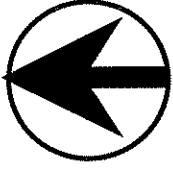


Date : 05/22/00

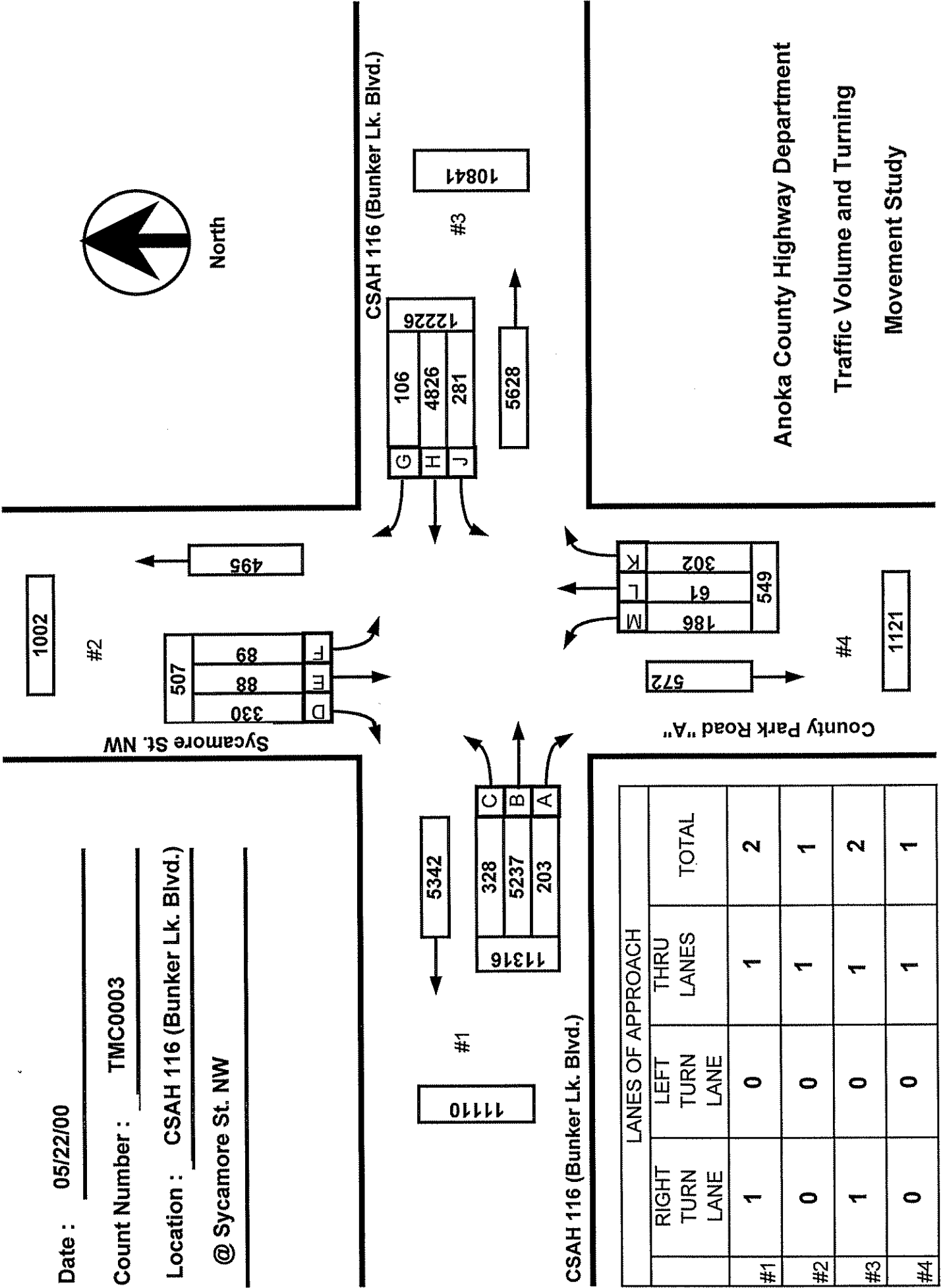
Count Number : TMC0003

Location : CSAH 116 (Bunker Lk. Blvd.)

@ Sycamore St. NW



North



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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Anoka County Highway Department Traffic Engineering

Weather: Sunny and Windy
under TDC-8
Counted by: Ryan & Justin

Traffic Volume and Turning Movement Stud

File Name : TMC0003
Site Code : 00030102
Start Date : 05/22/2000
Page No : 1

Groups Printed- 1 - 1 - Unshifted

Start Time	Sycamore St. NW Southbound					CSAH 116 (Bunker Lk. Blvd.) Westbound					County Park Road "A" Northbound					CSAH 116 (Bunker Lk. Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
06:00	2	5	6	0	13	13	52	1	0	66	0	0	0	0	0	1	34	0	3	35	3	114	117
06:15	1	2	11	0	14	12	72	1	0	85	2	0	0	0	2	1	68	2	4	71	4	172	176
06:30	3	3	5	0	11	11	94	0	0	105	2	0	0	0	2	1	75	4	6	80	6	198	204
06:45	1	5	7	0	13	19	98	0	0	117	2	0	1	0	3	3	112	2	10	117	10	250	260
Total	7	15	29	0	51	55	316	2	0	373	6	0	1	0	7	6	289	8	23	303	23	734	757
07:00	5	14	12	0	31	9	87	0	0	96	0	0	3	0	3	0	121	5	2	126	2	256	258
07:15	4	3	3	0	10	21	81	1	0	103	1	0	2	0	3	0	109	4	4	113	4	229	233
07:30	1	6	6	2	13	20	87	1	1	108	0	0	0	0	0	2	100	4	6	106	9	227	236
07:45	2	7	12	1	21	19	88	1	0	108	2	0	2	0	4	5	87	3	3	95	4	228	232
Total	12	30	33	3	75	69	343	3	1	415	3	0	7	0	10	7	417	16	15	440	19	940	959
08:00	2	2	8	0	12	9	84	0	1	93	0	1	6	0	7	0	76	6	0	82	1	194	195
08:15	2	1	7	1	10	4	68	1	0	73	2	0	1	0	3	2	74	4	3	80	4	166	170
08:30	1	2	7	0	10	5	92	0	5	97	2	0	3	0	5	3	76	3	5	82	10	194	204
08:45	2	1	7	0	10	3	74	3	4	80	3	0	2	0	5	0	74	3	3	77	7	172	179
Total	7	6	29	1	42	21	318	4	10	343	7	1	12	0	20	5	300	16	11	321	22	726	748
09:00	1	1	10	0	12	4	69	0	4	73	3	0	3	1	6	2	48	6	4	56	9	147	156
09:15	2	1	3	0	6	5	76	0	2	81	1	1	1	0	3	5	56	1	2	62	4	152	156
09:30	0	0	4	0	4	6	61	2	1	69	1	0	3	0	4	2	40	2	1	44	2	121	123
09:45	0	4	2	0	6	2	58	0	2	60	2	1	0	0	3	3	58	1	2	62	4	131	135
Total	3	6	19	0	28	17	264	2	9	283	7	2	7	1	16	12	202	10	9	224	19	551	570
10:00	2	1	4	0	7	3	66	1	3	70	2	1	3	0	6	3	52	1	2	56	5	139	144
10:15	2	0	3	0	5	3	46	1	0	50	2	0	0	0	2	3	65	4	3	72	3	129	132
10:30	0	1	3	0	4	4	49	1	5	54	1	0	2	0	3	5	74	3	2	82	7	143	150
10:45	1	0	5	0	6	2	49	2	0	53	5	0	2	0	7	0	74	1	0	75	0	141	141
Total	5	2	15	0	22	12	210	5	8	227	10	1	7	0	18	11	265	9	7	285	15	552	567
11:00	0	0	1	0	1	3	33	1	1	37	0	1	0	0	1	2	65	0	4	67	5	108	111
11:15	0	1	1	0	2	3	40	1	5	44	5	0	3	0	8	4	80	7	3	91	8	145	153
11:30	0	1	2	2	3	1	52	2	3	55	1	1	3	0	5	7	63	2	6	72	11	135	146
11:45	3	0	2	0	5	1	53	0	1	54	2	1	3	0	6	5	67	4	4	76	5	141	146
Total	3	2	6	2	11	8	178	4	10	190	8	3	9	0	20	18	275	13	17	306	29	527	556
12:00	1	0	5	0	6	2	59	1	2	62	1	1	2	0	4	4	69	5	4	78	6	150	156
12:15	0	1	4	0	5	0	52	1	0	53	1	0	4	0	5	3	69	2	0	74	0	137	137
12:30	1	0	0	0	1	1	47	1	0	49	1	0	1	0	2	2	75	7	1	84	1	136	137
12:45	0	1	4	0	5	4	68	2	3	74	6	0	2	0	8	4	70	4	3	78	6	165	171
Total	2	2	13	0	17	7	226	5	5	238	9	1	9	0	19	13	283	18	8	314	13	588	601
13:00	2	1	6	0	9	4	50	2	2	56	4	0	2	0	6	4	70	5	3	79	5	150	155
13:15	1	2	3	0	6	1	59	1	5	61	5	0	2	0	7	10	82	1	4	93	9	167	176
13:30	0	0	3	0	3	0	60	1	2	61	3	0	7	0	10	1	66	4	5	71	7	145	152
13:45	1	1	6	0	8	2	63	2	3	67	1	0	0	0	1	3	63	1	0	67	3	143	146
Total	4	4	18	0	26	7	232	6	12	245	13	0	11	0	24	18	281	11	12	310	24	605	629
14:00	1	0	0	0	1	2	59	1	1	62	3	0	4	0	7	2	65	4	7	71	8	141	149
14:15	0	1	8	0	9	2	84	2	5	88	0	2	3	0	5	3	82	4	1	89	6	191	197
14:30	3	1	1	0	5	2	100	2	7	104	4	0	4	0	8	3	88	0	2	91	9	208	217
14:45	2	0	4	0	6	6	82	3	1	91	2	3	0	0	5	7	87	5	4	99	5	201	206
Total	6	2	13	0	21	12	325	8	14	345	9	5	11	0	25	15	322	13	14	350	28	741	769
15:00	2	1	3	1	6	2	93	3	5	98	3	3	3	1	9	4	94	4	4	102	11	215	226
15:15	0	1	7	0	8	4	97	4	3	105	5	0	10	0	15	5	101	5	6	111	9	239	248
15:30	1	2	4	0	7	3	124	1	2	128	5	2	5	0	12	6	99	2	4	107	6	254	260
15:45	0	0	12	0	12	7	101	3	1	111	3	1	7	0	11	12	137	5	4	154	5	288	293
Total	3	4	26	1	33	16	415	11	11	442	16	6	25	1	47	27	431	16	18	474	31	996	1027
16:00	0	0	9	0	9	2	111	4	9	117	5	2	15	0	22	7	106	4	3	117	12	265	277
16:15	2	0	9	0	11	3	118	2	5	123	4	4	10	0	18	11	142	2	0	155	5	307	312
16:30	1	0	10	0	11	3	139	1	8	143	4	1	8	0	13	10	121	3	3	134	11	301	312
16:45	4	1	7	0	12	5	93	1	0	99	4	3	16	0	23	13	127	3	0	143	0	277	277
Total	7	1	35	0	43	13	461	8	22	482	17	10	49	0	76	41	496	12	6	549	28	1150	1178

Anoka County Highway Department
Traffic Engineering

Weather: Sunny and Windy
under TDC-8
Counted by: Ryan & Justin

Traffic Volume and Turning Movement Stud

File Name : TMC0003
Site Code : 00030102
Start Date : 05/22/2000
Page No : 2

Groups Printed- 1 - 1 - Unshifted

Start Time	Sycamore St. NW Southbound					CSAH 116 (Bunker Lk. Blvd.) Westbound					County Park Road "A" Northbound					CSAH 116 (Bunker Lk. Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
17:00	2	0	8	0	10	1	139	5	0	145	10	5	10	0	25	11	118	7	1	136	1	316	317
17:15	1	0	4	0	5	4	138	7	1	149	9	4	14	0	27	11	133	4	2	148	3	329	332
17:30	1	0	9	0	10	6	131	3	0	140	5	4	12	0	21	8	101	2	2	111	2	282	284
17:45	3	1	5	0	9	6	95	2	3	103	10	3	20	0	33	12	107	4	0	123	3	268	271
Total	7	1	26	0	34	17	503	17	4	537	34	16	56	0	105	42	459	17	5	518	9	1195	1204
18:00	3	0	8	0	11	1	103	4	1	108	7	2	12	0	21	9	112	6	1	127	2	267	269
18:15	3	5	6	0	14	2	77	2	0	81	4	1	15	0	20	12	98	6	0	116	0	231	231
18:30	1	0	10	0	11	6	93	4	0	103	2	2	13	0	17	12	88	10	1	110	1	241	242
18:45	2	2	6	0	10	2	89	1	0	92	3	2	11	0	16	6	81	6	1	93	1	211	212
Total	9	7	30	0	46	11	362	11	1	384	16	7	51	0	74	39	379	28	3	446	4	950	954
19:00	4	0	10	0	14	1	77	0	1	78	2	0	3	0	5	4	92	0	0	96	1	193	194
19:15	4	0	5	0	9	2	73	2	0	77	4	1	5	0	10	7	80	0	0	87	0	183	183
19:30	0	0	3	0	3	0	60	0	0	60	5	2	6	0	13	8	69	0	0	77	0	153	153
19:45	0	1	3	0	4	0	77	2	0	79	4	1	5	0	10	5	76	2	0	83	0	176	176
Total	8	1	21	0	30	3	287	4	1	294	15	4	19	0	38	24	317	2	0	343	1	705	706
20:00	2	0	3	0	5	3	51	2	0	56	4	0	6	0	10	11	49	5	0	65	0	136	136
20:15	3	2	4	0	9	0	29	3	0	32	1	0	2	0	3	7	83	2	0	92	0	136	136
20:30	0	1	1	0	2	1	66	1	0	68	2	2	5	0	9	7	62	0	0	69	0	148	148
20:45	0	1	2	0	3	3	63	2	0	68	0	0	7	0	7	10	76	2	1	88	1	166	167
Total	5	4	10	0	19	7	209	8	0	224	7	2	20	0	29	35	270	9	1	314	1	586	587
21:00	0	0	2	0	2	2	68	3	0	73	1	0	4	0	5	6	74	3	0	83	0	163	163
21:15	0	0	1	0	1	1	42	3	0	46	4	1	2	0	7	3	68	2	0	73	0	127	127
21:30	1	0	3	0	4	2	39	1	0	42	2	1	2	0	5	4	51	0	0	55	0	106	106
21:45	0	1	1	0	2	1	28	1	0	30	2	1	0	0	3	2	58	0	0	60	0	95	95
Total	1	1	7	0	9	6	177	8	0	191	9	3	8	0	20	15	251	5	0	271	0	491	491
Grand Total	89	88	330	7	507	281	4826	106	108	5213	186	61	302	2	549	328	5237	203	149	5768	266	12037	12303
Apprch %	17.6	17.4	65.1			5.4	92.6	2.0			33.9	11.1	55.0			5.7	90.8	3.5					
Total %	0.7	0.7	2.7		4.2	2.3	40.1	0.9		43.3	1.5	0.5	2.5		4.6	2.7	43.5	1.7		47.9	2.2	97.8	

Major Street Approaches:

Eastbound:

CSAH 116 (Bunker Lk. Blvd.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0003.war
 Count Type: IMC. Channel: 0. Count Date: 5/22/ 0
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 5768

Westbound:

CSAH 116 (Bunker Lk. Blvd.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0003.war
 Count Type: IMC. Channel: 0. Count Date: 5/22/ 0
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 5213

Minor Street Approaches:

Northbound:

County Park Road "A"
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0003.war
 Count Type: IMC. Channel: 0. Count Date: 5/22/ 0
 Number of Lanes: 1
 Approach Speed: 35
 Total Approach Traffic: 549

Southbound:

Wyncamore St. NW
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0003.war
 Count Type: IMC. Channel: 0. Count Date: 5/22/ 0
 Number of Lanes: 1
 Approach Speed: 35
 Total Approach Traffic: 507

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	676	51 S 5	MAIN 105	MAIN 52	MAIN 84
7	855	75 S 3	MAIN 105	--BOTH-- 52	MAIN 84
8	664	42 S 7	MAIN 105	MAIN 52	MAIN 84
9	507	28 S 10	MAIN 105	52	MAIN 84
10	512	22 S 13	MAIN 105	52	MAIN 84
11	496	20 N 14	MAIN 105	52	MAIN 84
12	552	19 N 16	MAIN 105	MAIN 52	MAIN 84
13	555	26 S 11	MAIN 105	MAIN 52	MAIN 84
14	695	25 N 12	MAIN 105	MAIN 52	MAIN 84
15	916	47 N 6	MAIN 105	MAIN 52	MAIN 84
16	1031	76 N 2	MAIN 105	--BOTH-- 52	MAIN 84
17	1055	106 N 1	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
18	830	74 N 4	MAIN 105	--BOTH-- 52	MAIN 84
19	637	38 N 8	MAIN 105	MAIN 52	MAIN 84
20	538	29 N 9	MAIN 105	MAIN 52	MAIN 84
21	462	20 N 15	MAIN 105	52	MAIN 84
22	0	0 S 23	105	52	84
23	0	0 S 24	105	52	84

Warrant Study Data File: E:\2000CO~1\TMC0003.WAR; Time of Report: 11/20/2000; 15:12:35

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 525; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 0. Criteria--Pedestrians: 105; Vehicles: 420.

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: 1195.

- Approaches which are part of the principal through traffic roadway network.
- Approaches which connect areas of principal traffic generation.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which have surface street freeway or expressway ramp terminals.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 4 hours.

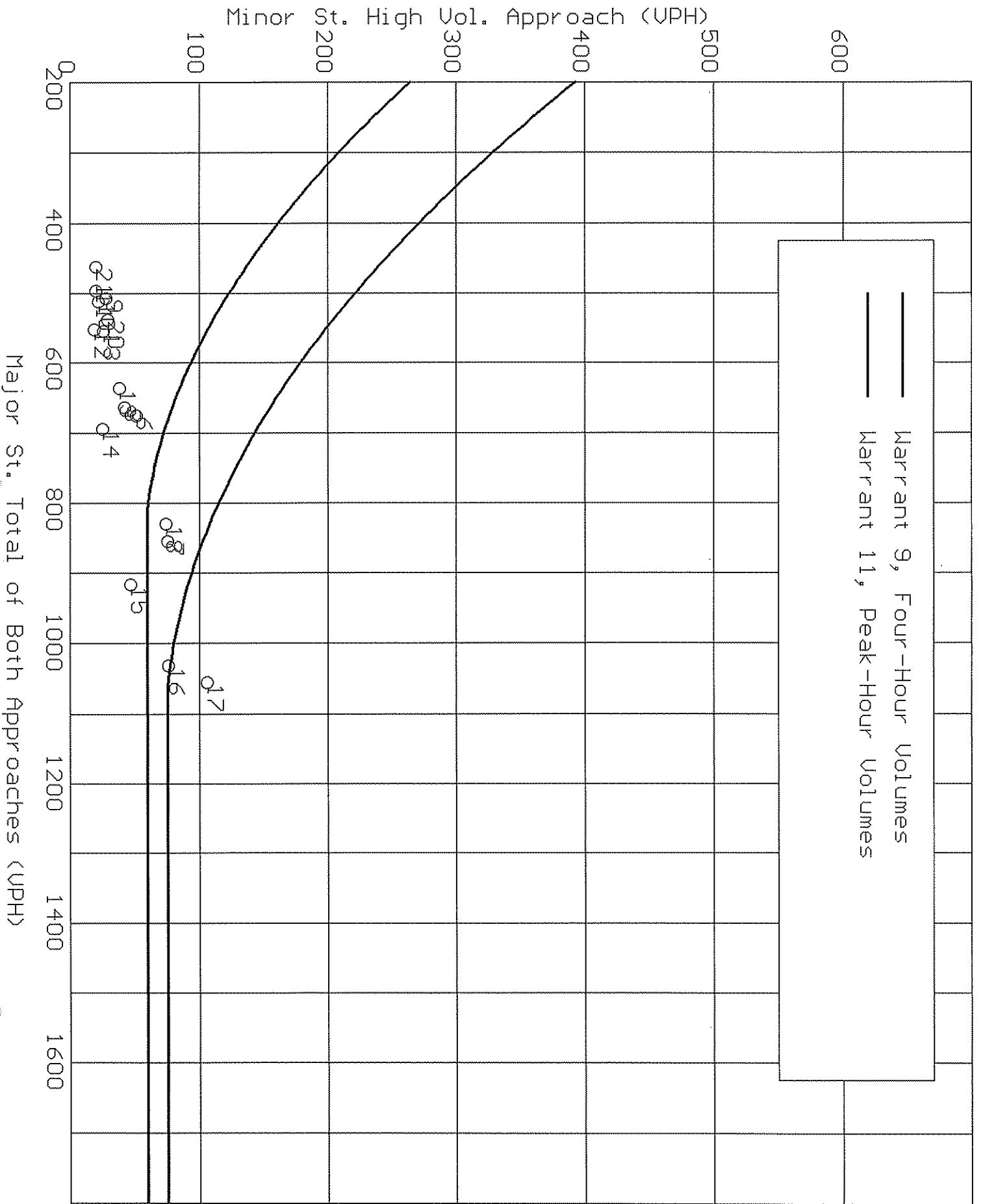
Warrant 10 - Peak Hour Delay

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 2 hours.





NORTH

COUNT LOCATION:

CSAH 116 (Bunker Lk. Blvd.) @
Sycamore St. NW

DATE:

5/24/00

APP. #1=WB CSAH 116
(Bunker Lk. Blvd.)

APP. #2 =NB
County Park Rd. "A"

APP. #3=EB CSAH 116
(Bunker Lk. Blvd.)

APP. #4=SB
Sycamore St. NW

APP.
#1

APP.
#2

APP.
#3

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								3
6:15-6:30						1		3
6:30-6:45						1		5
6:45-7:00						1		9
HOURLY TOTAL						HOURLY TOTAL		23
7:00-7:15						2		
7:15-7:30						4		
7:30-7:45						6		3
7:45-8:00						2		2
HOURLY TOTAL						HOURLY TOTAL		19
8:00-8:15						1		1
8:15-8:30						2		1
8:30-8:45						4		6
8:45-9:00						4	1	2
HOURLY TOTAL						HOURLY TOTAL		22
9:00-9:15						5		4
9:15-9:30						4		
9:30-9:45						2		
9:45-10:00						4		
HOURLY TOTAL						HOURLY TOTAL		19
10:00-10:15						4		1
10:15-10:30						3		
10:30-10:45						6		1
10:45-11:00								
HOURLY TOTAL						HOURLY TOTAL		15
11:00-11:15						5		
11:15-11:30						7		1
11:30-11:45						8		1
11:45-12:00						3	1	2
HOURLY TOTAL						HOURLY TOTAL		28
12:00-12:15						5		1
12:15-12:30								
12:30-12:45						1		1
12:45-1:00						4		1
HOURLY TOTAL						HOURLY TOTAL		13
1:00-1:15						5		
1:15-1:30						6		3
1:30-1:45						7		
1:45-2:00						2		
HOURLY TOTAL						HOURLY TOTAL		23



NORTH

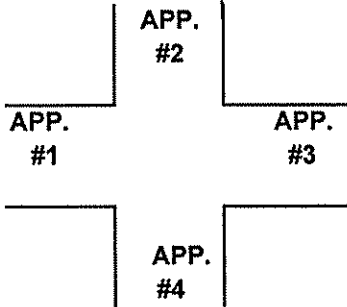
COUNT LOCATION:

CSAH 116 (Bunker Lk. Blvd.) @
Sycamore St. NW

DATE:

5/24/00

APP. #1=WB CSAH 116
(Bunker Lk. Blvd.)
APP. #2 =NB
County Park Rd. "A"
APP. #3=EB CSAH 116
(Bunker Lk. Blvd.)
APP. #4=SB
Sycamore St. NW



- 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						7		1
2:15-2:30						4		1
2:30-2:45						9		
2:45-3:00						5		1
HOURLY TOTAL						HOURLY TOTAL		28
3:00-3:15						7		4
3:15-3:30						6		3
3:30-3:45						4		3
3:45-4:00						4		1
HOURLY TOTAL						HOURLY TOTAL		32
4:00-4:15						3		8
4:15-4:30						1		4
4:30-4:45						5		6
4:45-5:00								
HOURLY TOTAL						HOURLY TOTAL		27
5:00-5:15								1
5:15-5:30						3		
5:30-5:45						2		1
5:45-6:00						1		1
HOURLY TOTAL						HOURLY TOTAL		9
6:00-6:15						2		
6:15-6:30								
6:30-6:45						1		
6:45-7:00						1		
HOURLY TOTAL						HOURLY TOTAL		4
7:00-7:15						1		
7:15-7:30								
7:30-7:45								
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		1
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00						1		
HOURLY TOTAL						HOURLY TOTAL		1
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		