70
6-7 pm	683	66
7-8 pm	505	53
8-9 pm	385	37
9-10 pm	373	40

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	557	85
7-8 am	596	80
8-9 am	381	31
9-10 am	303	45
10-11 am	299	36
11-12 pm	336	45
12-1 pm	427	36
1-2 pm	403	45
2-3 pm	378	42
3-4 pm	620	25
4-5 pm	789	54
5-6 pm	966	70
6-7 pm	683	66
7-8 pm	505	53
8-9 pm	385	37
9-10 pm	373	40

COUNT LOCATION:

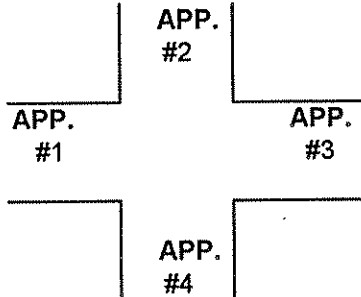
CSAH 18 (COON CREEK BLVD) @
131ST AVE.

D 7/12/93



NORTH

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



- 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						2		
6:15-6:30						6		
6:30-6:45						1		
6:45-7:00								
HOURLY TOTAL								9
7:00-7:15						2		
7:15-7:30						3		
7:30-7:45						6		
7:45-8:00								1
HOURLY TOTAL								12
8:00-8:15						4		
8:15-8:30			2		2	4		
8:30-8:45				1	1	7		1
8:45-9:00						6		
HOURLY TOTAL					3			22
9:00-9:15		3		1	4	2		
9:15-9:30						5		
9:30-9:45		1			1	11		1
9:45-10:00		1			1	3		
HOURLY TOTAL					6			22
10:00-10:15			1	3	4	5		
10:15-10:30		1		4	5	5		
10:30-10:45	1			4	5	5		
10:45-11:00	2	1	1	2	6	6		
HOURLY TOTAL					20			21
11:00-11:15				5	5	1		1
11:15-11:30			1	3	4	4		
11:30-11:45	1			10	11	1	1	
11:45-12:00		3	1	5	9	4		
HOURLY TOTAL					29			12
12:00-12:15		3	2		5	8		
12:15-12:30		3			3	5		
12:30-12:45		1			1	5		1
12:45-1:00	3	4		2	9	4		
HOURLY TOTAL					18			23
1:00-1:15		4			4	3		
1:15-1:30		1	2	1	4	4		
1:30-1:45		12			12	2		
1:45-2:00		4		8	12	4		
HOURLY TOTAL					32			13

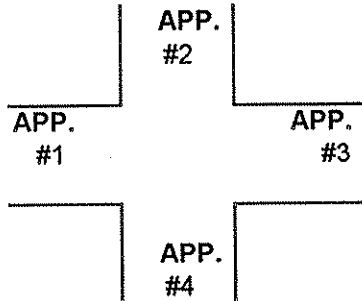
COUNT LOCATION: CSAH 18 (COON CREEK BLVD) @
131ST AVE

DA 7/13/93



NORTH

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



- 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	4	6		
2:15-2:30		8		2	10	3		
2:30-2:45		1		4	5	7		
2:45-3:00				2	2	1		
HOURLY TOTAL					21	HOURLY TOTAL		17
3:00-3:15		2			2	2		
3:15-3:30		6			6	2		
3:30-3:45		5			5	7	1	
3:45-4:00						1	1	
HOURLY TOTAL					13	HOURLY TOTAL		14
4:00-4:15						3		
4:15-4:30		1		1	2			
4:30-4:45		1			1	4		
4:45-5:00		2	2		4	2	1	
HOURLY TOTAL					7	HOURLY TOTAL		10
5:00-5:15						2	1	1
5:15-5:30		1			1	1		
5:30-5:45		1			1	4		
5:45-6:00		1			1	2		
HOURLY TOTAL					3	HOURLY TOTAL		11
6:00-6:15		1			1	2		
6:15-6:30						5		
6:30-6:45		1			1	1	1	
6:45-7:00		2			2	1		
HOURLY TOTAL					4	HOURLY TOTAL		10
7:00-7:15		2			2	2		
7:15-7:30		2			2			
7:30-7:45				2	2	2		
7:45-8:00		2			2			
HOURLY TOTAL					8	HOURLY TOTAL		4
8:00-8:15								
8:15-8:30		1			1			
8:30-8:45		1	2		3		1	
8:45-9:00								
HOURLY TOTAL					4	HOURLY TOTAL		1
9:00-9:15								
9:15-9:30								
9:30-9:45						2		
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		2