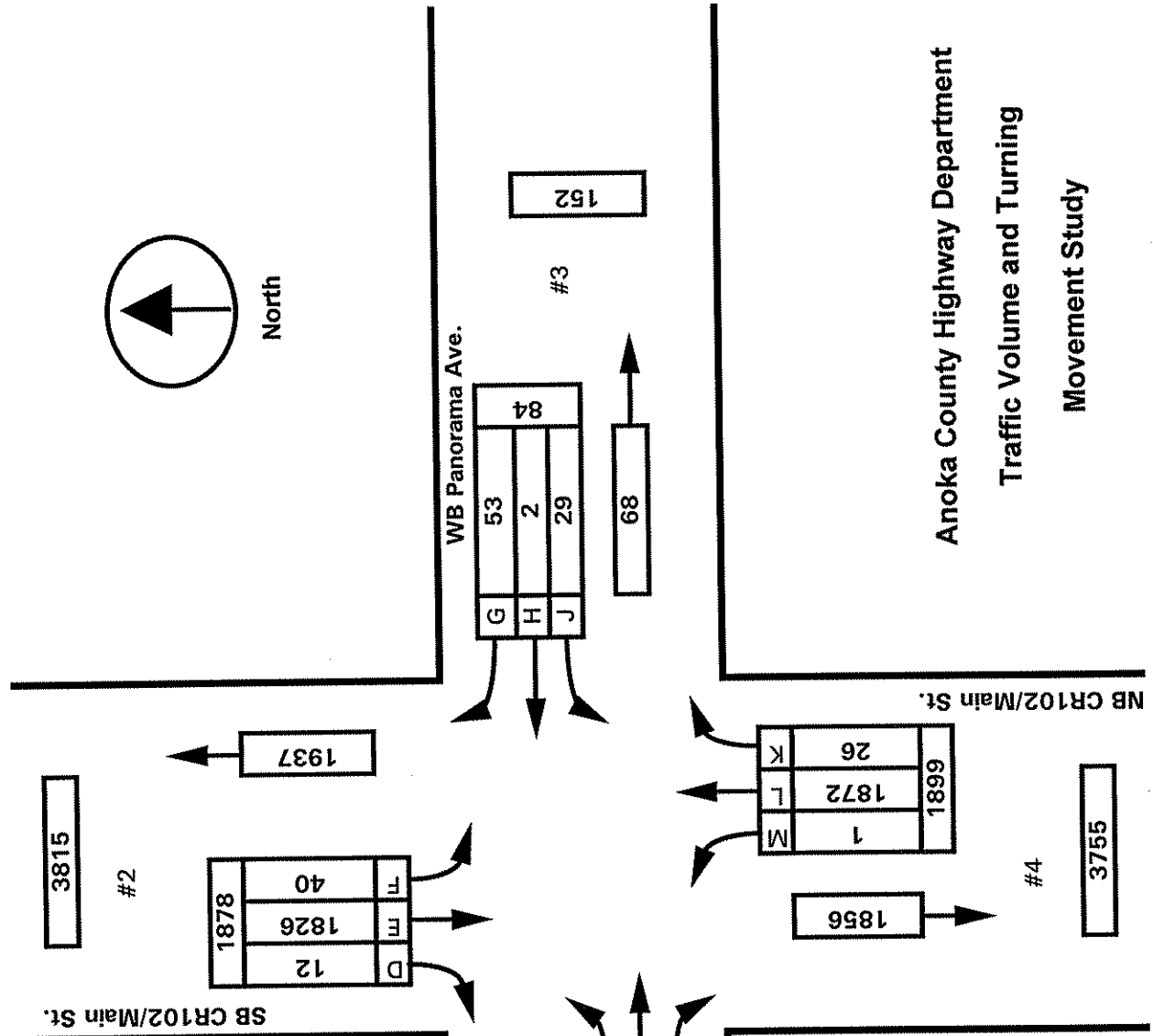
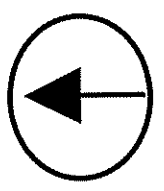


Date : 6/11/96PM 6/21/96AM

Count Number : TMC9602

Location : CR102 (Main St.) @

Panorama Ave.



Anoka County Highway Department
Traffic Volume and Turning
Movement Study

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

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :rain AM/pt. cloudy PM

Counted by:Ann and Gabe

Board # :

ther :

Study Name: TMC9602

Site Code : 96020202

Start Date: 06/11/96

Page : 1

Vehicle group 1

Start Time	CR102 (Main St.) From North				Panorama Ave. From East				CR102 (Main St.) From South				(Business Driveway) From West				Intvl	Exclu	Inclu	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				Total
06/11/96																				
06:00	0	24	0	1	0	0	1	0	0	11	0	0	0	0	0	0	0	37	1	36
06:15	0	33	0	0	1	0	1	0	0	11	0	0	0	0	0	0	0	46	0	46
06:30	0	55	1	3	2	0	1	0	0	13	0	1	0	0	0	0	0	76	4	72
06:45	0	55	0	1	1	0	1	0	0	25	0	0	0	0	0	0	0	83	1	82
Hour	0	167	1	5	4	0	4	0	0	60	0	1	0	0	0	0	0	242	6	236
07:00	0	28	0	5	0	0	0	0	0	49	0	5	0	0	0	0	0	87	10	77
07:15	0	50	0	2	1	0	3	1	0	15	0	1	0	0	0	0	0	73	4	69
07:30	0	45	0	6	2	0	2	1	0	15	0	0	0	0	0	0	0	71	7	64
07:45	0	47	1	0	1	0	0	0	0	14	0	3	0	0	0	0	0	66	3	63
Hour	0	170	1	13	4	0	5	2	0	93	0	9	0	0	0	0	0	297	24	273
08:00	0	24	1	2	0	0	0	0	0	17	0	4	0	0	0	0	0	48	6	42
08:15	0	9	1	0	1	0	0	0	0	11	0	0	0	0	0	0	0	22	0	22
08:30	0	18	0	2	2	0	0	0	1	17	0	1	0	0	0	0	0	41	3	38
08:45	0	19	2	7	2	0	0	0	0	9	0	2	0	0	0	0	0	41	9	32
Hour	0	70	4	11	5	0	0	0	1	54	0	7	0	0	0	0	0	152	18	134
09:00	0	12	2	3	1	0	0	0	0	12	0	1	0	0	0	0	0	31	4	27
09:15	0	20	0	4	0	0	0	0	0	21	0	2	0	0	0	0	0	47	6	41
09:30	0	17	0	1	0	0	0	0	0	19	0	2	0	0	0	0	0	39	3	36
09:45	0	12	0	3	0	0	0	1	0	23	0	3	0	0	0	0	0	42	7	35
Hour	0	61	2	11	1	0	0	1	0	75	0	8	0	0	0	0	0	159	20	139
10:00	0	19	0	3	1	0	0	0	0	12	0	4	0	0	0	0	0	39	7	32
10:15	0	25	1	3	0	0	0	0	1	31	0	5	0	0	0	0	0	66	8	58
10:30	0	18	0	5	1	0	0	0	0	34	0	8	0	0	0	0	0	66	13	53
10:45	0	35	0	7	1	0	0	0	0	30	0	3	0	0	0	0	0	76	10	66
Hour	0	97	1	18	3	0	0	0	1	107	0	20	0	0	0	0	0	247	38	209
11:00	0	21	2	4	1	0	3	0	0	32	0	5	0	0	0	0	0	68	9	59
11:15	0	32	0	8	1	0	1	0	2	28	0	3	0	0	0	0	0	75	11	64
11:30	0	29	0	3	1	0	0	0	0	38	0	4	0	0	0	0	0	75	7	68
11:45	0	35	1	5	1	0	1	0	0	37	0	4	0	0	0	0	0	84	9	75
Hour	0	117	3	20	4	0	5	0	2	135	0	16	0	0	0	0	0	302	36	266
12:00	0	42	1	3	0	0	2	0	1	67	0	6	0	0	0	0	0	122	9	113
12:15	0	49	1	5	2	0	0	0	0	30	0	1	0	0	0	0	0	88	6	82
12:30	0	44	1	8	1	0	0	0	1	35	0	5	0	0	0	0	0	95	13	82
12:45	0	38	0	3	0	0	1	0	0	26	0	4	0	0	0	0	0	72	7	65
Hour	0	173	3	19	3	0	3	0	2	158	0	16	0	0	0	0	0	377	35	342

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :rain AM/pt. cloudy PM

Counted by:Ann and Gabe

Board # :

ther :

Study Name: TMC9602

Site Code : 96020202

Start Date: 06/11/96

Page : 2

Vehicle group 1

Start Time	CR102 (Main St.) From North				Panorama Ave. From East				CR102 (Main St.) From South				(Business Driveway) From West				Intvl Total	Exclu Total	Inclu Total
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	0	46	0	9	0	0	0	0	1	33	0	5	0	0	0	0	94	14	80
13:15	0	41	1	8	1	0	0	0	1	19	0	1	0	0	0	0	72	9	63
13:30	0	41	0	7	2	0	0	0	1	26	0	7	0	0	0	0	84	14	70
13:45	0	31	0	4	0	0	2	0	0	33	0	7	0	0	0	0	77	11	66
Hour	0	159	1	28	3	0	2	0	3	111	0	20	0	0	0	0	327	48	279
14:00	1	22	3	5	0	0	0	0	0	27	0	4	0	1	0	0	63	9	54
14:15	0	25	1	2	1	1	1	0	1	27	0	6	0	0	0	0	65	8	57
14:30	3	45	2	5	0	0	0	0	1	42	0	7	0	0	1	0	106	12	94
14:45	1	38	0	2	1	0	0	0	0	35	0	3	1	0	0	0	81	5	76
Hour	5	130	6	14	2	1	1	0	2	131	0	20	1	1	1	0	315	34	281
15:00	0	25	0	3	0	0	0	0	2	48	0	4	0	0	0	0	82	7	75
15:15	1	37	1	8	0	0	1	0	0	43	0	4	0	0	0	0	95	12	83
15:30	1	64	1	4	2	0	1	0	1	109	0	7	0	0	0	0	190	11	179
15:45	0	27	0	4	1	0	0	0	0	47	0	4	0	0	1	0	84	8	76
Hour	2	153	2	19	3	0	2	0	3	247	0	19	0	0	1	0	451	38	413
16:00	1	35	1	5	0	0	0	0	0	68	0	5	0	0	0	0	115	10	105
16:15	0	27	0	1	0	0	1	0	0	44	0	2	0	0	2	1	78	4	74
16:30	1	40	1	3	1	0	0	0	0	55	0	5	0	0	3	0	109	8	101
16:45	0	31	0	2	1	0	0	0	1	66	0	3	0	1	0	0	105	5	100
Hour	2	133	2	11	2	0	1	0	1	233	0	15	0	1	5	1	407	27	380
17:00	1	35	1	4	1	0	1	0	1	50	0	6	0	0	1	0	101	10	91
17:15	1	30	1	5	3	0	0	0	3	55	0	4	0	0	0	0	102	9	93
17:30	0	25	0	2	1	0	1	0	0	43	0	5	0	0	1	0	78	7	71
17:45	0	28	1	4	4	0	0	0	1	40	0	1	0	0	1	0	80	5	75
Hour	2	118	3	15	9	0	2	0	5	188	0	16	0	0	3	0	361	31	330
18:00	0	24	1	4	2	0	1	1	2	23	0	2	0	0	0	0	60	7	53
18:15	0	17	0	2	1	0	0	0	0	25	0	0	0	0	0	0	45	2	43
18:30	0	16	0	1	0	0	0	0	1	25	0	1	0	0	1	0	45	2	43
18:45	0	13	1	2	1	0	0	0	0	35	0	4	0	0	0	0	56	6	50
Hour	0	70	2	9	4	0	1	1	3	108	0	7	0	0	1	0	206	17	189
19:00	1	25	0	3	0	0	0	0	0	24	0	1	0	0	0	0	54	4	50
19:15	0	11	2	0	1	0	0	0	0	26	1	0	0	0	0	0	41	0	41
19:30	0	31	0	1	0	1	1	0	0	28	0	3	0	0	1	0	66	4	62
19:45	0	19	1	0	0	0	0	0	0	14	0	1	0	0	0	0	35	1	34
Hour	1	86	3	4	1	1	1	0	0	92	1	5	0	0	1	0	196	9	187

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :rain AM/pt. cloudy PM

Counted by:Ann and Gabe

Board # :

her :

Study Name: TMC9602

Site Code : 96020202

Start Date: 06/11/96

Page : 3

Vehicle group 1

Start Time	CR102 (Main St.) From North				Panorama Ave. From East				CR102 (Main St.) From South				(Business Driveway) From West				Intvl	Exclu	Inclu	
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY				Total
20:00	0	23	1	0	1	0	0	0	0	7	0	0	0	0	0	0	0	32	0	32
20:15	0	16	2	0	0	0	0	0	1	11	0	0	0	0	0	0	0	30	0	30
20:30	0	17	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	29	0	29
20:45	0	12	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	24	0	24
Hour	0	68	3	0	1	0	0	0	1	42	0	0	0	0	0	0	0	115	0	115
21:00	0	13	1	0	1	0	0	0	0	10	0	0	0	0	0	0	0	25	0	25
21:15	0	16	0	0	1	0	1	0	0	10	0	0	0	0	0	0	0	28	0	28
21:30	0	14	2	0	0	0	0	0	2	12	0	0	0	0	0	0	0	30	0	30
21:45	0	11	0	0	2	0	1	0	0	6	0	0	0	0	0	0	0	20	0	20
Hour	0	54	3	0	4	0	2	0	2	38	0	0	0	0	0	0	0	103	0	103
Total	12	1826	40	197	53	2	29	4	26	1872	1	179	1	2	12	1	4257	381	3876	
% Apr.	0.5	88.0	1.9	9.4	60.2	2.2	32.9	4.5	1.2	90.0	-	8.6	6.2	12.5	75.0	6.2	-	-	-	
% Int.	0.2	42.8	0.9	4.6	1.2	-	0.6	-	0.6	43.9	-	4.2	-	-	0.2	-	-	-	-	

Major Street Approaches:

Northbound:

CR102 (Main St.)

Data File: C:\PETRA2\DATAFILE\TMC9602.PDF
 Count Type: IMC. Channel: 0. Count Date: 6/11/96
 Number of Lanes: 1
 Approach Speed: 35
 Total Approach Traffic: 1899

Southbound:

CR102 (Main St.)

Data File: C:\PETRA2\DATAFILE\TMC9602.PDF
 Count Type: IMC. Channel: 0. Count Date: 6/11/96
 Number of Lanes: 1
 Approach Speed: 35
 Total Approach Traffic: 1878

Minor Street Approaches:

Eastbound:

(Business Driveway)

Data File: C:\PETRA2\DATAFILE\TMC9602.PDF
 Count Type: IMC. Channel: 0. Count Date: 6/11/96
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 15

Westbound:

Panorama Ave.

Data File: C:\PETRA2\DATAFILE\TMC9602.PDF
 Count Type: IMC. Channel: 0. Count Date: 6/11/96
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 84

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		150		75		120
1	0	0	W	18		150		75		120
2	0	0	W	19		150		75		120
3	0	0	W	20		150		75		120
4	0	0	W	21		150		75		120
5	0	0	W	22		150		75		120
6	228	8	W	4		150		75		120
7	264	9	W	2		150		75		120
8	129	5	W	8		150		75		120
9	138	1	W	15		150		75		120
10	206	3	W	13		150		75		120
11	257	9	W	3		150		75		120
12	336	6	W	5		150		75		120
13	274	5	W	9		150		75		120
14	274	4	W	12		150		75		120
15	407	5	W	10		150		75		120
16	371	6	E	6		150		75		120
17	316	11	W	1		150		75		120
18	183	5	W	11		150		75		120
19	183	3	W	14		150		75		120
20	114	1	W	16		150		75		120
21	97	6	W	7		150		75		120
22	0	0	W	23		150		75		120
23	0	0	W	24		150		75		120

Warrant Summary:

Urban values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 500; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 750; 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. Peak hour total entering volume 413 does not meet criteria of 1000

- 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: 600; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

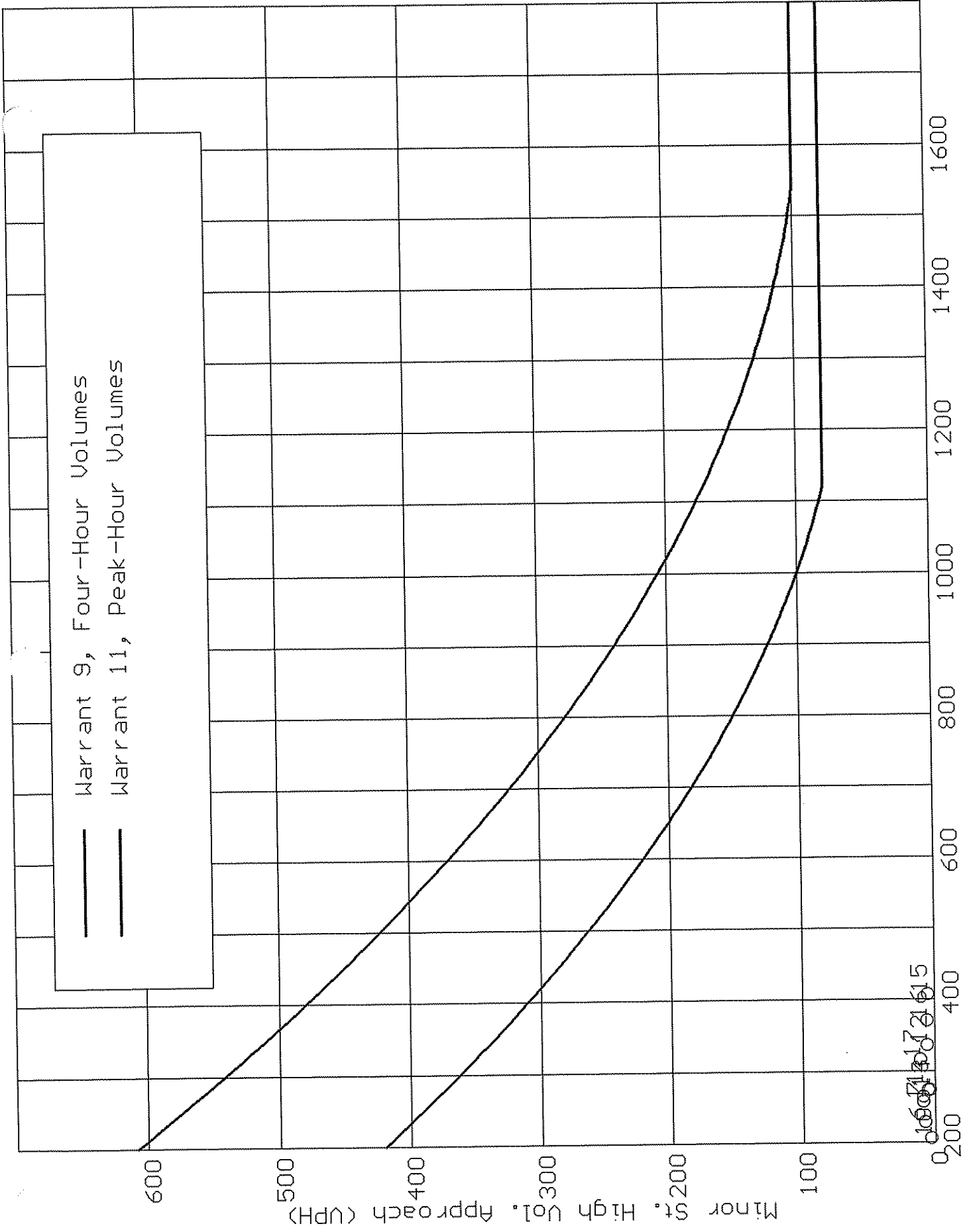
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1500 hours) volume not adequate.

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

Warrant 11 - Peak Hour Volume

NOT SATISFIED.



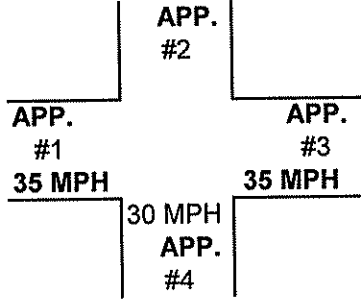
Major St. Total of Both Approaches (UPH)



COUNT LOCATION: CR 102 (MAIN ST.) @ PANORAMA AVE.

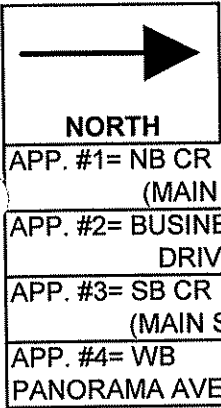
DATE: 6/21/96

- APP. #1= NB CR 102 (MAIN ST.)
- APP. #2= BUSINESS DRIVEWAY
- APP. #3= SB CR 102 (MAIN ST.)
- APP. #4= WB PANORAMA AVE.



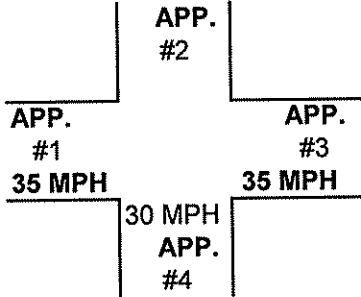
- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
 - B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR 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								
6:30-6:45		1			1	4		
6:45-7:00						1		
HOURLY TOTAL					1	HOURLY TOTAL		6
7:00-7:15						9		1
7:15-7:30	1				1	3		1
7:30-7:45	1				1	7		
7:45-8:00						3		
HOURLY TOTAL					2	HOURLY TOTAL		24
8:00-8:15						6		
8:15-8:30								
8:30-8:45						3		
8:45-9:00						9		
HOURLY TOTAL						HOURLY TOTAL		18
9:00-9:15						4		
9:15-9:30				1	1	6		
9:30-9:45						3		
9:45-10:00						7		
HOURLY TOTAL					1	HOURLY TOTAL		20
10:00-10:15						7		
10:15-10:30						8		
10:30-10:45						13		
10:45-11:00						10		
HOURLY TOTAL						HOURLY TOTAL		38
11:00-11:15						9		
11:15-11:30						11		
11:30-11:45						7		
11:45-12:00						9		
HOURLY TOTAL						HOURLY TOTAL		36
12:00-12:15						9		
12:15-12:30						6		
12:30-12:45						13		
12:45-1:00						7		
HOURLY TOTAL						HOURLY TOTAL		35
1:00-1:15	2				2	14		
1:15-1:30						9		
1:30-1:45						14		
1:45-2:00						11		
HOURLY TOTAL					2	HOURLY TOTAL		48



COUNT LOCATION: CR 102 (MAIN ST.) @ PANORAMA AVE.

DATE: 6/11/96



- 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	9		
2:15-2:30						8		
2:30-2:45	2				2	12		
2:45-3:00						5		
HOURLY TOTAL					3	HOURLY TOTAL		34
3:00-3:15		1		2	3	7		
3:15-3:30						12		
3:30-3:45						11		
3:45-4:00						7		1
HOURLY TOTAL					3	HOURLY TOTAL		38
4:00-4:15						10		
4:15-4:30						4		
4:30-4:45						8		
4:45-5:00						5		
HOURLY TOTAL						HOURLY TOTAL		27
5:00-5:15						10		
5:15-5:30				1	1	9		
5:30-5:45				2	2	7		
5:45-6:00				1	1	5		
HOURLY TOTAL					4	HOURLY TOTAL		31
6:00-6:15						7		
6:15-6:30		2		1	3	2		
6:30-6:45	1			3	4	2		
6:45-7:00		2			2	6		
HOURLY TOTAL					9	HOURLY TOTAL		17
7:00-7:15		1		1	2	4		
7:15-7:30				1	1			
7:30-7:45						4		
7:45-8:00						1		
HOURLY TOTAL					3	HOURLY TOTAL		9
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00	1	4		3	8			
HOURLY TOTAL					8	HOURLY TOTAL		
9:00-9:15				3	3			
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL					3	HOURLY TOTAL		