TRIP GENERATION WORKSHEET

x= 18 Holes LUC: Golf Course (430)

WEEKDAY

Average Rate = 35.74
Total Trips = 643.32

Fitted Curve Equation = Not Given

AM PEAK HOUR of ADJACENT STREET

Average Rate = 2.22
Total Trips = 39.96
79% of Trips In = 32
21% of Trips Out = 8

Fitted Curve Equation = Not Given

PM PEAK HOUR of ADJACENT STREET

Average Rate = 2.74
Total Trips = 49.32
44% of Trips In = 22
56% of Trips Out = 28

Fitted Curve Equation = Not Given

AM PEAK HOUR of GENERATOR

Average Rate = 3.01
Total Trips = 54.18
47% of Trips In = 25
53% of Trips Out = 29

Fitted Curve Equation = Not Given

PM PEAK HOUR of GENERATOR

Average Rate = 3.56
Total Trips = 64.08
43% of Trips In = 28
57% of Trips Out = 37

Fitted Curve Equation = Not Given

SATURDAY

Average Rate = 40.63
Total Trips = 731.34

Fitted Curve Equation = Not Given

PEAK HOUR of GENERATOR

Average Rate = 4.59
Total Trips = 82.62
49% of Trips In = 40
51% of Trips Out = 42

Fitted Curve Equation = Not Given

SUNDAY

Average Rate = 39.53
Total Trips = 711.54

Fitted Curve Equation = Not Given

PEAK HOUR of GENERATOR

Average Rate = 4.43
Total Trips = 79.74
Distribution: Not Available

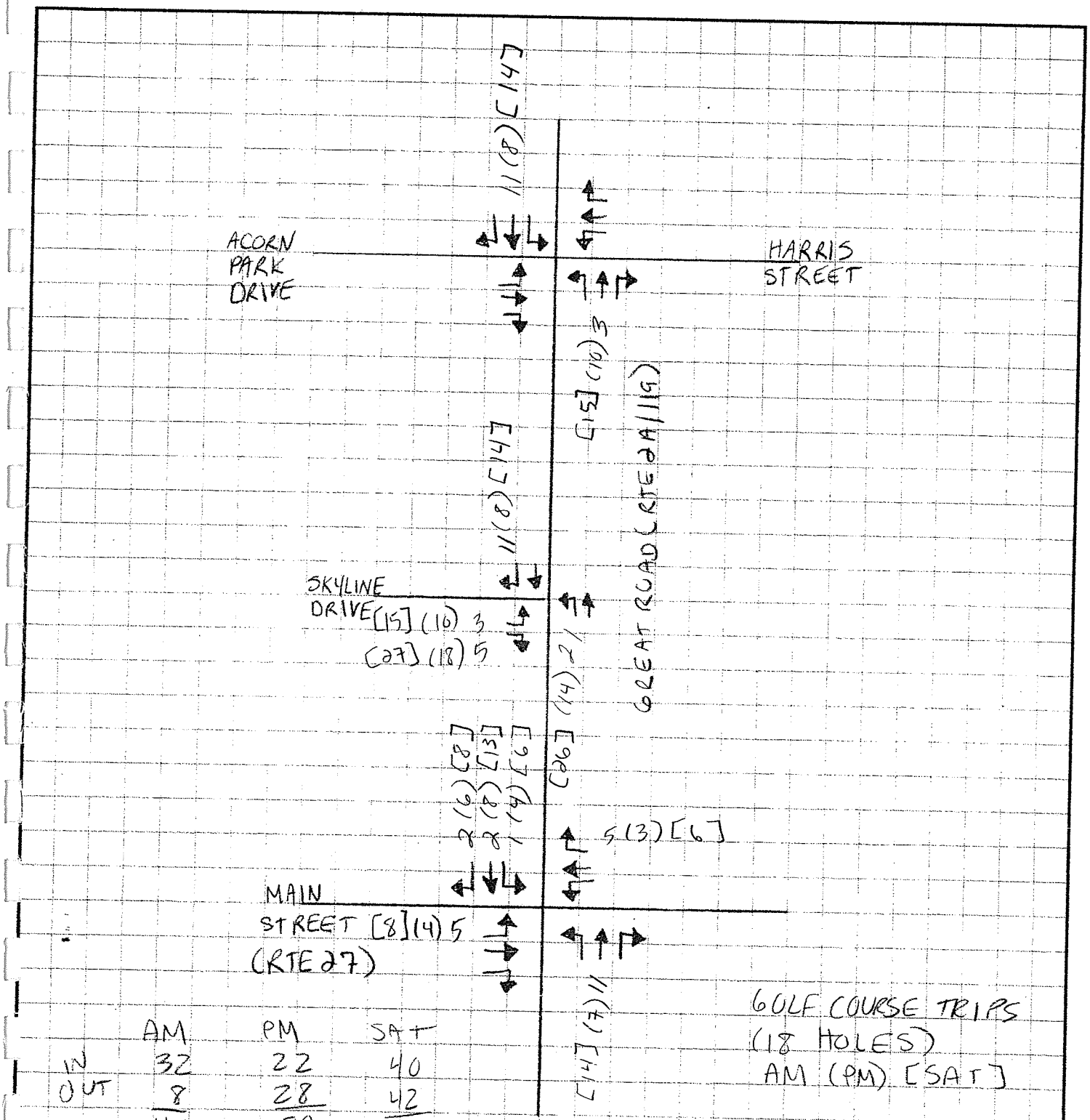
Fitted Curve Equation = Not Given

ITE TRIP GENERATION
7TH EDITION

CONLEY
ASSOCIATES

CONLEY ASSOCIATES
Phone: 617.542.5111 Fax: 617.542.5333
www.conleyassociates.com

JOB 1318 QUAIL RIDGE
SHEET NO. _____ OF _____
CALCULATED BY _____ DATE _____
CHECKED BY _____ DATE _____



	AM	PM	SAT
IN	32	22	40
OUT	8	28	42
	40	50	82

GOLF COURSE TRIPS
(18 HOLES)
AM (PM) [SAT]

MassHighway Seasonal Traffic Volume Data

STATION 403 - CONCORD - RTE.2 - 0.2 km EAST OF CONCORD ROTARY

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
01	*44,791*	44,928	44,228	*47,605*	48,756	*50,000*	50,710	48,651	47,013	49,474	47,683	43,363	47,267
	0%	2%	6%	1%	1%	3%	-6%	-1%	3%	1%	-4%	4%	1%
02	*44,954*	45,810	46,721	48,169	49,311	51,680	47,639	48,050	48,219	49,947	45,640	45,000	47,595
	0%	-5%	-1%	-2%	-2%	0%	-7%	-3%	-2%	-2%	7%	7%	-1%
03	44,737	43,740	46,023	47,402	48,225	51,537	44,070	46,781	47,154	49,000	48,980	*48,000*	47,137
	1%	5%	2%	2%	0%	4%	5%	0%	1%	0%	-6%	-4%	1%
04	45,000	46,000	46,867	48,260	48,136	53,710	46,206	46,905	47,793	49,000	46,023	*45,983*	47,490
	-9%	-5%	-3%	-4%	-2%	-5%	-3%	-1%	-4%	0%	-2%	-6%	-4%
05	41,051	43,677	45,426	46,370	46,939	51,129	44,632	46,318	46,004	49,000	45,178	*43,329*	45,754
Average:		44,831											47,049

STATION 4172 - ACTON - RTE.2 - 1.6 km WEST OF RTE.27

YR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
01	35,825	35,879	36,778	39,307	40,075	40,155	37,289	39,122	38,321	40,775	38,257	34,936	38,060
	1%	3%	4%	0%	1%	-1%	-1%	2%	-3%	0%	-3%	6%	1%
02	36,353	37,058	38,281	39,159	40,388	39,770	36,773	39,939	37,226	40,848	37,179	37,000	38,331
	-6%	-4%	-5%	-1%	-2%	1%	5%	-4%	7%	2%	2%	-3%	-1%
03	34,042	35,512	36,375	38,809	39,678	40,000	38,757	38,417	39,804	41,741	38,098	35,900	38,094
	5%	5%	7%	3%	1%	5%	0%	3%	9%	4%	3%	4%	4%
04	35,765	37,276	38,911	40,010	40,194	42,010	38,646	39,710	43,483	43,584	39,252	37,476	39,693
Average:		36,431											38,545

Seasonal Adjustment Calculation

	Station 403	Station 4172	Average
Month of count	FEB	FEB	
Volume	44,831	36,431	
Yearly Average Volume	47,049	38,545	
Seasonality Rate =	4.95%	5.80%	5.37%

CONLEY ASSOCIATES

MassHighway Annual Traffic Volume Data

STA.	TOWN	ROUTE/STREET	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
4172 L	ACTON	RTE. 2	1.6 km WEST OF RTE.27	32,643	32,950	36,145	36,544	37,736	38,060	38,331	38,094	39,693	
4001	ACTON	RTE. 27	NORTH OF RTE.2A			11,300			10,200			10,400	
4002	ACTON	RTE.119 & 2A	AT LITTLETON T.L.			18,100			17,500			15,500	
4167	ACTON	SCHOOL ST.	WEST OF PARKER ST.	3,100			3,300			3,000			4,000
4166	CONCORD	CAMBRIDGE TNPK	EAST OF RTE.24			6,300			7,200			6,200	
0403 L	CONCORD	RTE. 2	0.2 km EAST OF CONC ROT		46,879	47,407	47,161	47,011	46,354	47,595	47,137		45,754
4003	CONCORD	RTE. 62	AT ACTON T.L.		12,000			13,900			11,100		

Annual Growth Rate Calculation

Station #:	4172 L	4001	4002	4167	4166	0403 L	4003	AVE
First Date (year)	1996	1998	1998	1996	1998	1997	1997	
Volume	32,643	11,300	18,100	3,100	6,300	46,879	12,000	
Last Date (year)	2004	2004	2004	2005	2,004	2005	2003	
Volume	39,693	10,400	15,500	4,000	6,200	45,754	11,100	
Annual Growth Rate =	2.47%	-1.37%	-2.55%	2.87%	-0.27%	-0.30%	-1.29%	**-0.06%**

CONLEY
ASSOCIATES

TRAFFIC GROWTH SUMMARY

DISTRICT 1

STATION	URBAN/RURAL	2004	2005	% CHANGE
125	R5	1,202	1,190	-1.0
140	R5	2,928	2,901	-0.9
189	R5	3,168	3,103	-2.1
203	R5	2,388	2,324	-2.7
1178	R3	6,465	5,838	-9.7
1179	R2	17,974	17,650	-1.8
1180	R3	5,467	5,286	-3.3
	TOTAL URBAN	N/A	N/A	
	TOTAL RURAL	39,592	38,292	-3.3
TOTAL URBAN AND RURAL		39,592	38,292	-3.3

DISTRICT 2

STATION	URBAN/RURAL	2004	2005	% CHANGE
11	U5	11,255	11,304	0.4
44	U2	11,127	10,676	-4.1
211	R5	8,424	8,785	4.3
280	U5	12,943	12,602	-2.6
2264	R3	9,037	9,072	0.4
	TOTAL URBAN	35,325	34,582	-2.1
	TOTAL RURAL	17,461	17,857	2.3
TOTAL URBAN AND RURAL		52,786	52,439	-0.7

DISTRICT 3 (ACTON)

STATION	URBAN/RURAL	2004	2005	% CHANGE
307	U2	51,457	50,569	-1.7
3008	R2	43,257	42,991	-0.6
3291	U1	73,870	70,549	-4.5
3326	U1	96,208	92,189	-4.2
4164	U1	88,129	91,629	4.0
	TOTAL URBAN	309,664	304,936	-1.5
	TOTAL RURAL	43,257	42,991	-0.6
TOTAL URBAN AND RURAL		352,921	347,927	-1.4

DISTRICT 4

STATION	URBAN/RURAL	2004	2005	% CHANGE
12	U5	8,659	8,570	-1.0
35	U2	49,159	47,786	-2.8
82	U1	177,852	181,066	1.8
403	U2	47,490	45,754	-3.7
614	U1	135,450	127,086	-6.2
4097	U1	165,085	159,914	-3.1
4137	U1	139,600	134,845	-3.4
4803	U1	163,231	157,440	-3.5
5022	U1	140,397	134,462	-4.2
5048	U1	83,771	80,096	-4.4
5073	U1	137,402	129,310	-5.9
5128	R3	9,496	9,541	0.5
5234	U1	63,392	62,130	-2.0
6189	U1	143,381	139,852	-2.5
8011	U1	166,090	168,909	1.7
8087	U2	57,076	56,251	-1.4
8099	U1	170,445	169,479	-0.6
	TOTAL URBAN	1,848,480	1,802,950	-2.5
	TOTAL RURAL	9,496	9,541	0.5
TOTAL URBAN AND RURAL		1,857,976	1,812,491	-2.4

TDC
TRANSPORTATION DATA CORPORATION
23 Walnut Street
Natick, MA 01760
Telephone: (508) 651-1610
Fax: (508) 651-1229
Pager: (800) 898-0763

ATR: : Route 2A west of Rte 27
ation: : Acton, MA
nt: : CAI/C. Crane

Site:
Date: 10/09/01

Day: Tuesday

Interval	EB				WB				Combined			
Begin	AM		PM		AM		PM		AM		PM	
12:00	6	19	163	644	9	26	172	720	15	45	335	1,364
12:15	5		166		7		164		12		330	
12:30	3		144		7		202		10		346	
12:45	5		171		3		182		8		353	
01:00	2	4	149	602	2	12	156	668	4	16	305	1,270
01:15	0		161		6		174		6		335	
01:30	2		134		2		164		4		298	
01:45	0		158		2		174		2		332	
02:00	0	7	162	629	4	13	154	602	4	20	316	1,231
02:15	4		156		3		147		7		303	
02:30	2		179		3		131		5		310	
02:45	1		132		3		170		4		302	
03:00	1	11	144	612	2	8	190	790	3	19	334	1,402
03:15	3		142		2		188		5		330	
03:30	4		152		2		204		6		356	
03:45	3		174		2		208		5		382	
04:00	1	33	153	576	0	15	182	823	1	48	335	1,399
04:15	8		132		6		193		14		325	
04:30	12		140		2		242		14		382	
04:45	12		151		7		206		19		357	
05:00	23	187	150	624	1	33	236	955	24	220	386	1,579
05:15	28		169		4		246		32		415	
05:30	56		139		6		237		62		376	
05:45	80		166		22		236		102		402	
06:00	100	788	180	620	15	101	226	859	115	889	406	1,479
06:15	150		161		16		220		166		381	
06:30	260		141		42		232		302		373	
06:45	278		138		28		181		306		319	
07:00	222	848	130	431	60	305	216	610	282	1,153	346	1,041
07:15	200		116		59		144		259		260	
07:30	208		95		90		136		298		231	
07:45	218		90		96		114		314		204	
08:00	212	750	76	281	98	466	82	332	310	1,216	158	613
08:15	180		71		94		98		274		169	
08:30	171		72		130		88		301		160	
08:45	187		62		144		64		331		126	
09:00	175	618	52	172	124	491	70	281	299	1,109	122	453
09:15	154		45		140		77		294		122	
09:30	150		36		110		76		260		112	
09:45	139		39		117		58		256		97	
10:00	134	504	24	91	118	442	45	154	252	946	69	245
10:15	126		24		106		38		232		62	
10:30	125		24		110		38		235		62	
10:45	119		19		108		33		227		52	
11:00	141	608	18	45	148	600	24	69	289	1,208	42	114
11:15	142		13		142		15		284		28	
11:30	156		9		150		17		306		26	
11:45	169		5		160		13		329		18	
Totals	4,377		5,327		2,512		6,863		6,889		12,190	
Split%	63.5		43.7		36.5		56.3					
Day Totals		9,704				9,375				19,079		
Day Splits		50.9				49.1						
Peak Hour	06:30		01:45		11:00		05:00		08:30		05:15	
Volume	960		655		600		955		1,225		1,599	
Factor	0.86		0.91		0.94		0.97		0.93		0.96	

Data File : 01730A

TDC
TRANSPORTATION DATA CORPORATION
23 Walnut Street
Natick, MA 01760
Telephone: (508) 651-1610
Fax: (508) 651-1229
Pager: (800) 898-0763

ATR: : Route 2A west of Rte 27
ation: : Acton, MA
nt: : CAI/C. Crane

Site:
Date: 10/10/01

Interval Begin	EB AM		EB PM		WB AM		WB PM		Combined AM		Combined PM	
12:00	11	23	165	631	21	49	195	692	32	72	360	1,323
12:15	6		145		13		140		19		285	
12:30	3		167		7		176		10		343	
12:45	3		154		8		181		11		335	
01:00	5	13	152	632	4	16	158	634	9	29	310	1,266
01:15	2		168		4		156		6		324	
01:30	3		144		6		154		9		298	
01:45	3		168		2		166		5		334	
02:00	3	10	157	622	4	10	180	707	7	20	337	1,329
02:15	2		158		1		165		3		323	
02:30	1		156		3		176		4		332	
02:45	4		151		2		186		6		337	
03:00	4	10	158	599	1	12	200	811	5	22	358	1,410
03:15	3		134		4		179		7		313	
03:30	2		161		4		220		6		381	
03:45	1		146		3		212		4		358	
04:00	6	43	160	607	5	26	202	862	11	69	362	1,469
04:15	13		149		8		213		21		362	
04:30	12		152		2		213		14		365	
04:45	12		146		11		234		23		380	
05:00	22	183	175	636	0	30	250	968	22	213	425	1,604
05:15	20		159		1		234		21		393	
05:30	59		158		13		252		72		410	
05:45	82		144		16		232		98		376	
06:00	110	847	158	599	13	99	238	862	123	946	396	1,461
06:15	192		168		18		206		210		374	
06:30	276		141		33		196		309		337	
06:45	269		132		35		222		304		354	
07:00	224	902	137	423	70	364	194	609	294	1,266	331	1,032
07:15	256		99		72		164		328		263	
07:30	213		93		112		134		325		227	
07:45	209		94		110		117		319		211	
08:00	276	914	76	270	100	520	98	366	376	1,434	174	636
08:15	222		68		141		102		363		170	
08:30	200		71		142		82		342		153	
08:45	216		55		137		84		353		139	
09:00	164	651	57	204	115	511	78	265	279	1,162	135	469
09:15	166		70		126		78		292		148	
09:30	146		41		131		56		277		97	
09:45	175		36		139		53		314		89	
10:00	144	541	42	123	124	498	48	155	268	1,039	90	278
10:15	136		24		131		44		267		68	
10:30	141		38		125		27		266		65	
10:45	120		19		118		36		238		55	
11:00	136	588	24	53	118	587	36	94	254	1,175	60	147
11:15	141		12		138		26		279		38	
11:30	137		8		158		15		295		23	
11:45	174		9		173		17		347		26	
Totals	4,725		5,399		2,722		7,025		7,447		12,424	
Split%	63.4		43.5		36.6		56.5					
Day Totals		10,124				9,747				19,871		
Day Splits		50.9				49.1						
Peak Hour	06:30		12:30		11:00		04:45		08:00		04:45	
Volume	1,025		641		587		970		1,434		1,608	
Factor	0.93		0.95		0.85		0.96		0.95		0.95	

Day: Wednesday

Data File : 01730A

TDC
TRANSPORTATION DATA CORPORATION
23 Walnut Street
Natick, MA 01760
Telephone: (508) 651-1610
Fax: (508) 651-1229
Pager: (800) 898-0763

ATR: : Route 2A west of Rte 27
Location: : Acton, MA
Count: : CAI/C. Crane

Site:
Date: 10/11/01

Interval	EB				WB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	6	20	190	704	15	47	170	723	21	67	360	1,427	
12:15	4		166		18		185		22		351		
12:30	5		186		11		182		16		368		
12:45	5		162		3		186		8		348		
01:00	2	9	147	624	4	15	193	638	6	24	340	1,262	
01:15	5		175		3		154		8		329		
01:30	1		162		2		158		3		320		
01:45	1		140		6		133		7		273		
02:00	3	10	134	557	4	15	176	676	7	25	310	1,233	
02:15	4		142		4		154		8		296		
02:30	1		149		3		171		4		320		
02:45	2		132		4		175		6		307		
03:00	2	10	147	609	3	12	170	827	5	22	317	1,436	
03:15	3		146		2		209		5		355		
03:30	4		159		3		228		7		387		
03:45	1		157		4		220		5		377		
04:00	3	34	168	596	2	17	188	867	5	51	356	1,463	
04:15	12		156		4		218		16		374		
04:30	6		124		3		239		9		363		
04:45	13		148		8		222		21		370		
05:00	28	186	173	653	4	38	251	1,031	32	224	424	1,684	
05:15	29		170		4		272		33		442		
05:30	48		148		6		238		54		386		
05:45	81		162		24		270		105		432		
06:00	107	819	171	612	12	113	238	894	119	932	409	1,506	
06:15	188		148		29		216		217		364		
06:30	268		152		30		210		298		362		
06:45	256		141		42		230		298		371		
07:00	236	883	138	511	70	362	211	635	306	1,245	349	1,146	
07:15	228		121		84		162		312		283		
07:30	195		128		108		139		303		267		
07:45	224		124		100		123		324		247		
08:00	234	876	96	326	106	477	96	386	340	1,353	192	712	
08:15	204		80		138		108		342		188		
08:30	205		88		115		94		320		182		
08:45	233		62		118		88		351		150		
09:00	170	642	72	220	148	576	94	289	318	1,218	166	509	
09:15	162		50		145		80		307		130		
09:30	166		47		132		61		298		108		
09:45	144		51		151		54		295		105		
10:00	138	561	43	144	142	541	54	177	280	1,102	97	321	
10:15	142		34		131		46		273		80		
10:30	141		39		132		46		273		85		
10:45	140		28		136		31		276		59		
11:00	144	572	21	64	122	576	48	119	266	1,148	69	183	
11:15	116		13		136		23		252		36		
11:30	144		17		164		33		308		50		
11:45	168		13		154		15		322		28		
Totals	4,622		5,620		2,789		7,262		7,411		12,882		
Split%	62.4		43.6		37.6		56.4						

Day Totals	10,242	10,051	20,293
Day Splits	50.5	49.5	

Peak Hour	06:30	12:00	09:00	05:00	08:00	05:00
Volume	988	704	576	1,031	1,353	1,684
Factor	0.92	0.93	0.95	0.95	0.96	0.95

Data File : 01730A

TRIP GENERATION WORKSHEET

x= 380 Dwelling Units LUC: Apartment (220)

WEEKDAY

Average Rate =	6.72	Fitted Curve Equation =	T = 6.01(X)+150.35
Total Trips =	2553.6	Total Trips =	2434.15

AM PEAK HOUR of ADJACENT STREET

Average Rate =	0.51	Fitted Curve Equation =	T = 0.49(X) +3.73
Total Trips =	193.8	Total Trips =	189.93
20% of Trips In =	39	20% of Trips In =	38
80% of Trips Out =	155	80% of Trips Out =	152

PM PEAK HOUR of ADJACENT STREET

Average Rate =	0.62	Fitted Curve Equation =	T = 0.55(X) +17.65
Total Trips =	235.6	Total Trips =	226.65
65% of Trips In =	153	65% of Trips In =	147
35% of Trips Out =	82	35% of Trips Out =	79

AM PEAK HOUR of GENERATOR

Average Rate =	0.55	Fitted Curve Equation =	T = 0.53(X) +4.21
Total Trips =	209	Total Trips =	205.61
29% of Trips In =	61	29% of Trips In =	60
71% of Trips Out =	148	71% of Trips Out =	146

PM PEAK HOUR of GENERATOR

Average Rate =	0.67	Fitted Curve Equation =	T = 0.60(X) +17.52
Total Trips =	254.6	Total Trips =	245.52
61% of Trips In =	155	61% of Trips In =	150
39% of Trips Out =	99	39% of Trips Out =	96

SATURDAY

Average Rate =	6.39	Fitted Curve Equation =	T = 7.85(X) -256.19
Total Trips =	2428.2	Total Trips =	2726.81

PEAK HOUR of GENERATOR

Average Rate =	0.52	Fitted Curve Equation =	T = 0.41(X) +19.23
Total Trips =	197.6	Total Trips =	175.03
NA of Trips In =	NA	NA of Trips In =	NA
NA of Trips Out =	NA	NA of Trips Out =	NA

SUNDAY

Average Rate =	5.86	Fitted Curve Equation =	T = 6.42(X) -101.12
Total Trips =	2226.8	Total Trips =	2338.48

PEAK HOUR of GENERATOR

Average Rate =	0.51	Fitted Curve Equation =	NA
Total Trips =	193.8		
NA of Trips In =	NA		
NA of Trips Out =	NA		

ITE TRIP GENERATION
7TH EDITION

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TRIP GENERATION WORKSHEET

x= 64 Dwelling Units LUC: Senior Adult Housing - Detached (251)

WEEKDAY

Average Rate = 3.71
Total Trips = 237.44

Fitted Curve Equation = Ln (T) = 0.850* Ln(X) +2.38
Total Trips = 370.57

AM PEAK HOUR of ADJACENT STREET

Average Rate = 0.20
Total Trips = 12.8
38% of Trips In = 5
62% of Trips Out = 8

Fitted Curve Equation = Ln (T) = 0.860* Ln(X) - 0.63
Total Trips = 19.04
38% of Trips In = 7
62% of Trips Out = 12

PM PEAK HOUR of ADJACENT STREET

Average Rate = 0.26
Total Trips = 16.64
61% of Trips In = 10
39% of Trips Out = 6

Fitted Curve Equation = Ln (T) = 0.720* Ln(X) + 0.58
Total Trips = 35.67
61% of Trips In = 22
39% of Trips Out = 14

AM PEAK HOUR of GENERATOR

Average Rate = 0.31
Total Trips = 19.84
51% of Trips In = 10
49% of Trips Out = 10

Fitted Curve Equation = Not Given

PM PEAK HOUR of GENERATOR

Average Rate = 0.35
Total Trips = 22.4
59% of Trips In = 13
41% of Trips Out = 9

Fitted Curve Equation = Not Given

SATURDAY

Average Rate = 2.77
Total Trips = 177.28

Fitted Curve Equation = Not Given

SUNDAY

Average Rate = 2.33
Total Trips = 149.12

Fitted Curve Equation = Not Given

Weekday Daily / Sat Daily = Weekday PM Peak / Sat Midd Peak

$\frac{3.71}{2.77} = \frac{0.26}{x}$ x= 0.19

(0.19)(64) = 12
61% IN 7
39% OUT 5
TOTAL 12

ITE TRIP GENERATION
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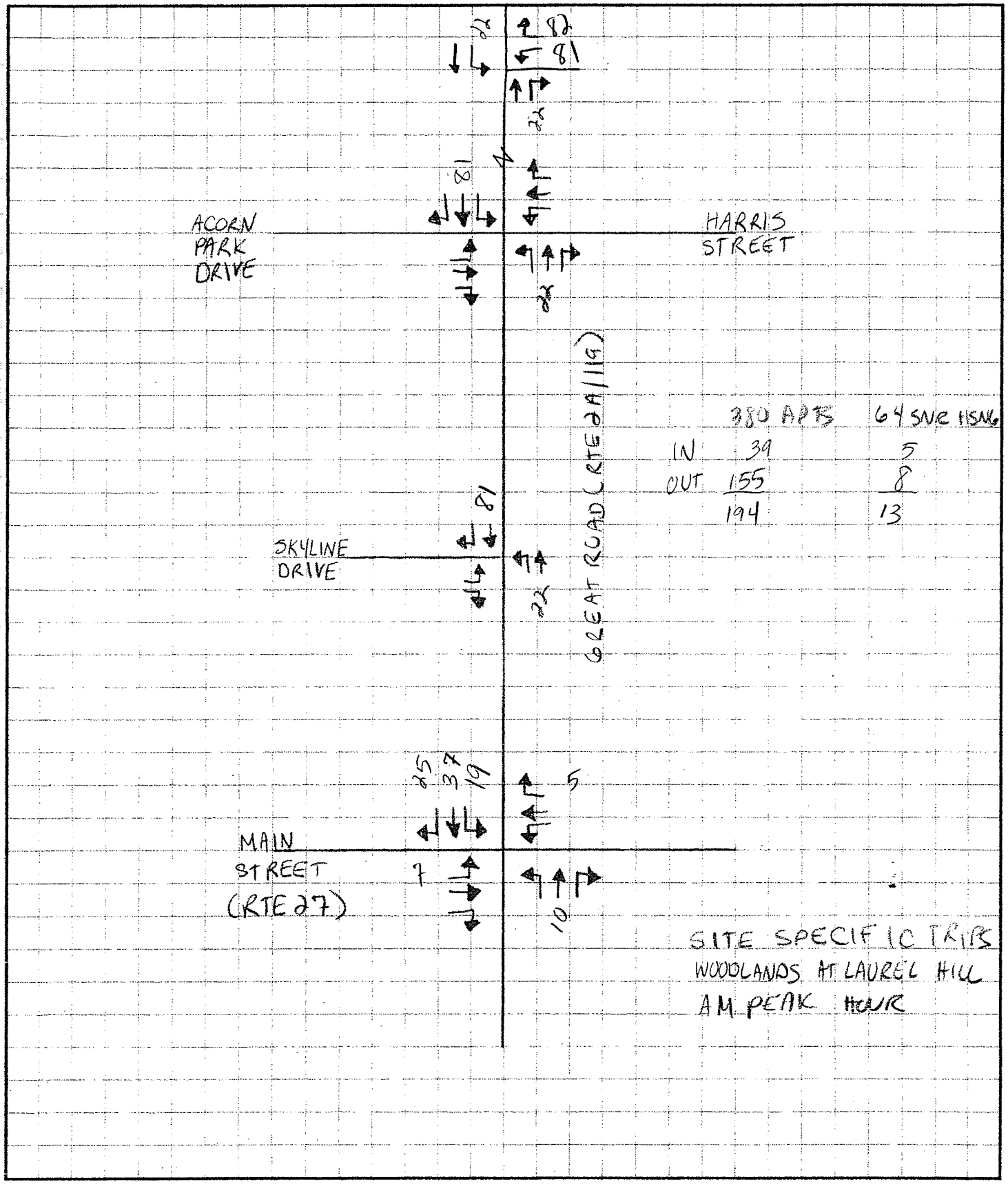

	380 APTS	64 SNR HSNG
IN	39	5
OUT	155	8
	194	13

SITE SPECIFIC TRIPS
WOODLANDS AT LAUREL HILL
AM PEAK HOUR

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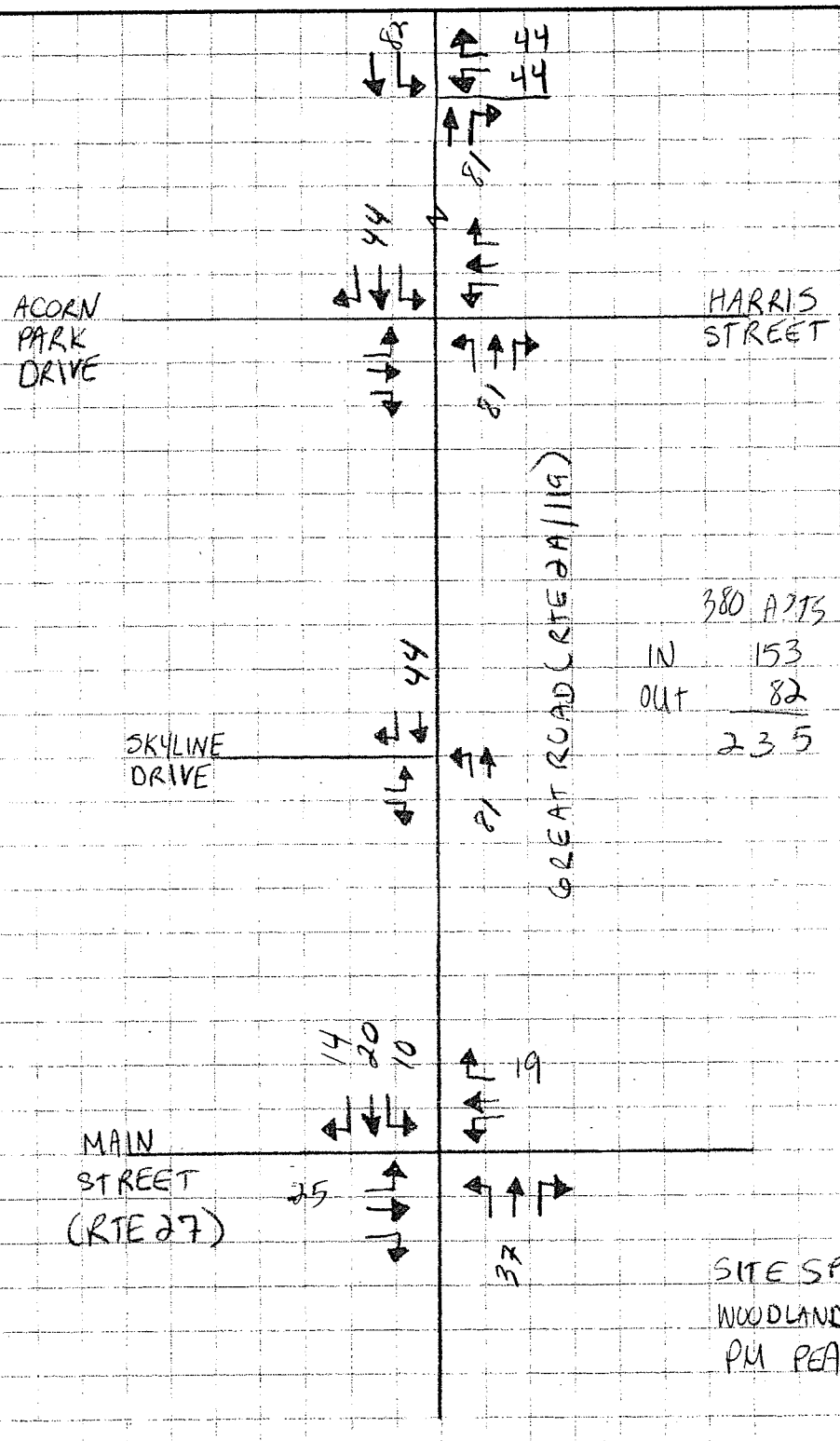

	380 APTS	64 SNRHSNG
IN	153	10
OUT	82	6
	235	16

SITE SPECIFIC TRIPS
WOODLANDS AT LAUREL HILL
PM PEAK HOUR

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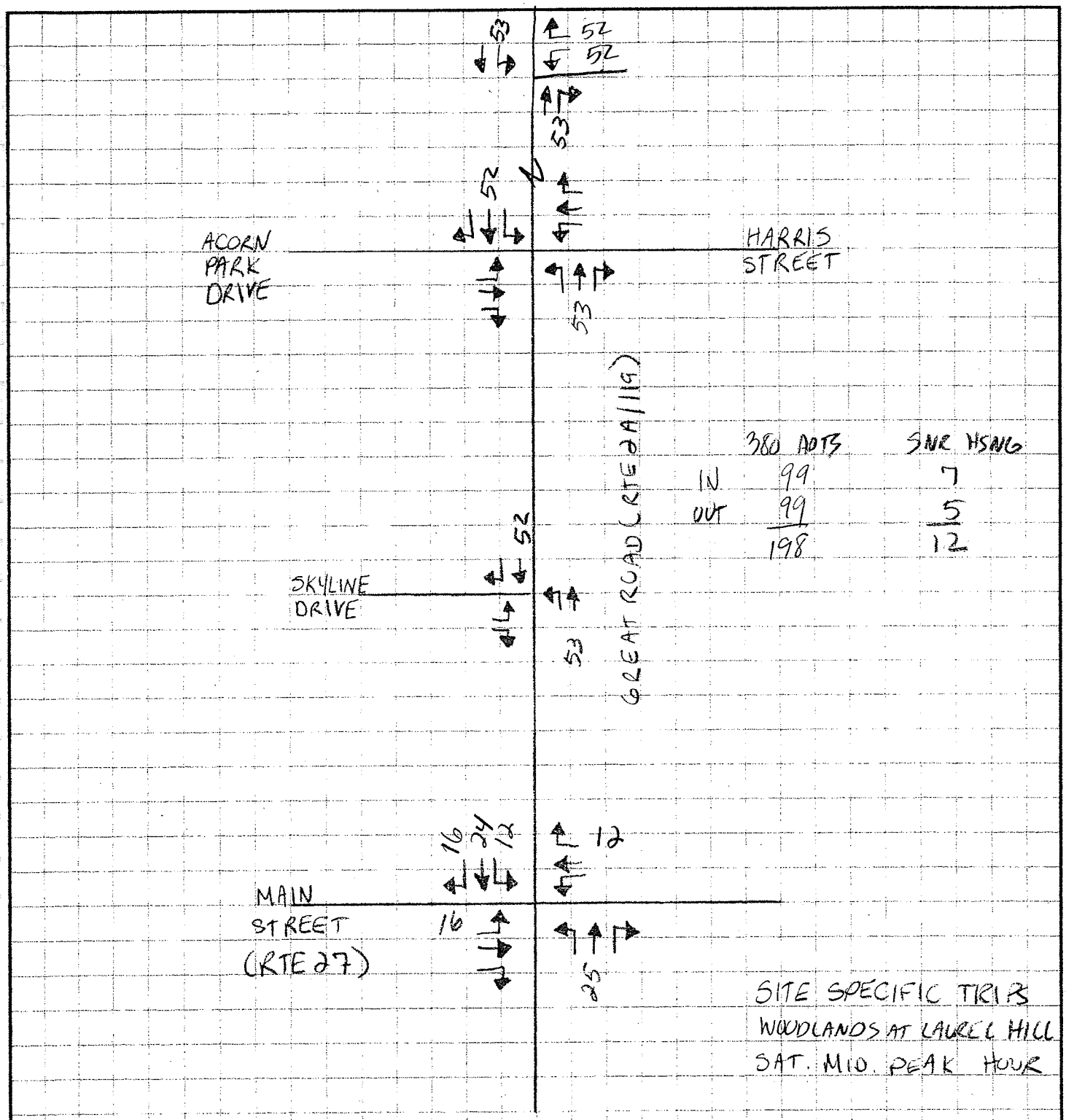

	380 ADTS	SNR HSNG
IN	99	7
OUT	99	5
	198	12

SITE SPECIFIC TRIPS
WOODLANDS AT LAUREL HILL
SAT. MID. PEAK HOUR

TRIP GENERATION WORKSHEET

x= 33 Dwelling Units

LUC: Senior Adult Housing - Detached (251)

WEEKDAY

Average Rate = 3.71
Total Trips = 122.43

Fitted Curve Equation = Ln (T) = 0.850* Ln(X) +2.38
Total Trips = 211.04

AM PEAK HOUR of ADJACENT STREET

Average Rate = 0.20
Total Trips = 6.6
38% of Trips In = 3
62% of Trips Out = 4

Fitted Curve Equation = Ln (T) = 0.860* Ln(X) - 0.63
Total Trips = 10.77
38% of Trips In = 4
62% of Trips Out = 7

PM PEAK HOUR of ADJACENT STREET

Average Rate = 0.26
Total Trips = 8.58
61% of Trips In = 5
39% of Trips Out = 3

Fitted Curve Equation = Ln (T) = 0.720* Ln(X) + 0.58
Total Trips = 22.14
61% of Trips In = 14
39% of Trips Out = 9

AM PEAK HOUR of GENERATOR

Average Rate = 0.31
Total Trips = 10.23
51% of Trips In = 5
49% of Trips Out = 5

Fitted Curve Equation = Not Given

PM PEAK HOUR of GENERATOR

Average Rate = 0.35
Total Trips = 11.55
59% of Trips In = 7
41% of Trips Out = 5

Fitted Curve Equation = Not Given

SATURDAY

Average Rate = 2.77
Total Trips = 91.41

Fitted Curve Equation = Not Given

SUNDAY

Average Rate = 2.33
Total Trips = 76.89

Fitted Curve Equation = Not Given

$$\frac{\text{Weekday Daily}}{\text{Sat. Daily}} = \frac{3.71}{2.77} = \frac{0.26}{X} = \frac{\text{Weekday PM Peak}}{\text{Sat Mid Peak}}$$

$X = 0.19$

$(0.19)(33) = 6$

IN 4
OUT 2
6

ITE TRIP GENERATION
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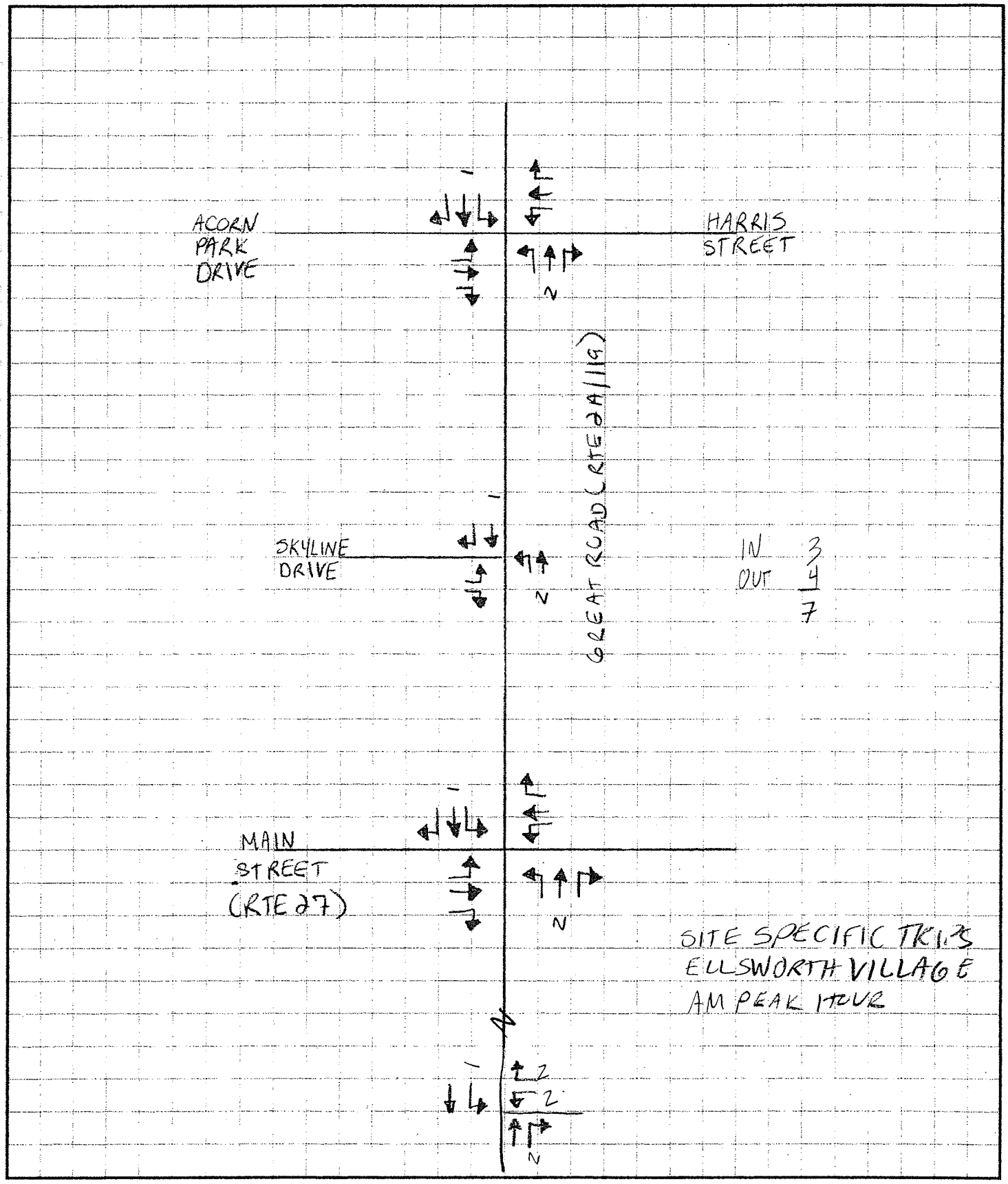

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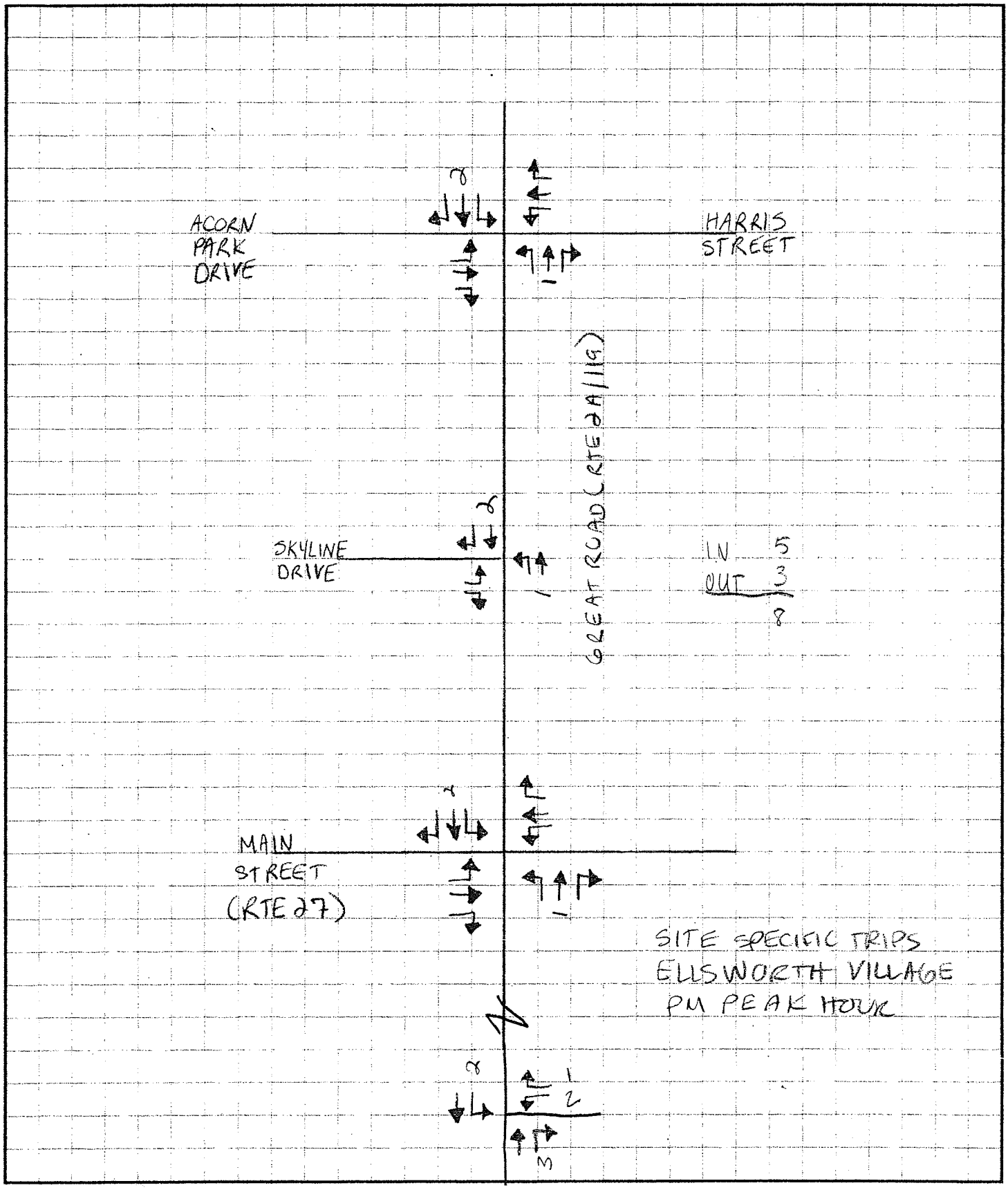

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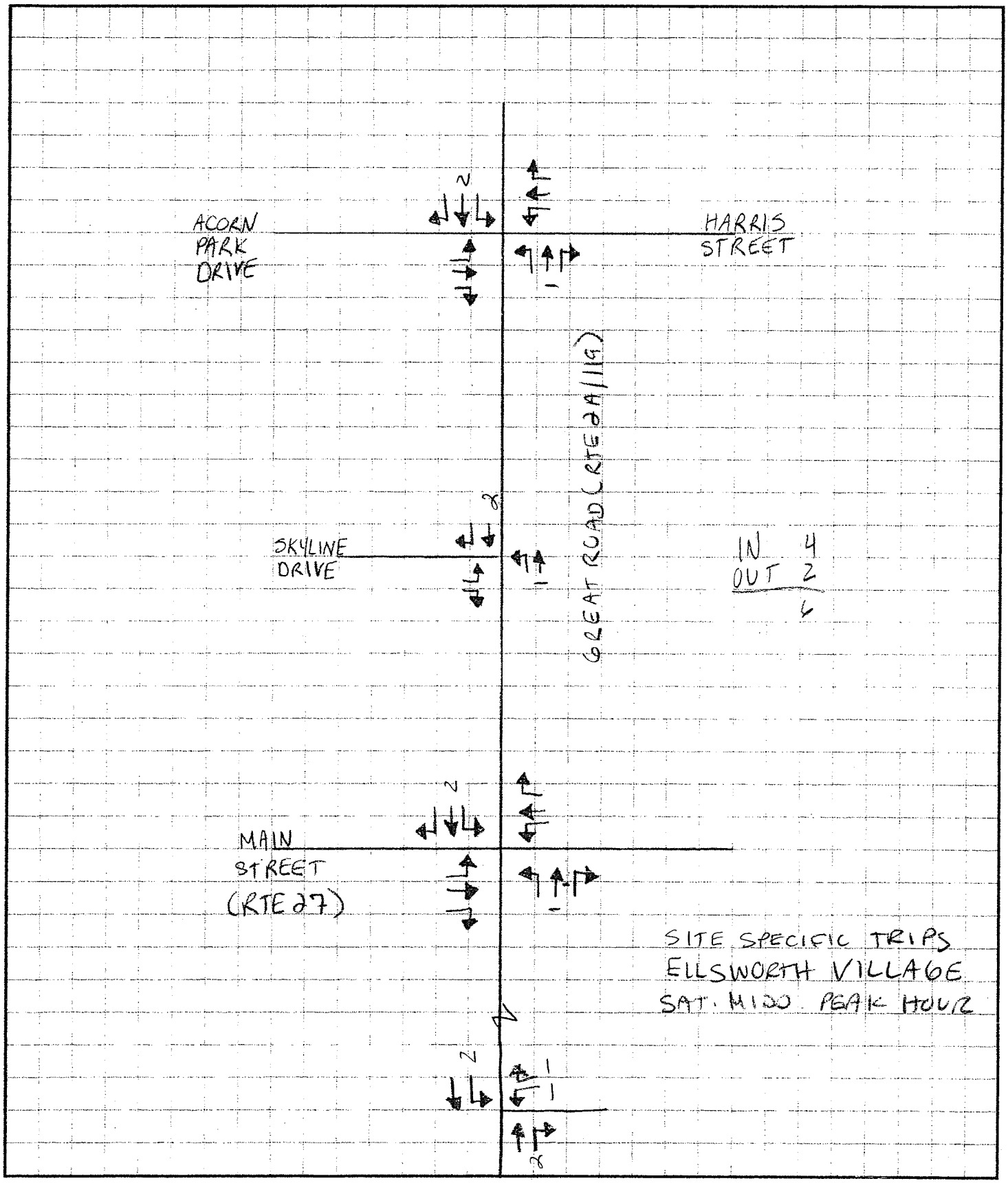

TRIP GENERATION WORKSHEET

x= 9 Holes LUC: Golf Course (430)

WEEKDAY

Average Rate = 35.74
Total Trips = 321.66

Fitted Curve Equation = Not Given

AM PEAK HOUR of ADJACENT STREET

Average Rate = 2.22
Total Trips = 19.98
79% of Trips In = 16
21% of Trips Out = 4

Fitted Curve Equation = Not Given

PM PEAK HOUR of ADJACENT STREET

Average Rate = 2.74
Total Trips = 24.66
44% of Trips In = 11
56% of Trips Out = 14

Fitted Curve Equation = Not Given

AM PEAK HOUR of GENERATOR

Average Rate = 3.01
Total Trips = 27.09
47% of Trips In = 13
53% of Trips Out = 14

Fitted Curve Equation = Not Given

PM PEAK HOUR of GENERATOR

Average Rate = 3.56
Total Trips = 32.04
43% of Trips In = 14
57% of Trips Out = 18

Fitted Curve Equation = Not Given

SATURDAY

Average Rate = 40.63
Total Trips = 365.67

Fitted Curve Equation = Not Given

PEAK HOUR of GENERATOR

Average Rate = 4.59
Total Trips = 41.31
49% of Trips In = 20
51% of Trips Out = 21

Fitted Curve Equation = Not Given

SUNDAY

Average Rate = 39.53
Total Trips = 355.77

Fitted Curve Equation = Not Given

PEAK HOUR of GENERATOR

Average Rate = 4.43
Total Trips = 39.87
Distribution: Not Available

Fitted Curve Equation = Not Given

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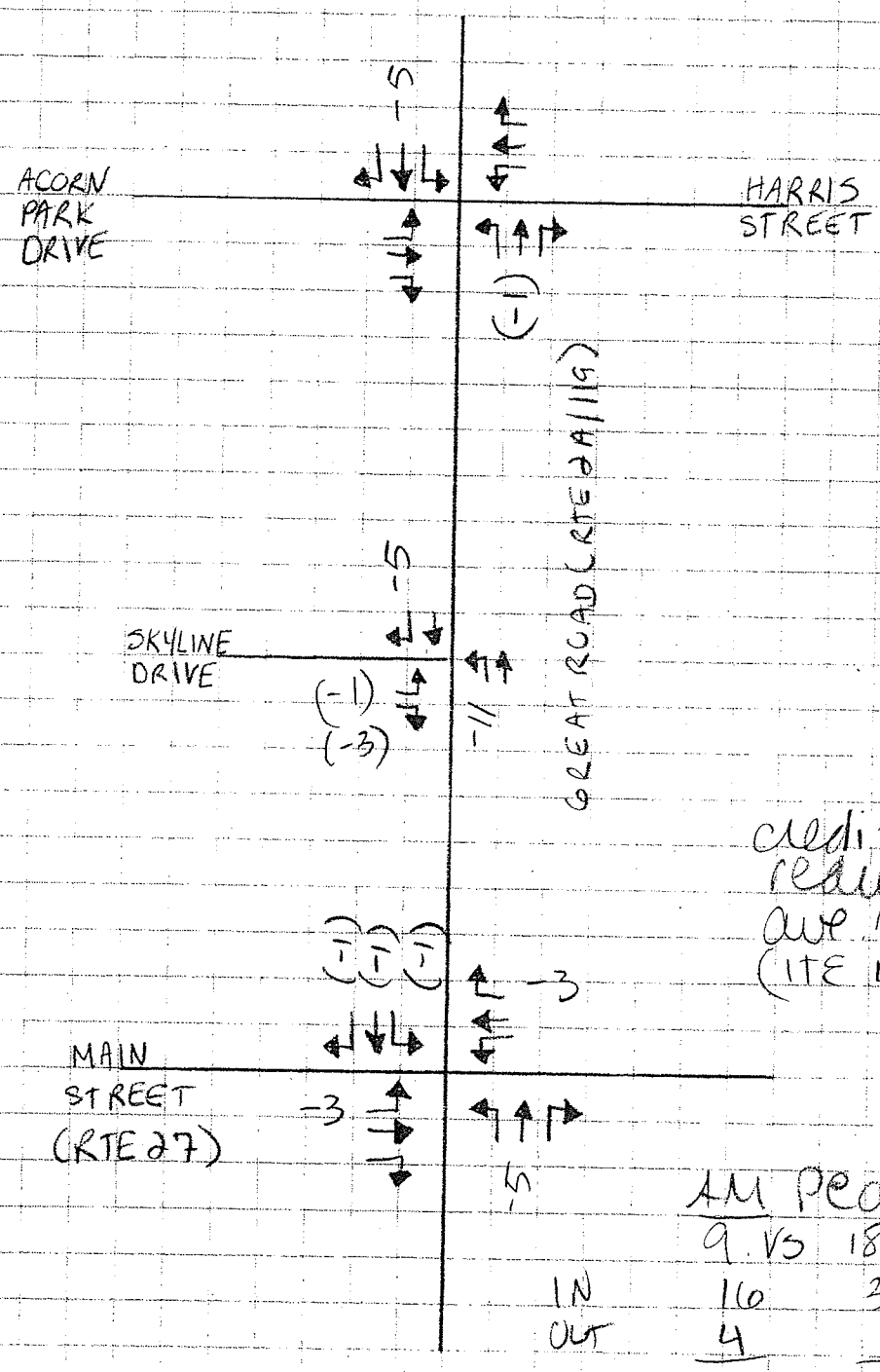

credit for 9 hole reduction ave rate (ITE LUC 430)

AM peak hour

	9 vs	18	
IN	16	32	-16
OUT	4	8	-4
	20	40	-20

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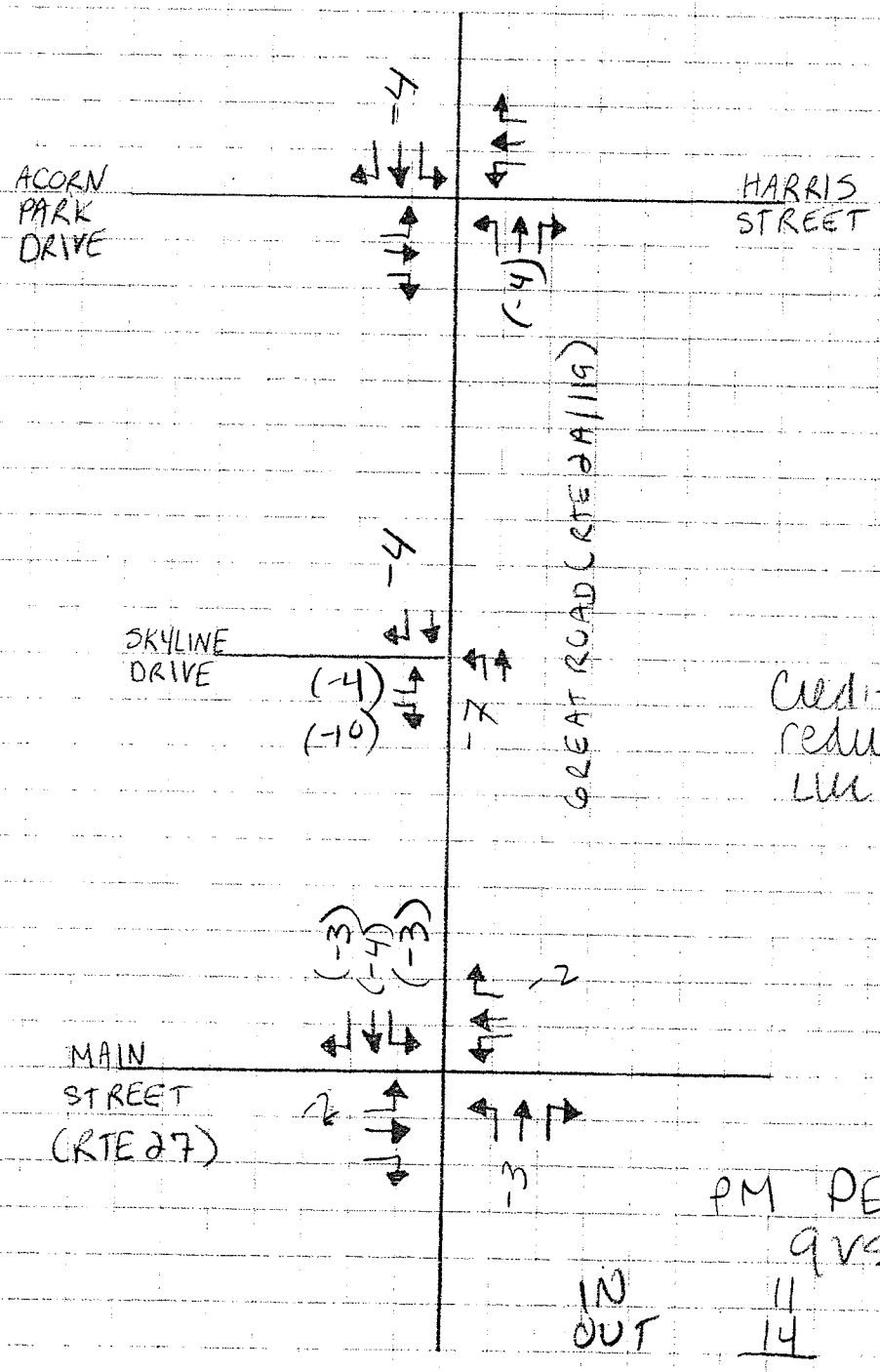

Credit for 9 hole reduction and it LUC 430

PM PEAK HOUR

	9	vs. 18	
IN	11	22	-11
OUT	14	28	-14
	25	50	-25

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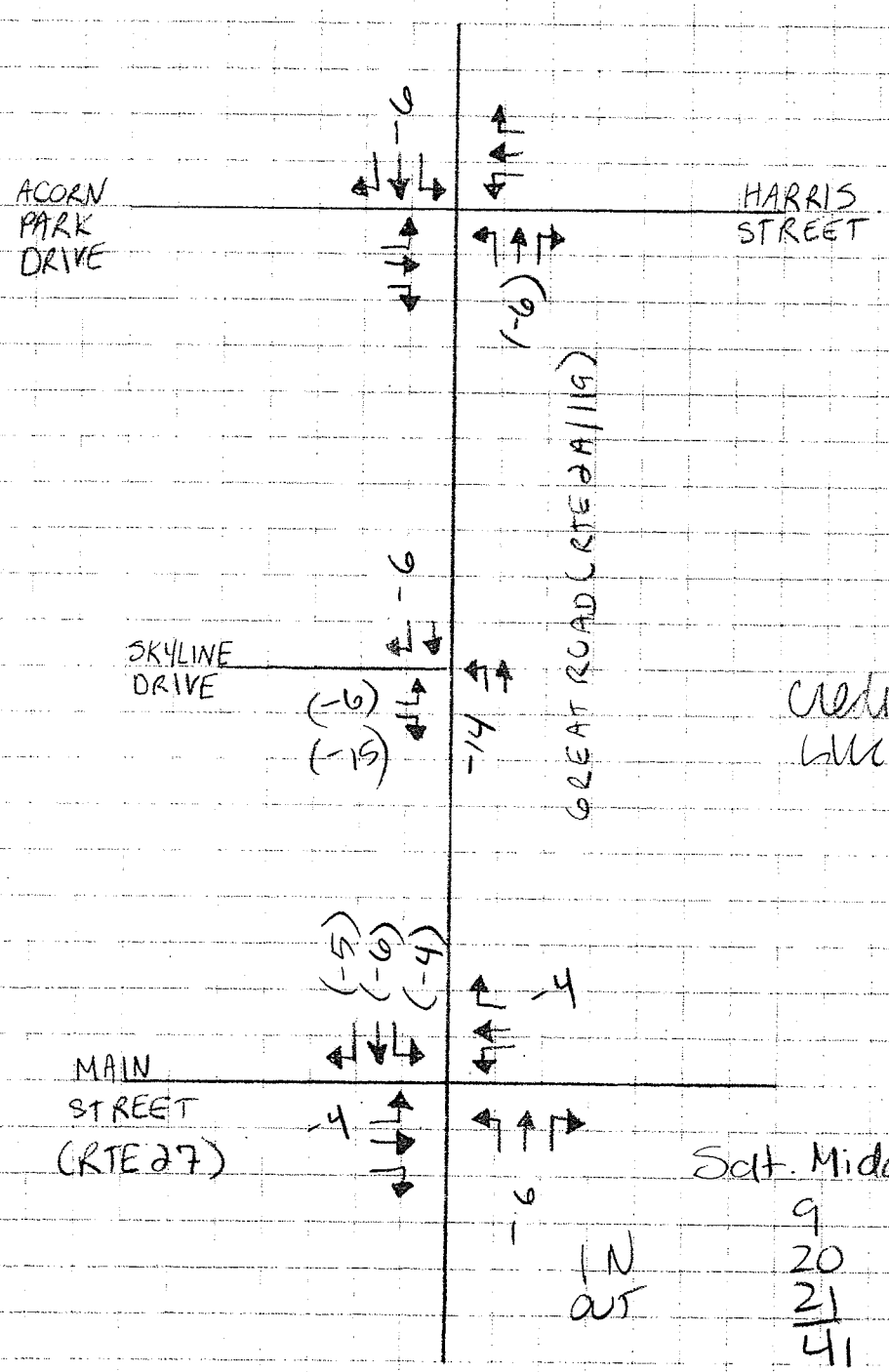

credit for 9 hole
LUC 430

Sat. Midd. Peak Hour			
	9 vs.	18	
IN	20	46	-20
OUT	21	42	-21
	41	82	-41

TRIP GENERATION WORKSHEET

x= 175 Dwelling Units

LUC: Senior Adult Housing - Detached (251)

WEEKDAY

Average Rate = 3.71
Total Trips = 649.25

Fitted Curve Equation = Ln (T) = 0.850* Ln(X) +2.38
Total Trips = 871.37

AM PEAK HOUR of ADJACENT STREET

Average Rate = 0.20
Total Trips = 35
38% of Trips In = 13
62% of Trips Out = 22

Fitted Curve Equation = Ln (T) = 0.860* Ln(X) - 0.63
Total Trips = 45.23
38% of Trips In = 17
62% of Trips Out = 28

PM PEAK HOUR of ADJACENT STREET

Average Rate = 0.26
Total Trips = 45.5
61% of Trips In = 28
39% of Trips Out = 18

Fitted Curve Equation = Ln (T) = 0.720* Ln(X) + 0.58
Total Trips = 73.60
61% of Trips In = 45
39% of Trips Out = 29

AM PEAK HOUR of GENERATOR

Average Rate = 0.31
Total Trips = 54.25
51% of Trips In = 28
49% of Trips Out = 27

Fitted Curve Equation = Not Given

PM PEAK HOUR of GENERATOR

Average Rate = 0.35
Total Trips = 61.25
59% of Trips In = 36
41% of Trips Out = 25

Fitted Curve Equation = Not Given

SATURDAY

Average Rate = 2.77
Total Trips = 484.75

Fitted Curve Equation = Not Given

SUNDAY

Average Rate = 2.33
Total Trips = 407.75

Fitted Curve Equation = Not Given

$\frac{\text{Weekday Daily}}{\text{Weekday PM}} = \frac{\text{Sat Daily}}{\text{Sat Peak}} = \frac{3.71}{0.26} = \frac{2.77}{x}$

$x = 0.19\ (175) = 34$

ITE TRIP GENERATION
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TRIP GENERATION WORKSHEET

x= 175 units

LUC: Residential Condominium/Townhouse (230)

WEEKDAY

Average Rate =	5.86	Fitted Curve Equation =	Ln (T) = 0.850* Ln(X) +2.55
Total Trips =	1025.5	Total Trips =	1032.84

AM PEAK HOUR of ADJACENT STREET

Average Rate =	0.44	Fitted Curve Equation =	Ln (T) = 0.80* Ln(X) +0.26
Total Trips =	77	Total Trips =	80.79
17% of Trips In =	13	17% of Trips In =	14
83% of Trips Out =	64	83% of Trips Out =	67

PM PEAK HOUR of ADJACENT STREET

Average Rate =	0.52	Fitted Curve Equation =	Ln (T) = 0.82* Ln(X) +0.32
Total Trips =	91	Total Trips =	95.12
67% of Trips In =	61	67% of Trips In =	64
33% of Trips Out =	30	33% of Trips Out =	31

AM PEAK HOUR of GENERATOR

Average Rate =	0.44	Fitted Curve Equation =	Ln (T) = 0.82* Ln(X) +0.17
Total Trips =	77	Total Trips =	81.87
18% of Trips In =	14	18% of Trips In =	15
82% of Trips Out =	63	82% of Trips Out =	67

PM PEAK HOUR of GENERATOR

Average Rate =	0.52	Fitted Curve Equation =	T=0.34(X)+38.31
Total Trips =	91	Total Trips =	97.81
64% of Trips In =	58	64% of Trips In =	63
36% of Trips Out =	33	36% of Trips Out =	35

SATURDAY

Average Rate =	5.67	Fitted Curve Equation =	T= 3.62 (X) + 427.93
Total Trips =	992.25	Total Trips =	1061.43

PEAK HOUR of GENERATOR

Average Rate =	0.47	Fitted Curve Equation =	T= 0.29 (X) + 42.63
Total Trips =	82.25	Total Trips =	93.38
54% of Trips In =	44	54% of Trips In =	50
46% of Trips Out =	38	46% of Trips Out =	43

SUNDAY

Average Rate =	4.84	Fitted Curve Equation =	T=3.13 (X) + 357.26
Total Trips =	847	Total Trips =	905.01

PEAK HOUR of GENERATOR

Average Rate =	0.45	Fitted Curve Equation =	T=0.23 (X) +50.01
Total Trips =	78.75	Total Trips =	90.26
49% of Trips In =	39	49% of Trips In =	44
51% of Trips Out =	40	51% of Trips Out =	46

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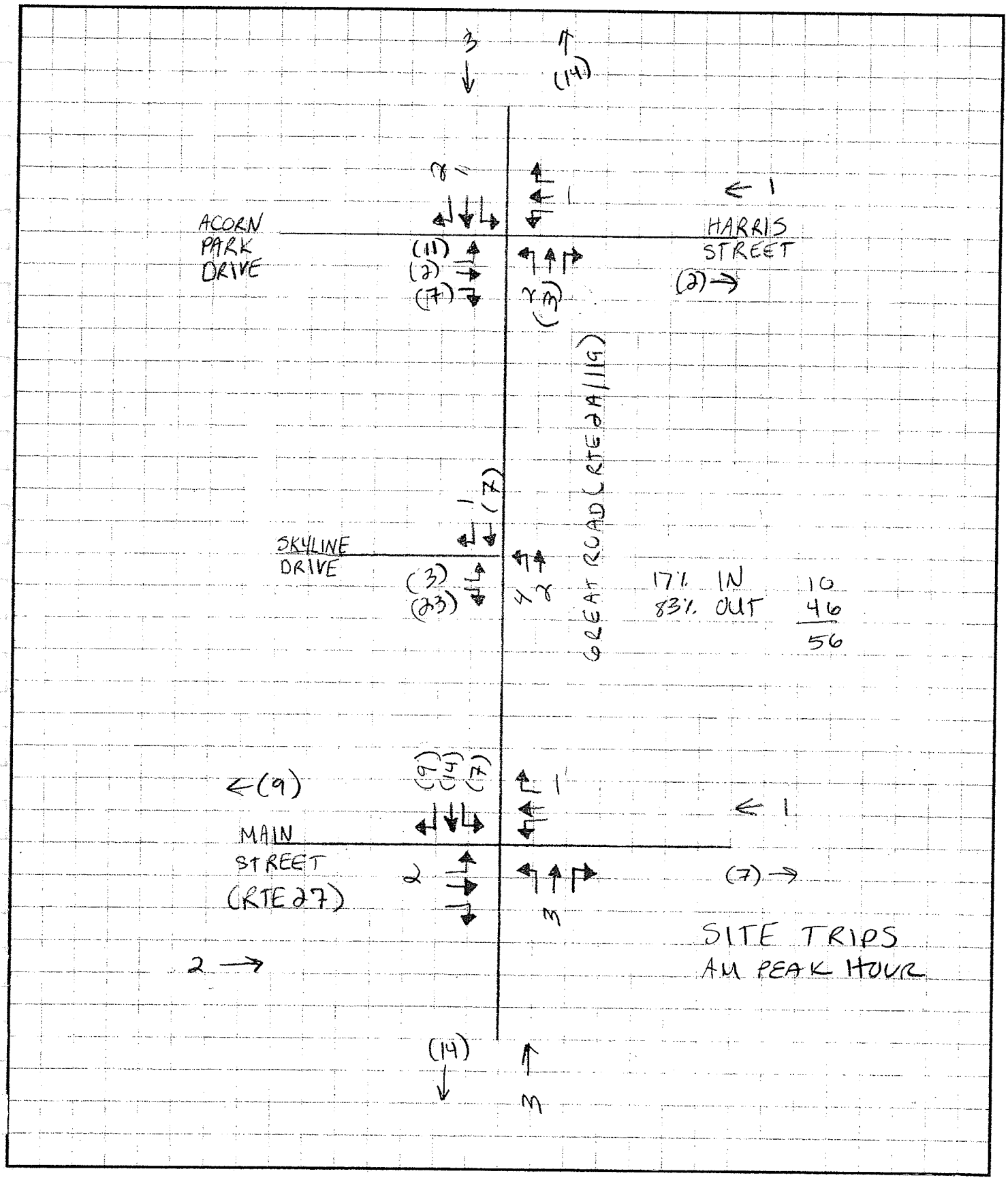

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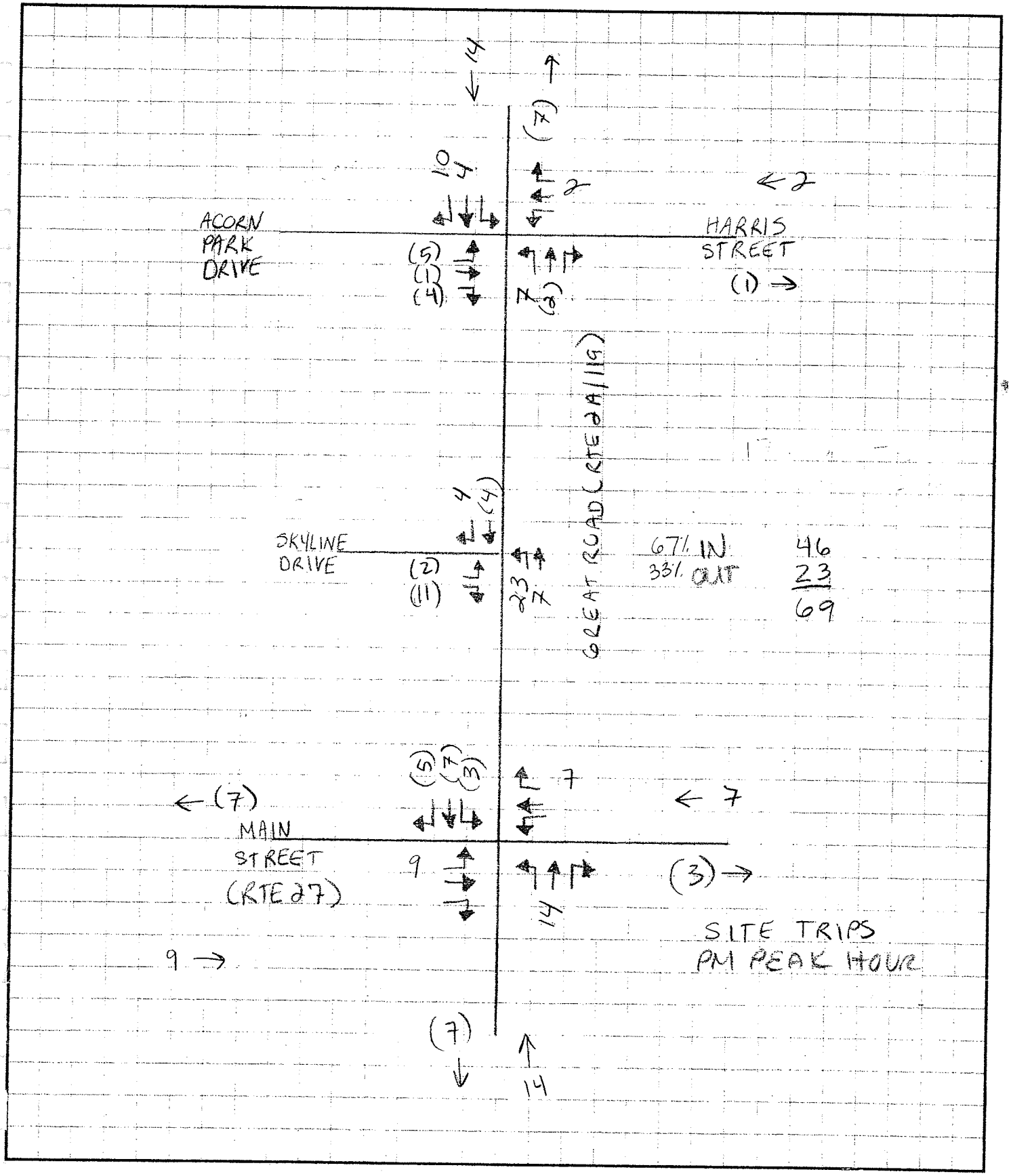

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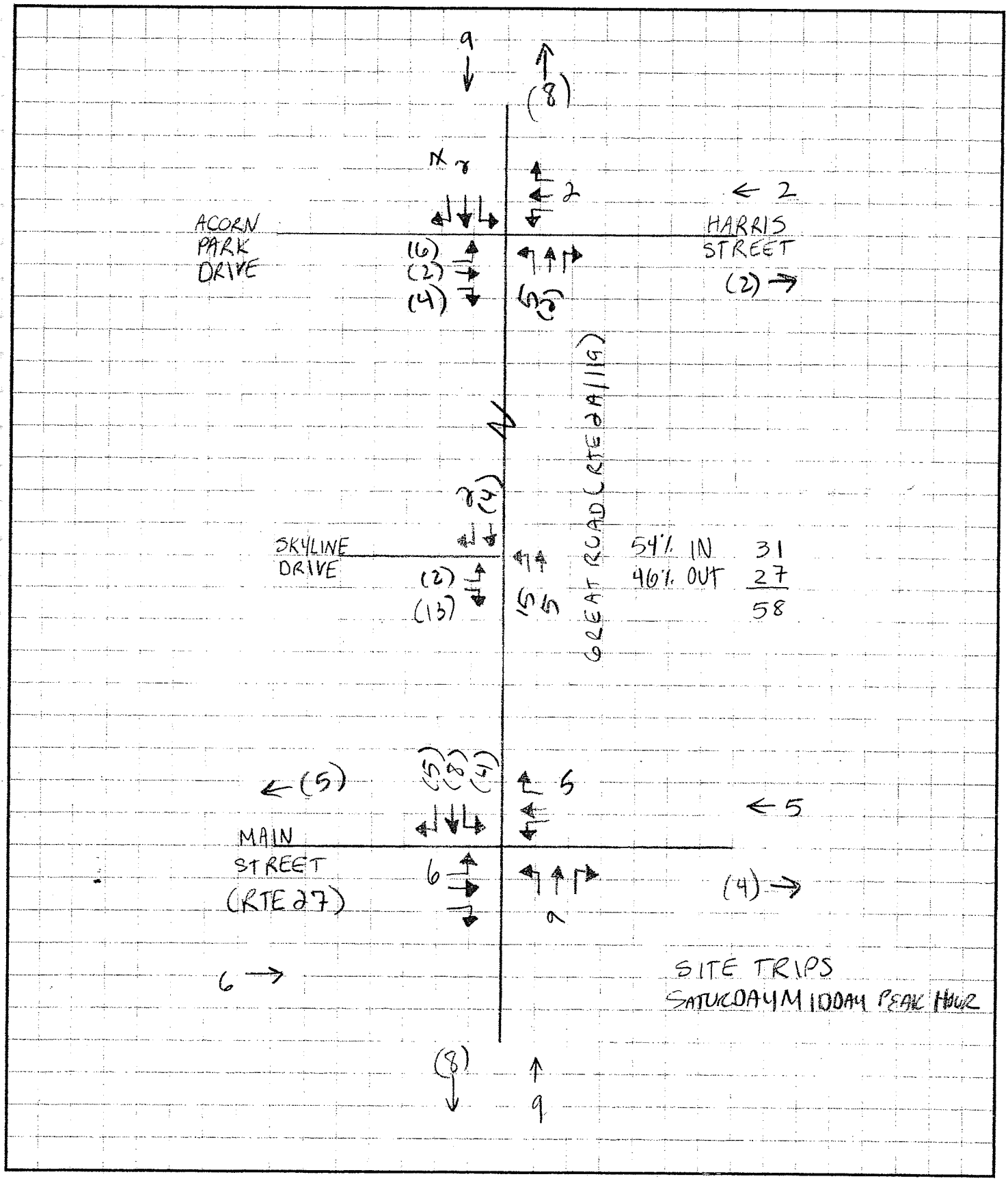


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.971			0.991			0.957			0.961	
Flt Protected	0.950			0.950				0.994			0.999	
Satd. Flow (prot)	1770	1809	0	1770	1846	0	0	3367	0	0	3398	0
Flt Permitted	0.525			0.362				0.704			0.934	
Satd. Flow (perm)	978	1809	0	674	1846	0	0	2384	0	0	3177	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			5			119			98	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	170	241	59	199	198	12	65	317	154	22	631	230
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	262	64	216	215	13	71	345	167	24	686	250
Lane Group Flow (vph)	185	326	0	216	228	0	0	583	0	0	960	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	21.3	13.5		22.1	15.9			24.1			24.1	
Actuated g/C Ratio	0.36	0.24		0.39	0.28			0.42			0.42	
v/c Ratio	0.41	0.74		0.53	0.44			0.54			0.69	
Control Delay	13.2	30.1		15.4	21.2			12.6			15.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	13.2	30.1		15.4	21.2			12.6			15.8	
LOS	B	C		B	C			B			B	
Approach Delay		24.0			18.4			12.6			15.8	
Approach LOS		C			B			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	37	97		45	67			62			128	
Queue Length 95th (ft)	71	#176		83	124			108			196	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	461	499		411	536			1071			1391	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.40	0.65		0.53	0.43			0.54			0.69	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 17.2 — Intersection LOS: B
Intersection Capacity Utilization 81.6% — ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)

ø2 28 s	ø3 12 s	ø4 20 s
ø6 28 s	ø7 12 s	ø8 20 s

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.971			0.989			0.958			0.960	
Flt Protected	0.950			0.950				0.994			0.998	
Satd. Flow (prot)	1770	1809	0	1770	1842	0	0	3370	0	0	3391	0
Flt Permitted	0.506			0.350				0.663			0.907	
Satd. Flow (perm)	943	1809	0	652	1842	0	0	2248	0	0	3082	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			7			115			101	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	181	247	60	204	203	17	67	337	158	42	684	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	197	268	65	222	221	18	73	366	172	46	743	284
Lane Group Flow (vph)	197	333	0	222	239	0	0	611	0	0	1073	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	21.5	13.7		22.3	16.0			24.1			24.1	
Actuated g/C Ratio	0.36	0.24		0.39	0.28			0.42			0.42	
v/c Ratio	0.44	0.75		0.55	0.46			0.61			0.80	
Control Delay	13.7	30.6		15.9	21.3			14.1			19.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	13.7	30.6		15.9	21.3			14.1			19.7	
LOS	B	C		B	C			B			B	
Approach Delay		24.3			18.7			14.1			19.7	
Approach LOS		C			B			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	40	100		46	70			70			157	
Queue Length 95th (ft)	75	#186		85	129			121			#272	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	455	499		407	537			1008			1349	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.43	0.67		0.55	0.45			0.61			0.80	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 19.1 — Intersection LOS: B
Intersection Capacity Utilization 86.1% — ICU Level of Service E
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)

ø2 28 s	ø3 12 s	ø4 20 s
ø6 28 s	ø7 12 s	ø8 20 s

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.971			0.990			0.958			0.960	
Flt Protected	0.950			0.950				0.994			0.998	
Satd. Flow (prot)	1770	1809	0	1770	1844	0	0	3370	0	0	3391	0
Flt Permitted	0.509			0.350				0.654			0.900	
Satd. Flow (perm)	948	1809	0	652	1844	0	0	2217	0	0	3058	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			6			115			101	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	180	247	60	204	203	15	67	335	158	48	697	269
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	268	65	222	221	16	73	364	172	52	758	292
Lane Group Flow (vph)	196	333	0	222	237	0	0	609	0	0	1102	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	21.5	13.7		22.3	16.0			24.1			24.1	
Actuated g/C Ratio	0.36	0.24		0.39	0.28			0.42			0.42	
v/c Ratio	0.44	0.75		0.55	0.46			0.61			0.82	
Control Delay	13.6	30.6		15.9	21.3			14.2			21.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	13.6	30.6		15.9	21.3			14.2			21.1	
LOS	B	C		B	C			B			C	
Approach Delay		24.3			18.7			14.2			21.1	
Approach LOS		C			B			B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	40	100		46	70			70			165	
Queue Length 95th (ft)	75	#186		85	128			121			#287	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	456	499		407	537			995			1339	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.43	0.67		0.55	0.44			0.61			0.82	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 19.8 Intersection LOS: B
Intersection Capacity Utilization 86.8% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)

ø2	ø3	ø4
28 s	12 s	20 s
ø6	ø7	ø8
28 s	12 s	20 s

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.964			0.982			0.967			0.946	
Flt Protected	0.950			0.950				0.996			0.998	
Satd. Flow (prot)	1770	1796	0	1770	1829	0	0	3409	0	0	3341	0
Flt Permitted	0.425			0.309				0.796			0.837	
Satd. Flow (perm)	792	1796	0	576	1829	0	0	2724	0	0	2802	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			11			71			215	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	296	251	79	158	233	31	83	741	231	24	399	237
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	322	273	86	172	253	34	90	805	251	26	434	258
Lane Group Flow (vph)	322	359	0	172	287	0	0	1146	0	0	718	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	22.7	16.5		21.5	13.7			24.1			24.1	
Actuated g/C Ratio	0.39	0.28		0.36	0.24			0.42			0.42	
v/c Ratio	0.72	0.68		0.48	0.65			0.98			0.56	
Control Delay	23.1	26.4		14.9	26.4			40.3			11.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	23.1	26.4		14.9	26.4			40.3			11.1	
LOS	C	C		B	C			D			B	
Approach Delay		24.8			22.1			40.3			11.1	
Approach LOS		C			C			D			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	71	108		34	86			~206			67	
Queue Length 95th (ft)	#125	#220		67	154			#344			115	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	446	540		368	496			1174			1291	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.72	0.66		0.47	0.58			0.98			0.56	

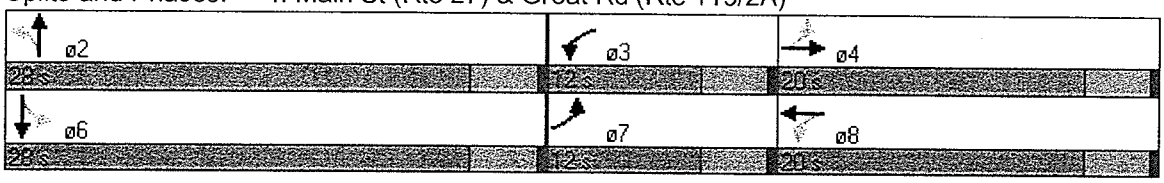
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 27.0 — Intersection LOS: C
Intersection Capacity Utilization 93.5% — ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.964			0.974			0.968			0.947	
Flt Protected	0.950			0.950				0.996			0.998	
Satd. Flow (prot)	1770	1796	0	1770	1814	0	0	3412	0	0	3345	0
Flt Permitted	0.379			0.296				0.768			0.749	
Satd. Flow (perm)	706	1796	0	551	1814	0	0	2631	0	0	2510	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			17			67			208	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	328	257	81	162	239	51	85	798	237	35	431	257
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	357	279	88	176	260	55	92	867	258	38	468	279
Lane Group Flow (vph)	357	367	0	176	315	0	0	1217	0	0	785	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	22.9	16.7		21.7	14.0			24.1			24.1	
Actuated g/C Ratio	0.39	0.29		0.36	0.24			0.41			0.41	
v/c Ratio	0.84	0.69		0.50	0.70			1.08			0.68	
Control Delay	33.3	26.9		15.3	28.1			70.4			13.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	33.3	26.9		15.3	28.1			70.4			13.9	
LOS	C	C		B	C			E			B	
Approach Delay		30.1			23.5			70.4			13.9	
Approach LOS		C			C			E			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	81	112		35	94			~267			85	
Queue Length 95th (ft)	#174	#228		68	169			#386			144	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	425	542		363	496			1130			1162	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.84	0.68		0.48	0.64			1.08			0.68	

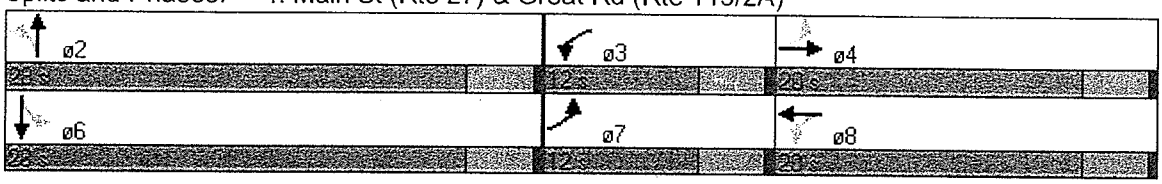
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 58.1
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 40.4 Intersection LOS: D
Intersection Capacity Utilization 100.4% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.964			0.971			0.969			0.947	
Flt Protected	0.950			0.950				0.996			0.998	
Satd. Flow (prot)	1770	1796	0	1770	1809	0	0	3416	0	0	3345	0
Flt Permitted	0.370			0.296				0.766			0.745	
Satd. Flow (perm)	689	1796	0	551	1809	0	0	2627	0	0	2497	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			19			66			209	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	335	257	81	162	239	56	85	809	237	35	434	259
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	364	279	88	176	260	61	92	879	258	38	472	282
Lane Group Flow (vph)	364	367	0	176	321	0	0	1229	0	0	792	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	22.9	16.7		21.7	14.0			24.1			24.1	
Actuated g/C Ratio	0.39	0.29		0.36	0.24			0.41			0.41	
v/c Ratio	0.86	0.69		0.50	0.71			1.09			0.69	
Control Delay	36.5	26.9		15.3	28.6			75.4			14.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	36.5	26.9		15.3	28.6			75.4			14.1	
LOS	D	C		B	C			E			B	
Approach Delay		31.7			23.9			75.4			14.1	
Approach LOS		C			C			E			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	83	112		35	96			~273			86	
Queue Length 95th (ft)	#183	#228		68	171			#392			147	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	421	543		364	496			1127			1156	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.86	0.68		0.48	0.65			1.09			0.69	

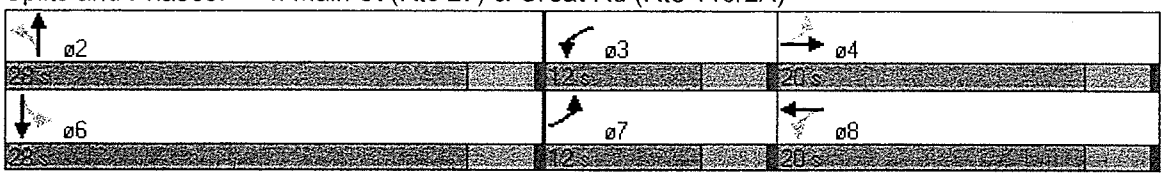
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 58.1
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 42.7 — Intersection LOS: D
Intersection Capacity Utilization 101.6% — ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.940			0.974			0.968			0.956	
Flt Protected	0.950			0.950				0.993			0.998	
Satd. Flow (prot)	1787	1768	0	1787	1832	0	0	3436	0	0	3410	0
Flt Permitted	0.594			0.347				0.580			0.843	
Satd. Flow (perm)	1117	1768	0	653	1832	0	0	2007	0	0	2881	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		54			17			67			128	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	279	186	122	154	143	30	137	581	192	37	576	257
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	303	202	133	167	155	33	149	632	209	40	626	279
Lane Group Flow (vph)	303	335	0	167	188	0	0	990	0	0	945	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	18.9	12.9		18.6	12.5			24.7			24.7	
Actuated g/C Ratio	0.35	0.24		0.33	0.22			0.45			0.45	
v/c Ratio	0.63	0.73		0.46	0.45			1.05			0.69	
Control Delay	17.9	27.0		14.5	20.6			64.3			15.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	17.9	27.0		14.5	20.6			64.3			15.3	
LOS	B	C		B	C			E			B	
Approach Delay		22.7			17.7			64.3			15.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			B			E			B	
Queue Length 50th (ft)	66	89		33	50			~216			123	
Queue Length 95th (ft)	116	166		65	99			#337			197	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	489	534		379	502			943			1371	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.62	0.63		0.44	0.37			1.05			0.69	

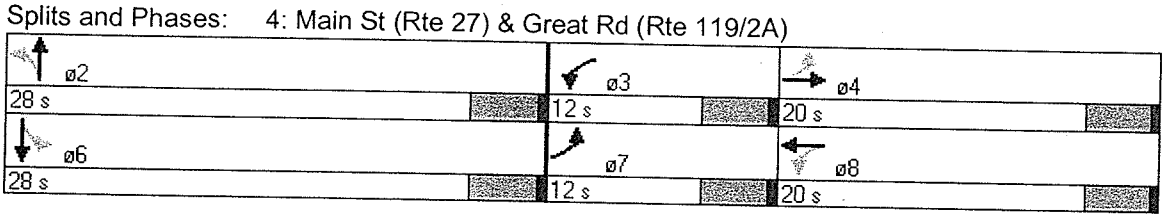
Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 54.7
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 33.8 — Intersection LOS: C
Intersection Capacity Utilization 90.5% — ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.941			0.966			0.969			0.956	
Flt Protected	0.950			0.950				0.993			0.997	
Satd. Flow (prot)	1787	1770	0	1787	1817	0	0	3439	0	0	3407	0
Flt Permitted	0.561			0.333				0.554			0.769	
Satd. Flow (perm)	1055	1770	0	626	1817	0	0	1919	0	0	2628	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			24			64			127	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	302	191	125	158	147	43	140	622	197	50	616	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	328	208	136	172	160	47	152	676	214	54	670	303
Lane Group Flow (vph)	328	344	0	172	207	0	0	1042	0	0	1027	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	19.2	13.2		18.9	12.7			24.6			24.6	
Actuated g/C Ratio	0.35	0.24		0.33	0.22			0.45			0.45	
v/c Ratio	0.69	0.74		0.48	0.49			1.16			0.82	
Control Delay	20.3	27.6		14.9	20.7			107.2			21.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	20.3	27.6		14.9	20.7			107.2			21.5	
LOS	C	C		B	C			F			C	
Approach Delay		24.1			18.1			107.2			21.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			B			F			C	
Queue Length 50th (ft)	73	93		34	54			~250			152	
Queue Length 95th (ft)	127	#179		66	106			#369			#284	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	479	534		375	503			895			1248	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.68	0.64		0.46	0.41			1.16			0.82	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 54.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.16
Intersection Signal Delay: 50.3 Intersection LOS: D
Intersection Capacity Utilization 95.4% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)

ø2	ø3	ø4
28 s	12 s	20 s
ø6	ø7	ø8
28 s	12 s	20 s

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.941			0.965			0.969			0.956	
Flt Protected	0.950			0.950				0.993			0.997	
Satd. Flow (prot)	1787	1770	0	1787	1815	0	0	3439	0	0	3407	0
Flt Permitted	0.559			0.333				0.553			0.768	
Satd. Flow (perm)	1052	1770	0	626	1815	0	0	1915	0	0	2624	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			25			64			127	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1904			1888			2128			576	
Travel Time (s)		43.3			42.9			48.4			13.1	
Volume (vph)	304	191	125	158	147	44	140	625	197	50	618	279
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	330	208	136	172	160	48	152	679	214	54	672	303
Lane Group Flow (vph)	330	344	0	172	208	0	0	1045	0	0	1029	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Detector Phases	7	4		3	8		2	2		6	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	12.0	20.0	0.0	12.0	20.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	20.0%	33.3%	0.0%	20.0%	33.3%	0.0%	46.7%	46.7%	0.0%	46.7%	46.7%	0.0%
Maximum Green (s)	8.0	16.0		8.0	16.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)		5.0			5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0			0		0	0		0	0	
Act Effct Green (s)	19.2	13.2		18.9	12.7			24.6			24.6	
Actuated g/C Ratio	0.35	0.24		0.33	0.22			0.45			0.45	
v/c Ratio	0.69	0.74		0.48	0.49			1.17			0.83	
Control Delay	20.5	27.6		14.9	20.6			109.4			21.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	20.5	27.6		14.9	20.6			109.4			21.7	
LOS	C	C		B	C			F			C	
Approach Delay		24.2			18.1			109.4			21.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			B			F			C	
Queue Length 50th (ft)	73	93		34	54			~252			153	
Queue Length 95th (ft)	128	#179		66	106			#371			#285	
Internal Link Dist (ft)		1824			1808			2048			496	
Turn Bay Length (ft)												
Base Capacity (vph)	478	534		375	503			894			1246	
Starvation Cap Reductn	0	0		0	0			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.69	0.64		0.46	0.41			1.17			0.83	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 54.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 51.1 — Intersection LOS: D
Intersection Capacity Utilization 95.7% — ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: Main St (Rte 27) & Great Rd (Rte 119/2A)

ø2	ø3	ø4
28 s	12 s	20 s
ø6	ø7	ø8
28 s	12 s	20 s

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	4	31	14	5	72	12	401	8	106	857	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	4	34	15	5	78	13	436	9	115	932	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1711	1635	934	1666	1633	440	936			445		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1711	1635	934	1666	1633	440	936			445		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	82	95	90	75	94	87	98			90		
cM capacity (veh/h)	54	89	322	60	89	617	732			1116		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	10	38	21	78	458	1051
Volume Left	10	0	15	0	13	115
Volume Right	0	34	0	78	9	4
cSH	54	248	66	617	732	1116
Volume to Capacity	0.18	0.15	0.31	0.13	0.02	0.10
Queue Length 95th (ft)	15	13	29	11	1	9
Control Delay (s)	85.8	22.1	82.9	11.7	0.5	2.7
Lane LOS	F	C	F	B	A	A
Approach Delay (s)	35.1		26.6		0.5	2.7
Approach LOS	E		D			

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	4	32	14	5	74	12	435	8	109	960	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	4	35	15	5	80	13	473	9	118	1043	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1869	1790	1046	1823	1788	477	1048			482		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1869	1790	1046	1823	1788	477	1048			482		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	76	94	87	66	92	86	98			89		
cM capacity (veh/h)	41	71	278	45	71	588	664			1081		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	10	39	21	80	495	1166
Volume Left	10	0	15	0	13	118
Volume Right	0	35	0	80	9	4
cSH	41	209	50	588	664	1081
Volume to Capacity	0.24	0.19	0.42	0.14	0.02	0.11
Queue Length 95th (ft)	20	17	38	12	2	9
Control Delay (s)	119.9	26.1	121.6	12.1	0.6	3.1
Lane LOS	F	D	F	B	A	A
Approach Delay (s)	44.9		34.5		0.6	3.1
Approach LOS	E		D			

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	20	6	39	14	5	74	14	437	8	109	956	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	7	42	15	5	80	15	475	9	118	1039	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1872	1793	1042	1835	1792	479	1046			484		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1872	1793	1042	1835	1792	479	1046			484		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	46	91	85	63	92	86	98			89		
cM capacity (veh/h)	40	70	279	41	70	586	665			1079		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	22	49	21	80	499	1164
Volume Left	22	0	15	0	15	118
Volume Right	0	42	0	80	9	7
cSH	40	200	46	586	665	1079
Volume to Capacity	0.54	0.25	0.44	0.14	0.02	0.11
Queue Length 95th (ft)	48	23	40	12	2	9
Control Delay (s)	171.2	28.8	133.7	12.1	0.6	3.1
Lane LOS	F	D	F	B	A	A
Approach Delay (s)	72.6		37.0		0.6	3.1
Approach LOS	F		E			

Intersection Summary			
Average Delay	7.0		
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	18	5	24	15	5	94	31	928	18	80	568	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	5	26	16	5	102	34	1009	20	87	617	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1990	1895	626	1914	1893	1018	634			1028		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1990	1895	626	1914	1893	1018	634			1028		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	18	91	95	59	91	65	96			87		
cM capacity (veh/h)	24	59	484	40	59	288	949			675		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	20	32	22	102	1062	721
Volume Left	20	0	16	0	34	87
Volume Right	0	26	0	102	20	16
cSH	24	215	43	288	949	675
Volume to Capacity	0.82	0.15	0.50	0.35	0.04	0.13
Queue Length 95th (ft)	61	13	45	39	3	11
Control Delay (s)	354.1	24.6	153.8	24.2	1.1	3.3
Lane LOS	F	C	F	C	A	A
Approach Delay (s)	150.8		47.0		1.1	3.3
Approach LOS	F		E			

Intersection Summary			
Average Delay	8.7		
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	18	5	25	15	5	96	32	1033	18	82	628	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	5	27	16	5	104	35	1123	20	89	683	16
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2178	2081	691	2101	2079	1133	699			1142		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2178	2081	691	2101	2079	1133	699			1142		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	88	94	41	88	58	96			85		
cM capacity (veh/h)	15	44	445	28	44	247	898			612		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	20	33	22	104	1177	788
Volume Left	20	0	16	0	35	89
Volume Right	0	27	0	104	20	16
cSH	15	176	31	247	898	612
Volume to Capacity	1.30	0.19	0.71	0.42	0.04	0.15
Queue Length 95th (ft)	75	16	59	49	3	13
Control Delay (s)	691.9	30.1	262.4	29.8	1.3	4.0
Lane LOS	F	D	F	D	A	A
Approach Delay (s)	278.3		69.9		1.3	4.0
Approach LOS	F		F			

Intersection Summary			
Average Delay	13.1		
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	23	5	29	15	5	96	39	1031	18	82	628	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	5	32	16	5	104	42	1121	20	89	683	27
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2197	2099	696	2124	2103	1130	710			1140		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2197	2099	696	2124	2103	1130	710			1140		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	87	93	38	87	58	95			85		
cM capacity (veh/h)	14	42	442	26	42	248	889			613		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	25	37	22	104	1183	799
Volume Left	25	0	16	0	42	89
Volume Right	0	32	0	104	20	27
cSH	14	185	29	248	889	613
Volume to Capacity	1.73	0.20	0.75	0.42	0.05	0.15
Queue Length 95th (ft)	95	18	61	49	4	13
Control Delay (s)	887.1	29.3	286.5	29.7	1.6	4.0
Lane LOS	F	D	F	D	A	A
Approach Delay (s)	375.4		74.0		1.6	4.0
Approach LOS	F		F			

Intersection Summary			
Average Delay	17.4		
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	13	2	32	7	2	41	37	782	17	44	771	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	2	35	8	2	45	40	850	18	48	838	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1927	1890	846	1917	1889	859	853			868		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1927	1890	846	1917	1889	859	853			868		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	64	97	90	82	97	88	95			94		
cM capacity (veh/h)	40	63	364	42	63	357	790			780		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	14	37	10	45	909	901
Volume Left	14	0	8	0	40	48
Volume Right	0	35	0	45	18	15
cSH	40	284	45	357	790	780
Volume to Capacity	0.36	0.13	0.22	0.12	0.05	0.06
Queue Length 95th (ft)	30	11	18	11	4	5
Control Delay (s)	139.9	19.6	106.2	16.5	1.4	1.7
Lane LOS	F	C	F	C	A	A
Approach Delay (s)	52.9		32.6		1.4	1.7
Approach LOS	F		D			

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	13	2	33	7	2	42	38	856	17	45	844	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	2	36	8	2	46	41	930	18	49	917	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2092	2054	925	2082	2053	940	933			949		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2092	2054	925	2082	2053	940	933			949		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	51	96	89	75	96	86	94			93		
cM capacity (veh/h)	29	49	328	31	49	321	738			728		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	14	38	10	46	990	982
Volume Left	14	0	8	0	41	49
Volume Right	0	36	0	46	18	15
cSH	29	247	33	321	738	728
Volume to Capacity	0.49	0.15	0.29	0.14	0.06	0.07
Queue Length 95th (ft)	39	13	23	12	4	5
Control Delay (s)	214.0	22.2	151.9	18.1	1.7	2.0
Lane LOS	F	C	F	C	A	A
Approach Delay (s)	74.1		41.7		1.7	2.0
Approach LOS	F		E			

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	19	5	37	7	5	42	43	852	17	45	840	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	5	40	8	5	46	47	926	18	49	913	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2099	2060	924	2094	2062	935	936			945		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2099	2060	924	2094	2062	935	936			945		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	24	89	88	73	89	86	94			93		
cM capacity (veh/h)	27	48	328	28	48	323	736			730		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	21	46	13	46	991	985
Volume Left	21	0	8	0	47	49
Volume Right	0	40	0	46	18	23
cSH	27	194	34	323	736	730
Volume to Capacity	0.76	0.24	0.39	0.14	0.06	0.07
Queue Length 95th (ft)	60	22	32	12	5	5
Control Delay (s)	304.8	29.2	167.0	18.0	1.9	2.0
Lane LOS	F	D	F	C	A	A
Approach Delay (s)	115.0		51.1		1.9	2.0
Approach LOS	F		F			

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	11	33	466	872	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	12	36	507	948	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.86					
vC, conflicting volume	1533	954	961			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1617	954	961			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	96	95			
cM capacity (veh/h)	93	314	716			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	3	12	542	961
Volume Left	3	0	36	0
Volume Right	0	12	0	13
cSH	93	314	716	1700
Volume to Capacity	0.03	0.04	0.05	0.57
Queue Length 95th (ft)	3	3	4	0
Control Delay (s)	45.0	16.9	1.4	0.0
Lane LOS	E	C	A	
Approach Delay (s)	22.9		1.4	0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	11	34	501	976	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	12	37	545	1061	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.84					
vC, conflicting volume	1686	1067	1074			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1819	1067	1074			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	96	94			
cM capacity (veh/h)	67	270	649			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	3	12	582	1074
Volume Left	3	0	37	0
Volume Right	0	12	0	13
cSH	67	270	649	1700
Volume to Capacity	0.05	0.04	0.06	0.63
Queue Length 95th (ft)	4	3	5	0
Control Delay (s)	61.1	19.0	1.5	0.0
Lane LOS	F	C	A	
Approach Delay (s)	28.0		1.5	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	5	31	27	503	983	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	34	29	547	1068	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.84					
vC, conflicting volume	1678	1073	1077			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1808	1073	1077			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	87	95			
cM capacity (veh/h)	70	268	647			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	5	34	576	1077
Volume Left	5	0	29	0
Volume Right	0	34	0	9
cSH	70	268	647	1700
Volume to Capacity	0.08	0.13	0.05	0.63
Queue Length 95th (ft)	6	11	4	0
Control Delay (s)	61.1	20.4	1.2	0.0
Lane LOS	F	C	A	
Approach Delay (s)	26.0		1.2	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	12	22	20	1048	638	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	24	22	1139	693	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.48					
vC, conflicting volume	1880	698	702			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2816	698	702			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	95	98			
cM capacity (veh/h)	9	441	895			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	13	24	1161	702
Volume Left	13	0	22	0
Volume Right	0	24	0	9
cSH	9	441	895	1700
Volume to Capacity	1.39	0.05	0.02	0.41
Queue Length 95th (ft)	61	4	2	0
Control Delay (s)	974.6	13.6	0.8	0.0
Lane LOS	F	B	A	
Approach Delay (s)	352.8		0.8	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	12	23	21	1156	700	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	25	23	1257	761	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.44					
vC, conflicting volume	2067	765	770			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3415	765	770			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	94	97			
cM capacity (veh/h)	3	403	845			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	13	25	1279	770
Volume Left	13	0	23	0
Volume Right	0	25	0	9
cSH	3	403	845	1700
Volume to Capacity	3.78	0.06	0.03	0.45
Queue Length 95th (ft)	Err	5	2	0
Control Delay (s)	Err	14.5	1.1	0.0
Lane LOS	F	B	A	
Approach Delay (s)	3437.8		1.1	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	63.4		
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	10	24	37	1163	704	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	26	40	1264	765	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.43					
vC, conflicting volume	2114	770	774			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3571	770	774			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	93	95			
cM capacity (veh/h)	3	401	842			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	11	26	1304	774
Volume Left	11	0	40	0
Volume Right	0	26	0	9
cSH	3	401	842	1700
Volume to Capacity	4.17	0.07	0.05	0.46
Queue Length 95th (ft)	Err	5	4	0
Control Delay (s)	Err	14.6	2.0	0.0
Lane LOS	F	B	A	
Approach Delay (s)	2951.2		2.0	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	52.8		
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	18	35	34	856	835	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	38	37	930	908	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.58					
vC, conflicting volume	1922	917	927			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2580	917	927			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	88	95			
cM capacity (veh/h)	16	329	737			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	20	38	967	927
Volume Left	20	0	37	0
Volume Right	0	38	0	20
cSH	16	329	737	1700
Volume to Capacity	1.25	0.12	0.05	0.55
Queue Length 95th (ft)	74	10	4	0
Control Delay (s)	658.3	17.3	1.5	0.0
Lane LOS	F	C	A	
Approach Delay (s)	235.0		1.5	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	7.7		
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	18	36	35	932	909	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	39	38	1013	988	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.53					
vC, conflicting volume	2087	998	1008			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3052	998	1008			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	87	94			
cM capacity (veh/h)	7	296	688			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	20	39	1051	1008
Volume Left	20	0	38	0
Volume Right	0	39	0	20
cSH	7	296	688	1700
Volume to Capacity	2.81	0.13	0.06	0.59
Queue Length 95th (ft)	90	11	4	0
Control Delay (s)	1836.5	19.0	1.8	0.0
Lane LOS	F	C	A	
Approach Delay (s)	624.9		1.8	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	18.2		
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	14	34	36	937	913	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	37	39	1018	992	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				576		
pX, platoon unblocked	0.53					
vC, conflicting volume	2097	1000	1008			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3086	1000	1008			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	87	94			
cM capacity (veh/h)	7	295	688			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	15	37	1058	1008
Volume Left	15	0	39	0
Volume Right	0	37	0	15
cSH	7	295	688	1700
Volume to Capacity	2.32	0.13	0.06	0.59
Queue Length 95th (ft)	75	11	5	0
Control Delay (s)	1665.2	18.9	1.8	0.0
Lane LOS	F	C	A	
Approach Delay (s)	499.1		1.8	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	13.2		
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		