TECHNICAL APPENDIX

APPENDIX A

TRAFFIC COUNTS

Burns Service Inc.

1202 Langdon Terrace Drive
Raleigh, NC, 27615

File Name : Chapel Hill(US 15-501 and Lystra) AM Peak
Site Code :
Start Date : 2/15/2017
Page No : 1

Groups Printed- Cars + - Trucks

	US 15-501 Southbound				Lystra Road Westbound				US 15-501 Northbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
07:00	0	36	0	36	23	5	0	28	4	246	0	250	314
07:15	0	31	1	32	21	12	0	33	9	319	1	329	394
07:30	0	35	0	35	34	21	0	55	19	275	4	298	388
07:45	0	31	0	31	42	20	0	62	27	279	1	307	400
Total	0	133	1	134	120	58	0	178	59	1119	6	1184	1496
08:00	0	29	0	29	32	13	0	45	17	301	0	318	392
08:15	0	34	1	35	30	18	0	48	12	269	4	285	368
08:30	0	21	1	22	20	6	0	26	4	244	2	250	298
08:45	0	20	0	20	27	16	0	43	9	242	4	255	318
Total	0	104	2	106	109	53	0	162	42	1056	10	1108	1376
Grand Total	0	237	3	240	229	111	0	340	101	2175	16	2292	2872
Apprch %	0	98.8	1.2		67.4	32.6	0		4.4	94.9	0.7		
Total %	0	8.3	0.1	8.4	8	3.9	0	11.8	3.5	75.7	0.6	79.8	
Cars +	0	236	3	239	227	110	0	337	101	2164	16	2281	2857
% Cars +	0	99.6	100	99.6	99.1	99.1	0	99.1	100	99.5	100	99.5	99.5
Trucks	0	1	0	1	2	1	0	3	0	11	0	11	15
% Trucks	0	0.4	0	0.4	0.9	0.9	0	0.9	0	0.5	0	0.5	0.5

Burns Service Inc.

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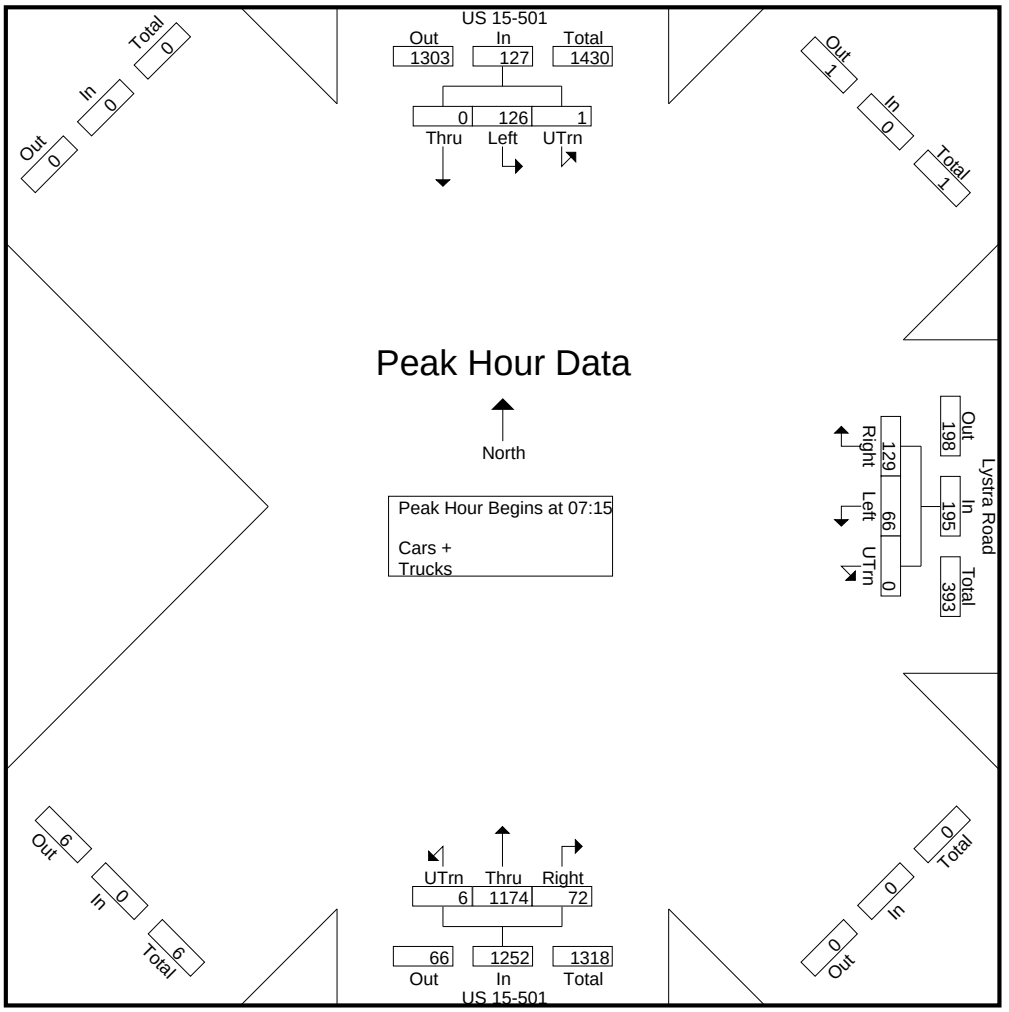
File Name : Chapel Hill(US 15-501 and Lystra) AM Peak
Site Code :
Start Date : 2/15/2017
Page No : 2

	US 15-501 Southbound				Lystra Road Westbound				US 15-501 Northbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15													
07:15	0	31	**1**	32	21	12	0	33	9	**319**	1	**329**	394
07:30	0	**35**	0	**35**	34	**21**	0	55	19	275	**4**	298	388
07:45	0	31	0	31	**42**	20	0	**62**	**27**	279	1	307	**400**
08:00	0	29	0	29	32	13	0	45	17	301	0	318	392
Total Volume	0	126	1	127	129	66	0	195	72	1174	6	1252	1574
% App. Total	0	99.2	0.8		66.2	33.8	0		5.8	93.8	0.5		
PHF	.000	.900	.250	.907	.768	.786	.000	.786	.667	.920	.375	.951	.984



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Groups Printed- Cars + - Trucks

	US 15-501 Southbound				Lystra Road Westbound				US 15-501 Northbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
16:00	0	48	2	50	15	38	0	53	8	175	4	187	290
16:15	0	40	0	40	51	30	0	81	11	152	9	172	293
16:30	0	64	0	64	45	37	0	82	5	153	11	169	315
16:45	0	55	0	55	29	36	0	65	9	136	6	151	271
Total	0	207	2	209	140	141	0	281	33	616	30	679	1169
17:00	0	54	0	54	34	42	0	76	5	148	5	158	288
17:15	0	51	1	52	33	40	0	73	10	204	11	225	350
17:30	0	55	1	56	40	33	0	73	9	176	5	190	319
17:45	0	43	0	43	41	44	0	85	12	155	12	179	307
Total	0	203	2	205	148	159	0	307	36	683	33	752	1264
Grand Total	0	410	4	414	288	300	0	588	69	1299	63	1431	2433
Apprch %	0	99	1		49	51	0		4.8	90.8	4.4		
Total %	0	16.9	0.2	17	11.8	12.3	0	24.2	2.8	53.4	2.6	58.8	
Cars +	0	410	4	414	288	300	0	588	69	1292	63	1424	2426
% Cars +	0	100	100	100	100	100	0	100	100	99.5	100	99.5	99.7
Trucks	0	0	0	0	0	0	0	0	0	7	0	7	7
% Trucks	0	0	0	0	0	0	0	0	0	0.5	0	0.5	0.3

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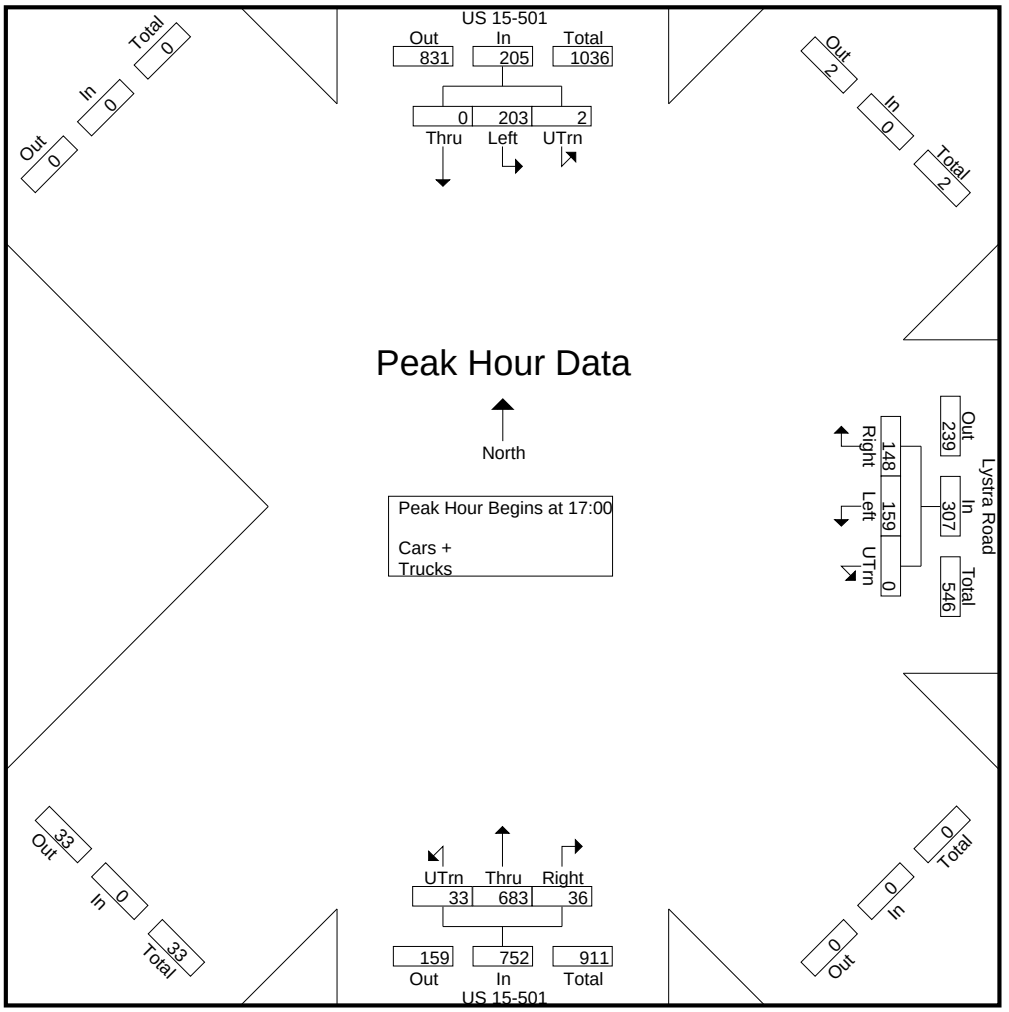
Site Code :
Start Date : 2/15/2017
Page No : 2

	US 15-501 Southbound				Lystra Road Westbound				US 15-501 Northbound				
Start Time	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Right	Thru	UTrn	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 17:00													
17:00	0	54	0	54	34	42	0	76	5	148	5	158	288
17:15	0	51	**1**	52	33	40	0	73	10	**204**	11	**225**	**350**
17:30	0	**55**	1	**56**	40	33	0	73	9	176	5	190	319
17:45	0	43	0	43	**41**	**44**	0	**85**	**12**	155	**12**	179	307
Total Volume	0	203	2	205	148	159	0	307	36	683	33	752	1264
% App. Total	0	99	1		48.2	51.8	0		4.8	90.8	4.4		
PHF	.000	.923	.500	.915	.902	.903	.000	.903	.750	.837	.688	.836	.903



Burns Service Inc.

1202 Langdon Terrace Drive
Raleigh, NC, 27615

File Name : Chapel Hill(US 15-501 and Polks Landing) AM Peak
Site Code :
Start Date : 2/15/2017
Page No : 1

Groups Printed- Cars + - Trucks

	US 15-501 Southbound				US 15-501 Northbound				Polks Landing Road Eastbound				
Start Time	Right	Thru	UTrn	App. Total	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Int. Total
07:00	3	132	13	148	0	4	0	4	6	0	0	6	158
07:15	2	142	16	160	0	5	0	5	14	0	0	14	179
07:30	0	147	15	162	0	3	0	3	13	0	0	13	178
07:45	6	155	16	177	0	21	0	21	8	0	0	8	206
Total	11	576	60	647	0	33	0	33	41	0	0	41	721
08:00	2	174	7	183	0	17	1	18	7	0	0	7	208
08:15	1	151	13	165	0	15	0	15	7	0	0	7	187
08:30	0	129	13	142	0	7	0	7	3	0	0	3	152
08:45	3	112	23	138	0	9	0	9	3	0	0	3	150
Total	6	566	56	628	0	48	1	49	20	0	0	20	697
Grand Total	17	1142	116	1275	0	81	1	82	61	0	0	61	1418
Apprch %	1.3	89.6	9.1		0	98.8	1.2		100	0	0		
Total %	1.2	80.5	8.2	89.9	0	5.7	0.1	5.8	4.3	0	0	4.3	
Cars +	17	1133	116	1266	0	81	1	82	61	0	0	61	1409
% Cars +	100	99.2	100	99.3	0	100	100	100	100	0	0	100	99.4
Trucks	0	9	0	9	0	0	0	0	0	0	0	0	9
% Trucks	0	0.8	0	0.7	0	0	0	0	0	0	0	0	0.6

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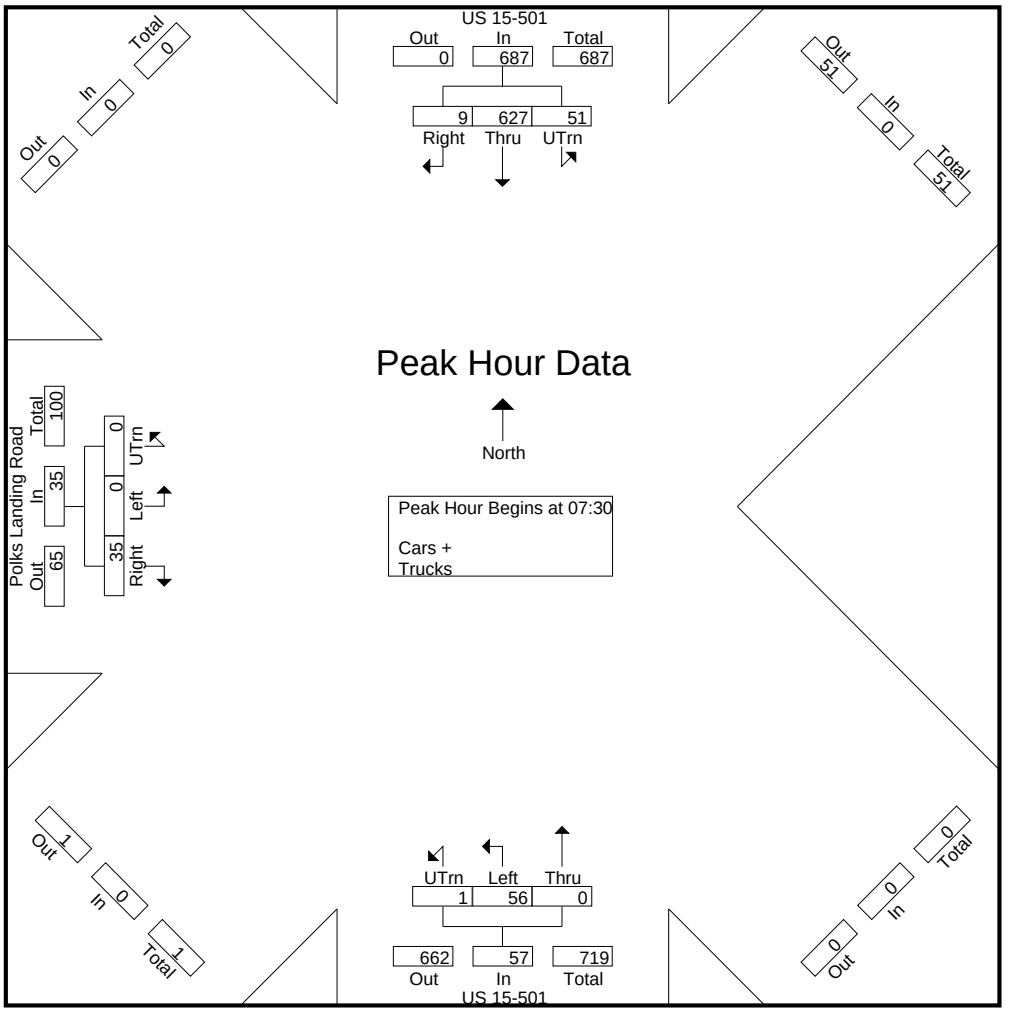
	US 15-501 Southbound				US 15-501 Northbound				Polks Landing Road Eastbound				
Start Time	Right	Thru	UTrn	App. Total	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30													
07:30	0	147	15	162	0	3	0	3	**13**	0	0	**13**	178
07:45	**6**	155	**16**	177	0	**21**	0	**21**	8	0	0	8	206
08:00	2	**174**	7	**183**	0	17	**1**	18	7	0	0	7	**208**
08:15	1	151	13	165	0	15	0	15	7	0	0	7	187
Total Volume	9	627	51	687	0	56	1	57	35	0	0	35	779
% App. Total	1.3	91.3	7.4		0	98.2	1.8		100	0	0		
PHF	.375	.901	.797	.939	.000	.667	.250	.679	.673	.000	.000	.673	.936



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Site Code :
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Page No : 1

Groups Printed- Cars + - Trucks

	US 15-501 Southbound				US 15-501 Northbound				Polks Landing Road Eastbound				
Start Time	Right	Thru	UTrn	App. Total	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Int. Total
16:00	7	268	18	293	0	9	0	9	5	0	0	5	307
16:15	9	287	13	309	0	10	0	10	3	0	0	3	322
16:30	10	316	13	339	0	8	0	8	4	0	0	4	351
16:45	9	326	12	347	0	7	0	7	6	0	0	6	360
Total	35	1197	56	1288	0	34	0	34	18	0	0	18	1340
17:00	10	344	16	370	0	4	0	4	3	0	0	3	377
17:15	9	370	27	406	0	12	0	12	4	0	0	4	422
17:30	8	318	22	348	0	8	1	9	6	0	0	6	363
17:45	8	302	14	324	0	15	1	16	8	0	0	8	348
Total	35	1334	79	1448	0	39	2	41	21	0	0	21	1510
Grand Total	70	2531	135	2736	0	73	2	75	39	0	0	39	2850
Apprch %	2.6	92.5	4.9		0	97.3	2.7		100	0	0		
Total %	2.5	88.8	4.7	96	0	2.6	0.1	2.6	1.4	0	0	1.4	
Cars +	70	2517	135	2722	0	73	2	75	39	0	0	39	2836
% Cars +	100	99.4	100	99.5	0	100	100	100	100	0	0	100	99.5
Trucks	0	14	0	14	0	0	0	0	0	0	0	0	14
% Trucks	0	0.6	0	0.5	0	0	0	0	0	0	0	0	0.5

Burns Service Inc.

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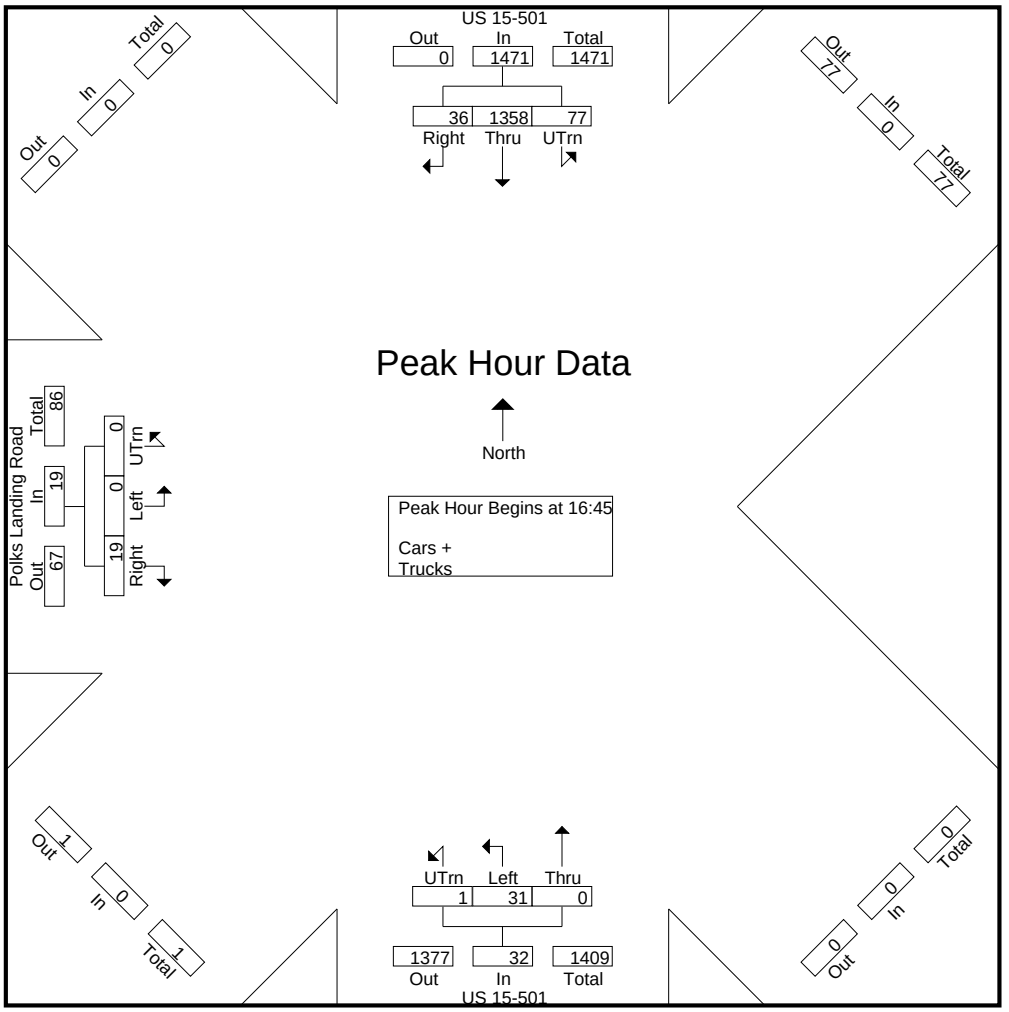
File Name : Chapel Hill(US 15-501 and Polks Landing) PM Peak
Site Code :
Start Date : 2/15/2017
Page No : 2

	US 15-501 Southbound				US 15-501 Northbound				Polks Landing Road Eastbound				
Start Time	Right	Thru	UTrn	App. Total	Thru	Left	UTrn	App. Total	Right	Left	UTrn	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 16:45													
16:45	9	326	12	347	0	7	0	7	**6**	0	0	**6**	360
17:00	**10**	344	16	370	0	4	0	4	3	0	0	3	377
17:15	9	**370**	**27**	**406**	0	**12**	0	**12**	4	0	0	4	**422**
17:30	8	318	22	348	0	8	**1**	9	6	0	0	6	363
Total Volume	36	1358	77	1471	0	31	1	32	19	0	0	19	1522
% App. Total	2.4	92.3	5.2		0	96.9	3.1		100	0	0		
PHF	.900	.918	.713	.906	.000	.646	.250	.667	.792	.000	.000	.792	.902

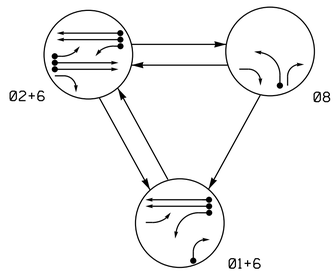


APPENDIX B

SIGNAL INFORMATION

PROJECT REFERENCE NO.	SHEET NO.
	Sig.

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

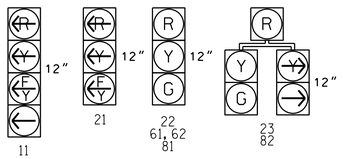
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+6	PHASE Ø2+6	PHASE Ø8	FLASH
11	←	~~FY~~	~~R~~	~~Y~~
21	~~FY~~	~~FY~~	~~R~~	~~Y~~
22	R	G	R	Y
23	R	G	R/→	Y
61, 62	G	G	R	Y
81	R	R	G	R
82	R/→	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



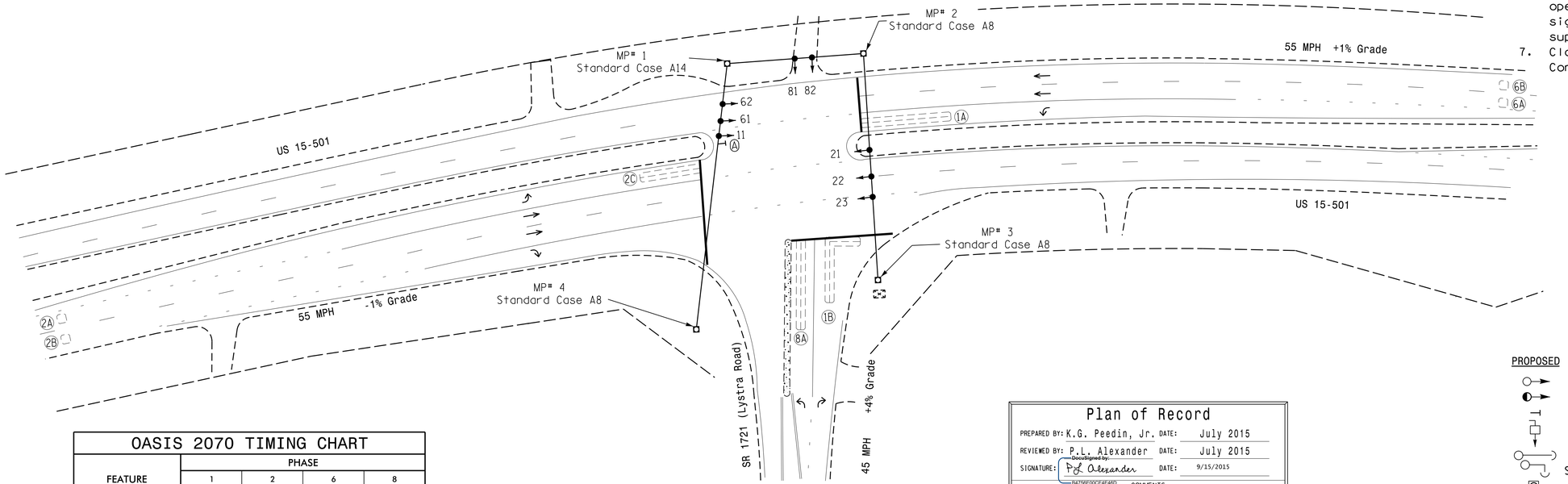
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Y	Y	-	-	15	-	-
					6	Y	Y	Y	-	3	-	-
1B	6X60	0	2-4-2	-	1	Y	Y	-	-	15	-	-
2A	6X6	420	4	-	2	Y	Y	-	-	-	-	-
2B	6X6	420	4	-	2	Y	Y	-	-	-	-	-
2C	6X40	0	2-4-2	-	2	Y	Y	Y	-	3	-	-
6A	6X6	420	4	-	6	Y	Y	-	-	-	-	-
6B	6X6	420	4	-	6	Y	Y	-	-	-	-	-
8A	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-	-

3 Phase
Fully Actuated
US 15-501 CLS

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
7. Closed loop system data: Controller Asset #: 0429.



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 6	PHASE 8
Min Green 1 *	7	14	14	7
Extension 1 *	1.0	6.0	6.0	1.0
Max Green 1 *	25	120	120	40
Yellow Clearance	3.0	5.3	5.3	3.0
Red Clearance	2.9	1.1	1.1	3.1
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	1.5	1.5	-
Max Variable Initial *	-	46	45	-
Time Before Reduction *	-	15	15	-
Time To Reduce *	-	30	30	-
Minimum Gap	-	4.0	4.0	-
Recall Mode	-	MIN RECALL	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	YELLOW	-
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Plan of Record

PREPARED BY: K.G. Peedin, Jr. DATE: July 2015
REVIEWED BY: P.L. Alexander DATE: July 2015
SIGNATURE: DocuSigned by: P.L. Alexander B4756E00CE4E46D... DATE: 9/15/2015

COMMENTS
Changed phase 4 to 8 and modified loop 1B.

This plan of record reflects existing field conditions as submitted by field personnel. This plan may have been modified from its original state.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
(A)	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	(A)

Plan of Record

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

US 15-501
at
SR 1721 (Lystra Road)

Division 8 Chatham County NE of Pittsboro

PLAN DATE: July 2011 REVIEWED BY:
PREPARED BY: Sterling REVIEWED BY:

SCALE 0 40 1" = 40'

REVISIONS	INIT.	DATE

Not a certified document. This document originally Issued and sealed by Robert J Ziemba, 26486 on October 4, 2011. This document shall not be considered a certified document.

SIG. INVENTORY NO. 08-0429

15-SEP-2015 09:50
S:\ITS\SIG\ITS Signals\Signal Design Section\Central Region\Div 8\PORs\08-0429\08429_sig_POR_2015mod1.dgn
kpeedin

APPENDIX C

ADJACENT DEVELOPMENT INFORMATION

Transportation Impact Assessment

for

Briar Chapel

Chatham County, North Carolina

Prepared for:

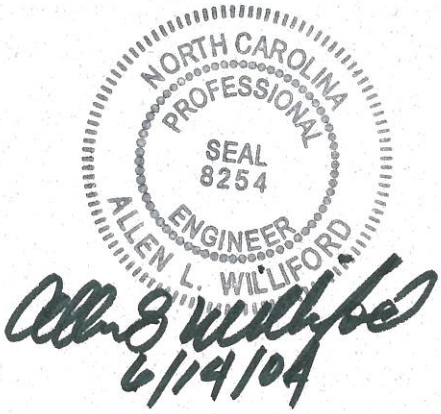
The John R. McAdams Company, Inc.
Research Triangle Park, North Carolina

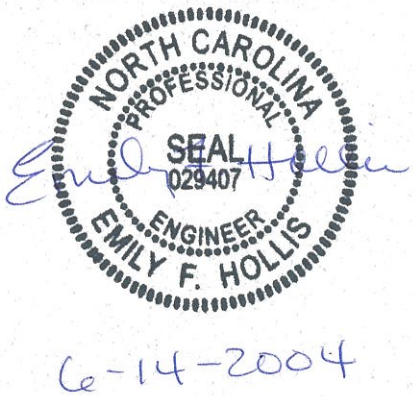
Prepared By:

Kimley-Horn and Associates, Inc.
P.O. Box 33068
Raleigh, North Carolina 27636-3068
(919) 677-2000

011270015

June 2004





MASTER PLAN

- OPEN SPACE
- STREAM BUFFER
- PARK
- RESIDENTIAL LOTS
- MULTI-FAMILY RESIDENTIAL
- CIVIC
- RETAIL
- OFFICE
- STORM POND
- WATER RECLAMATION

MANN'S CHAPEL ROAD

FIRE STATION/ EMS

100' PERIMETER BUFFER

NEIGHBORHOOD PARK, TYP,

STORMWATER POND, TYP.

COMMUNITY CENTER

WATER RECLOMATION FACILITY
WATER REUSE/ STORAGE POND, TYP.

US HWY 15-501

BENNET MOUNTAIN

100' PERIMETER BUFFER

WATER REUSE/ STORAGE POND

WILKENSON CREEK

100' VIEWSHED BUFFER

VILLAGE MARKET

50' VIEWSHED BUFFER

200' PERIMETER BUFFER

NEIGHBORHOOD PARK, TYP.

VILLAGE CENTER

COUNTY SCHOOL

ANDREWS STORE ROAD

LIBRARY

CIVIC BUILDING

POKEBERRY CREEK

CEMETERY

RECREATION CENTER

VILLAGE RETAIL

CHARTER SCHOOL

300' PERIMETER BUFFER

50' VIEWSHED BUFFER

COUNTY PARK/ RECREATION CENTER

TOWN CENTER

STORMWATER POND, TYP.

100' VIEWSHED BUFFER

SITE DATA

Area	1,589.36 Acres
Total Units	2,389
Gross Density	1.50 Units/Acre
Lot Area	359.90 Acres
Net Density	6.64 Units / Acre

Briar Chapel
A Newland Communities Development

FIGURE 2

SITE PLAN

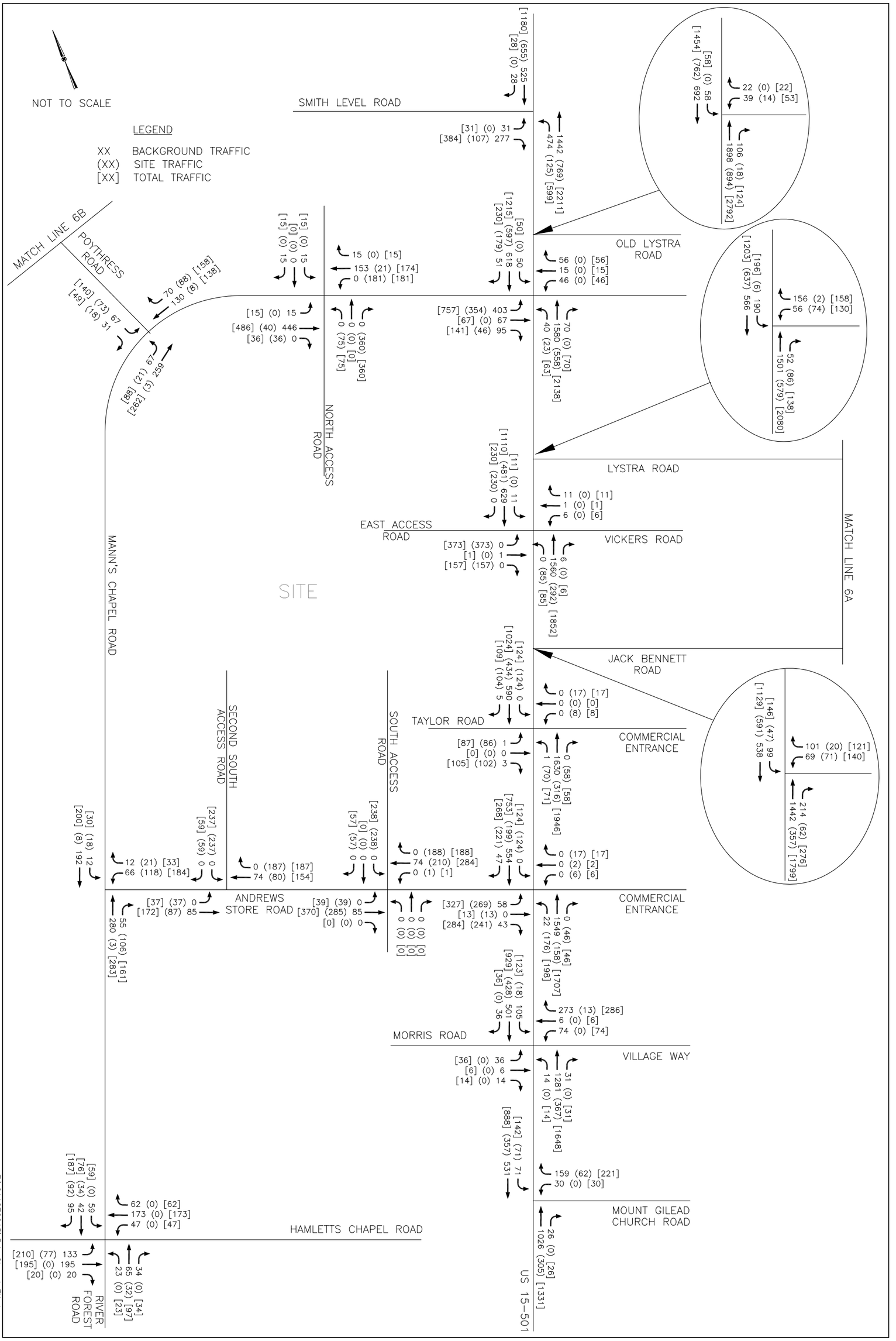
BRIAR CHAPEL
TRANSPORTATION IMPACT ASSESSMENT

Kimley»Horn and Associates, Inc.

Table 4.0
Trip Generation
Briar Chapel

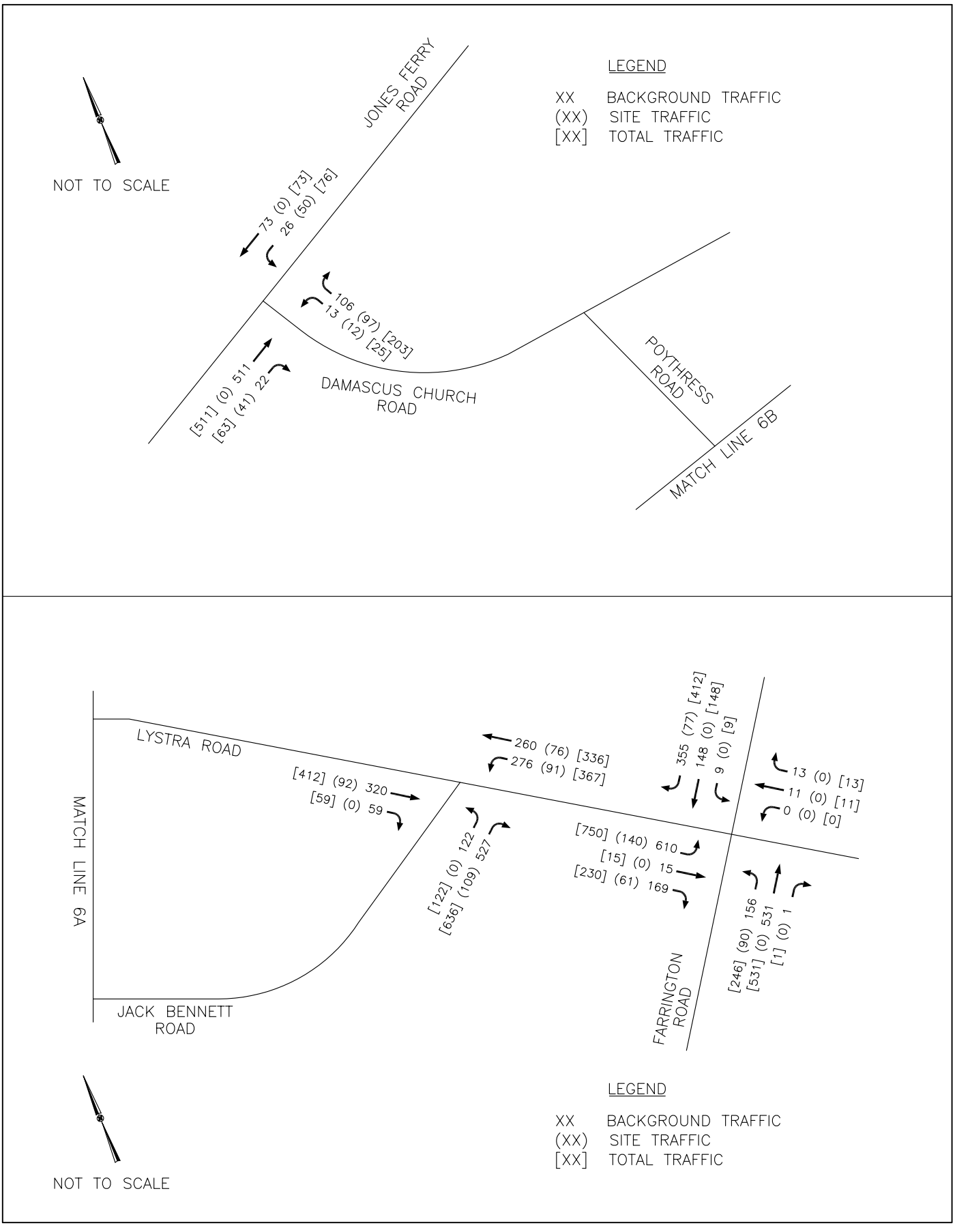
ITE LUC	Land Use	Intensity	units	Daily Total	AM Peak Hour Total	AM Peak Hour Enter	AM Peak Hour Exit	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
North Neighborhood										
210	Single Family	223	DU	2,175	166	42	124	221	139	82
Central Neighborhoods										
210	Single Family	734	DU	6,507	523	131	392	645	406	239
230	Residential Condo/Townhouse	107	DU	680	55	9	46	64	43	21
	Subtotal Trips			7,187	578	140	438	709	449	260
West Neighborhood										
210	Single Family	277	DU	2,655	203	51	152	268	169	99
East Neighborhood										
210	Single Family	67	DU	719	56	14	42	75	47	28
230	Residential Condo/Townhouse	14	DU	121	11	2	9	12	8	4
	Subtotal Trips			840	67	16	51	87	55	32
Traditional Neighborhood										
210	Single Family	576	DU	5,206	413	103	310	518	326	192
230	Residential Condo/Townhouse	311	DU	1,684	128	22	106	152	102	50
536	Charter School	400	Students	992	310	189	121	68	29	39
920	Public School*	900	Students	1,588	375	259	116	126	59	67
412	County Park	141	Acres	321	1	1	0	8	3	5
814	Specialty Retail	12	1000 S.F.	551	175	84	91	50	22	28
	Subtotal Trips			10,342	1,402	658	744	922	541	381
North Garden										
814	Specialty Retail	40	1000 S.F.	1,749	312	150	162	117	52	65
Southern Mixed Use Village										
220	Apartment	80	DU	631	43	9	34	62	40	22
710	General Office	270	1000 S.F.	2,866	415	365	50	381	65	316
820	General Retail	200	1000 S.F.	10,656	237	145	92	989	475	514
	Subtotal Trips			14,153	695	519	176	1,432	580	852
Total Project Generated Trips				39,101	3,423	1,576	1,847	3,756	1,985	1,771
Total Internal Capture				5,863	106	53	53	400	200	200
Total Project Driveway Volumes				33,238	3,317	1,523	1,794	3,356	1,785	1,571
Total Project Pass-By Trips - Southern Village Retail			20%	2,012				165	81	84
Total Project New External Trips				**31,226**	**3,317**	**1,523**	**1,794**	**3,191**	**1,704**	**1,488**

Trip Generation Rates from ITE *Trip Generation*, 7th Edition, 2003
* Although intended to be K-8, the public school was generated as a high school to be conservative



T:\011270015\Briar Chapel_TIA.dwg

Kimley-Horn and Associates, Inc.	BRIAR CHAPEL TRANSPORTATION IMPACT ASSESSMENT	PROJECTED 2014 AM PEAK HOUR TRAFFIC VOLUMES	FIGURE 6



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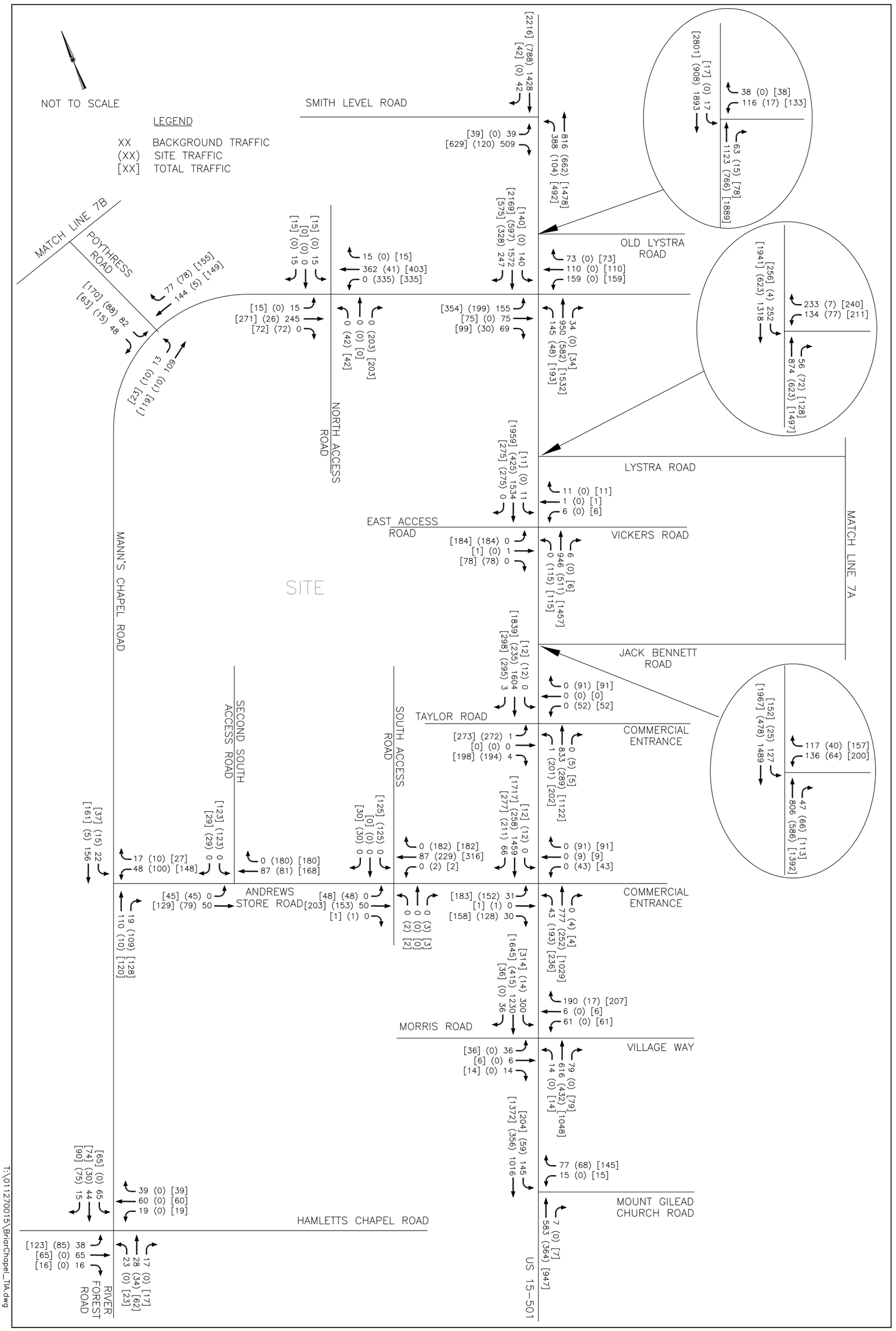
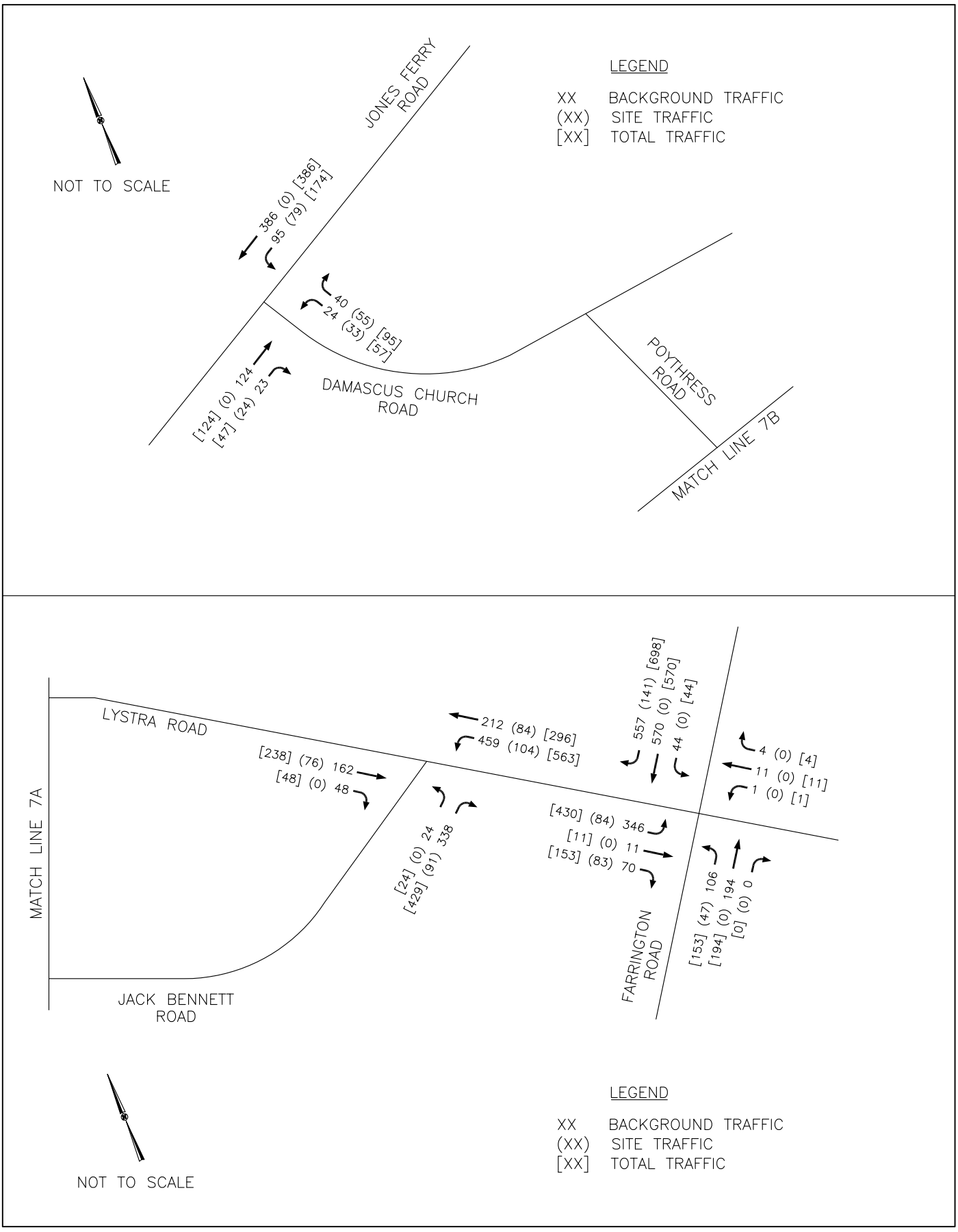
Kimley-Horn and Associates, Inc.	BRIAR CHAPEL TRANSPORTATION IMPACT ASSESSMENT	PROJECTED 2014 AM PEAK HOUR TRAFFIC VOLUMES	FIGURE 6A



Kimley-Horn and Associates, Inc.	BRIAR CHAPEL TRANSPORTATION IMPACT ASSESSMENT	PROJECTED 2014 PM PEAK HOUR TRAFFIC VOLUMES	FIGURE 7

T:\011270015\BriarChapel_TIA.dwg



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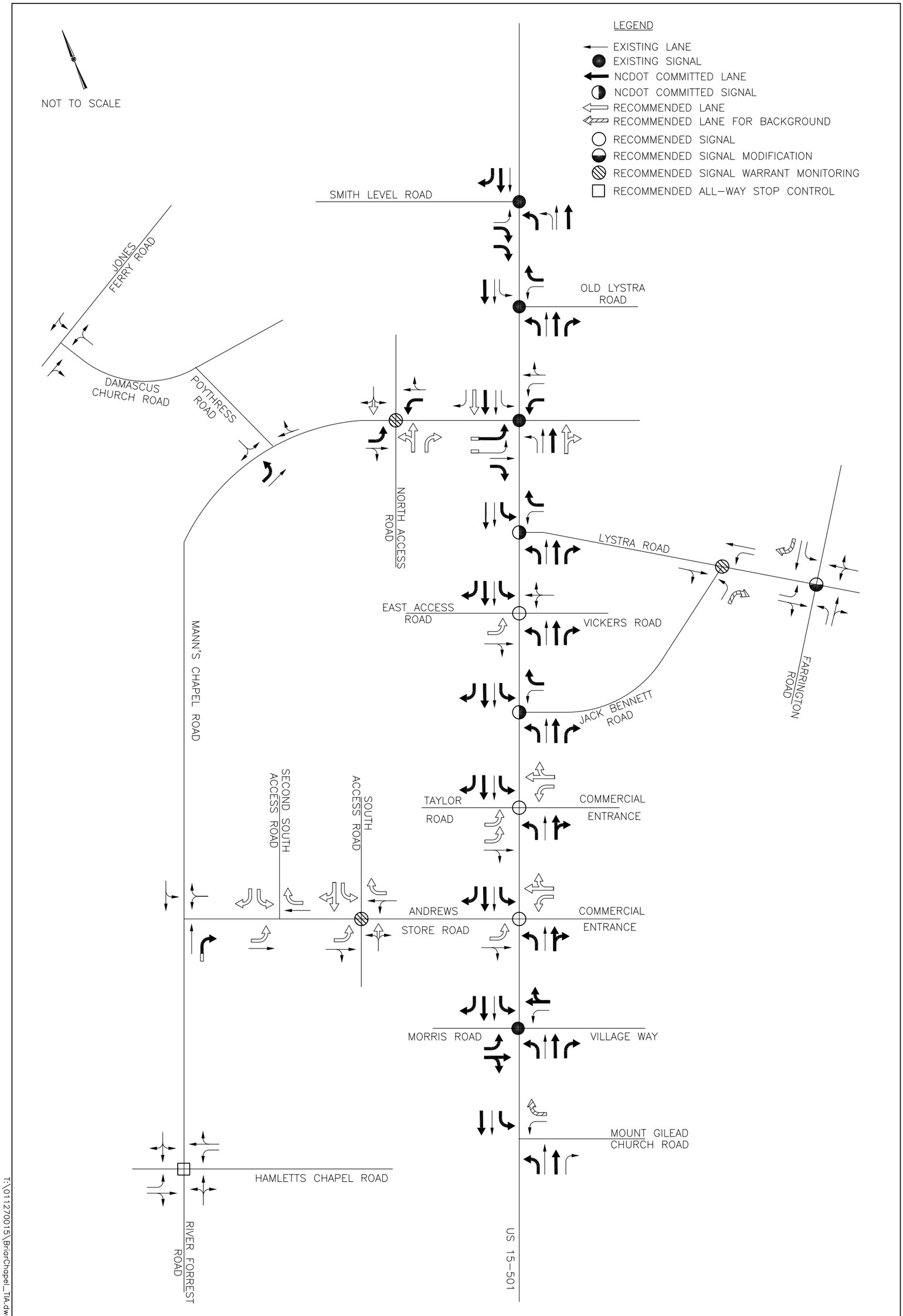
Kimley-Horn and Associates, Inc.	BRIAR CHAPEL TRANSPORTATION IMPACT ASSESSMENT	PROJECTED 2014 PM PEAK HOUR TRAFFIC VOLUMES	FIGURE 7A



T:\011270015\BriarChapel_TIA.dwg

Kimley-Horn and Associates, Inc.	BRIAR CHAPEL TRANSPORTATION IMPACT ASSESSMENT	RECOMMENDED ROADWAY LANEAGE	FIGURE 8

TRAFFIC IMPACT ANALYSIS REPORT

FOR THE

PROPOSED FEARRINGTON RETAIL DEVELOPMENT

LOCATED IN

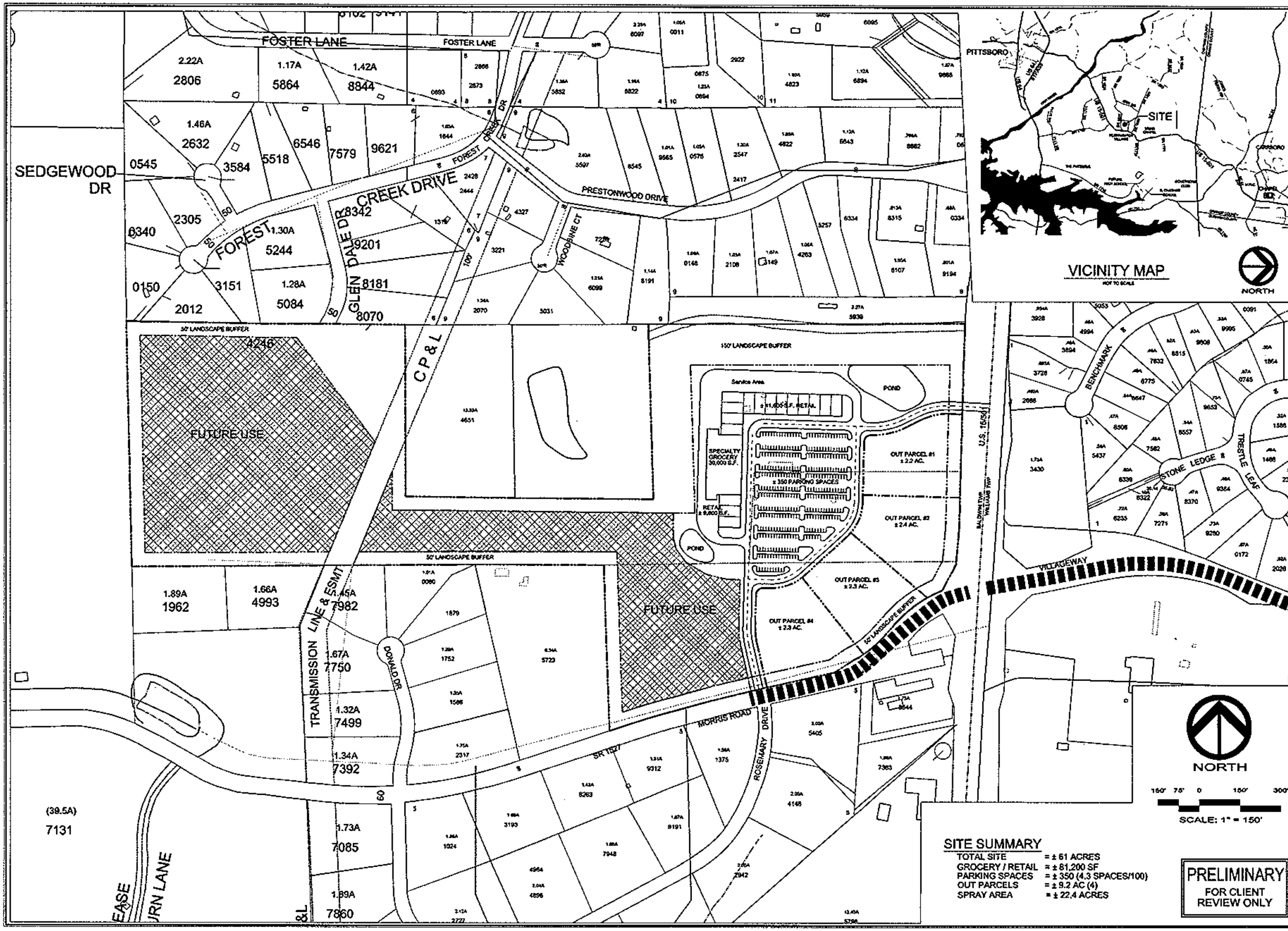
CHATHAM COUNTY, NORTH CAROLINA

Prepared For
Jesse Fearrington
724 Morris Road
Pittsboro, NC 27312

Prepared By
Ramey Kemp & Associates, Inc.
4928-A Windy Hill Drive
Raleigh, North Carolina

April 2006

RKA Project No. 06055


VICINITY MAP
NOT TO SCALE
NORTH
PITTSBORO
SITE
SEDGEWOOD DR
FOSTER LANE
FOREST CREEK DRIVE
PRESTONWOOD DRIVE
WOODBINE CT
GLEN DALE DR
CP&L
TRANSMISSION LINE & ESMT
DONALD DR
MORRIS ROAD
SR 1527
ROSEMARY DRIVE
U.S. 15/501
BALDWIN TWP
WILLIAMS TWP
VILLAGEWAY
BENCHMARK
STONE LEDGE
TRESTLE LEAF
FUTURE USE
FUTURE USE
50' LANDSCAPE BUFFER
150' LANDSCAPE BUFFER
50' LANDSCAPE BUFFER
Service Area
POND
POND
± 11,600 S.F. RETAIL
SPECIALTY GROCERY 30,000 S.F.
RETAIL ± 9,800 S.F.
± 350 PARKING SPACES
OUT PARCEL #1 ± 2.2 AC.
OUT PARCEL #2 ± 2.4 AC.
OUT PARCEL #3 ± 2.3 AC.
OUT PARCEL #4 ± 2.3 AC.
NORTH
150' 75' 0 150' 300'
SCALE: 1" = 150'
(39.5A)
7131

SITE SUMMARY

TOTAL SITE	= ± 61 ACRES
GROCERY / RETAIL	= ± 81,200 SF
PARKING SPACES	= ± 350 (4.3 SPACES/100)
OUT PARCELS	= ± 9.2 AC (4)
SPRAY AREA	= ± 22.4 ACRES

PRELIMINARY
FOR CLIENT
REVIEW ONLY

NO.	REVISIONS	DATE

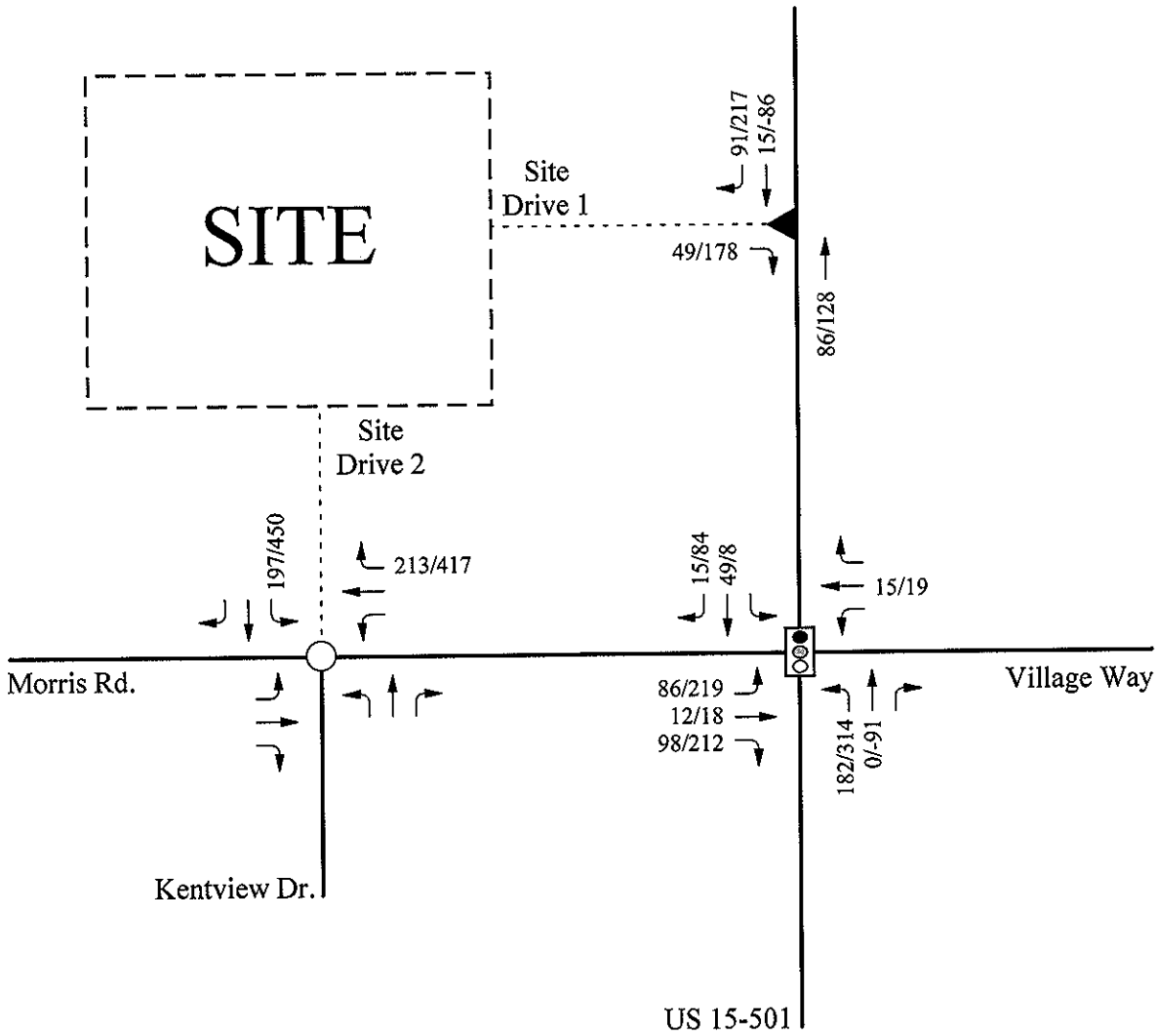
LE Group, inc.
LAND PLANNING
CIVIL ENGINEERING
CONSTRUCTION MANAGEMENT

Preliminary – Not Released for Construction

Fearrington Retail
US 15/501 and Morris Road
Conceptual Site Plan
Chatham County
North Carolina

Date:	April 3, 2006
Scale:	1"= 150
Drawn:	JLM
Checked:	MFA
Project No.	101
Computer Dwg. Name	15-501 040306.dwg

Sheet No.
C
Of __



LEGEND

Signalized Intersection

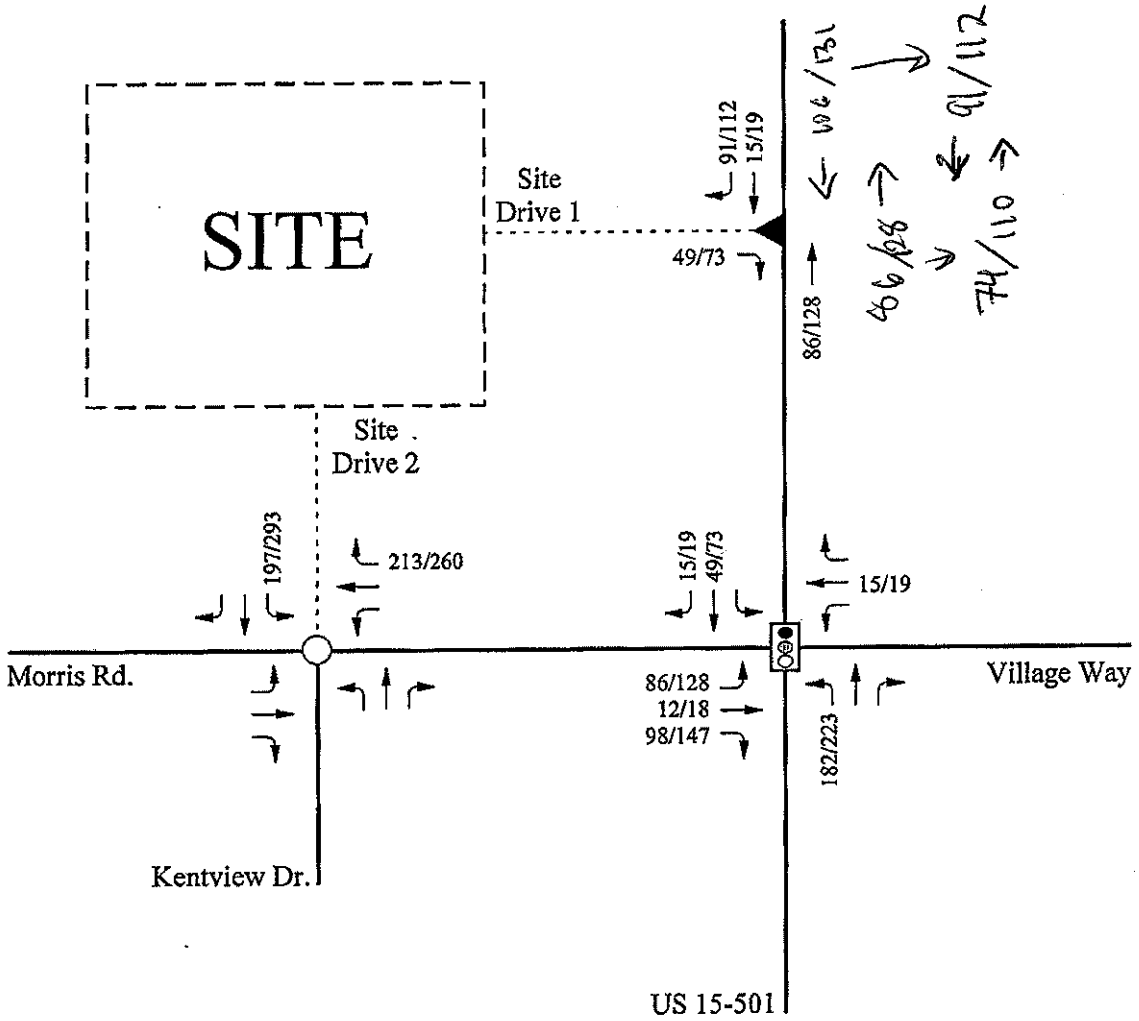
Unsignalized Intersection

X/Y → AM/PM Weekday Peak Hour Site Trips

FEARRINGTON RETAIL DEVELOPMENT CHATHAM COUNTY, NORTH CAROLINA		
Total Peak Hour Site Trip Assignment		
	Scale: Not to Scale	Figure 12

30k sf grocery
51.2k sf retail

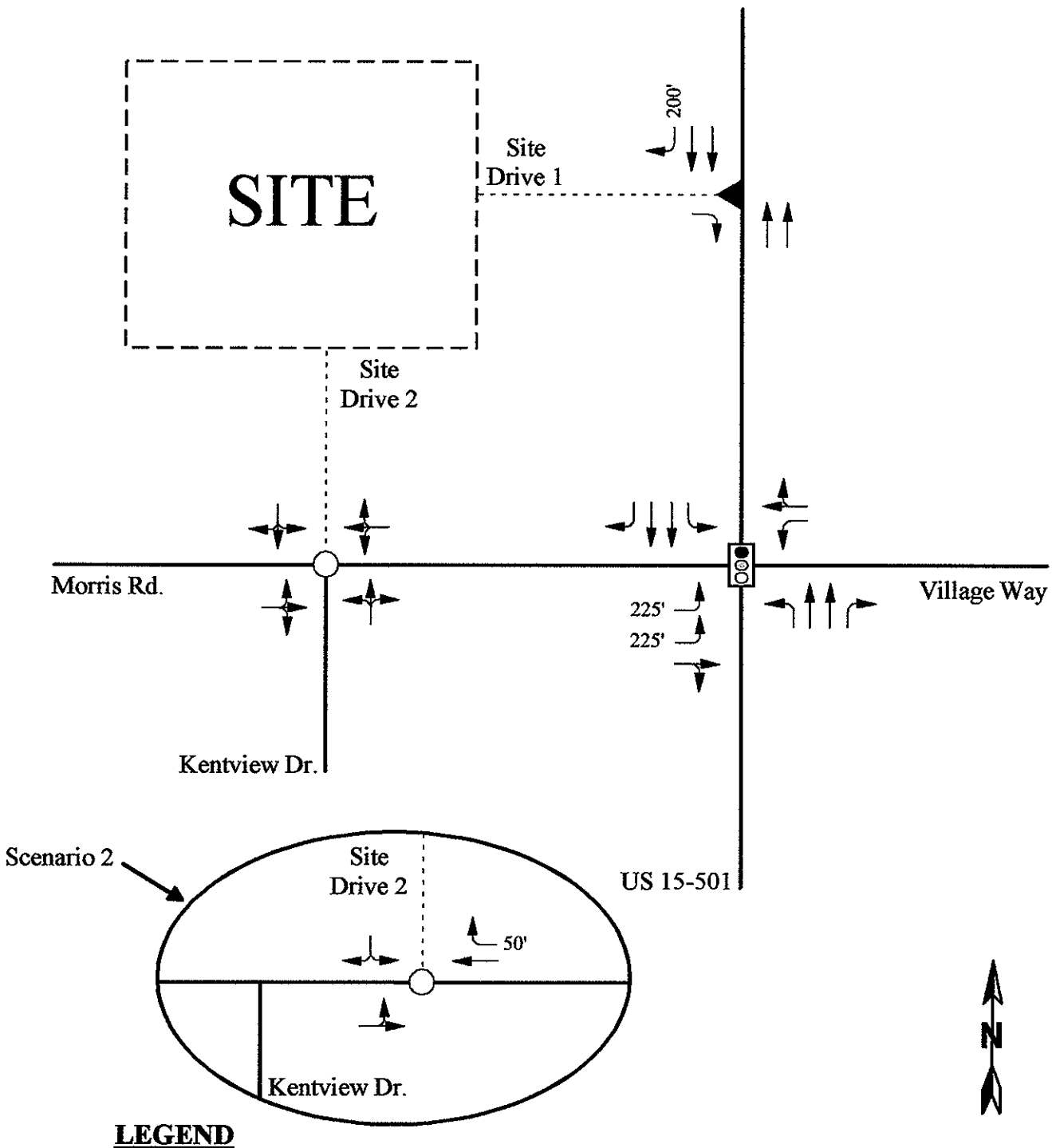
35% → 30%



LEGEND

- Signalized Intersection
- Unsignalized Intersection
- X/Y → AM/PM Weekday Peak Hour Site Trips

FEARRINGTON RETAIL DEVELOPMENT CHATHAM COUNTY, NORTH CAROLINA		
Primary Peak Hour Site Trip Assignment		
	Scale: Not to Scale	Figure 10



LEGEND

- Existing Lane
- Recommended Lane
- Recommended Right-In / Right-Out

N

FEARRINGTON RETAIL DEVELOPMENT CHATHAM COUNTY, NORTH CAROLINA		
Recommended Improvements		
	Scale: Not to Scale	Figure 14

Table 2 shows that when compared to the land uses from the TIA, the trip generation potential of the alternate land uses results in a net decrease of 218 daily trips in and 218 daily trips out on a typical weekday (almost 9% decrease) with 76 fewer trips entering and 35 fewer trips exiting during the AM peak hour (approximately 25% decrease) and 20 fewer trips entering and 78 fewer trips exiting during the PM peak hour (approximately 17% decrease).

It should be noted that the trip generation potential of the alternate land uses is also lower than that of the land uses proposed in the Trip Generation letter to Mr. Reuben Blakley dated October 14, 2010 and approved by the District office on December 2, 2010.

Based on this comparison of the trip generation potential of this alternate set of land uses versus those analyzed in the January 11, 2008 TIA, there are no requested changes to the required improvements for the Polks Village development.

Please feel free to contact me with any questions or comments.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.
NC License #F-0102

Richard C. Adams, P.E.
Vice President

RCA/jtf

Attachments: Trip Generation

CC: Brantley Powell, HBP Properties, LLC

NORTH CAROLINA PROFESSIONAL SEAL 18425 ENGINEER RICHARD CHILDS ADAMS

4.26.13

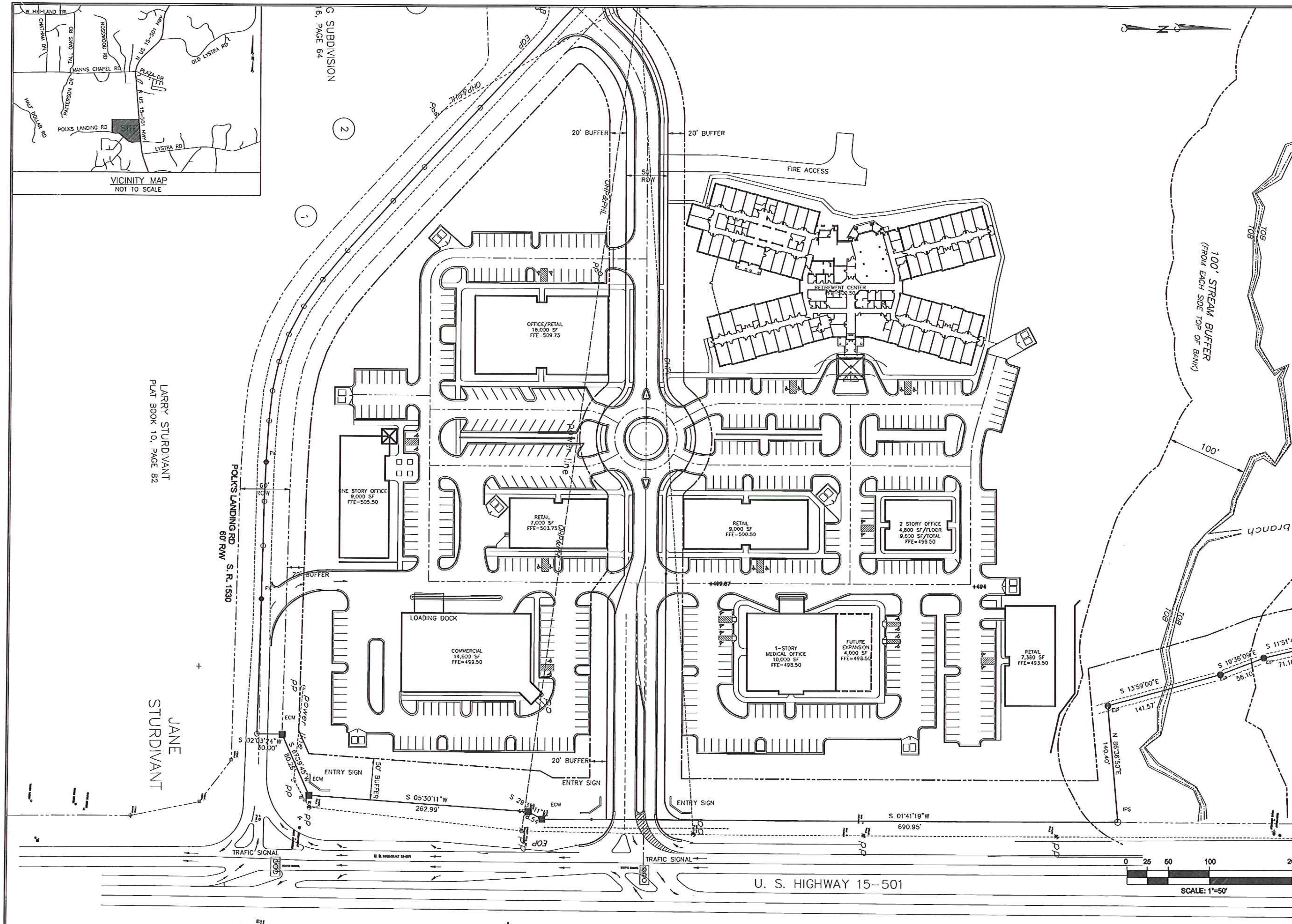
K:\RAL_TPTO_Traffic\012949000 Polks Landing\T2 - Correspondence\Trip Gen Letter Birchett 4-26-2013.doc

Polks Village

Trip Generation Comparison - Alternate Land Use Scenario

Land Use		Intensity		Daily			AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out	Total	In	Out
254	Assisted Living	96	beds	278	139	139	13	8	5	21	9	12
565	Day Care Center	10,000	s.f.	742	371	371	122	65	57	123	58	65
710	General Office Building[1]	9,600	s.f.	106	53	53	15	13	2	14	2	12
720	Medical Office Building	14,000	s.f.	358	179	179	33	26	7	50	14	36
820	Shopping Center	9,000	s.f.	1,420	710	710	36	22	14	119	57	62
843	Automobile Parts Sales	7,380	s.f.	448	224	224	16	8	8	43	21	22
850	Supermarket	30,000	s.f.	3,400	1,700	1,700	102	63	39	320	163	157
Subtotal				**6,752**	**3,376**	**3,376**	**337**	**205**	**132**	**690**	**324**	**366**
Internal Capture												
	Assisted Living			28	14	14	0	0	0	2	1	1
	Day Care Center			74	37	37	0	0	0	12	6	6
	General Office Building			11	6	5	0	0	0	1	1	0
	Medical Office Building			36	18	18	0	0	0	5	2	3
	Shopping Center			142	71	71	0	0	0	12	6	6
	Automobile Parts Sales			45	22	23	0	0	0	4	2	2
	Supermarket			340	170	170	0	0	0	32	16	16
Internal Capture Total		**10.00%**		676	338	338	0	0	0	68	34	34
Driveway Volumes				**6,076**	**3,038**	**3,038**	**337**	**205**	**132**	**622**	**290**	**332**
Pass-By Traffic (ITE)		AM	PM									
	Shopping Center	0%	34%	360	180	180	0	0	0	36	17	19
	Automobile Parts Sales	0%	43%	170	85	85	0	0	0	17	8	9
	Supermarket	0%	36%	1,040	520	520	0	0	0	104	53	51
Subtotal		*22.75%*		1,570	785	785	0	0	0	157	78	79
10% Adjacent Street Traffic				2,980	1,490	1,490	281	141	141	298	149	149
Pass-By Total:		**22.75%**		**1,570**	**785**	**785**	**0**	**0**	**0**	**157**	**78**	**79**
Total Net New External Trips				**4,506**	**2,253**	**2,253**	**337**	**205**	**132**	**465**	**212**	**253**
Total Net New External Trips From 2008 TIA				**4,942**	**2,471**	**2,471**	**448**	**281**	**167**	**563**	**232**	**331**
Difference vs. 2008 TIA				**-436**	**-218**	**-218**	**-111**	**-76**	**-35**	**-98**	**-20**	**-78**
Percent Difference				**-8.8%**	**-8.8%**	**-8.8%**	**-24.8%**	**-27.0%**	**-21.0%**	**-17.4%**	**-8.6%**	**-23.6%**
Total Net New External Trips From 2010 Site Plan				**4,938**	**2,469**	**2,469**	**401**	**261**	**140**	**466**	**196**	**270**
Difference vs. 2010 Site Plan				**-432**	**-216**	**-216**	**-64**	**-56**	**-8**	**-1**	**16**	**-17**
Percent Difference				**-8.7%**	**-8.7%**	**-8.7%**	**-16.0%**	**-21.5%**	**-5.7%**	**-0.2%**	**8.2%**	**-6.3%**

[1] *For the Office Space land use (less than 50,000 s.f.), the peak hour rates were used.*



VICINITY MAP
NOT TO SCALE
SITE
POLKS LANDING RD
LYSTRA RD
MANNS CHAPEL RD
OLD LYSTRA RD
N US 15-501 HWY
20' BUFFER
20' BUFFER
FIRE ACCESS
50' ROW
RETIREMENT CENTER
OFFICE/RETAIL 18,000 SF FFE=509.75
ONE STORY OFFICE 9,000 SF FFE=505.50
RETAIL 7,000 SF FFE=503.75
RETAIL 9,000 SF FFE=500.50
2 STORY OFFICE 4,800 SF/FLOOR 9,600 SF/TOTAL FFE=498.50
LOADING DOCK
COMMERCIAL 14,600 SF FFE=493.50
1-STORY MEDICAL OFFICE 10,000 SF FFE=498.50
FUTURE EXPANSION 4,000 SF FFE=498.50
RETAIL 7,350 SF FFE=493.50
100' STREAM BUFFER (FROM EACH SIDE TOP OF BANK)
100'
branch
LARRY STURDIVANT PLAT BOOK 10, PAGE 82
POLK'S LANDING RD 60' R/W S.R. 1530
JANE STURDIVANT
ENTRY SIGN
ENTRY SIGN
ENTRY SIGN
50' BUFFER
20' BUFFER
S 05°30'11"W 262.99'
S 01°41'19"W 690.95'
S 13°59'00"E 141.57'
S 19°36'09"E 56.10'
S 11°51'42" 71.16'
N 86°38'50"E 140.40'
S 02°03'24"W 30.00'
TRAFIC SIGNAL
TRAFIC SIGNAL
U. S. HIGHWAY 15-501
0 25 50 100 200
SCALE: 1"=50'

CONSULTING ENGINEERS ARCADIA

1071 CLASSIC ROAD
APEX, NC 27539
TELEPONE: 919 363-1422
FACSIMILE: 919 363-1477

PRELIMINARY PLANS

POLKS VILLAGE

OWNER/DEVELOPER: POLKS VILLAGE, INC.

CHATHAM COUNTY NORTH CAROLINA

DRAWN BY	CHECKED BY
	TDS
DATE	11-21-07

REVISIONS

1	1-26-09

SHEET TITLE

OVERALL SITE LAYOUT PLAN

SHEET NUMBER

C-1

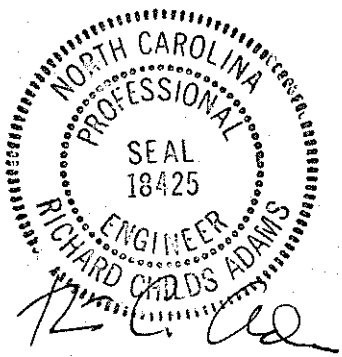
1 OF X

Traffic Impact Analysis
for
Williams Corner
Chatham County, North Carolina

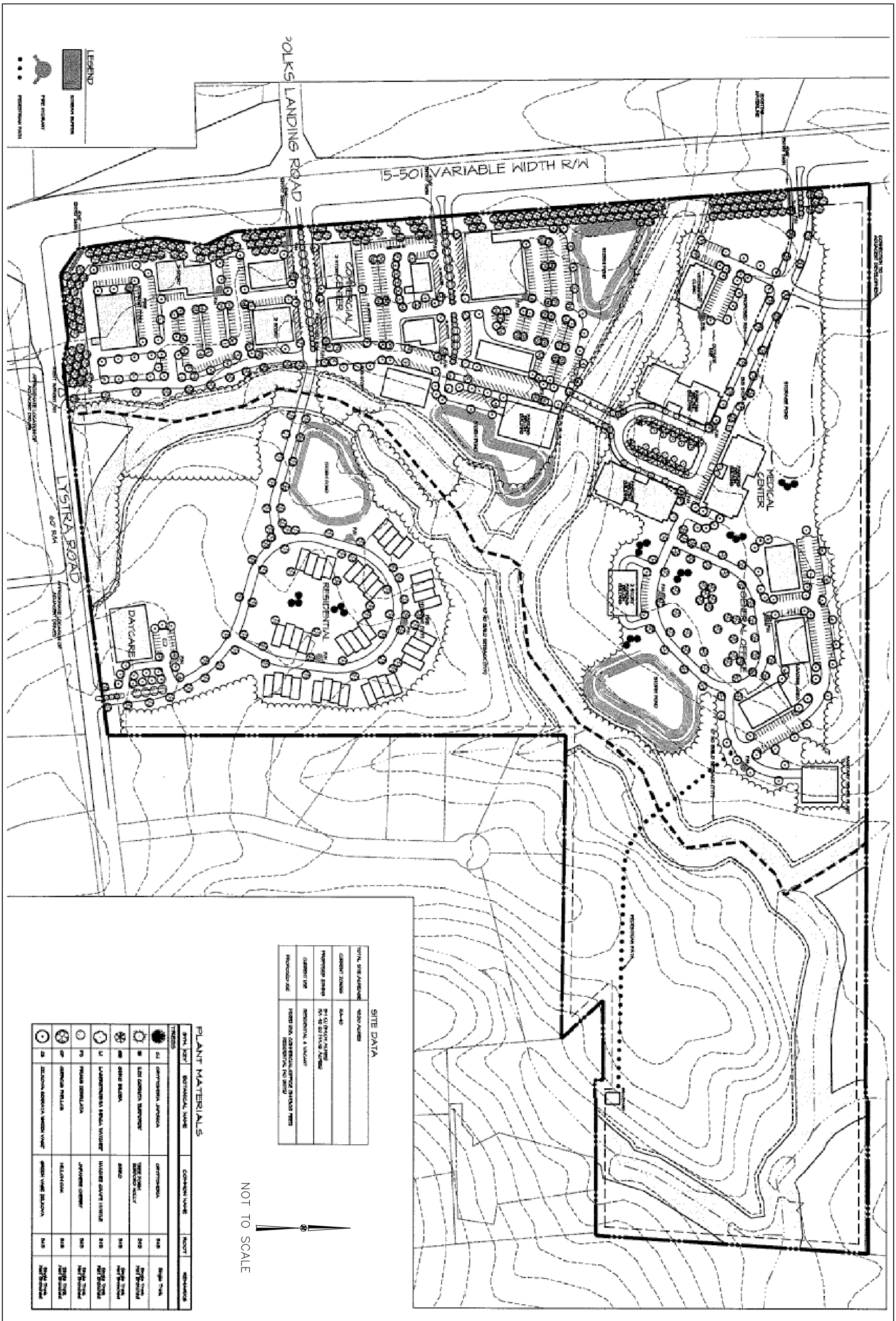
Prepared for:
North Chatham Investments, Inc.
Chapel Hill, North Carolina

Prepared by:
Kimley-Horn and Associates, Inc.
PO Box 33068
Raleigh, North Carolina 27636-3068
(919) 677-2000

012726000
August 2005

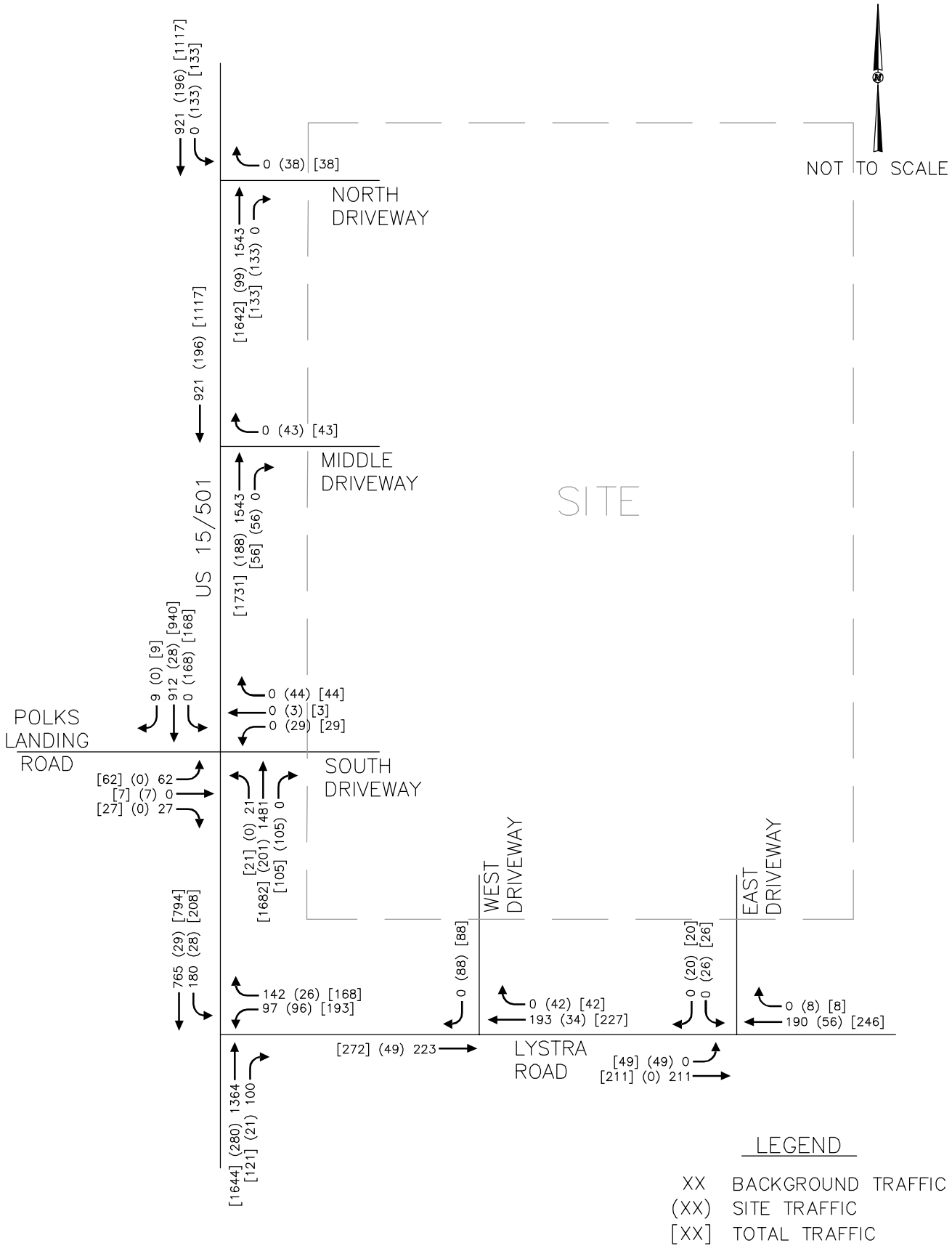


8.29.05



Kimley-Horn and Associates, Inc.	WILLIAMS CORNER TRAFFIC IMPACT ANALYSIS
SITE PLAN (PROVIDED BY THE JOHN R. McADAMS COMPANY)	FIGURE 2

H:\PN\012726000 501 Centre TIA\Figures\TIA Figures.dwg



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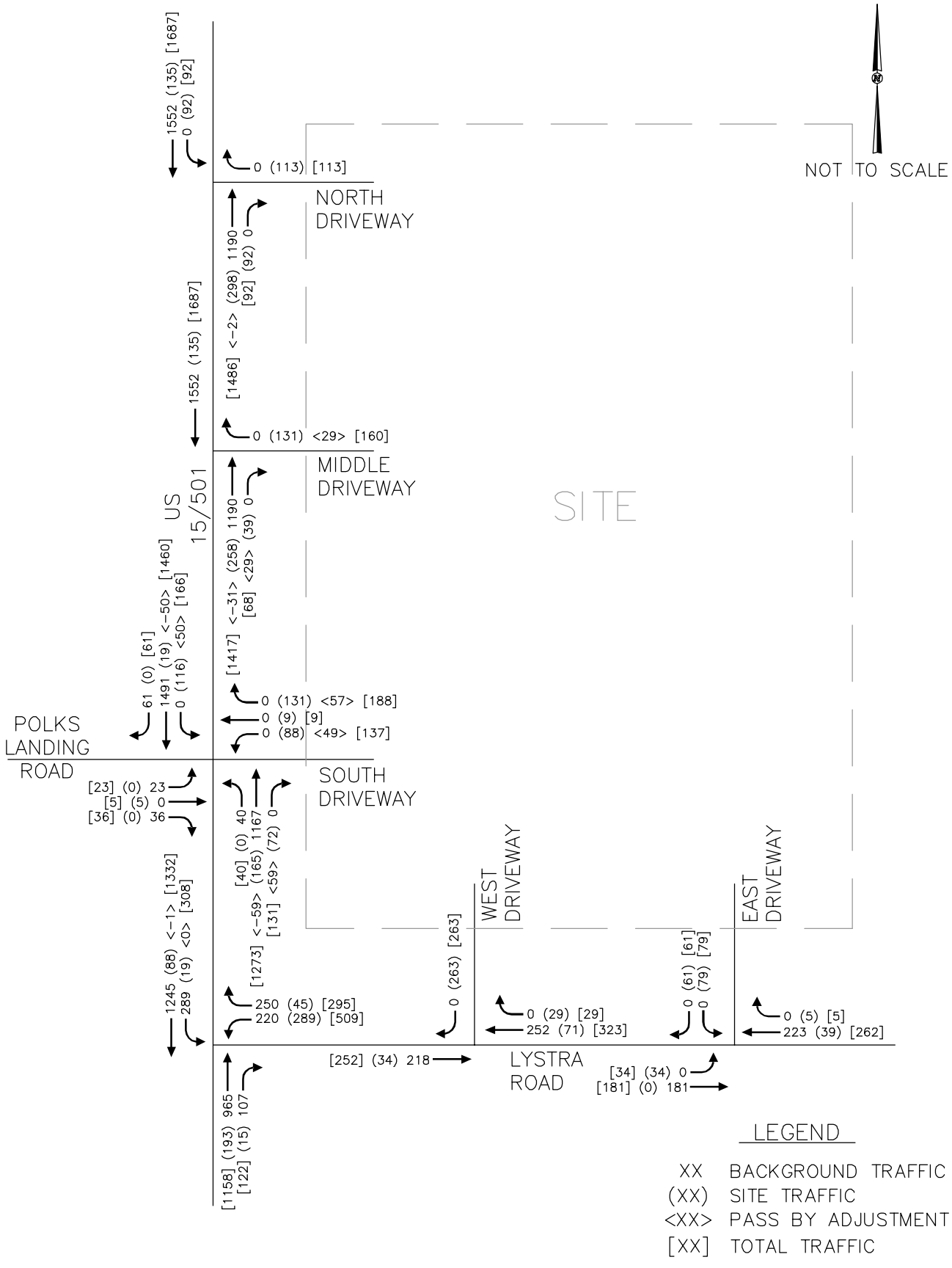
Kimley-Horn and Associates, Inc.

WILLIAMS CORNER
TRAFFIC IMPACT ANALYSIS

PROPOSED (2010) AM PEAK HOUR TRAFFIC VOLUMES

FIGURE 6



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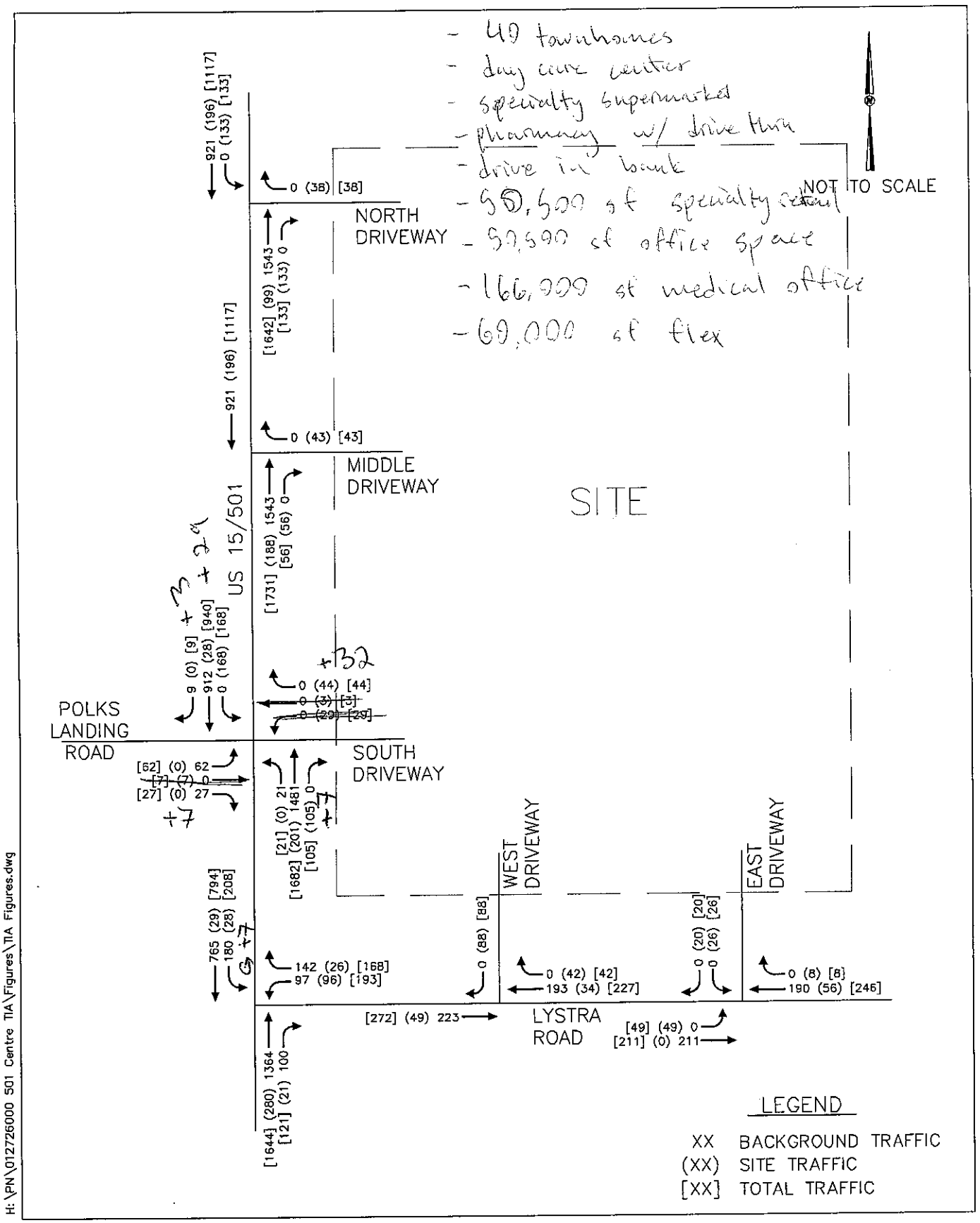
Kimley-Horn and Associates, Inc.

WILLIAMS CORNER
TRAFFIC IMPACT ANALYSIS

PROPOSED (2010) PM PEAK HOUR TRAFFIC VOLUMES

FIGURE 7



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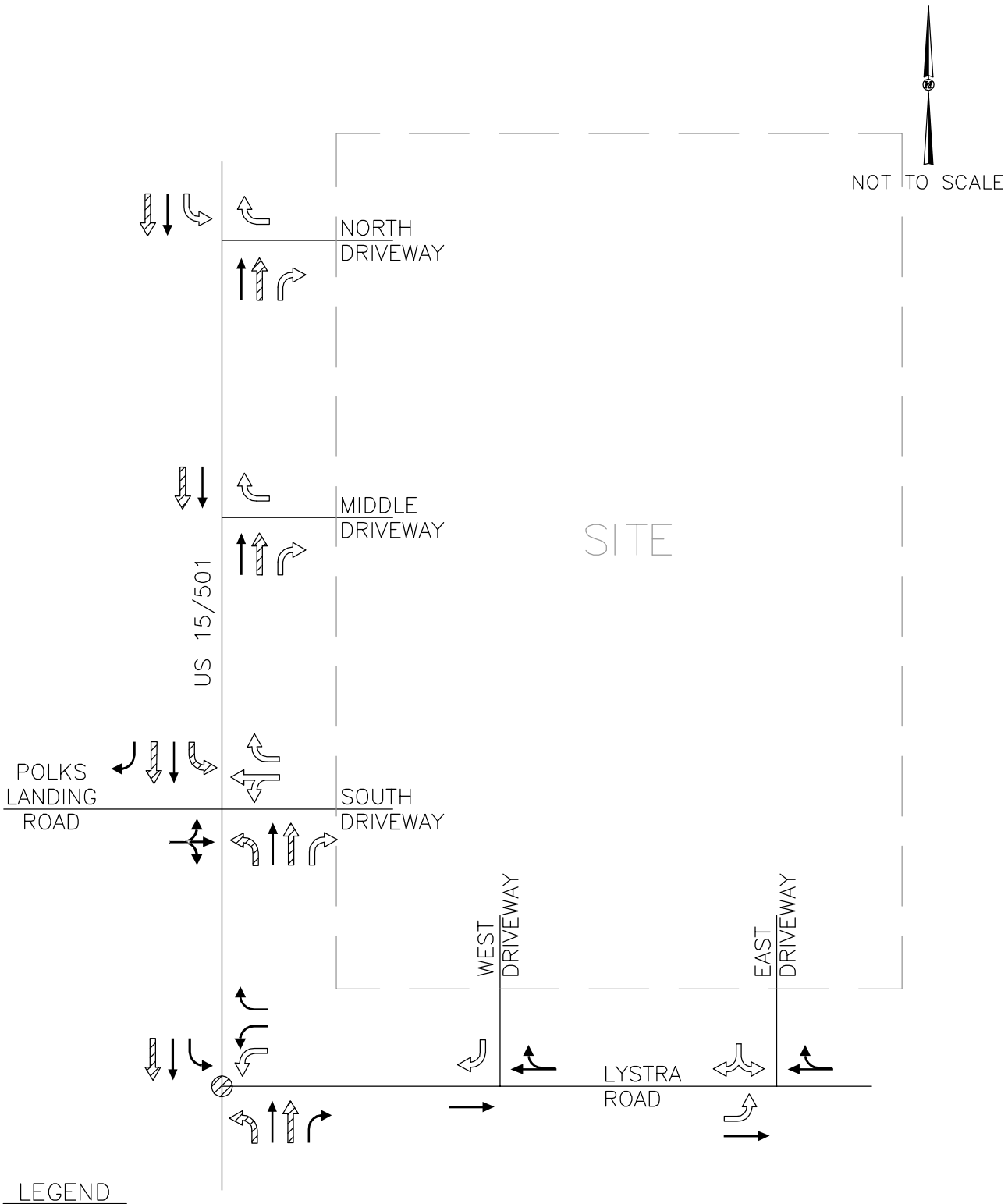
Kimley-Horn and Associates, Inc.

WILLIAMS CORNER
TRAFFIC IMPACT ANALYSIS

PROPOSED (2010) AM PEAK HOUR TRAFFIC VOLUMES

FIGURE 6



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Kimley-Horn and Associates, Inc.

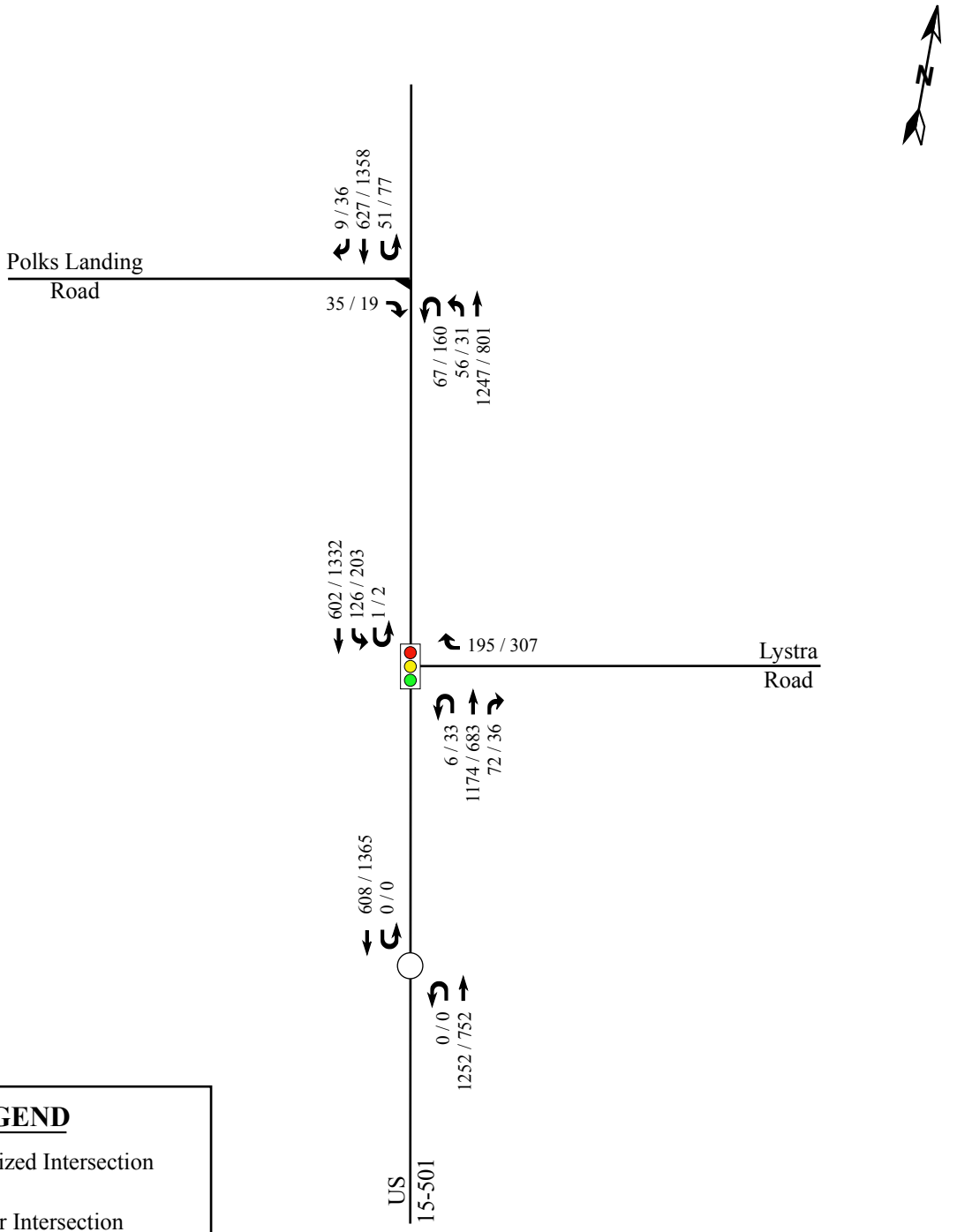
WILLIAMS CORNER
TRAFFIC IMPACT ANALYSIS

RECOMMENDED ROADWAY
LANEAGE

FIGURE
8

APPENDIX D

DIVERTED TRAFFIC



LEGEND

- Unsignalized Intersection
- Left-Over Intersection
- Signalized Intersection
- X / Y → AM / PM Peak Hour Traffic

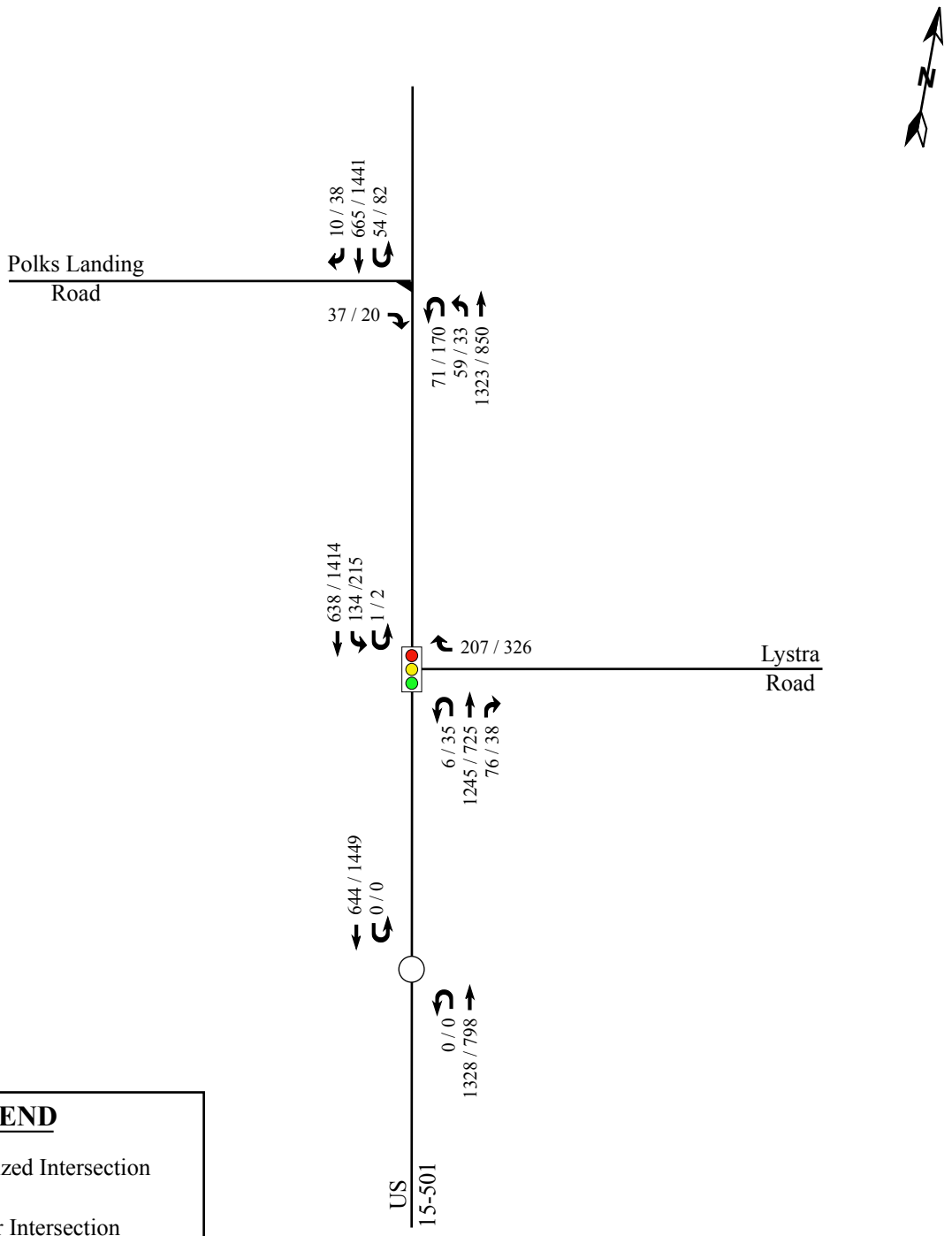
RAMEY KEMP & ASSOCIATES
TRANSPORTATION ENGINEERS

Chatham County
Grocery Store
Chatham County, NC

Diverted Existing (2017)
Peak Hour Traffic Volumes
with Synchronized Street

Scale: Not to Scale

Figure 4-A



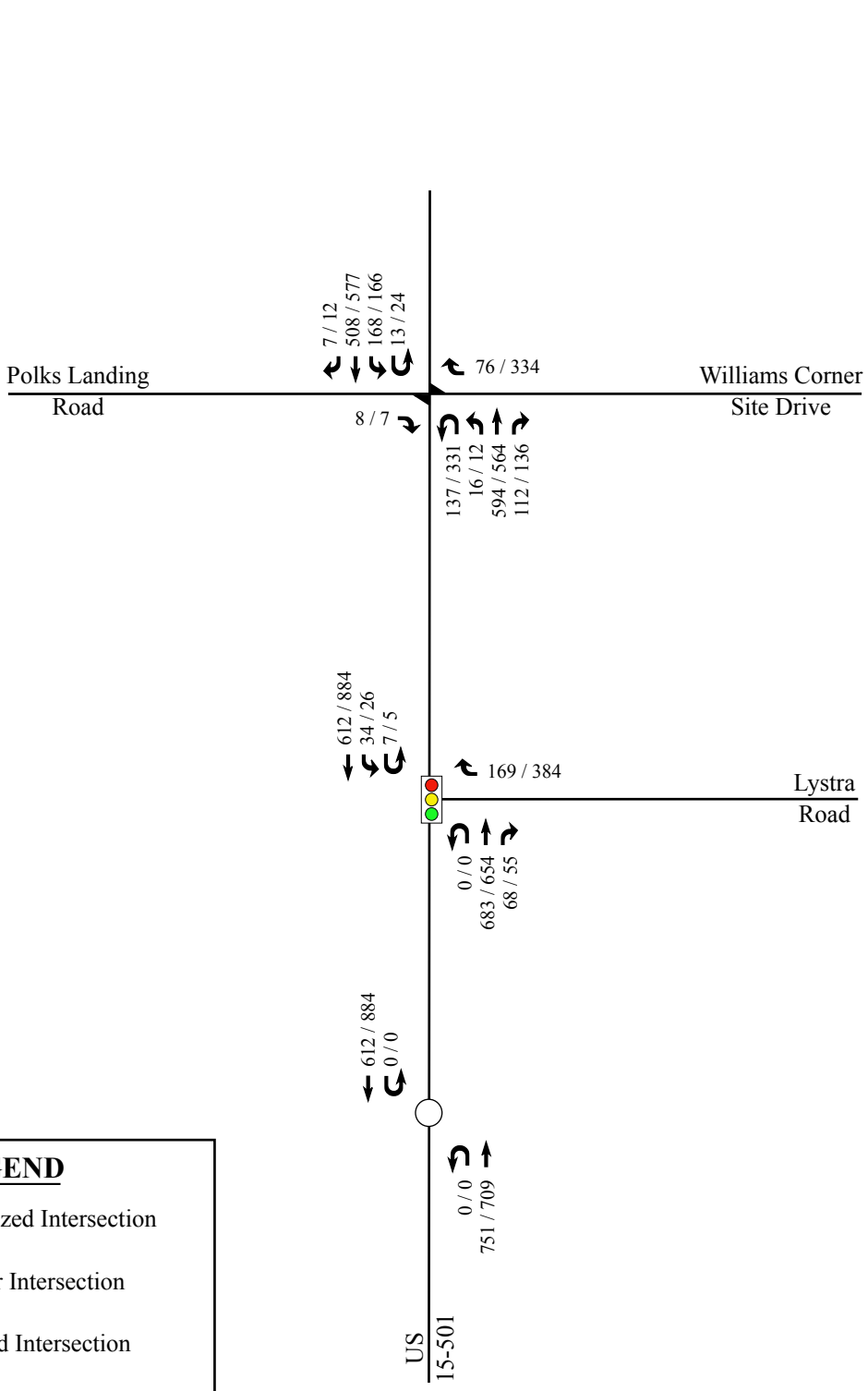
RAMEY KEMP & ASSOCIATES
TRANSPORTATION ENGINEERS

Chatham County
Grocery Store
Chatham County, NC

Projected (2019)
Peak Hour Traffic Volumes
with Synchronized Street

Scale: Not to Scale

Figure 5-A



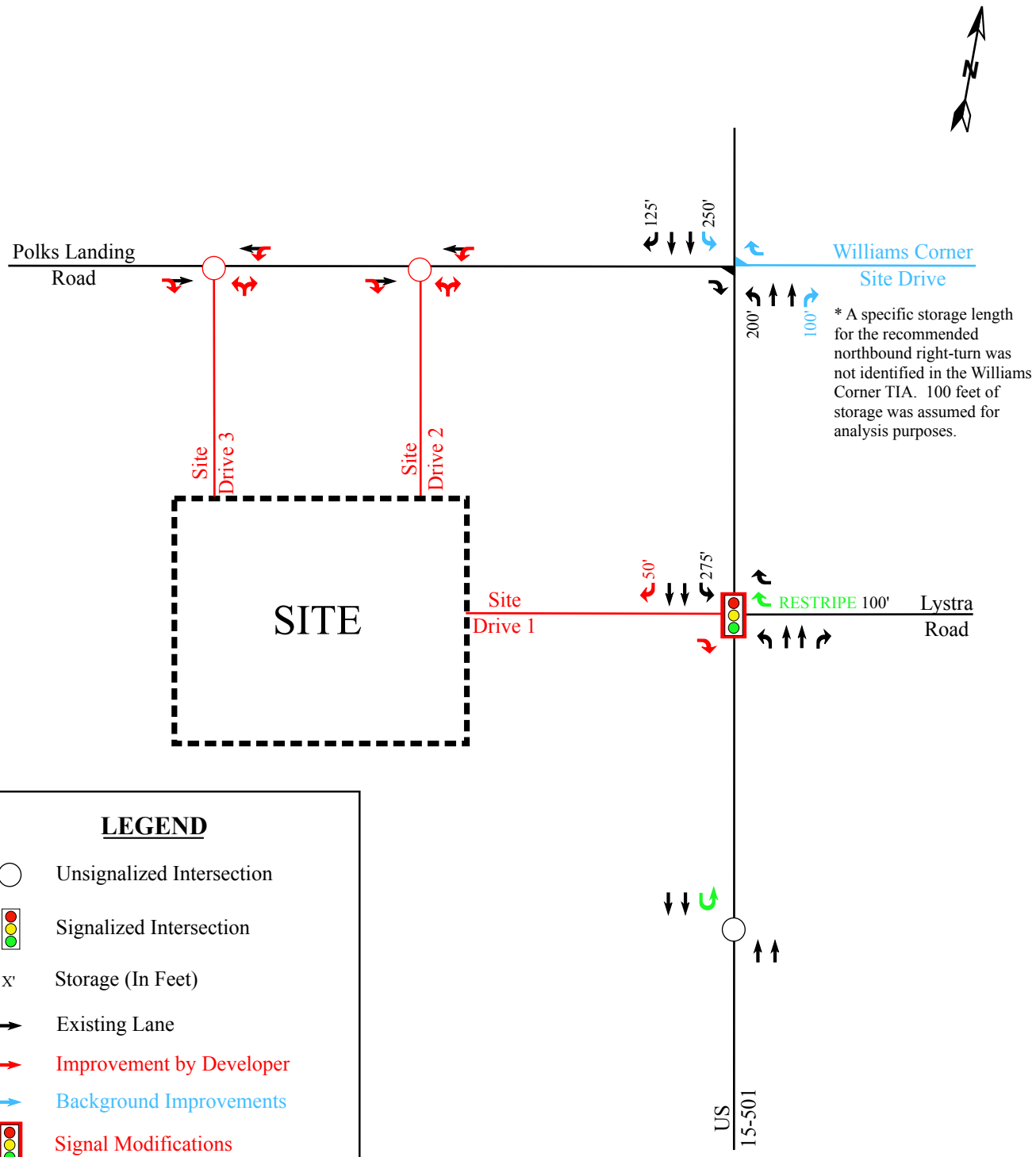
RAMEY KEMP & ASSOCIATES
TRANSPORTATION ENGINEERS

Chatham County
Grocery Store
Chatham County, NC

Total Adjacent Development
Traffic Volumes
with Synchronized Street

Scale: Not to Scale

Figure 6-A



RAMEY KEMP & ASSOCIATES
TRANSPORTATION ENGINEERS

Chatham County
Grocery Store
Chatham County, NC

Recommended
Lane Configurations
with Synchronized Street

Scale: Not to Scale

Figure 14-A

APPENDIX E

CAPACITY ANALYSIS CALCULATIONS

US 15-501

&

LYSTRA ROAD / SITE DRIVE 1

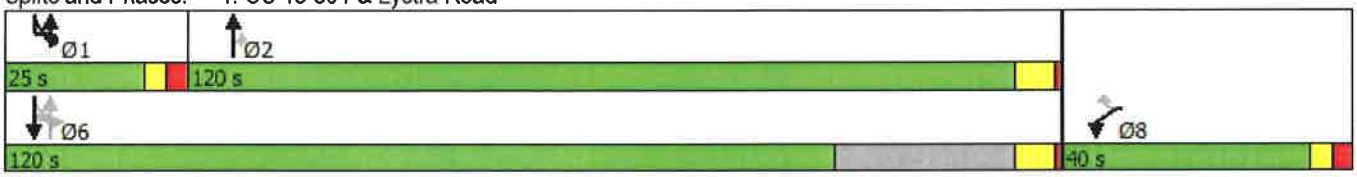
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	66	129	6	1174	72	1	126	536
Future Volume (vph)	66	129	6	1174	72	1	126	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	250		200		250	
Storage Lanes	1	1	1		1		1	
Taper Length (ft)	100		100				100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Frt		0.850			0.850			
Flt Protected	0.950		0.950				0.950	
Satd. Flow (prot)	1770	1583	1770	3539	1583	0	1770	3539
Flt Permitted	0.950		0.427				0.124	
Satd. Flow (perm)	1770	1583	795	3539	1583	0	231	3539
Right Turn on Red		Yes			Yes			
Satd. Flow (RTOR)		143			54			
Link Speed (mph)	45			55				55
Link Distance (ft)	3512			3465				428
Travel Time (s)	53.2			43.0				5.3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	73	143	7	1304	80	1	140	596
Shared Lane Traffic (%)								
Lane Group Flow (vph)	73	143	7	1304	80	0	141	596
Turn Type	Prot	Perm	D.Pm	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	8			2		1	1	6
Permitted Phases		8	6		2	6	6	
Detector Phase	8	8	6	2	2	1	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	14.0	14.0	14.0	7.0	7.0	14.0
Minimum Split (s)	13.1	13.1	20.4	20.4	20.4	12.9	12.9	20.4
Total Split (s)	40.0	40.0	120.0	120.0	120.0	25.0	25.0	120.0
Total Split (%)	21.6%	21.6%	64.9%	64.9%	64.9%	13.5%	13.5%	64.9%
Maximum Green (s)	33.9	33.9	113.6	113.6	113.6	19.1	19.1	113.6
Yellow Time (s)	3.0	3.0	5.3	5.3	5.3	3.0	3.0	5.3
All-Red Time (s)	3.1	3.1	1.1	1.1	1.1	2.9	2.9	1.1
Lost Time Adjust (s)	-1.1	-1.1	-1.4	-1.4	-1.4		-0.9	-1.4
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	6.0	6.0	6.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	4.0	4.0	4.0	1.0	1.0	4.0
Time Before Reduce (s)	0.0	0.0	15.0	15.0	15.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	30.0	30.0	30.0	0.0	0.0	30.0
Recall Mode	None	None	Min	Min	Min	None	None	Min
Act Effct Green (s)	9.3	9.3	56.6	43.6	43.6		56.6	56.6
Actuated g/C Ratio	0.12	0.12	0.74	0.57	0.57		0.74	0.74
v/c Ratio	0.34	0.45	0.01	0.64	0.09		0.42	0.23
Control Delay	37.6	11.6	2.7	12.6	3.5		7.0	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	37.6	11.6	2.7	12.6	3.5		7.0	3.2

Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
LOS	D	B	A	B	A		A	A
Approach Delay	20.4			12.0				3.9
Approach LOS	C			B				A
Queue Length 50th (ft)	31	0	1	191	5		13	32
Queue Length 95th (ft)	81	53	4	281	22		34	58
Internal Link Dist (ft)	3432			3385				348
Turn Bay Length (ft)	100		250		200		250	
Base Capacity (vph)	825	814	795	3539	1583		581	3539
Starvation Cap Reductn	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0
Reduced v/c Ratio	0.09	0.18	0.01	0.37	0.05		0.24	0.17

Intersection Summary

Area Type: Other
Cycle Length: 185
Actuated Cycle Length: 76.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 10.3 Intersection LOS: B
Intersection Capacity Utilization 60.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 1: US 15-501 & Lystra Road



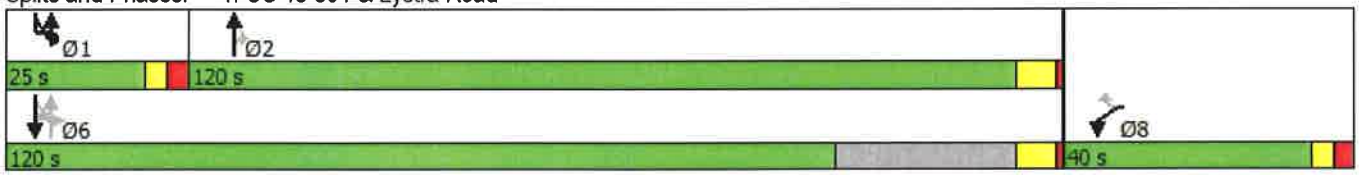
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	159	148	33	683	36	2	203	1173
Future Volume (vph)	159	148	33	683	36	2	203	1173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	250		200		250	
Storage Lanes	1	1	1		1		1	
Taper Length (ft)	100		100				100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Frt		0.850			0.850			
Flt Protected	0.950		0.950				0.950	
Satd. Flow (prot)	1770	1583	1770	3539	1583	0	1770	3539
Flt Permitted	0.950		0.167				0.248	
Satd. Flow (perm)	1770	1583	311	3539	1583	0	462	3539
Right Turn on Red		Yes			Yes			
Satd. Flow (RTOR)		164			40			
Link Speed (mph)	45			55				55
Link Distance (ft)	3512			3465				457
Travel Time (s)	53.2			43.0				5.7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	177	164	37	759	40	2	226	1303
Shared Lane Traffic (%)								
Lane Group Flow (vph)	177	164	37	759	40	0	228	1303
Turn Type	Prot	Perm	D.Pm	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	8			2		1	1	6
Permitted Phases		8	6		2	6	6	
Detector Phase	8	8	6	2	2	1	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	14.0	14.0	14.0	7.0	7.0	14.0
Minimum Split (s)	13.1	13.1	20.4	20.4	20.4	12.9	12.9	20.4
Total Split (s)	40.0	40.0	120.0	120.0	120.0	25.0	25.0	120.0
Total Split (%)	21.6%	21.6%	64.9%	64.9%	64.9%	13.5%	13.5%	64.9%
Maximum Green (s)	33.9	33.9	113.6	113.6	113.6	19.1	19.1	113.6
Yellow Time (s)	3.0	3.0	5.3	5.3	5.3	3.0	3.0	5.3
All-Red Time (s)	3.1	3.1	1.1	1.1	1.1	2.9	2.9	1.1
Lost Time Adjust (s)	-1.1	-1.1	-1.4	-1.4	-1.4		-0.9	-1.4
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	6.0	6.0	6.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	4.0	4.0	4.0	1.0	1.0	4.0
Time Before Reduce (s)	0.0	0.0	15.0	15.0	15.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	30.0	30.0	30.0	0.0	0.0	30.0
Recall Mode	None	None	Min	Min	Min	None	None	Min
Act Effct Green (s)	13.1	13.1	43.9	29.1	29.1		43.9	43.9
Actuated g/C Ratio	0.19	0.19	0.65	0.43	0.43		0.65	0.65
v/c Ratio	0.51	0.37	0.18	0.50	0.06		0.47	0.56
Control Delay	31.3	7.5	7.9	15.6	4.9		8.4	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	31.3	7.5	7.9	15.6	4.9		8.4	7.9

Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
LOS	C	A	A	B	A		A	A
Approach Delay	19.8			14.7				8.0
Approach LOS	B			B				A
Queue Length 50th (ft)	64	0	5	108	0		31	127
Queue Length 95th (ft)	141	47	22	197	17		72	231
Internal Link Dist (ft)	3432			3385				377
Turn Bay Length (ft)	100		250		200		250	
Base Capacity (vph)	945	922	311	3539	1583		700	3539
Starvation Cap Reductn	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0
Reduced v/c Ratio	0.19	0.18	0.12	0.21	0.03		0.33	0.37

Intersection Summary

Area Type: Other
Cycle Length: 185
Actuated Cycle Length: 67.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 11.5 — Intersection LOS: B
Intersection Capacity Utilization 65.4% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: US 15-501 & Lystra Road



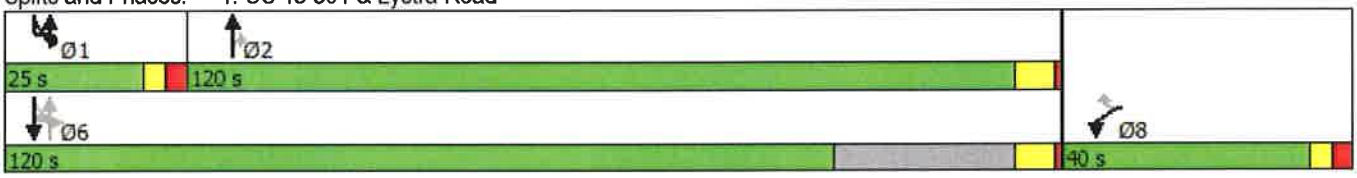
Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	207	169	6	1928	144	8	168	1043
Future Volume (vph)	207	169	6	1928	144	8	168	1043
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	250		200		250	
Storage Lanes	1	1	1		1		1	
Taper Length (ft)	100		100				100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Frt		0.850			0.850			
Flt Protected	0.950		0.950				0.950	
Satd. Flow (prot)	1770	1583	1770	3539	1583	0	1770	3539
Flt Permitted	0.950		0.219				0.034	
Satd. Flow (perm)	1770	1583	408	3539	1583	0	63	3539
Right Turn on Red		Yes			Yes			
Satd. Flow (RTOR)		152			66			
Link Speed (mph)	45			55				55
Link Distance (ft)	3512			3465				422
Travel Time (s)	53.2			43.0				5.2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	230	188	7	2142	160	9	187	1159
Shared Lane Traffic (%)								
Lane Group Flow (vph)	230	188	7	2142	160	0	196	1159
Turn Type	Prot	Perm	D.Pm	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	8			2		1	1	6
Permitted Phases		8	6		2	6	6	
Detector Phase	8	8	6	2	2	1	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	14.0	14.0	14.0	7.0	7.0	14.0
Minimum Split (s)	13.1	13.1	20.4	20.4	20.4	12.9	12.9	20.4
Total Split (s)	40.0	40.0	120.0	120.0	120.0	25.0	25.0	120.0
Total Split (%)	21.6%	21.6%	64.9%	64.9%	64.9%	13.5%	13.5%	64.9%
Maximum Green (s)	33.9	33.9	113.6	113.6	113.6	19.1	19.1	113.6
Yellow Time (s)	3.0	3.0	5.3	5.3	5.3	3.0	3.0	5.3
All-Red Time (s)	3.1	3.1	1.1	1.1	1.1	2.9	2.9	1.1
Lost Time Adjust (s)	-1.1	-1.1	-1.4	-1.4	-1.4		-0.9	-1.4
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	6.0	0.2	0.2	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	4.0	4.0	4.0	1.0	1.0	4.0
Time Before Reduce (s)	0.0	0.0	15.0	15.0	15.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	30.0	30.0	30.0	0.0	0.0	30.0
Recall Mode	None	None	Min	Min	Min	None	None	Min
Act Effct Green (s)	26.7	26.7	134.5	111.7	111.7		134.5	134.5
Actuated g/C Ratio	0.16	0.16	0.79	0.65	0.65		0.79	0.79
v/c Ratio	0.84	0.50	0.02	0.93	0.15		0.87	0.42
Control Delay	96.2	20.3	5.3	35.6	7.8		86.9	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	96.2	20.3	5.3	35.6	7.8		86.9	6.8

Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
LOS	F	C	A	D	A		F	A
Approach Delay	62.1			33.6				18.4
Approach LOS	E			C				B
Queue Length 50th (ft)	264	37	2	1120	39		173	198
Queue Length 95th (ft)	370	119	7	#1495	80		#330	281
Internal Link Dist (ft)	3432			3385				342
Turn Bay Length (ft)	100		250		200		250	
Base Capacity (vph)	364	446	336	2397	1093		250	2918
Starvation Cap Reductn	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0
Reduced v/c Ratio	0.63	0.42	0.02	0.89	0.15		0.78	0.40

Intersection Summary

Area Type: Other
Cycle Length: 185
Actuated Cycle Length: 171.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 31.5 Intersection LOS: C
Intersection Capacity Utilization 87.0% 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: 1: US 15-501 & Lystra Road



Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	500	210	35	1379	93	7	241	1798
Future Volume (vph)	500	210	35	1379	93	7	241	1798
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100	0	250		200		250	
Storage Lanes	1	1	1		1		1	
Taper Length (ft)	100		100				100	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.95	1.00	0.95
Frt		0.850			0.850			
Flt Protected	0.950		0.950				0.950	
Satd. Flow (prot)	1770	1583	1770	3539	1583	0	1770	3539
Flt Permitted	0.950		0.045				0.057	
Satd. Flow (perm)	1770	1583	84	3539	1583	0	106	3539
Right Turn on Red		Yes			Yes			
Satd. Flow (RTOR)		111			59			
Link Speed (mph)	45			55				55
Link Distance (ft)	3512			3465				397
Travel Time (s)	53.2			43.0				4.9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	556	233	39	1532	103	8	268	1998
Shared Lane Traffic (%)								
Lane Group Flow (vph)	556	233	39	1532	103	0	276	1998
Turn Type	Prot	Perm	D.Pm	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	8			2		1	1	6
Permitted Phases		8	6		2	6	6	
Detector Phase	8	8	6	2	2	1	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	14.0	14.0	14.0	7.0	7.0	14.0
Minimum Split (s)	13.1	13.1	20.4	20.4	20.4	12.9	12.9	20.4
Total Split (s)	40.0	40.0	120.0	120.0	120.0	25.0	25.0	120.0
Total Split (%)	21.6%	21.6%	64.9%	64.9%	64.9%	13.5%	13.5%	64.9%
Maximum Green (s)	33.9	33.9	113.6	113.6	113.6	19.1	19.1	113.6
Yellow Time (s)	3.0	3.0	5.3	5.3	5.3	3.0	3.0	5.3
All-Red Time (s)	3.1	3.1	1.1	1.1	1.1	2.9	2.9	1.1
Lost Time Adjust (s)	-1.1	-1.1	-1.4	-1.4	-1.4		-0.9	-1.4
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag				Lag	Lag	Lead	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Vehicle Extension (s)	1.0	1.0	6.0	6.0	6.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	4.0	4.0	4.0	1.0	1.0	4.0
Time Before Reduce (s)	0.0	0.0	15.0	15.0	15.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	30.0	30.0	30.0	0.0	0.0	30.0
Recall Mode	None	None	Min	Min	Min	None	None	Min
Act Effct Green (s)	35.5	35.5	104.5	80.5	80.5		104.5	104.5
Actuated g/C Ratio	0.24	0.24	0.70	0.54	0.54		0.70	0.70
v/c Ratio	1.33	0.51	0.67	0.81	0.12		0.98	0.81
Control Delay	207.7	32.2	68.3	31.9	7.6		91.1	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	207.7	32.2	68.3	31.9	7.6		91.1	18.6

Lane Group	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
LOS	F	C	E	C	A		F	B
Approach Delay	155.9			31.2				27.4
Approach LOS	F			C				C
Queue Length 50th (ft)	~711	103	20	632	20		208	654
Queue Length 95th (ft)	#1140	226	#109	717	49		#455	736
Internal Link Dist (ft)	3432			3385				317
Turn Bay Length (ft)	100		250		200		250	
Base Capacity (vph)	418	458	77	2747	1242		298	3251
Starvation Cap Reductn	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0
Reduced v/c Ratio	1.33	0.51	0.51	0.56	0.08		0.93	0.61

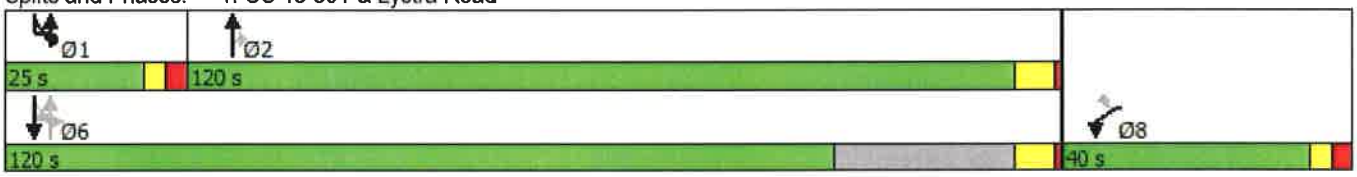
Intersection Summary

Area Type: Other
Cycle Length: 185
Actuated Cycle Length: 150.1
Natural Cycle: 110
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 50.2 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: 1: US 15-501 & Lystra Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	109	20	37	204	35	166	6	81	1907	144	8	168
Future Volume (vph)	109	20	37	204	35	166	6	81	1907	144	8	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	200		100		250		200		250
Storage Lanes	2		1	2		1		1		1		1
Taper Length (ft)	100			100				100				100
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	1863	1583	3433	1863	1583	0	1770	3539	1583	0	1770
Flt Permitted	0.950			0.950				0.184				0.048
Satd. Flow (perm)	3433	1863	1583	3433	1863	1583	0	343	3539	1583	0	89
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			185			185				136		
Link Speed (mph)		30			45				55			
Link Distance (ft)		696			3512				3465			
Travel Time (s)		15.8			53.2				43.0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	121	22	41	227	39	184	7	90	2119	160	9	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	22	41	227	39	184	0	97	2119	160	0	196
Turn Type	Prot	NA	Perm	Prot	NA	Perm	D.P+P	D.P+P	NA	Perm	D.P+P	D.P+P
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases			4			8	6	6		2	2	2
Detector Phase	7	4	4	3	8	8	5	5	2	2	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	14.0	7.0	7.0
Minimum Split (s)	14.0	20.0	20.0	13.1	13.1	13.1	14.0	14.0	20.4	20.4	12.9	12.9
Total Split (s)	14.0	20.0	20.0	15.0	21.0	21.0	14.0	14.0	88.0	88.0	17.0	17.0
Total Split (%)	10.0%	14.3%	14.3%	10.7%	15.0%	15.0%	10.0%	10.0%	62.9%	62.9%	12.1%	12.1%
Maximum Green (s)	7.0	13.0	13.0	8.9	14.9	14.9	7.0	7.0	81.6	81.6	11.1	11.1
Yellow Time (s)	5.0	5.0	5.0	3.0	3.0	3.0	5.0	5.0	5.3	5.3	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	3.1	3.1	3.1	2.0	2.0	1.1	1.1	2.9	2.9
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-1.1	-1.1	-1.1		-2.0	-1.4	-1.4		-0.9
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	6.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	1.0	1.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	None	None
Act Effct Green (s)	9.0	9.8	9.8	12.5	10.4	10.4		95.0	83.0	83.0		95.0
Actuated g/C Ratio	0.07	0.07	0.07	0.09	0.08	0.08		0.71	0.62	0.62		0.71
v/c Ratio	0.53	0.16	0.14	0.71	0.27	0.63		0.29	0.97	0.16		0.92
Control Delay	69.8	61.4	1.1	73.1	63.2	17.9		7.2	38.3	2.9		90.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	69.8	61.4	1.1	73.1	63.2	17.9		7.2	38.3	2.9		90.4

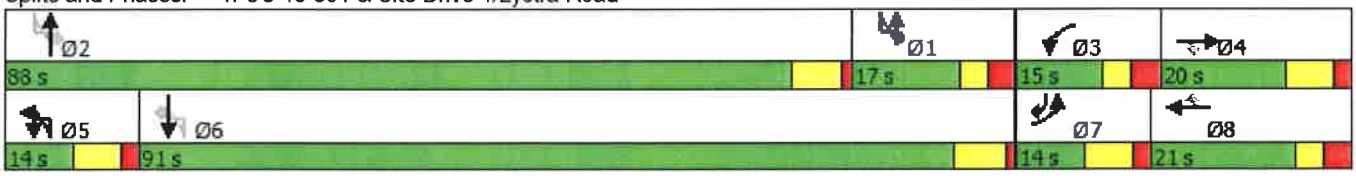
Lane Group	SBT	SBR
Lane Configurations	↑↑	↱
Traffic Volume (vph)	1050	10
Future Volume (vph)	1050	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		50
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3539	1583
Flt Permitted		
Satd. Flow (perm)	3539	1583
Right Turn on Red		Yes
Satd. Flow (RTOR)		86
Link Speed (mph)	55	
Link Distance (ft)	334	
Travel Time (s)	4.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	1167	11
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1167	11
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	14.0	7.0
Minimum Split (s)	20.4	14.0
Total Split (s)	91.0	14.0
Total Split (%)	65.0%	10.0%
Maximum Green (s)	84.6	7.0
Yellow Time (s)	5.3	5.0
All-Red Time (s)	1.1	2.0
Lost Time Adjust (s)	-1.4	0.0
Total Lost Time (s)	5.0	7.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	6.0	3.0
Minimum Gap (s)	4.0	3.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	30.0	0.0
Recall Mode	Min	None
Act Effct Green (s)	86.0	98.0
Actuated g/C Ratio	0.64	0.73
v/c Ratio	0.52	0.01
Control Delay	14.1	0.0
Queue Delay	0.0	0.0
Total Delay	14.1	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
LOS	E	E	A	E	E	B		A	D	A		F
Approach Delay		53.5			49.7				34.6			
Approach LOS		D			D				C			
Queue Length 50th (ft)	53	18	0	102	33	0		20	869	8		120
Queue Length 95th (ft)	89	48	0	#184	71	73		38	#1151	37		#281
Internal Link Dist (ft)		616			3432				3385			
Turn Bay Length (ft)	100		100	200		100		250		200		250
Base Capacity (vph)	229	207	341	318	221	351		338	2186	1029		212
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0		0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0		0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0		0
Reduced v/c Ratio	0.53	0.11	0.12	0.71	0.18	0.52		0.29	0.97	0.16		0.92

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 134.4
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 33.9 Intersection LOS: C
Intersection Capacity Utilization 95.2% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: US 15-501 & Site Drive 1/Lystra Road



Lane Group	SBT	SBR
LOS	B	A
Approach Delay	24.9	
Approach LOS	C	
Queue Length 50th (ft)	267	0
Queue Length 95th (ft)	342	0
Internal Link Dist (ft)	254	
Turn Bay Length (ft)		50
Base Capacity (vph)	2264	1177
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.52	0.01

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	197	38	72	492	56	202	35	114	1344	93	7	241
Future Volume (vph)	197	38	72	492	56	202	35	114	1344	93	7	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	100		100		250		200		250
Storage Lanes	2		1	2		1		1		1		1
Taper Length (ft)	100			200				100				100
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	1863	1583	3433	1863	1583	0	1770	3539	1583	0	1770
Flt Permitted	0.950			0.950				0.050				0.058
Satd. Flow (perm)	3433	1863	1583	3433	1863	1583	0	93	3539	1583	0	108
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)			175			224				87		
Link Speed (mph)		30			45				55			
Link Distance (ft)		696			3512				3465			
Travel Time (s)		15.8			53.2				43.0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	219	42	80	547	62	224	39	127	1493	103	8	268
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	42	80	547	62	224	0	166	1493	103	0	276
Turn Type	Prot	NA	Perm	Prot	NA	Perm	D.P+P	D.P+P	NA	pm+ov	D.P+P	D.P+P
Protected Phases	7	4		3	8		5	5	2	3	1	1
Permitted Phases			4			8	6	6		2	2	2
Detector Phase	7	4	4	3	8	8	5	5	2	3	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	7.0
Minimum Split (s)	14.0	14.0	14.0	13.1	13.1	13.1	14.0	14.0	20.4	13.1	12.9	12.9
Total Split (s)	16.0	14.0	14.0	27.2	25.2	25.2	14.0	14.0	73.6	27.2	25.2	25.2
Total Split (%)	11.4%	10.0%	10.0%	19.4%	18.0%	18.0%	10.0%	10.0%	52.6%	19.4%	18.0%	18.0%
Maximum Green (s)	9.0	7.0	7.0	21.1	19.1	19.1	7.0	7.0	67.2	21.1	19.3	19.3
Yellow Time (s)	5.0	5.0	5.0	3.0	3.0	3.0	5.0	5.0	5.3	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	3.1	3.1	3.1	2.0	2.0	1.1	3.1	2.9	2.9
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-1.1	-1.1	-1.1		-2.0	-1.4	-1.4		-0.9
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	4.7		5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	6.0	1.0	1.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	4.0	1.0	1.0	1.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	None	Min	None	None	None
Act Effct Green (s)	11.0	9.0	9.0	22.2	20.2	20.2		88.8	69.6	92.4		88.8
Actuated g/C Ratio	0.08	0.06	0.06	0.16	0.14	0.14		0.63	0.50	0.66		0.63
v/c Ratio	0.81	0.35	0.30	1.01	0.23	0.53		1.00	0.85	0.10		0.93
Control Delay	86.4	71.4	2.9	98.0	55.6	11.5		118.6	36.7	1.4		79.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	86.4	71.4	2.9	98.0	55.6	11.5		118.6	36.7	1.4		79.3

Lane Group	SBT	SBR
Lane Configurations	↑↑	↱
Traffic Volume (vph)	1811	13
Future Volume (vph)	1811	13
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		50
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3539	1583
Flt Permitted		
Satd. Flow (perm)	3539	1583
Right Turn on Red		Yes
Satd. Flow (RTOR)		133
Link Speed (mph)	55	
Link Distance (ft)	334	
Travel Time (s)	4.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	2012	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2012	14
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Detector Phase	6	6
Switch Phase		
Minimum Initial (s)	14.0	14.0
Minimum Split (s)	20.4	20.4
Total Split (s)	84.8	84.8
Total Split (%)	60.6%	60.6%
Maximum Green (s)	78.4	78.4
Yellow Time (s)	5.3	5.3
All-Red Time (s)	1.1	1.1
Lost Time Adjust (s)	-1.4	-1.4
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	6.0	6.0
Minimum Gap (s)	4.0	4.0
Time Before Reduce (s)	15.0	15.0
Time To Reduce (s)	30.0	30.0
Recall Mode	Min	Min
Act Effct Green (s)	79.8	79.8
Actuated g/C Ratio	0.57	0.57
v/c Ratio	1.00	0.01
Control Delay	49.5	0.0
Queue Delay	0.0	0.0
Total Delay	49.5	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
LOS	F	E	A	F	E	B		F	D	A		E
Approach Delay		65.0			71.5				42.3			
Approach LOS		E			E				D			
Queue Length 50th (ft)	103	37	0	~261	51	0		102	617	3		197
Queue Length 95th (ft)	#168	78	0	#385	97	77		#258	725	14		#366
Internal Link Dist (ft)		616			3432				3385			
Turn Bay Length (ft)	100		100	100		100		250		200		250
Base Capacity (vph)	269	119	265	544	268	420		166	1759	1074		309
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0		0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0		0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0		0
Reduced v/c Ratio	0.81	0.35	0.30	1.01	0.23	0.53		1.00	0.85	0.10		0.89

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 53.0 Intersection LOS: D
Intersection Capacity Utilization 94.9% 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: 1: US 15-501 & Site Drive 1/Lystra Road

Lane Group	SBT	SBR
LOS	D	A
Approach Delay	52.7	
Approach LOS	D	
Queue Length 50th (ft)	924	0
Queue Length 95th (ft)	#1132	0
Internal Link Dist (ft)	254	
Turn Bay Length (ft)		50
Base Capacity (vph)	2017	959
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	1.00	0.01

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	109	20	37	204	35	166	6	81	1907	144	8	168
Future Volume (vph)	109	20	37	204	35	166	6	81	1907	144	8	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	200		100		250		200		250
Storage Lanes	2		1	2		1		1		1		1
Taper Length (ft)	100			100				100				100
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	1863	1583	3433	1863	1583	0	1770	3539	1583	0	1770
Flt Permitted	0.950			0.950				0.179				0.045
Satd. Flow (perm)	3433	1863	1583	3433	1863	1583	0	333	3539	1583	0	84
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		30			45				55			
Link Distance (ft)		696			3512				3465			
Travel Time (s)		15.8			53.2				43.0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	121	22	41	227	39	184	7	90	2119	160	9	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	22	41	227	39	184	0	97	2119	160	0	196
Turn Type	Prot	NA	Perm	Prot	NA	Perm	D.P+P	D.P+P	NA	Perm	D.P+P	D.P+P
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases			4			8	6	6		2	2	2
Detector Phase	7	4	4	3	8	8	5	5	2	2	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	14.0	7.0	7.0
Minimum Split (s)	14.0	20.0	20.0	13.1	13.1	13.1	14.0	14.0	20.4	20.4	12.9	12.9
Total Split (s)	14.0	20.0	20.0	17.0	23.0	23.0	14.0	14.0	95.0	95.0	18.0	18.0
Total Split (%)	9.3%	13.3%	13.3%	11.3%	15.3%	15.3%	9.3%	9.3%	63.3%	63.3%	12.0%	12.0%
Maximum Green (s)	7.0	13.0	13.0	10.9	16.9	16.9	7.0	7.0	88.6	88.6	12.1	12.1
Yellow Time (s)	5.0	5.0	5.0	3.0	3.0	3.0	5.0	5.0	5.3	5.3	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	3.1	3.1	3.1	2.0	2.0	1.1	1.1	2.9	2.9
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-1.1	-1.1	-1.1		-2.0	-1.4	-1.4		-0.9
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	6.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	1.0	1.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	None	None
Act Effct Green (s)	9.0	13.8	13.8	16.0	18.0	18.0		103.0	90.0	90.0		103.0
Actuated g/C Ratio	0.06	0.09	0.09	0.11	0.12	0.12		0.69	0.60	0.60		0.69
v/c Ratio	0.59	0.13	0.28	0.62	0.17	0.97		0.31	1.00	0.17		0.97
Control Delay	80.9	63.5	67.9	73.3	61.6	123.4		9.0	48.9	13.9		107.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	80.9	63.5	67.9	73.3	61.6	123.4		9.0	48.9	13.9		107.3

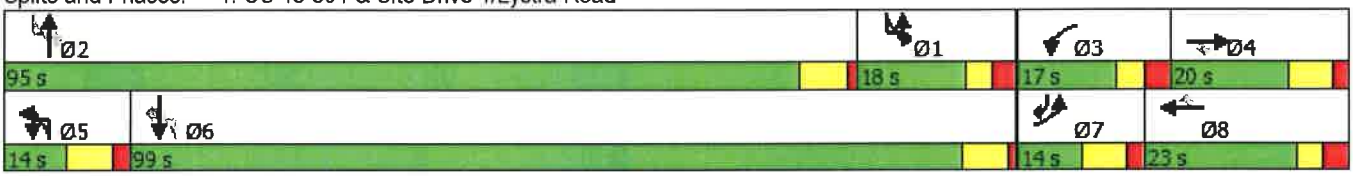
Lane Group	SBT	SBR
Lane Configurations	↑↑	↱
Traffic Volume (vph)	1050	10
Future Volume (vph)	1050	10
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		50
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3539	1583
Flt Permitted		
Satd. Flow (perm)	3539	1583
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	55	
Link Distance (ft)	334	
Travel Time (s)	4.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	1167	11
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1167	11
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	14.0	7.0
Minimum Split (s)	20.4	14.0
Total Split (s)	99.0	14.0
Total Split (%)	66.0%	9.3%
Maximum Green (s)	92.6	7.0
Yellow Time (s)	5.3	5.0
All-Red Time (s)	1.1	2.0
Lost Time Adjust (s)	-1.4	-2.0
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	6.0	3.0
Minimum Gap (s)	4.0	3.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	30.0	0.0
Recall Mode	Min	None
Act Effct Green (s)	94.0	108.0
Actuated g/C Ratio	0.63	0.72
v/c Ratio	0.53	0.01
Control Delay	16.7	6.0
Queue Delay	0.0	0.0
Total Delay	16.7	6.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
LOS	F	E	E	E	E	F		A	D	B		F
Approach Delay		76.0			92.8				44.9			
Approach LOS		E			F				D			
Queue Length 50th (ft)	60	20	38	114	35	182		26	1042	67		142
Queue Length 95th (ft)	96	50	80	#183	73	#343		43	#1258	104		#307
Internal Link Dist (ft)		616			3432				3385			
Turn Bay Length (ft)	100		100	200		100		250		200		250
Base Capacity (vph)	205	186	158	366	223	189		314	2123	949		203
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0		0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0		0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0		0
Reduced v/c Ratio	0.59	0.12	0.26	0.62	0.17	0.97		0.31	1.00	0.17		0.97

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 150
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 46.3 Intersection LOS: D
Intersection Capacity Utilization 95.2% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: US 15-501 & Site Drive 1/Lystra Road



Lane Group	SBT	SBR
LOS	B	A
Approach Delay	29.5	
Approach LOS	C	
Queue Length 50th (ft)	318	3
Queue Length 95th (ft)	375	9
Internal Link Dist (ft)	254	
Turn Bay Length (ft)		50
Base Capacity (vph)	2217	1139
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.53	0.01

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	197	38	72	492	56	202	35	114	1344	93	7	241
Future Volume (vph)	197	38	72	492	56	202	35	114	1344	93	7	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		100	200		100		250		200		250
Storage Lanes	2		1	2		1		1		1		1
Taper Length (ft)	100			100				100				100
Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	0.95	1.00	0.95	1.00	0.95	1.00
Frt			0.850			0.850				0.850		
Flt Protected	0.950			0.950				0.950				0.950
Satd. Flow (prot)	3433	1863	1583	3433	1863	1583	0	1770	3539	1583	0	1770
Flt Permitted	0.950			0.950				0.054				0.060
Satd. Flow (perm)	3433	1863	1583	3433	1863	1583	0	101	3539	1583	0	112
Right Turn on Red			No			No				No		
Satd. Flow (RTOR)												
Link Speed (mph)		30			45				55			
Link Distance (ft)		696			3512				3465			
Travel Time (s)		15.8			53.2				43.0			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	219	42	80	547	62	224	39	127	1493	103	8	268
Shared Lane Traffic (%)												
Lane Group Flow (vph)	219	42	80	547	62	224	0	166	1493	103	0	276
Turn Type	Prot	NA	Perm	Prot	NA	Perm	D.P+P	D.P+P	NA	Perm	D.P+P	D.P+P
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases			4			8	6	6		2	2	2
Detector Phase	7	4	4	3	8	8	5	5	2	2	1	1
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	14.0	7.0	7.0
Minimum Split (s)	14.0	14.0	14.0	13.1	13.1	13.1	14.0	14.0	20.4	20.4	12.9	12.9
Total Split (s)	16.0	20.0	20.0	26.0	30.0	30.0	15.0	15.0	72.0	72.0	22.0	22.0
Total Split (%)	11.4%	14.3%	14.3%	18.6%	21.4%	21.4%	10.7%	10.7%	51.4%	51.4%	15.7%	15.7%
Maximum Green (s)	9.0	13.0	13.0	19.9	23.9	23.9	8.0	8.0	65.6	65.6	16.1	16.1
Yellow Time (s)	5.0	5.0	5.0	3.0	3.0	3.0	5.0	5.0	5.3	5.3	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	3.1	3.1	3.1	2.0	2.0	1.1	1.1	2.9	2.9
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-1.1	-1.1	-1.1		-2.0	-1.4	-1.4		-0.9
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	6.0	6.0	1.0	1.0
Minimum Gap (s)	3.0	3.0	3.0	1.0	1.0	1.0	3.0	3.0	4.0	4.0	1.0	1.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0	30.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	None	None	Min	Min	None	None
Act Effct Green (s)	11.0	13.3	13.3	21.0	23.3	23.3		84.0	67.0	67.0		84.0
Actuated g/C Ratio	0.08	0.10	0.10	0.15	0.17	0.17		0.61	0.48	0.48		0.61
v/c Ratio	0.80	0.24	0.53	1.05	0.20	0.84		0.92	0.87	0.13		1.02
Control Delay	84.5	60.9	72.5	108.9	51.0	82.4		95.8	38.9	20.7		100.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0
Total Delay	84.5	60.9	72.5	108.9	51.0	82.4		95.8	38.9	20.7		100.5

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1811	13
Future Volume (vph)	1811	13
Ideal Flow (vphpl)	1900	1900
Storage Length (ft)		50
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3539	1583
Flt Permitted		
Satd. Flow (perm)	3539	1583
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	55	
Link Distance (ft)	334	
Travel Time (s)	4.1	
Peak Hour Factor	0.90	0.90
Adj. Flow (vph)	2012	14
Shared Lane Traffic (%)		
Lane Group Flow (vph)	2012	14
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	14.0	7.0
Minimum Split (s)	20.4	14.0
Total Split (s)	79.0	16.0
Total Split (%)	56.4%	11.4%
Maximum Green (s)	72.6	9.0
Yellow Time (s)	5.3	5.0
All-Red Time (s)	1.1	2.0
Lost Time Adjust (s)	-1.4	-2.0
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	6.0	3.0
Minimum Gap (s)	4.0	3.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	30.0	0.0
Recall Mode	Min	None
Act Effct Green (s)	74.0	85.0
Actuated g/C Ratio	0.54	0.61
v/c Ratio	1.06	0.01
Control Delay	71.4	5.9
Queue Delay	0.0	0.0
Total Delay	71.4	5.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
LOS	F	E	E	F	D	F		F	D	C		F
Approach Delay		78.8			97.5				43.2			
Approach LOS		E			F				D			
Queue Length 50th (ft)	103	36	70	~281	49	198		100	632	51		~216
Queue Length 95th (ft)	#168	75	127	#400	93	#326		#245	743	88		#404
Internal Link Dist (ft)		616			3432				3385			
Turn Bay Length (ft)	100		100	200		100		250		200		250
Base Capacity (vph)	273	202	171	521	336	286		181	1714	767		271
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0		0
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0		0
Storage Cap Reductn	0	0	0	0	0	0		0	0	0		0
Reduced v/c Ratio	0.80	0.21	0.47	1.05	0.18	0.78		0.92	0.87	0.13		1.02

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 138.3
Natural Cycle: 140
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 67.9 Intersection LOS: E
Intersection Capacity Utilization 94.9% 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: 1: US 15-501 & Site Drive 1/Lystra Road

Lane Group	SBT	SBR
LOS	E	A
Approach Delay	74.5	
Approach LOS	E	
Queue Length 50th (ft)	~1071	3
Queue Length 95th (ft)	#1205	8
Internal Link Dist (ft)	254	
Turn Bay Length (ft)		50
Base Capacity (vph)	1894	973
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	1.06	0.01

Intersection Summary

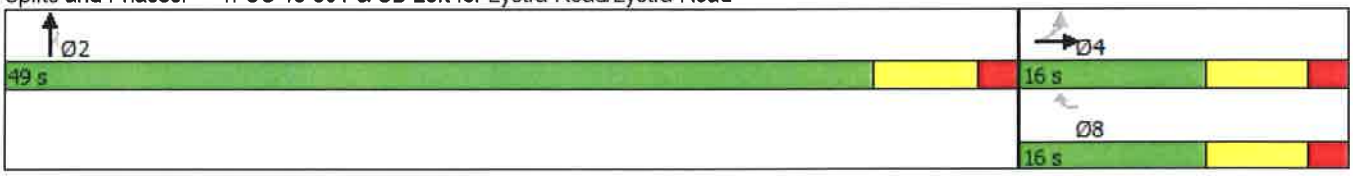
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	168	0	0	0	376	0	1928	145	0	0	0
Future Volume (vph)	8	168	0	0	0	376	0	1928	145	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected		0.998										
Satd. Flow (prot)	0	1859	0	0	0	2787	0	3539	1583	0	0	0
Flt Permitted		0.998										
Satd. Flow (perm)	0	1859	0	0	0	2787	0	3539	1583	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			45			55			55	
Link Distance (ft)		208			3512			144			568	
Travel Time (s)		2.6			53.2			1.8			7.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	9	187	0	0	0	418	0	2142	161	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	196	0	0	0	418	0	2142	161	0	0	0
Turn Type	Perm	NA				Perm		NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					8			2			
Detector Phase	4	4				8		2	2			
Switch Phase												
Minimum Initial (s)	7.0	7.0				7.0		14.0	14.0			
Minimum Split (s)	14.0	14.0				14.0		21.0	21.0			
Total Split (s)	16.0	16.0				16.0		49.0	49.0			
Total Split (%)	24.6%	24.6%				24.6%		75.4%	75.4%			
Maximum Green (s)	9.0	9.0				9.0		42.0	42.0			
Yellow Time (s)	5.0	5.0				5.0		5.0	5.0			
All-Red Time (s)	2.0	2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0			
Recall Mode	None	None				None		Min	Min			
Act Effct Green (s)		11.0				11.0		43.5	43.5			
Actuated g/C Ratio		0.17				0.17		0.67	0.67			
v/c Ratio		0.62				0.88		0.90	0.15			
Control Delay		35.0				49.2		15.6	4.2			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay		35.0				49.2		15.6	4.2			
LOS		C				D		B	A			
Approach Delay		35.0			49.2			14.8				
Approach LOS		C			D			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		73				93		297	19			
Queue Length 95th (ft)		#146				#176		#456	36			
Internal Link Dist (ft)		128			3432			64			488	
Turn Bay Length (ft)						100						
Base Capacity (vph)		316				474		2413	1079			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.62				0.88		0.89	0.15			

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 64.5
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 21.1 Intersection LOS: C
Intersection Capacity Utilization 88.2% 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: 1: US 15-501 & SB Left for Lystra Road/Lystra Road



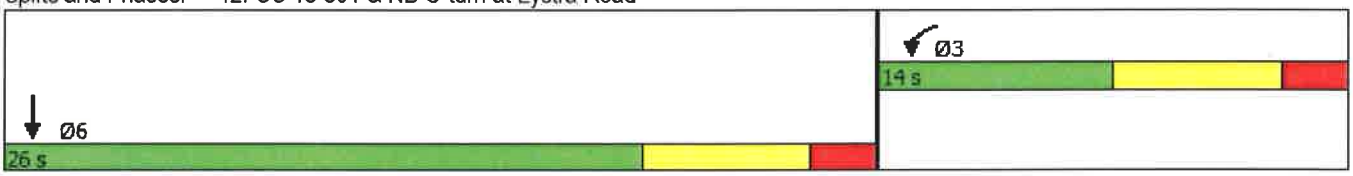
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	6	0	0	0	0	1250
Future Volume (vph)	6	0	0	0	0	1250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	0	0	3539
Right Turn on Red	No	No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		55			45
Link Distance (ft)	151		628			205
Travel Time (s)	2.3		7.8			3.1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	7	0	0	0	0	1389
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	0	0	1389
Turn Type	Prot					NA
Protected Phases	3					6
Permitted Phases						
Detector Phase	3					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	14.0					26.0
Total Split (%)	35.0%					65.0%
Maximum Green (s)	7.0					19.0
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0					3.0
Recall Mode	None					Min
Act Effct Green (s)	9.2					39.1
Actuated g/C Ratio	0.22					0.93
v/c Ratio	0.02					0.42
Control Delay	16.5					2.1
Queue Delay	0.0					0.0
Total Delay	16.5					2.1
LOS	B					A
Approach Delay	16.5					2.1
Approach LOS	B					A
Queue Length 50th (ft)	1					0
Queue Length 95th (ft)	11					155
Internal Link Dist (ft)	71		548			125

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)						
Base Capacity (vph)	387					3294
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.02					0.42

Intersection Summary

Area Type: Other
Cycle Length: 40
Actuated Cycle Length: 42
Natural Cycle: 40
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 2.2 Intersection LOS: A
Intersection Capacity Utilization 48.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 12: US 15-501 & NB U-turn at Lystra Road



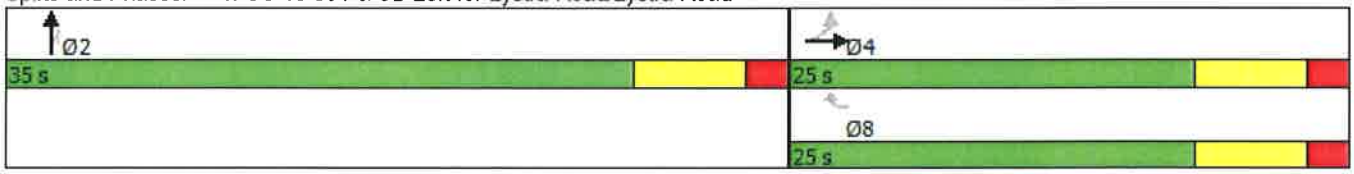
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	241	0	0	0	710	0	1379	93	0	0	0
Future Volume (vph)	7	241	0	0	0	710	0	1379	93	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected		0.999										
Satd. Flow (prot)	0	1861	0	0	0	2787	0	3539	1583	0	0	0
Flt Permitted		0.999										
Satd. Flow (perm)	0	1861	0	0	0	2787	0	3539	1583	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			45			55			55	
Link Distance (ft)		208			3512			144			568	
Travel Time (s)		2.6			53.2			1.8			7.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	268	0	0	0	789	0	1532	103	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	276	0	0	0	789	0	1532	103	0	0	0
Turn Type	Perm	NA				Perm		NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					8			2			
Detector Phase	4	4				8		2	2			
Switch Phase												
Minimum Initial (s)	7.0	7.0				7.0		14.0	14.0			
Minimum Split (s)	14.0	14.0				14.0		21.0	21.0			
Total Split (s)	25.0	25.0				25.0		35.0	35.0			
Total Split (%)	41.7%	41.7%				41.7%		58.3%	58.3%			
Maximum Green (s)	18.0	18.0				18.0		28.0	28.0			
Yellow Time (s)	5.0	5.0				5.0		5.0	5.0			
All-Red Time (s)	2.0	2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0			
Recall Mode	None	None				None		Min	Min			
Act Effct Green (s)		19.6				19.6		29.4	29.4			
Actuated g/C Ratio		0.33				0.33		0.50	0.50			
v/c Ratio		0.45				0.85		0.87	0.13			
Control Delay		18.5				29.9		20.3	8.6			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay		18.5				29.9		20.3	8.6			
LOS		B				C		C	A			
Approach Delay		18.5			29.9			19.6				
Approach LOS		B			C			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		77				147		237	18			
Queue Length 95th (ft)		136				#251		#355	40			
Internal Link Dist (ft)		128			3432			64			488	
Turn Bay Length (ft)						100						
Base Capacity (vph)		631				946		1801	805			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.44				0.83		0.85	0.13			

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 59
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 22.5 Intersection LOS: C
Intersection Capacity Utilization 88.5% 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: 1: US 15-501 & SB Left for Lystra Road/Lystra Road



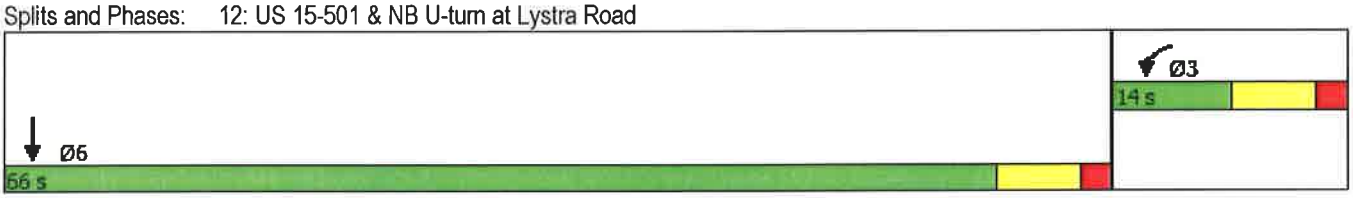
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	35	0	0	0	0	2298
Future Volume (vph)	35	0	0	0	0	2298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	0	0	3539
Right Turn on Red	No	No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	45		25			45
Link Distance (ft)	151		628			205
Travel Time (s)	2.3		17.1			3.1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	0	0	0	0	2553
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	0	0	2553
Turn Type	Prot					NA
Protected Phases	3					6
Permitted Phases						
Detector Phase	3					6
Switch Phase						
Minimum Initial (s)	7.0					14.0
Minimum Split (s)	14.0					21.0
Total Split (s)	14.0					66.0
Total Split (%)	17.5%					82.5%
Maximum Green (s)	7.0					59.0
Yellow Time (s)	5.0					5.0
All-Red Time (s)	2.0					2.0
Lost Time Adjust (s)	-2.0					-2.0
Total Lost Time (s)	5.0					5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0					3.0
Recall Mode	None					Min
Act Effct Green (s)	9.1					74.3
Actuated g/C Ratio	0.11					0.88
v/c Ratio	0.21					0.82
Control Delay	40.1					8.9
Queue Delay	0.0					0.0
Total Delay	40.1					8.9
LOS	D					A
Approach Delay	40.1					8.9
Approach LOS	D					A
Queue Length 50th (ft)	22					436
Queue Length 95th (ft)	49					#659
Internal Link Dist (ft)	71		548			125

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Turn Bay Length (ft)						
Base Capacity (vph)	190					3098
Starvation Cap Reductn	0					0
Spillback Cap Reductn	0					0
Storage Cap Reductn	0					0
Reduced v/c Ratio	0.21					0.82

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 84.9
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 9.3 Intersection LOS: A
Intersection Capacity Utilization 99.5% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: US 15-501 & NB U-turn at Lystra Road



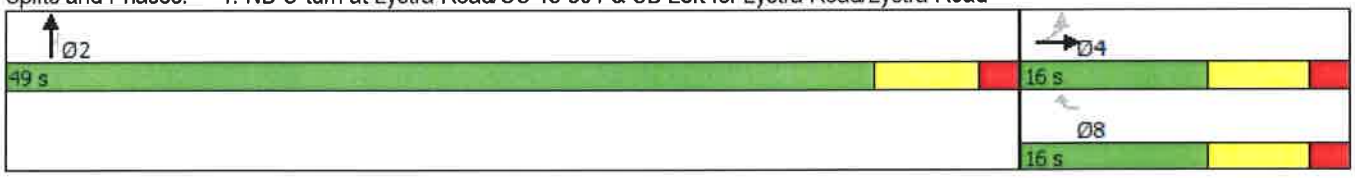
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	182	0	0	0	405	0	1986	152	0	0	0
Future Volume (vph)	35	182	0	0	0	405	0	1986	152	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected		0.992										
Satd. Flow (prot)	0	1848	0	0	0	2787	0	3539	1583	0	0	0
Flt Permitted		0.992										
Satd. Flow (perm)	0	1848	0	0	0	2787	0	3539	1583	0	0	0
Right Turn on Red	No		No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		55			45			55			55	
Link Distance (ft)		208			3512			150			568	
Travel Time (s)		2.6			53.2			1.9			7.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	39	202	0	0	0	450	0	2207	169	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	241	0	0	0	450	0	2207	169	0	0	0
Turn Type	Perm	NA				Perm		NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					8			2			
Detector Phase	4	4				8		2	2			
Switch Phase												
Minimum Initial (s)	7.0	7.0				7.0		14.0	14.0			
Minimum Split (s)	14.0	14.0				14.0		21.0	21.0			
Total Split (s)	16.0	16.0				16.0		49.0	49.0			
Total Split (%)	24.6%	24.6%				24.6%		75.4%	75.4%			
Maximum Green (s)	9.0	9.0				9.0		42.0	42.0			
Yellow Time (s)	5.0	5.0				5.0		5.0	5.0			
All-Red Time (s)	2.0	2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0			
Recall Mode	None	None				None		Min	Min			
Act Effct Green (s)		11.0				11.0		44.0	44.0			
Actuated g/C Ratio		0.17				0.17		0.68	0.68			
v/c Ratio		0.77				0.96		0.92	0.16			
Control Delay		45.0				61.8		17.6	4.2			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay		45.0				61.8		17.6	4.2			
LOS		D				E		B	A			
Approach Delay		45.0			61.8			16.6				
Approach LOS		D			E			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		92				101		322	20			
Queue Length 95th (ft)		#196				#194		#583	38			
Internal Link Dist (ft)		128			3432			70			488	
Turn Bay Length (ft)						100						
Base Capacity (vph)		312				471		2395	1071			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.77				0.96		0.92	0.16			

Intersection Summary

Area Type: Other
Cycle Length: 65
Actuated Cycle Length: 65
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 25.5 Intersection LOS: C
Intersection Capacity Utilization 93.1% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NB U-turn at Lystra Road/US 15-501 & SB Left for Lystra Road/Lystra Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	122	6	84	0	0	0	0	0	1258	10
Future Volume (vph)	0	0	122	6	84	0	0	0	0	0	1258	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.865									0.850
Flt Protected					0.997							
Satd. Flow (prot)	0	0	1611	0	1857	0	0	0	0	0	3539	1583
Flt Permitted					0.997							
Satd. Flow (perm)	0	0	1611	0	1857	0	0	0	0	0	3539	1583
Right Turn on Red			No	No		No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			55			45	
Link Distance (ft)		546			163			628			205	
Travel Time (s)		12.4			2.5			7.8			3.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	136	7	93	0	0	0	0	0	1398	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	136	0	100	0	0	0	0	0	1398	11
Turn Type			Perm	Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases			4	8								6
Detector Phase			4	8	8						6	6
Switch Phase												
Minimum Initial (s)			7.0	7.0	7.0						14.0	14.0
Minimum Split (s)			14.0	14.0	14.0						21.0	21.0
Total Split (s)			14.0	14.0	14.0						26.0	26.0
Total Split (%)			35.0%	35.0%	35.0%						65.0%	65.0%
Maximum Green (s)			7.0	7.0	7.0						19.0	19.0
Yellow Time (s)			5.0	5.0	5.0						5.0	5.0
All-Red Time (s)			2.0	2.0	2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)			3.0	3.0	3.0						3.0	3.0
Recall Mode			None	None	None						Min	Min
Act Effct Green (s)			9.0		9.0						24.3	24.3
Actuated g/C Ratio			0.23		0.23						0.62	0.62
v/c Ratio			0.37		0.23						0.64	0.01
Control Delay			16.6		14.4						8.5	4.6
Queue Delay			0.0		0.0						0.0	0.0
Total Delay			16.6		14.4						8.5	4.6
LOS			B		B						A	A
Approach Delay		16.6			14.4						8.4	
Approach LOS		B			B						A	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)			26		18						110	1
Queue Length 95th (ft)			60		46						171	5
Internal Link Dist (ft)		466			83			548			125	
Turn Bay Length (ft)												50
Base Capacity (vph)			370		426						2193	981
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.37		0.23						0.64	0.01

Intersection Summary

Area Type: Other
Cycle Length: 40
Actuated Cycle Length: 39.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 9.5
Intersection LOS: A
Intersection Capacity Utilization 60.7%
ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 12: US 15-501 & Site Drive 1

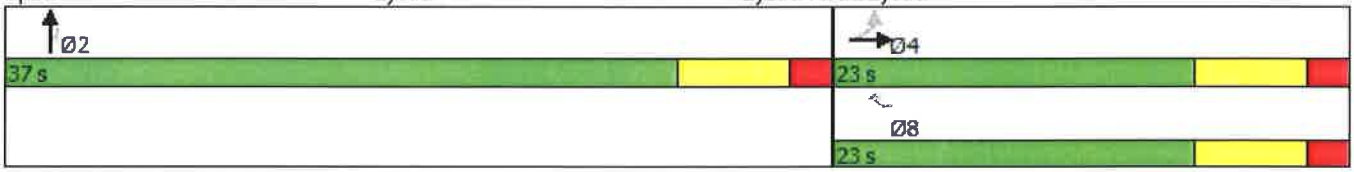
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	267	0	0	0	750	0	1482	106	0	0	0
Future Volume (vph)	58	267	0	0	0	750	0	1482	106	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		100	0		0	0		0
Storage Lanes	0		0	0		1	0		1	0		0
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.88	1.00	0.95	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected		0.991										
Satd. Flow (prot)	0	1846	0	0	0	2787	0	3539	1583	0	0	0
Flt Permitted		0.991										
Satd. Flow (perm)	0	1846	0	0	0	2787	0	3539	1583	0	0	0
Right Turn on Red	Yes		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		73				73			118			
Link Speed (mph)		55			45			55			55	
Link Distance (ft)		208			3512			150			568	
Travel Time (s)		2.6			53.2			1.9			7.0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	297	0	0	0	833	0	1647	118	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	361	0	0	0	833	0	1647	118	0	0	0
Turn Type	Perm	NA				Perm		NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					8			2			
Detector Phase	4	4				8		2	2			
Switch Phase												
Minimum Initial (s)	7.0	7.0				7.0		14.0	14.0			
Minimum Split (s)	14.0	14.0				14.0		21.0	21.0			
Total Split (s)	23.0	23.0				23.0		37.0	37.0			
Total Split (%)	38.3%	38.3%				38.3%		61.7%	61.7%			
Maximum Green (s)	16.0	16.0				16.0		30.0	30.0			
Yellow Time (s)	5.0	5.0				5.0		5.0	5.0			
All-Red Time (s)	2.0	2.0				2.0		2.0	2.0			
Lost Time Adjust (s)		-2.0				-2.0		-2.0	-2.0			
Total Lost Time (s)		5.0				5.0		5.0	5.0			
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0				3.0		3.0	3.0			
Recall Mode	None	None				None		Min	Min			
Act Effct Green (s)		18.0				18.0		31.6	31.6			
Actuated g/C Ratio		0.30				0.30		0.53	0.53			
v/c Ratio		0.59				0.93		0.88	0.13			
Control Delay		18.8				38.8		19.6	2.1			
Queue Delay		0.0				0.0		0.0	0.0			
Total Delay		18.8				38.8		19.6	2.1			
LOS		B				D		B	A			
Approach Delay		18.8			38.8			18.4				
Approach LOS		B			D			B				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		86				151		248	0			
Queue Length 95th (ft)		162				#272		#374	19			
Internal Link Dist (ft)		128			3432			70			488	
Turn Bay Length (ft)						100						
Base Capacity (vph)		608				892		1899	904			
Starvation Cap Reductn		0				0		0	0			
Spillback Cap Reductn		0				0		0	0			
Storage Cap Reductn		0				0		0	0			
Reduced v/c Ratio		0.59				0.93		0.87	0.13			

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 59.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 97.0% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: NB U-turn at Lystra Road/US 15-501 & SB Left for Lystra Road/Lystra Road



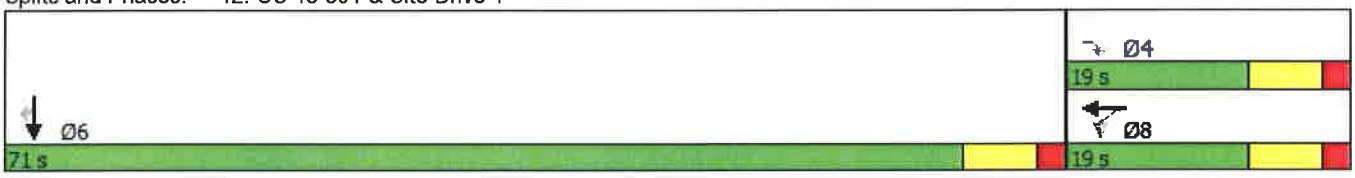
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	222	35	122	0	0	0	0	0	2311	13
Future Volume (vph)	0	0	222	35	122	0	0	0	0	0	2311	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	0		50
Storage Lanes	0		1	0		0	0		0	0		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.865									0.850
Flt Protected					0.989							
Satd. Flow (prot)	0	0	1611	0	1842	0	0	0	0	0	3539	1583
Flt Permitted					0.989							
Satd. Flow (perm)	0	0	1611	0	1842	0	0	0	0	0	3539	1583
Right Turn on Red			No	No		No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			55			45	
Link Distance (ft)		546			163			628			205	
Travel Time (s)		12.4			2.5			7.8			3.1	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	247	39	136	0	0	0	0	0	2568	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	247	0	175	0	0	0	0	0	2568	14
Turn Type			Perm	Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases			4	8								6
Detector Phase			4	8	8						6	6
Switch Phase												
Minimum Initial (s)			7.0	7.0	7.0						14.0	14.0
Minimum Split (s)			14.0	14.0	14.0						21.0	21.0
Total Split (s)			19.0	19.0	19.0						71.0	71.0
Total Split (%)			21.1%	21.1%	21.1%						78.9%	78.9%
Maximum Green (s)			12.0	12.0	12.0						64.0	64.0
Yellow Time (s)			5.0	5.0	5.0						5.0	5.0
All-Red Time (s)			2.0	2.0	2.0						2.0	2.0
Lost Time Adjust (s)			-2.0		-2.0						-2.0	-2.0
Total Lost Time (s)			5.0		5.0						5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)			3.0	3.0	3.0						3.0	3.0
Recall Mode			None	None	None						Min	Min
Act Effct Green (s)			14.0		14.0						66.0	66.0
Actuated g/C Ratio			0.16		0.16						0.73	0.73
v/c Ratio			0.99		0.61						0.99	0.01
Control Delay			94.4		45.6						28.3	3.3
Queue Delay			0.0		0.0						0.0	0.0
Total Delay			94.4		45.6						28.3	3.3
LOS			F		D						C	A
Approach Delay		94.4			45.6						28.1	
Approach LOS		F			D						C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)			142		94						617	2
Queue Length 95th (ft)			#292		162						#936	6
Internal Link Dist (ft)		466			83			548			125	
Turn Bay Length (ft)												50
Base Capacity (vph)			250		286						2595	1160
Starvation Cap Reductn			0		0						0	0
Spillback Cap Reductn			0		0						0	0
Storage Cap Reductn			0		0						0	0
Reduced v/c Ratio			0.99		0.61						0.99	0.01

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 34.6 Intersection LOS: C
Intersection Capacity Utilization 98.5% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: US 15-501 & Site Drive 1



APPENDIX F

CAPACITY ANALYSIS CALCULATIONS

US 15-501

&

POLKS LANDING ROAD / WILLIAMS CORNER

SITE DRIVE

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	35	1	56	0	0	0	0	0	627	9
Future Vol, veh/h	0	0	35	1	56	0	0	0	0	0	627	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	39	1	62	0	0	0	0	0	697	10

Major/Minor	Minor2			Minor1			Major2		
Conflicting Flow All	-	-	348	348	697	-	-	-	0
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	348	697	-	-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-	-	-	-
Pot Cap-1 Maneuver	0	0	648	582	363	0	0	-	-
Stage 1	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	641	441	0	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	-	648	547	363	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	547	363	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	603	441	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	10.9	16.9	0
HCM LOS	B	C	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	648	365	-	-
HCM Lane V/C Ratio	0.06	0.174	-	-
HCM Control Delay (s)	10.9	16.9	-	-
HCM Lane LOS	B	C	-	-
HCM 95th %tile Q(veh)	0.2	0.6	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	0	0	1247	0	0
Future Vol, veh/h	51	0	0	1247	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	0	0	1386	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	693	-	-	0
Stage 1	0	-	-	-
Stage 2	693	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	377	0	0	-
Stage 1	-	0	0	-
Stage 2	457	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	377	-	-	-
Mov Cap-2 Maneuver	377	-	-	-
Stage 1	-	-	-	-
Stage 2	457	-	-	-

Approach	EB	NB
HCM Control Delay, s	16.2	0
HCM LOS	C	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	377
HCM Lane V/C Ratio	-	0.15
HCM Control Delay (s)	-	16.2
HCM Lane LOS	-	C
HCM 95th %tile Q(veh)	-	0.5

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰↑						↑↑	↱
Traffic Vol, veh/h	0	0	19	1	31	0	0	0	0	0	1358	36
Future Vol, veh/h	0	0	19	1	31	0	0	0	0	0	1358	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	21	1	34	0	0	0	0	0	1509	40

Major/Minor	Minor2			Minor1			Major2		
Conflicting Flow All	-	-	754	754	1509	-	-	-	0
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	754	1509	-	-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-	-	-	-
Pot Cap-1 Maneuver	0	0	352	298	119	0	0	-	-
Stage 1	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	367	182	0	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	-	352	280	119	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	280	119	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	345	182	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	15.9	46.7	0
HCM LOS	C	E	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	352	121	-	-
HCM Lane V/C Ratio	0.06	0.294	-	-
HCM Control Delay (s)	15.9	46.7	-	-
HCM Lane LOS	C	E	-	-
HCM 95th %tile Q(veh)	0.2	1.1	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	77	0	0	801	0	0
Future Vol, veh/h	77	0	0	801	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	0	0	890	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	445	-	-	0
Stage 1	0	-	-	-
Stage 2	445	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	542	0	0	-
Stage 1	-	0	0	-
Stage 2	613	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	542	-	-	-
Mov Cap-2 Maneuver	542	-	-	-
Stage 1	-	-	-	-
Stage 2	613	-	-	-

Approach	EB	NB
HCM Control Delay, s	12.9	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	542
HCM Lane V/C Ratio	-	0.158
HCM Control Delay (s)	-	12.9
HCM Lane LOS	-	B
HCM 95th %tile Q(veh)	-	0.6

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	45	1	75	0	0	0	0	0	1173	17
Future Vol, veh/h	0	0	45	1	75	0	0	0	0	0	1173	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	1	83	0	0	0	0	0	1303	19

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	652	652	1303	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	652	1303	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	411	353	159	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	423	229	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	411	310	159	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	310	159	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	372	229	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	15	50.2	0
HCM LOS	C	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	411	160	-	-
HCM Lane V/C Ratio	0.122	0.528	-	-
HCM Control Delay (s)	15	50.2	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0.4	2.6	-	-

Intersection

Int Delay, s/veh 173.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑				↱		↑↑	↱			
Traffic Vol, veh/h	67	168	0	0	0	76	0	1917	112	0	0	0
Future Vol, veh/h	67	168	0	0	0	76	0	1917	112	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	187	0	0	0	84	0	2130	124	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1065	2130	-	-	-	1065	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	1065	2130	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	177	~ 49	0	0	0	219	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	238	~ 89	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	109	~ 49	-	-	-	219	-	-	-
Mov Cap-2 Maneuver	109	~ 49	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	146	~ 89	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	$ 1719	31.4	0
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	58	219
HCM Lane V/C Ratio	-	-	4.502	0.386
HCM Control Delay (s)	-	-	$ 1719	31.4
HCM Lane LOS	-	-	F	D
HCM 95th %tile Q(veh)	-	-	28.8	1.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	27	1	45	0	0	0	0	0	2018	50
Future Vol, veh/h	0	0	27	1	45	0	0	0	0	0	2018	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	30	1	50	0	0	0	0	0	2242	56

Major/Minor	Minor2			Minor1			Major2		
Conflicting Flow All	-	-	1121	1121	2242	-	-	-	0
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	1121	2242	-	-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-	-	-	-
Pot Cap-1 Maneuver	0	0	200	161	~ 42	0	0	-	-
Stage 1	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	220	77	0	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	-	200	137	~ 42	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	137	~ 42	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	187	77	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	26.2	$ 347	0
HCM LOS	D	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	200	43	-	-
HCM Lane V/C Ratio	0.15	1.189	-	-
HCM Control Delay (s)	26.2	$ 347	-	-
HCM Lane LOS	D	F	-	-
HCM 95th %tile Q(veh)	0.5	4.9	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰				↱		↑↑	↱			
Traffic Vol, veh/h	106	166	0	0	0	334	0	1414	136	0	0	0
Future Vol, veh/h	106	166	0	0	0	334	0	1414	136	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	184	0	0	0	371	0	1571	151	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	786	1571	-	-	-	786	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	786	1571	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	283	~ 109	0	0	0	~ 335	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	351	~ 169	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	~ 109	-	-	-	~ 335	-	-	-
Mov Cap-2 Maneuver	-	~ 109	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	~ 169	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s		117.1	0
HCM LOS	-	F	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	335
HCM Lane V/C Ratio	-	-	-	1.108
HCM Control Delay (s)	-	-	-	117.1
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	14.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	35.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	45	208	75	0	0	0	0	0	1173	17
Future Vol, veh/h	0	0	45	208	75	0	0	0	0	0	1173	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	231	83	0	0	0	0	0	1303	19

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	652	652	1303	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	652	1303	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	411	353	159	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	423	229	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	411	310	159	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	310	159	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	372	229	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	15	189	0
HCM LOS	C	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	411	248	-	-
HCM Lane V/C Ratio	0.122	1.268	-	-
HCM Control Delay (s)	15	189	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0.4	15.8	-	-

Intersection

Int Delay, s/veh 173.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑				↱		↑↑	↱			
Traffic Vol, veh/h	67	168	0	0	0	76	0	1917	112	0	0	0
Future Vol, veh/h	67	168	0	0	0	76	0	1917	112	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	187	0	0	0	84	0	2130	124	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1065	2130	-	-	-	1065	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	1065	2130	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	177	~ 49	0	0	0	219	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	238	~ 89	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	109	~ 49	-	-	-	219	-	-	-
Mov Cap-2 Maneuver	109	~ 49	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	146	~ 89	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	$ 1719	31.4	0
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	58	219
HCM Lane V/C Ratio	-	-	4.502	0.386
HCM Control Delay (s)	-	-	$ 1719	31.4
HCM Lane LOS	-	-	F	D
HCM 95th %tile Q(veh)	-	-	28.8	1.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 413.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	27	501	45	0	0	0	0	0	2018	50
Future Vol, veh/h	0	0	27	501	45	0	0	0	0	0	2018	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	30	557	50	0	0	0	0	0	2242	56

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	1121	1121	2242	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	1121	2242	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	200	~ 161	~ 42	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	~ 220	77	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	200	~ 137	~ 42	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	~ 137	~ 42	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	~ 187	77	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	26.2	$ 1998.1	0
HCM LOS	D	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	200	115	-	-
HCM Lane V/C Ratio	0.15	5.275	-	-
HCM Control Delay (s)	26.2	$ 1998.1	-	-
HCM Lane LOS	D	F	-	-
HCM 95th %tile Q(veh)	0.5	65	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 26.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑				↱		↑↑↱				
Traffic Vol, veh/h	106	166	0	0	0	334	0	1414	136	0	0	0
Future Vol, veh/h	106	166	0	0	0	334	0	1414	136	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	184	0	0	0	371	0	1571	151	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	786	1722	-	-	-	861	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	786	1722	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	283	~ 88	0	0	0	~ 299	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	351	~ 142	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	~ 88	-	-	-	~ 299	-	-	-
Mov Cap-2 Maneuver	-	~ 88	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	~ 142	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s		169.6	0
HCM LOS	-	F	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	299
HCM Lane V/C Ratio	-	-	-	1.241
HCM Control Delay (s)	-	-	-	169.6
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	17.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	68	1	85	0	0	0	0	0	1167	132
Future Vol, veh/h	0	0	68	1	85	0	0	0	0	0	1167	132
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	76	1	94	0	0	0	0	0	1297	147

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	648	648	1297	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	648	1297	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	413	355	161	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	425	230	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	413	290	161	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	290	161	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	347	230	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	15.7	55	0
HCM LOS	C	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	413	162	-	-
HCM Lane V/C Ratio	0.183	0.59	-	-
HCM Control Delay (s)	15.7	55	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0.7	3.1	-	-

Intersection

Int Delay, s/veh 197

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑				↱		↑↑	↱			
Traffic Vol, veh/h	67	168	0	0	0	76	0	1992	112	0	0	0
Future Vol, veh/h	67	168	0	0	0	76	0	1992	112	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	187	0	0	0	84	0	2213	124	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1107	2213	-	-	-	1107	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	1107	2213	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	165	~ 43	0	0	0	205	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	224	~ 80	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	97	~ 43	-	-	-	205	-	-	-
Mov Cap-2 Maneuver	97	~ 43	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	132	~ 80	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	$ 2013.4	34.3	0
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	51	205
HCM Lane V/C Ratio	-	-	5.12	0.412
HCM Control Delay (s)	-	-	$ 2013.4	34.3
HCM Lane LOS	-	-	F	D
HCM 95th %tile Q(veh)	-	-	29.6	1.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 12.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	136	1	58	0	0	0	0	0	1935	278
Future Vol, veh/h	0	0	136	1	58	0	0	0	0	0	1935	278
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	151	1	64	0	0	0	0	0	2150	309

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	1075	1075	2150	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	1075	2150	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	215	174	~ 48	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	234	86	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	215	52	~ 48	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	52	~ 48	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	70	86	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	53.7	$ 392.2	0
HCM LOS	F	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	215	48	-	-
HCM Lane V/C Ratio	0.703	1.366	-	-
HCM Control Delay (s)	53.7	$ 392.2	-	-
HCM Lane LOS	F	F	-	-
HCM 95th %tile Q(veh)	4.5	6.2	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	25.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	166	0	0	0	334	0	1555	136	0	0	0
Future Vol, veh/h	106	166	0	0	0	334	0	1555	136	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	184	0	0	0	371	0	1728	151	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	864	1728	-	-	-	864	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	864	1728	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	248	~ 88	0	0	0	~ 297	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	315	~ 142	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	~ 88	-	-	-	~ 297	-	-	-
Mov Cap-2 Maneuver	-	~ 88	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	~ 142	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s		173.1	0
HCM LOS	-	F	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	297
HCM Lane V/C Ratio	-	-	-	1.25
HCM Control Delay (s)	-	-	-	173.1
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	17.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	71.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	112	208	114	0	0	0	0	0	1165	135
Future Vol, veh/h	0	0	112	208	114	0	0	0	0	0	1165	135
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	124	231	127	0	0	0	0	0	1294	150

Major/Minor	Minor2			Minor1						Major2		
Conflicting Flow All	-	-	647	647	1294	-				-	-	0
Stage 1	-	-	-	0	0	-				-	-	-
Stage 2	-	-	-	647	1294	-				-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-				-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-				-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-				-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-				-	-	-
Pot Cap-1 Maneuver	0	0	414	356	161	0				0	-	-
Stage 1	0	0	-	-	-	0				0	-	-
Stage 2	0	0	-	426	231	0				0	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver	-	-	414	249	161	-				-	-	-
Mov Cap-2 Maneuver	-	-	-	249	161	-				-	-	-
Stage 1	-	-	-	-	-	-				-	-	-
Stage 2	-	-	-	298	231	-				-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	17.4	$ 379.7	0
HCM LOS	C	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	414	209	-	-
HCM Lane V/C Ratio	0.301	1.712	-	-
HCM Control Delay (s)	17.4	$ 379.7	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	1.2	24.2	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 197

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑				↱		↑↑	↱			
Traffic Vol, veh/h	67	168	0	0	0	76	0	1992	112	0	0	0
Future Vol, veh/h	67	168	0	0	0	76	0	1992	112	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	74	187	0	0	0	84	0	2213	124	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	1107	2213	-	-	-	1107	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	1107	2213	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	165	~ 43	0	0	0	205	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	224	~ 80	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	97	~ 43	-	-	-	205	-	-	-
Mov Cap-2 Maneuver	97	~ 43	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	132	~ 80	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	$ 2013.4	34.3	0
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	51	205
HCM Lane V/C Ratio	-	-	5.12	0.412
HCM Control Delay (s)	-	-	$ 2013.4	34.3
HCM Lane LOS	-	-	F	D
HCM 95th %tile Q(veh)	-	-	29.6	1.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱		↰						↑↑	↱
Traffic Vol, veh/h	0	0	221	501	98	0	0	0	0	0	1927	286
Future Vol, veh/h	0	0	221	501	98	0	0	0	0	0	1927	286
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	246	557	109	0	0	0	0	0	2141	318

Major/Minor	Minor2			Minor1			Major2		
Conflicting Flow All	-	-	1071	1071	2141	-	-	-	0
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	1071	2141	-	-	-	-
Critical Hdwy	-	-	6.94	7.54	6.54	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	3.32	3.52	4.02	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 217	~ 175	~ 48	0	0	-	-
Stage 1	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	~ 236	~ 87	0	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	-	~ 217	-	~ 48	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	~ 48	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	~ 87	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	147.8		0
HCM LOS	F	-	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	217	-	-	-
HCM Lane V/C Ratio	1.132	-	-	-
HCM Control Delay (s)	147.8	-	-	-
HCM Lane LOS	F	-	-	-
HCM 95th %tile Q(veh)	11.5	-	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection

Int Delay, s/veh 25.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰				↱		↑↑	↱			
Traffic Vol, veh/h	106	166	0	0	0	334	0	1555	136	0	0	0
Future Vol, veh/h	106	166	0	0	0	334	0	1555	136	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	184	0	0	0	371	0	1728	151	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	864	1728	-	-	-	864	-	0	0
Stage 1	0	0	-	-	-	-	-	-	-
Stage 2	864	1728	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	-	-	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	-	-	-	3.32	-	-	-
Pot Cap-1 Maneuver	248	~ 88	0	0	0	~ 297	0	-	-
Stage 1	-	-	0	0	0	-	0	-	-
Stage 2	315	~ 142	0	0	0	-	0	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	~ 88	-	-	-	~ 297	-	-	-
Mov Cap-2 Maneuver	-	~ 88	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	~ 142	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s		173.1	0
HCM LOS	-	F	

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	297
HCM Lane V/C Ratio	-	-	-	1.25
HCM Control Delay (s)	-	-	-	173.1
HCM Lane LOS	-	-	-	F
HCM 95th %tile Q(veh)	-	-	-	17.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

APPENDIX G

CAPACITY ANALYSIS CALCULATIONS

POLKS LANDING ROAD

&

SITE DRIVE 2

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	61	4	69	148	4	7
Future Vol, veh/h	61	4	69	148	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	4	77	164	4	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	72	0	388	70
Stage 1	-	-	-	-	70	-
Stage 2	-	-	-	-	318	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1528	-	616	993
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	738	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1528	-	582	993
Mov Cap-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	790	-	-	1528	-
HCM Lane V/C Ratio	0.015	-	-	0.05	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	-

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	59	4	156	180	4	77
Future Vol, veh/h	59	4	156	180	4	77
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	4	173	200	4	86

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	70	0	615	68
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	547	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1531	-	455	995
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1531	-	397	995
Mov Cap-2 Maneuver	-	-	-	-	397	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	506	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	926	-	-	1531	-
HCM Lane V/C Ratio	0.097	-	-	0.113	-
HCM Control Delay (s)	9.3	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.4	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	4	99	150	4	41
Future Vol, veh/h	71	4	99	150	4	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	4	110	167	4	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	83	0	468	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	387	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1514	-	553	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	686	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1514	-	509	979
Mov Cap-2 Maneuver	-	-	-	-	509	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	631	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	905	-	-	1514	-
HCM Lane V/C Ratio	0.055	-	-	0.073	-
HCM Control Delay (s)	9.2	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	4	196	188	4	141
Future Vol, veh/h	80	4	196	188	4	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	4	218	209	4	157

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	93	0	735	91
Stage 1	-	-	-	-	91	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1501	-	387	967
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	523	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1501	-	324	967
Mov Cap-2 Maneuver	-	-	-	-	324	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	437	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	917	-	-	1501	-
HCM Lane V/C Ratio	0.176	-	-	0.145	-
HCM Control Delay (s)	9.8	-	-	7.8	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.5	-

APPENDIX H

CAPACITY ANALYSIS CALCULATIONS

POLKS LANDING ROAD

&

SITE DRIVE 3

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	45	4	56	92	4	16
Future Vol, veh/h	45	4	56	92	4	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	4	62	102	4	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	279	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	227	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1551	-	711	1016
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	811	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	681	1016
Mov Cap-2 Maneuver	-	-	-	-	681	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	777	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	925	-	-	1551	-
HCM Lane V/C Ratio	0.024	-	-	0.04	-
HCM Control Delay (s)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	4	85	95	4	32
Future Vol, veh/h	27	4	85	95	4	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	94	106	4	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	34	0	326	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	294	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1578	-	668	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1578	-	626	1042
Mov Cap-2 Maneuver	-	-	-	-	626	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	970	-	-	1578	-
HCM Lane V/C Ratio	0.041	-	-	0.06	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	45	4	58	92	4	26
Future Vol, veh/h	45	4	58	92	4	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	4	64	102	4	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	283	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1551	-	707	1016
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	676	1016
Mov Cap-2 Maneuver	-	-	-	-	676	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	771	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.9	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	952	-	-	1551	-
HCM Lane V/C Ratio	0.035	-	-	0.042	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	4	93	95	4	53
Future Vol, veh/h	27	4	93	95	4	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	103	106	4	59

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	34	0	344	32
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	312	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1578	-	652	1042
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	742	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1578	-	607	1042
Mov Cap-2 Maneuver	-	-	-	-	607	-
Stage 1	-	-	-	-	991	-
Stage 2	-	-	-	-	691	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.7	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	992	-	-	1578	-
HCM Lane V/C Ratio	0.064	-	-	0.065	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.2	-

APPENDIX I

CAPACITY ANALYSIS CALCULATIONS

US 15-501

&

SOUTHBOUND U-TURN

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	2079	0	0
Future Vol, veh/h	4	0	0	2079	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	2310	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	1155	-	-	0
Stage 1	0	-	-	-
Stage 2	1155	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	190	0	0	-
Stage 1	-	0	0	-
Stage 2	262	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	190	-	-	-
Mov Cap-2 Maneuver	190	-	-	-
Stage 1	-	-	-	-
Stage 2	262	-	-	-

Approach	EB	NB
HCM Control Delay, s	24.4	0
HCM LOS	C	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	190
HCM Lane V/C Ratio	-	0.023
HCM Control Delay (s)	-	24.4
HCM Lane LOS	-	C
HCM 95th %tile Q(veh)	-	0.1

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	1507	0	0
Future Vol, veh/h	4	0	0	1507	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	1674	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	837	-	-	0
Stage 1	0	-	-	-
Stage 2	837	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	305	0	0	-
Stage 1	-	0	0	-
Stage 2	385	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	305	-	-	-
Mov Cap-2 Maneuver	305	-	-	-
Stage 1	-	-	-	-
Stage 2	385	-	-	-

Approach	EB	NB
HCM Control Delay, s	17	0
HCM LOS	C	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	305
HCM Lane V/C Ratio	-	0.015
HCM Control Delay (s)	-	17
HCM Lane LOS	-	C
HCM 95th %tile Q(veh)	-	0

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	88	0	0	2140	0	0
Future Vol, veh/h	88	0	0	2140	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	0	0	2378	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	1189	-	-	0
Stage 1	0	-	-	-
Stage 2	1189	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	181	0	0	-
Stage 1	-	0	0	-
Stage 2	251	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	181	-	-	-
Mov Cap-2 Maneuver	181	-	-	-
Stage 1	-	-	-	-
Stage 2	251	-	-	-

Approach	EB	NB
HCM Control Delay, s	46.1	0
HCM LOS	E	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	181
HCM Lane V/C Ratio	-	0.54
HCM Control Delay (s)	-	46.1
HCM Lane LOS	-	E
HCM 95th %tile Q(veh)	-	2.8

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	158	0	0	1587	0	0
Future Vol, veh/h	158	0	0	1587	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	176	0	0	1763	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	882	-	-	0
Stage 1	0	-	-	-
Stage 2	882	-	-	-
Critical Hdwy	6.84	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-
Follow-up Hdwy	3.52	-	-	-
Pot Cap-1 Maneuver	286	0	0	-
Stage 1	-	0	0	-
Stage 2	365	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	286	-	-	-
Mov Cap-2 Maneuver	286	-	-	-
Stage 1	-	-	-	-
Stage 2	365	-	-	-

Approach	EB	NB
HCM Control Delay, s	35.7	0
HCM LOS	E	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	286
HCM Lane V/C Ratio	-	0.614
HCM Control Delay (s)	-	35.7
HCM Lane LOS	-	E
HCM 95th %tile Q(veh)	-	3.8