

TRAFFIC IMPACT STUDY FOR

LIBERTY-BUTTS COUNTY INDUSTRIAL DRI 2678

Midway Road at Windy Lane, south of SR 16, in Butts County, GA

June 11, 2017

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Executive Summary

A new warehouse/distribution center consisting of 1,082,400 square feet in two buildings is planned for the southeast quadrant of the intersection of Windy Lane and Midway Road in northwestern Butts County, Georgia to be completed in 2018. There will be five (5) full movement intersection vehicular access points to the development on Midway Road. Two (2) will be primarily for trucks and the other three (3) for personal vehicles. Windy Lane provides direct access to Arthur K Bolton Parkway (SR 16), and via SR 16 to I-75 east of the site.

When completed, the development is expected to generate approximately 87 entering and 39 exiting new vehicular trips during the morning peak volume hour. Approximately 42 entering and 95 exiting new evening peak hour vehicular trips are expected. A total of 1,818 new entering and exiting vehicular trips are expected daily, approximately 38% of these to be trucks.

Approximately 60% of the new personal vehicle trips are expected to originate and terminate east and 30% west of the site using SR 16, and 10% to the north using Jackson Road (aligns with Windy Lane at SR 16). Approximately 90% of the new truck trips are expected to originate and terminate east and 10% west of the site using SR 16. The directional distribution is consistent with the previously approved DRI 2549 on Jackson Road Traffic Impact Study.

The existing study intersections operate adequately and are expected to continue to operate adequately during weekday peak morning and evening hours with the new project trips in 2018 with the existing or planned intersection lane configurations and traffic control except for southbound left-turning Jackson Rd vehicles. All of the site driveways intersections on Midway Road are expected to operate adequately. The expected background peak hour intersection turning movement volumes include the traffic expected from the Jackson Road DRI 2549 and the Jones Petroleum Travel Center redevelopment DRI 2674 and an additional three (3) percent annual growth of the existing traffic counts collected on Thursday, May 25, 2017, when public schools were in session. A modern design single lane roundabout or installation of a traffic signal at the SR 16 and Jackson Road/Windy Lane intersection would be expected to provide adequate peak hour operations. However, a signal warrant study is required to show that minimum hourly volume requirements are met to consider installation of a traffic signal. Based on a preliminary analyses using the DRI 2549 trip generation, hour of the day trip distribution, and directional trip distribution with the 3% annual growth rate and the new project trips, it is unlikely the minimum eight (8) hour (Warrant 1) or four (4) hour (Warrant 2) hourly volumes will be met when the project opens by 2018. The hourly volume projections indicate the Warrant 2 volumes are likely to be met between 2020 and 2022 and the Warrant 1 volumes will be met by 2024. Typical weekday turning movement counts should be collected and analyzed when the DRI 2549 is operational to determine if consideration of allowing a traffic signal to be installed is warranted. A single lane roundabout designed to be easily expanded to two circulating lanes could provide adequate operations now and for 20 years.

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CALYX #2017075

1. Introduction

A new warehouse/distribution center consisting of 1,082,400 square feet in two buildings is planned for the southeast quadrant of the intersection of Windy Lane and Midway Road in northwestern Butts County, Georgia. Windy Lane provides direct access to Arthur K Bolton Parkway (SR 16), and via SR 16 to I-75 east of the site.

There will be five (5) full movement vehicular access points to the development on Midway Road. Two (2) will be primarily for trucks and the other three (3) for personal vehicles.

The development is expected to be completed in 2018. The traffic impact analyses are for a single phase of construction.

The traffic study includes existing traffic volumes, trip generation, directional distribution, and traffic impacts at the following intersections:

- Windy lane/Jackson Road at SR 16 (Arthur K Bolton Parkway)
- Windy Lane at Midway Road

Figure 1 shows the site location. The site plan is included with this report.

Figure 1: Vicinity Map



LOCATION MAP

NTS

Traffic Impact Study for
Liberty DRI 2678 on Midway Rd at Windy Ln in Butts County, GA

2. Existing Conditions

2.1. Transportation Facilities

Arthur K Bolton Parkway (SR 16) is an east-west principal arterial with two through lanes in each direction with a 55 MPH speed limit at the study intersection (the speed limit is posted as 65 MPH west of the intersection and 45 MPH to the east. The land uses along SR 16 in this area are primarily commercial, agricultural, and industrial. SR 16 provides access between Griffin and Jackson, and beyond. The intersections at the I-75 ramps are signalized, and most nearby intersections have turning lanes.

Windy Lane is a local dead-end north-south street with a single through lane in each direction and an assumed 35 MPH speed limit providing access to residential uses in the area. Windy Lane aligns with a median crossover on SR 16 at Jackson Road. The intersections are side-street stop sign controlled.

Midway Road is an east-west local street with a single through lane in each direction and a posted 35 MPH speed limit running between Windy Lane and Glade Road (Steele Road), providing access to residential uses in the area.

2.2. Traffic Volumes

Traffic counts collected on Thursday, May 25, 2017, from 7 AM to 7 PM while schools were in session and on Tuesday, May 23, 2017 from 7-9 AM and 4-6 PM at the following intersections:

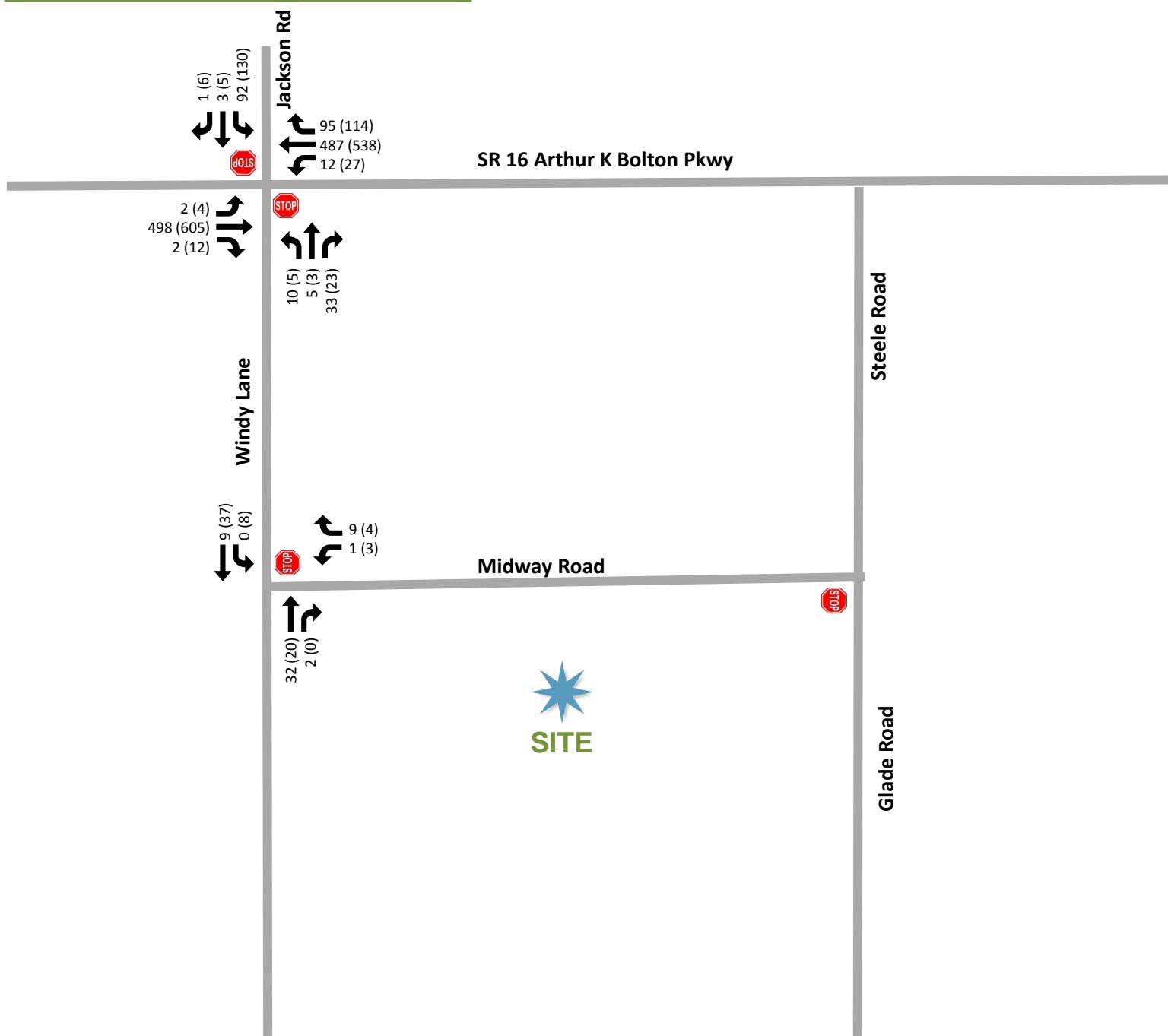
- Windy lane/Jackson Road at SR 16 (Arthur K Bolton Parkway)
- Windy Lane at Midway Road

Bi-directional vehicular traffic counts were also collected Thursday, May 25, 2017, on SR 16 and on Tuesday, May 23, 2017 on Windy Lane and on Midway Road. There were 16,706 vehicles counted on SR 16, including 2,252 single-unit and 1,602 combination trucks. On Windy Lane, 744 and on Midway Road 245 vehicles in both directions were counted.

The existing peak hour turning movement counts at the study intersections are shown in Figure 3. The count worksheets are included in the Appendix.

Figure 3: Existing Traffic Volumes

##(##) → AM(PM) Peak Hour Traffic Volume



N
NOT TO SCALE

2.3. Existing Capacity Analysis

The results of the intersection capacity analysis are shown in Table 1 for existing volumes. Average vehicular delays are calculated and reported as Levels of Service (LOS) as defined by the Highway Capacity Manual (HCM).

Table 1: Existing Intersection Capacity Analyses

Intersection	Control	Approach	Peak Hour LOS	
			AM	PM
Windy Lane/Jackson Road at SR 16	Side-Street Stop-Signs	Eastbound	A	A
		Westbound	A	A
		Northbound Left	C	C
		Southbound Left	E	F
Windy Lane at Midway Road	Side-St Stop-Sign	Northbound	A	A
		Southbound	A	A
		Westbound	A	A

As can be seen in Table 1, all of the approaches to the existing study intersections operate adequately during weekday peak volume hours with the existing lane configuration and traffic controls except the southbound Jackson Road left-turning movement onto eastbound SR 16.

Installation of a modern design single-lane roundabout or a traffic signal would provide adequate operations; however, a signal warrant study is required to determine if consideration of permitting a traffic signal to be installed is appropriate at this time.

A preliminary analyses of the hourly existing counted turning movement volumes on May 25, 2017 indicates that Warrant 1B volumes are met for four of the eight required hours, Warrant 2 volumes are met for one of the four required hours, and Warrant 3A volumes (only) are met for four hours (based on the side-street shared turning and through movement existing lane configurations). No reduction for speeds over 40 MPH or inclusion of right-turn volumes was used in the analyses. Signal Warrant worksheets with turning movement volumes are included in the Appendix.

A roundabout would require reverse-curve deflection on the approaches to mitigate high vehicular speeds and a single circulating lane and approaches would provide adequate peak hour operations (until 2027 with the three DRI's traffic plus a 3% annual background growth).

Intersection capacity analyses worksheets are included in the Appendix.

3. Trip Generation

Table 2 summarizes the project trip generation using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition, 2012 rates and equations and *Trip Generation Handbook*, 3rd Edition, 2014, internal capture formulas, constrained between types of use.

Table 2: Project Trip Generation

Project Land Use (LUC)		Project Density		Total	IN	OUT
High-Cube Warehouse Distribution Center (152)		1,082.4	ksf			
	Daily			1,818	909	909
	AM Peak Hour			126	87	39
	PM Peak Hour			137	42	95

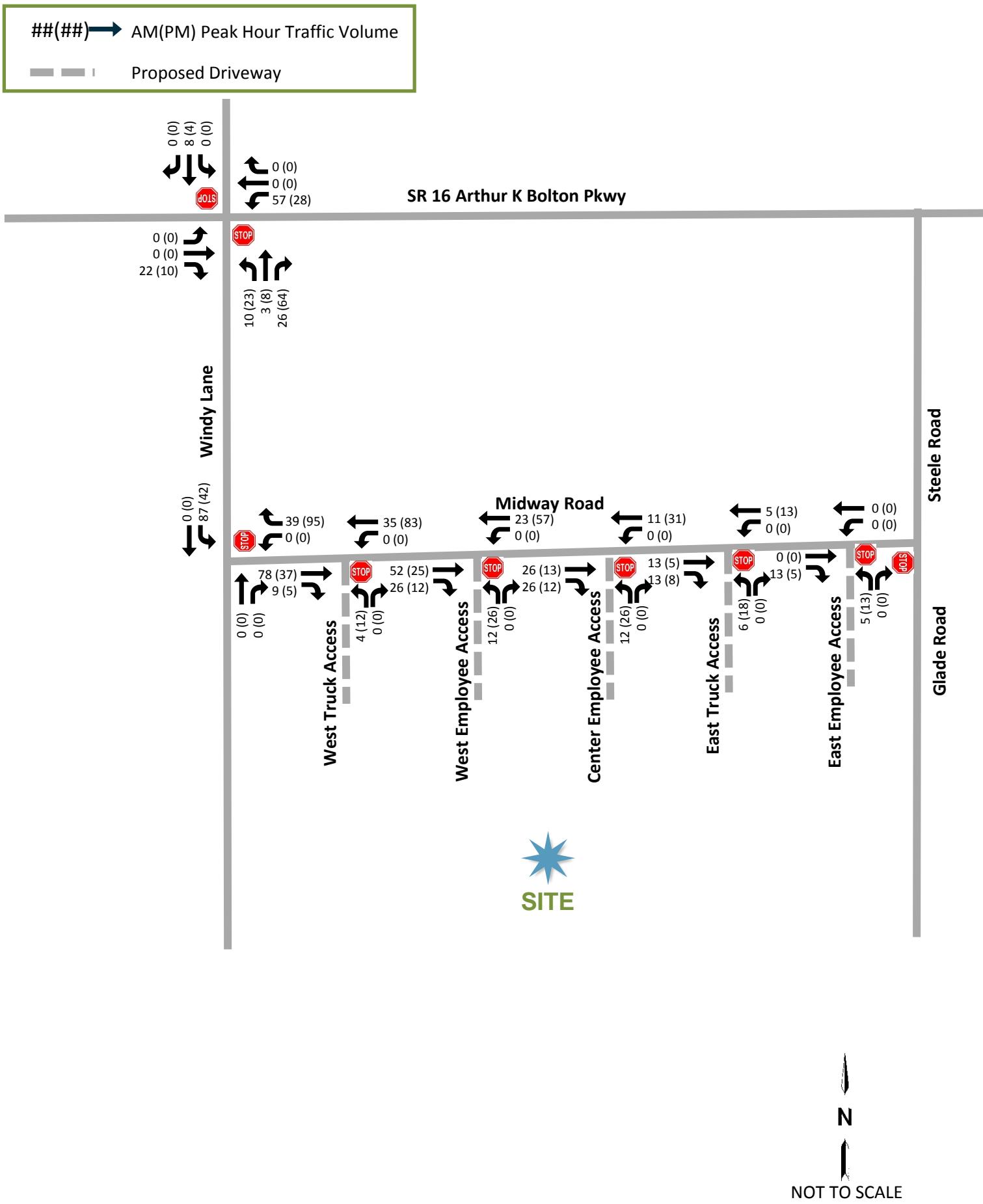
When completed, the development is expected to generate approximately 87 entering and 39 exiting new vehicular trips during the morning peak volume hour, 25% of these are expected to be trucks. Approximately 42 entering and 95 exiting new evening peak hour vehicular trips are expected, 31% trucks. A total of 1,818 new entering and exiting vehicular trips are expected daily, including approximately 38% trucks. Figure 4 shows the new peak hour intersection turning movement volumes. The Appendix includes the trip generation worksheet.

3.1. Trip Distribution and Assignment

The directional distribution of new project trips was based on the personal vehicle and truck directional distributions provided in the Wilburn Engineering, LLC. March 7, 2016 DRI 2549 Traffic Impact Study.

Approximately 60% of the new personal vehicle trips are expected to originate and terminate east and 30% west of the site using SR 16, and 10% to the north using Jackson Road (aligns with Windy Lane at SR 16). Approximately 90% of the new truck trips are expected to originate and terminate east and 10% west of the site using SR 16.

Figure 4: Project Traffic Volumes



4. Background Conditions Capacity Analysis

The existing peak hour intersection turning movement counts were increased by 3% per year for one year to approximate the background traffic growth from outside the study area and by the new trips expected to be generated by the Jackson Road DRI 2549 and the Jones Petroleum DRI 2674. The peak hour turning movement project trips from the Wilburn Engineering, LLC. March 7, 2016 DRI 2549 Traffic Impact Study and an estimation of the new peak hour trips expected to be generated by the DRI 2674 redevelopment of existing gas stations, convenience stores, and fast food restaurants based on the DCA DRI Form 2 4,472 daily trips reported, a 12% peak hour factor, 50% directional distribution, and 50% pass-by trip reduction distribution based on this type of land use, but without deducting the existing use trips to provide a more conservative analysis. The background growth rate was based on historical GDOT counts on area roadways. The results of the intersection capacity analysis are shown in Table 3 for background growth volumes shown in Figure 5.

Table 3: Background Conditions LOS

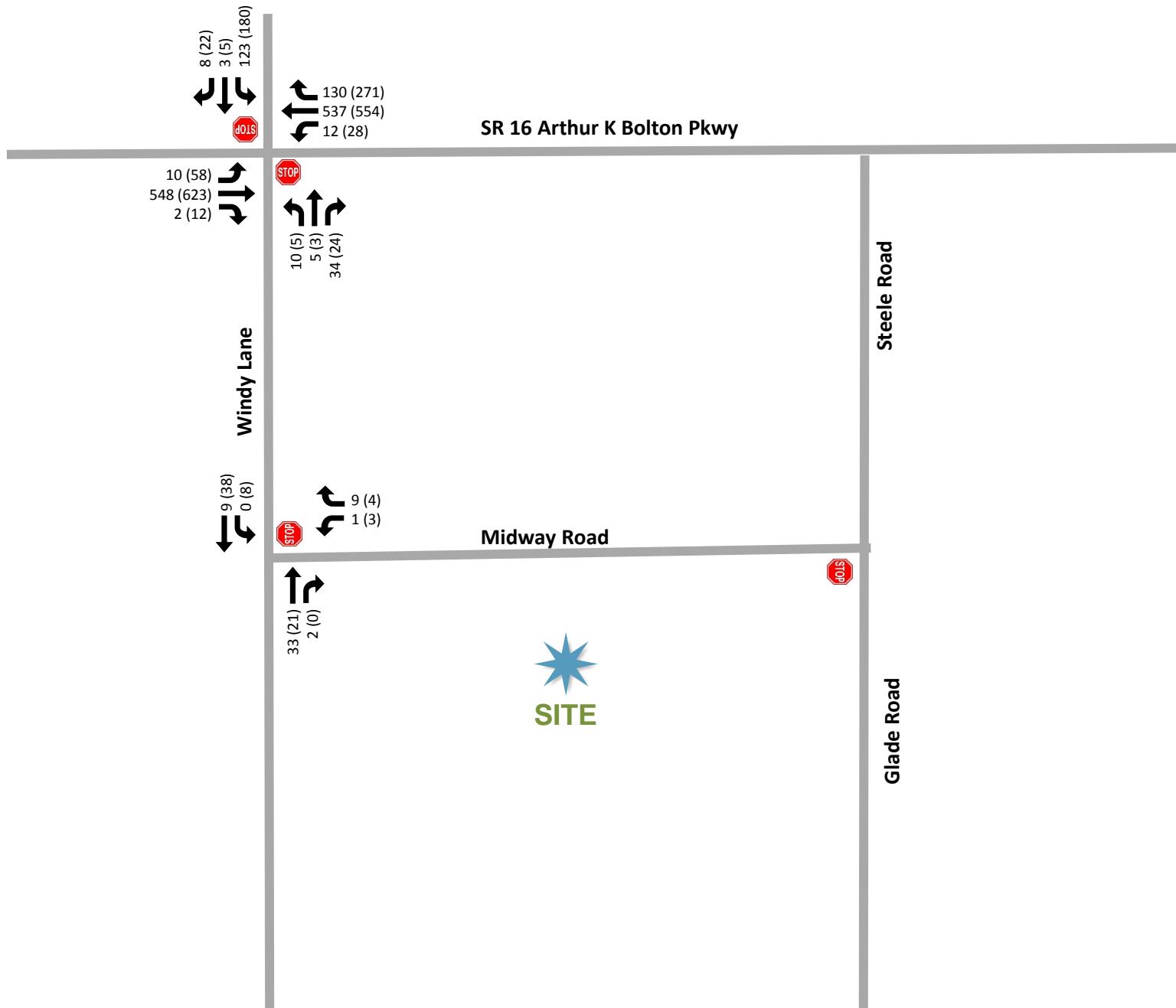
Intersection	Control	Approach	Peak Hour LOS	
			AM	PM
Windy Lane/Jackson Road at SR 16	Side-Street Stop-Signs	Eastbound	A	A
		Westbound	A	A
		Northbound Left	C	C
		Southbound Left	F	F
Windy Lane at Midway Road	Side-St Stop-Sign	Northbound	A	A
		Southbound	A	A
		Westbound	A	A

As can be seen in Table 3, all of the approaches to the existing study intersections are expected to continue to operate adequately in 2018 during weekday peak volume hours with the existing lane configuration and traffic controls except the southbound Jackson Road left-turning movement onto eastbound SR 16. Installation of a modern design single-lane roundabout or a traffic signal would provide adequate operations; however, a signal warrant study based on new counts to determine if consideration of permitting a traffic signal to be installed is appropriate at that time is required. A preliminary analyses of the background 2018 hourly volumes indicates that Warrant 1B volumes are met for four of the eight required hours, Warrant 2 volumes are met for one of the four required hours, and Warrant 3A volumes (only) are met for two hours (based on the planned side-street dedicated right-turning lanes configurations). No reduction for speeds over 40 MPH or inclusion of right-turn volumes was used in the analyses. A roundabout would require reverse-curve deflection on the approaches to mitigate high vehicular speeds and a single circulating lane and approaches would provide adequate peak hour operations (until 2027 with the three DRI's traffic plus a 3% annual background growth and with two circulating lanes and dual SR 16 approaches lanes until 2038).

Intersection capacity and signal warrant analyses worksheets are included in the Appendix.

Figure 5: Background Traffic Volumes

##(##) → AM(PM) Peak Hour Traffic Volume



N

NOT TO SCALE

5. Future Conditions Capacity Analysis

The results of the intersection capacity analysis are shown in Table 4 for existing with project volumes shown in Figure 6.

Table 4: Future with Project Trips LOS

Intersection	Control	Approach	Peak Hour LOS	
			AM	PM
Windy Lane/Jackson Road at SR 16	Side-Street Stop-Signs	Eastbound	A	A
		Westbound	A	A
		Northbound Left	C	C
		Southbound Left	F	F
	Signal	Overall	B	B
	Roundabout	Overall	B	C
Windy Lane at Midway Road	Side-St Stop-Sign	Northbound	A	A
		Southbound	A	A
		Westbound	A	A
at Midway Road	Side-St Stop-Sign	Eastbound	A	A
		Westbound	A	A
		Northbound	A	A
at Midway Road	Side-St Stop-Sign	Eastbound	A	A
		Westbound	A	A
		Northbound	A	A
at Midway Road	Side-St Stop-Sign	Eastbound	A	A
		Westbound	A	A
		Northbound	A	A
at Midway Road	Side-St Stop-Sign	Eastbound	A	A
		Westbound	A	A
		Northbound	A	A
at Midway Road	Side-St Stop-Sign	Eastbound	A	A
		Westbound	A	A
		Northbound	A	A

As can be seen in Table 4, all of the approaches to the study intersections, including the site driveways, are expected to continue to operate adequately in 2018 with the project trips during weekday peak volume hours with the existing and planned lane configurations and side-street stop-signs except the southbound Jackson Road left-turning movement onto eastbound SR 16.

Installation of a modern design single-lane roundabout or a traffic signal would provide adequate operations; however, a signal warrant study based on new counts to determine if consideration of permitting a traffic signal to be installed is appropriate at that time is required.

A preliminary analyses of the future Build 2018 hourly volumes indicates that Warrant 1A volumes are met for one hour with Warrant 1B volumes are met for four of the eight required hours, Warrant 2 volumes are met for two of the four required hours, and Warrant 3A volumes (only) are met for two hours (based on the planned side-street dedicated right-turning lanes configurations). No reduction for speeds over 40 MPH or inclusion of right-turn volumes was used in the analyses.

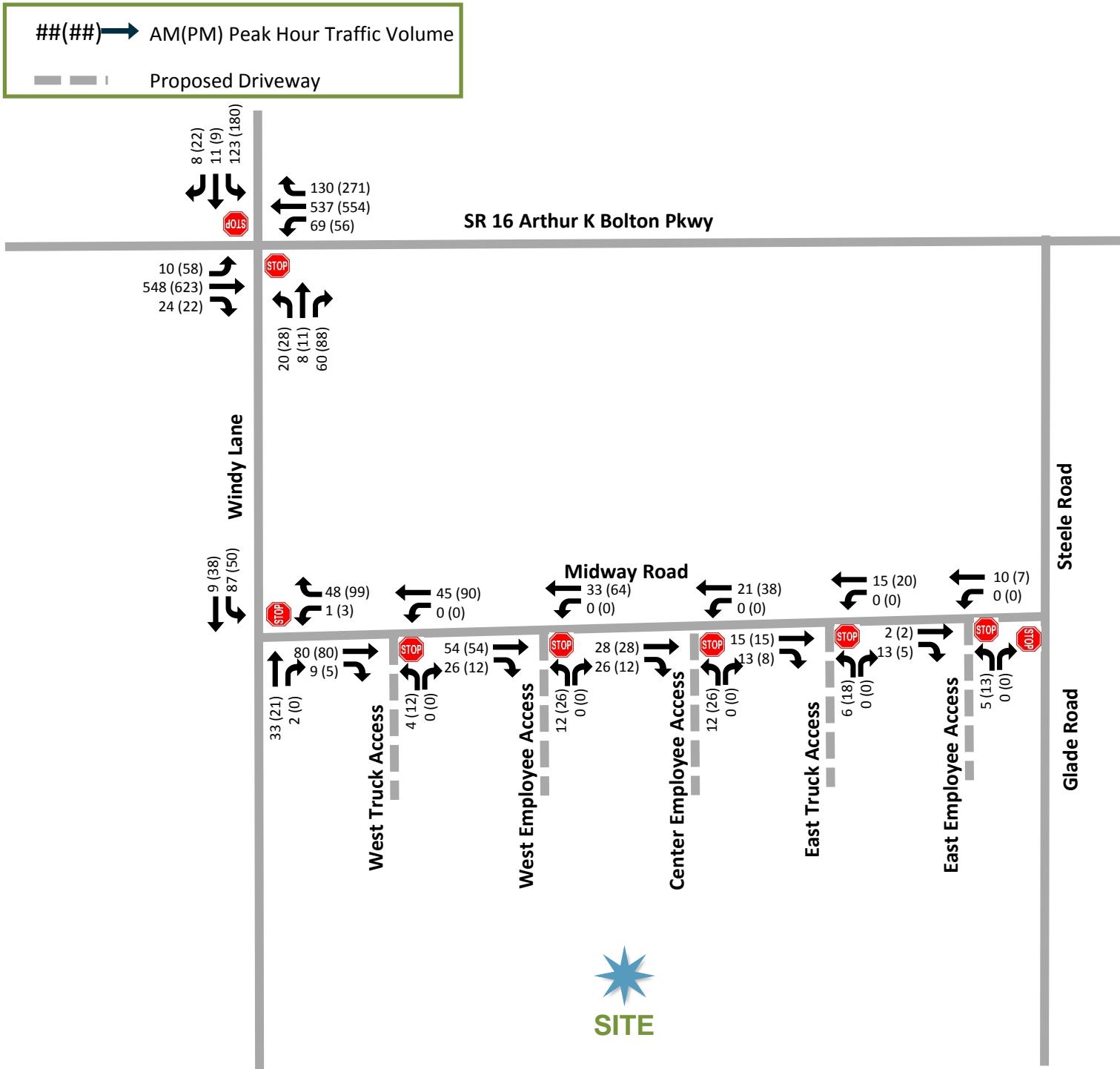
A roundabout would require reverse-curve deflection on the approaches to mitigate high vehicular speeds and a single circulating lane and approaches would provide adequate evening peak hour operations until 2027 with the three DRI's traffic plus a 3% annual background growth, and with two circulating lanes and dual SR 16 approaches lanes until at least 2038.

Installation of dedicated turning lanes on all approaches is recommended or required when installing a traffic signal. Installation of dedicated left-turning storage lanes at all site access exits on Midway Road are also recommended to avoid unnecessary delays to other exiting vehicles. As long as Glade Road does not allow through traffic on Steele Road to SR 16, the entrances on Midway Road will not have many, if any, left-turning vehicles; therefore, separate left-turning lanes into these site access points should not be necessary.

Weekday peak hour 95th percentile vehicular queuing analyses provide with the intersection capacity analyses showed most approaches with project trips will require less than one vehicle length storage capacity, although the evening peak hour northbound Windy Land at SR 16 planned combined left and through lane would have a queue of 2.1 vehicles when the project is completed. The 85-foot right-turn lane on this approach should be sufficient.

Intersection capacity and signal warrant analyses worksheets are included in the Appendix.

Figure 6: Build Traffic Volumes



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Appendix

Traffic Impact Study for
Liberty DRI 2678 on Midway Rd at Windy Ln in Butts County, GA



TEL 770.452.7849 FAX 770.452.0086
8852 CENTURY PLACE, SUITE 202
ATLANTA, GEORGIA 30345
WWW.FREELYNET

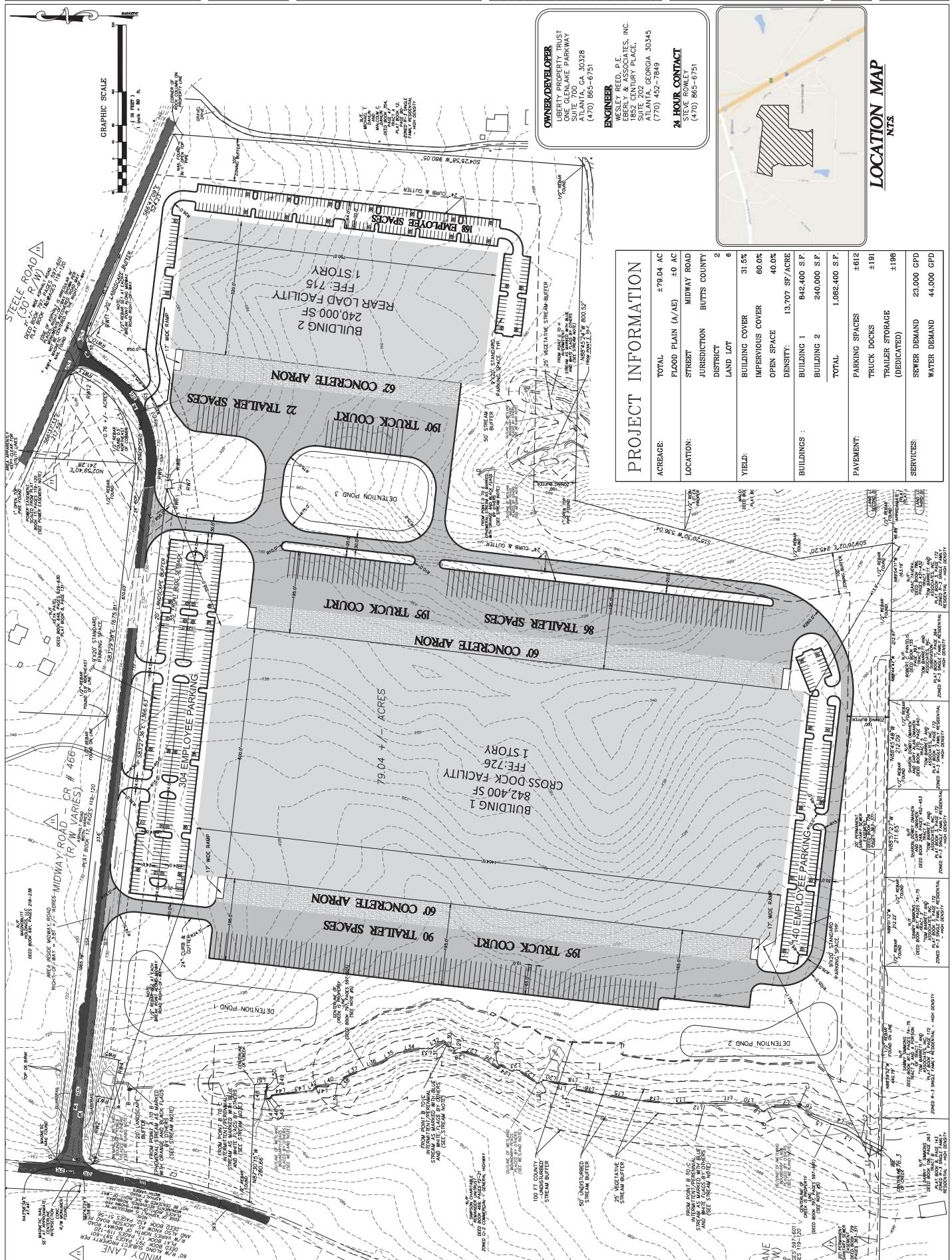


BUTTS COUNTY, GEORGIA
2ND DISTRICT
LAND LOT 6
LIBERTY
BUTTS COUNTY
ECT.

REVISIONS:						
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SCALE:	DRI SITE PLAN
DATE:	1-6
DRAWN BY:	S. FREEMAN
RECD BY:	S. FREEMAN
PROJECT NO.	16-122

SHEET NO. 1



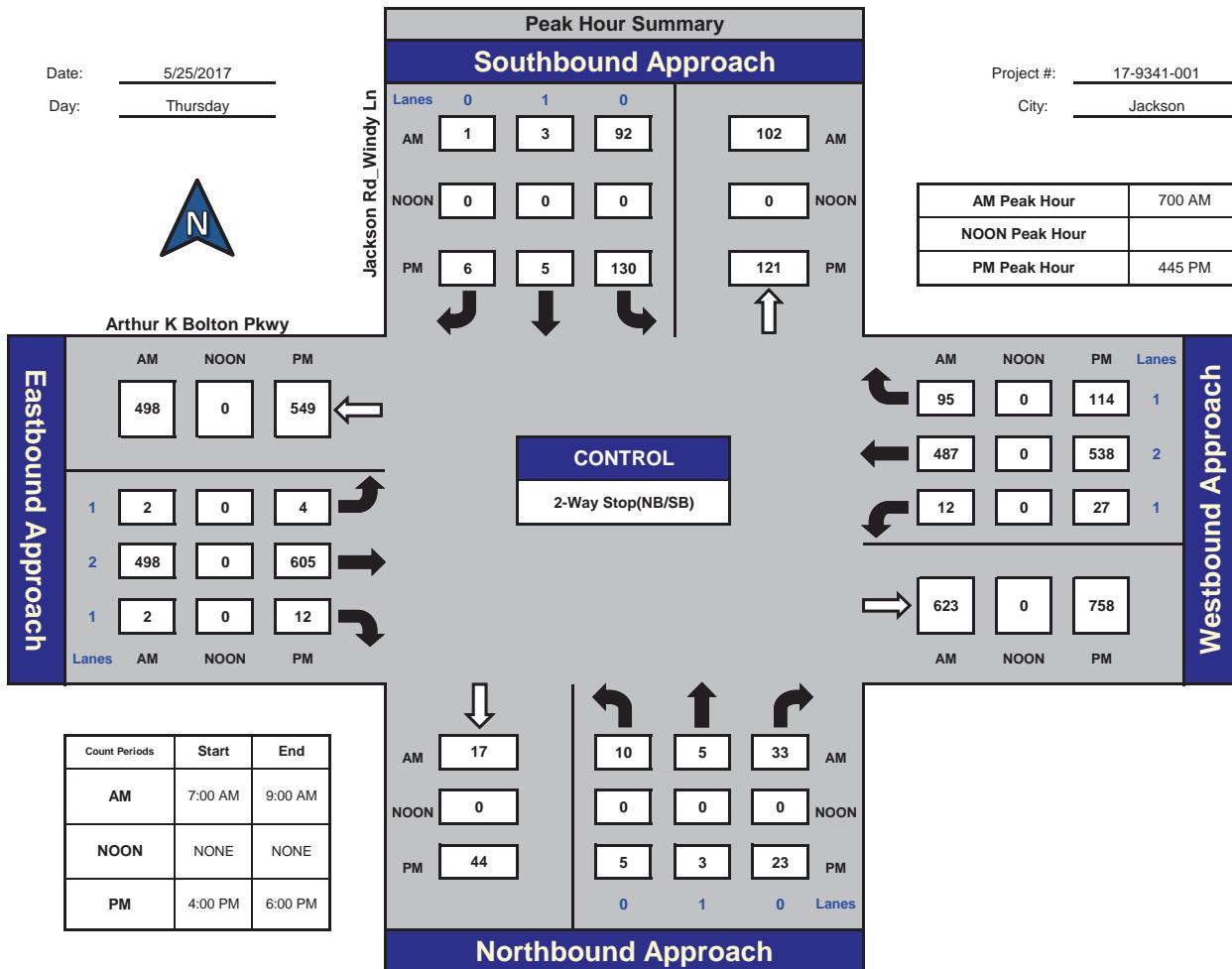
ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

Jackson Rd Windy Ln and Arthur K Bolton Pkwy , Jackson



Total Ins & Outs

			North Leg					
			96	102				
			0	0				
			141	121				
AM	NOON	PM				AM	NOON	PM
498	0	549	17	48	102	1000	0	1170
502	0	621	0	0	0	1217	0	1437
West Leg			East Leg			North Leg		
AM	NOON	PM	594	0	679	198	0	262
NOON			623	0	758	1217	0	1437
PM			17	48	102	65	0	75
South Leg								
AM	NOON	PM	0	0		AM	NOON	PM
NOON			44	31		0	0	
PM			0	0		65	0	75

Total Volume Per Leg

			North Leg					
			198	0	262			
			0	0				
			262	0				
AM	NOON	PM	1217	0	1437	AM	NOON	PM
NOON			65	0	75	AM	NOON	PM
PM			0	0		0	0	
South Leg								
AM	NOON	PM	1000	0	1170	AM	NOON	PM
NOON			1217	0	1437	0	0	
PM			65	0	75	65	0	75

Project ID: 17-9341-001

Location: Jackson Rd_Windy Ln & Arthur K Bolton Pkwy
City: Jackson

Day: Thursday
Date: 5/25/2017

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Jackson Rd_Windy Ln Southbound					Arthur K Bolton Pkwy Westbound					Jackson Rd_Windy Ln Northbound					Arthur K Bolton Pkwy Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	0	0	23	0	23	18	103	0	0	121	7	2	3	0	12	0	119	1	0	120	276
7:15 AM	0	0	26	0	26	26	106	2	0	134	6	2	4	0	12	0	144	1	0	145	317
7:30 AM	0	2	21	0	23	24	128	5	0	157	10	1	2	0	13	1	123	0	0	124	317
7:45 AM	1	1	22	0	24	27	150	5	0	182	10	0	1	0	11	1	112	0	0	113	330
Total	1	3	92	0	96	95	487	12	0	594	33	5	10	0	48	2	498	2	0	502	1240
8:00 AM	0	1	24	0	25	10	114	3	0	127	4	3	0	0	7	2	96	0	0	98	257
8:15 AM	0	2	22	0	24	24	98	0	0	122	2	2	1	0	5	0	100	0	0	100	251
8:30 AM	0	0	13	0	13	14	101	4	0	119	0	1	0	0	1	2	87	0	0	89	222
8:45 AM	0	0	17	0	17	16	109	1	0	126	2	1	0	0	3	0	91	0	0	91	237
Total	0	3	76	0	79	64	422	8	0	494	8	7	1	0	16	4	374	0	0	378	967

BREAK

Project ID: 17-9341-001

Location: Jackson Rd_Windy Ln & Art
City: Jackson

PEAK HOURS

Day: Thursday
Date: 5/25/2017

AM

PM

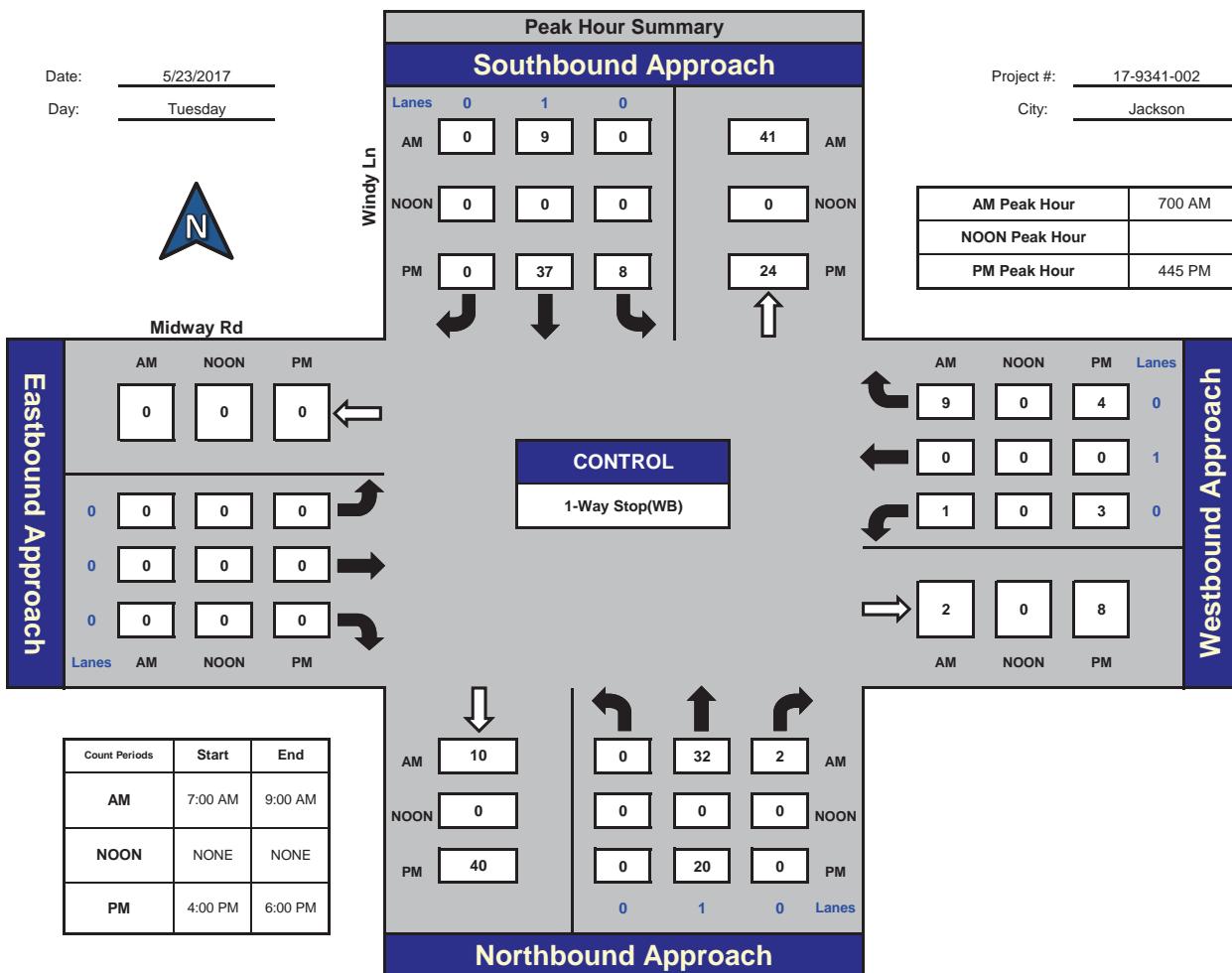
ITM Peak Hour Summary

Prepared by:

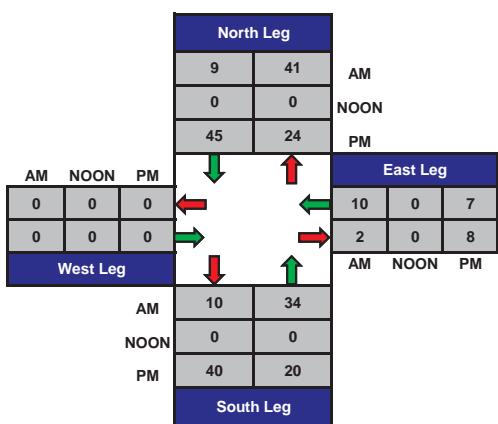


National Data & Surveying Services

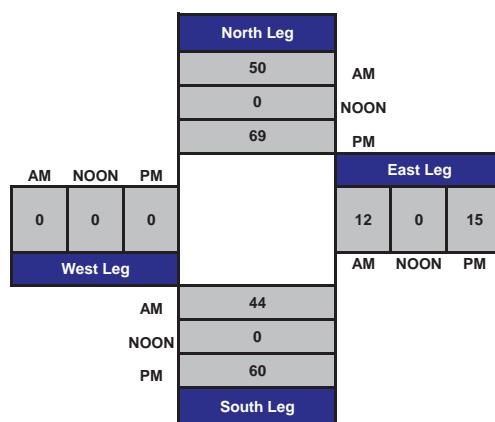
Windy Ln and Midway Rd , Jackson



Total Ins & Outs



Total Volume Per Leg



Project ID: 17-9341-002
Location: Windy Ln & Midway Rd
City: Jackson

Day: Tuesday
Date: 5/23/2017

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Windy Ln Southbound					Midway Rd Westbound					Windy Ln Northbound					Midway Rd Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	0	2	0	0	2	2	0	0	0	2	0	9	0	0	9	0	0	0	0	0	13
7:15 AM	0	2	0	0	2	1	0	1	0	2	0	7	0	0	7	0	0	0	0	0	11
7:30 AM	0	2	0	0	2	4	0	0	0	4	1	12	0	0	13	0	0	0	0	0	19
7:45 AM	0	3	0	0	3	2	0	0	0	2	1	4	0	0	5	0	0	0	0	0	10
Total	0	9	0	0	9	9	0	1	0	10	2	32	0	0	34	0	0	0	0	0	53
8:00 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	3
8:30 AM	0	1	1	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
8:45 AM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	6
Total	0	8	1	0	9	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	20

BREAK

Project ID: 17-9341-002
Location: Windy Ln & Midway Rd
City: Jackson

PEAK HOURS

Day: Tuesday
Date: 5/23/2017

AM

PM

Project ID: 17-9341-001

Location: Jackson Rd_Windy Ln & Arthur K Bolton Pkwy

City: Jackson

Day: Thursday

Date: 5/25/2017

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Jackson Rd_Windy Ln Southbound					Arthur K Bolton Pkwy Westbound					Jackson Rd_Windy Ln Northbound					Arthur K Bolton Pkwy Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	0	0	23	0	23	18	103	0	0	121	7	2	3	0	12	0	119	1	0	120	276
7:15 AM	0	0	26	0	26	26	106	2	0	134	6	2	4	0	12	0	144	1	0	145	317
7:30 AM	0	2	21	0	23	24	128	5	0	157	10	1	2	0	13	1	123	0	0	124	317
7:45 AM	1	1	22	0	24	27	150	5	0	182	10	0	1	0	11	1	112	0	0	113	330
Total	1	3	92	0	96	95	487	12	0	594	33	5	10	0	48	2	498	2	0	502	1240
8:00 AM	0	1	24	0	25	10	114	3	0	127	4	3	0	0	7	2	96	0	0	98	257
8:15 AM	0	2	22	0	24	24	98	0	0	122	2	2	1	0	5	0	100	0	0	100	251
8:30 AM	0	0	13	0	13	14	101	4	0	119	0	1	0	0	1	2	87	0	0	89	222
8:45 AM	0	0	17	0	17	16	109	1	0	126	2	1	0	0	3	0	91	0	0	91	237
Total	0	3	76	0	79	64	422	8	0	494	8	7	1	0	16	4	374	0	0	378	967
9:00 AM	0	3	17	0	20	17	80	2	0	99	4	1	1	0	6	2	71	0	0	73	198
9:15 AM	1	0	14	0	15	11	85	3	0	99	6	2	1	0	9	1	86	0	0	87	210
9:30 AM	1	0	20	0	21	14	93	1	0	108	10	0	2	0	12	0	82	2	0	84	225
9:45 AM	1	0	15	0	16	13	70	0	0	83	5	0	2	0	7	1	82	3	0	86	192
Total	3	3	66	0	72	55	328	6	0	389	25	3	6	0	34	4	321	5	0	330	825
10:00 AM	0	0	10	0	10	3	72	3	0	78	4	2	1	0	7	1	89	1	0	91	186
10:15 AM	4	0	9	0	13	10	97	2	0	109	3	0	3	0	6	3	107	2	0	112	240
10:30 AM	2	0	11	0	13	11	68	5	0	84	1	1	3	0	5	1	79	0	0	80	182
10:45 AM	0	0	20	0	20	12	82	3	0	97	5	1	1	0	7	1	78	2	0	81	205
Total	6	0	50	0	56	36	319	13	0	368	13	4	8	0	25	6	353	5	0	364	813
11:00 AM	4	0	15	0	19	13	71	2	0	86	6	0	4	0	10	4	80	1	0	85	200
11:15 AM	1	0	19	0	20	5	74	3	0	82	3	2	2	0	7	4	79	1	0	84	193
11:30 AM	1	10	35	0	46	17	64	5	0	86	3	0	1	0	4	3	74	0	0	77	213
11:45 AM	3	0	23	0	26	21	81	3	0	105	6	2	7	0	15	5	86	1	0	92	238
Total	9	10	92	0	111	56	290	13	0	359	18	4	14	0	36	16	319	3	0	338	844
12:00 PM	1	0	25	0	26	22	72	5	0	99	2	5	0	0	7	2	78	0	0	80	212
12:15 PM	0	0	19	0	19	27	92	4	0	123	3	7	2	0	12	2	98	1	0	101	255
12:30 PM	1	0	10	0	11	18	92	3	0	113	2	1	1	0	4	1	90	1	0	92	220
12:45 PM	0	0	14	0	14	16	84	2	0	102	1	0	2	0	3	1	79	0	0	80	199
Total	2	0	68	0	70	83	340	14	0	437	8	13	5	0	26	6	345	2	0	353	886
1:00 PM	0	0	17	0	17	11	80	6	0	97	5	0	2	0	7	2	79	0	0	81	202
1:15 PM	0	0	7	0	7	18	86	6	0	110	5	3	1	0	9	2	86	2	0	90	216
1:30 PM	0	0	13	0	13	11	79	3	0	93	4	1	2	0	7	1	79	0	0	80	193
1:45 PM	3	0	16	0	19	19	85	4	0	108	8	0	1	0	9	0	86	1	0	87	223
Total	3	0	53	0	56	59	330	19	0	408	22	4	6	0	32	5	330	3	0	338	834
2:00 PM	2	1	13	0	16	10	101	2	0	113	5	1	3	0	9	0	98	0	0	98	236
2:15 PM	1	1	19	0	21	12	94	6	0	112	4	1	0	0	5	0	99	0	0	99	237
2:30 PM	0	1	17	0	18	14	109	7	0	130	5	0	2	0	7	2	98	0	0	100	255
2:45 PM	0	0	20	0	20	24	96	6	0	126	4	1	3	0	8	1	107	1	0	109	263
Total	3	3	69	0	75	60	400	21	0	481	18	3	8	0	29	3	402	1	0	406	991
3:00 PM	0	3	21	0	24	21	104	3	0	128	3	1	1	0	5	1	115	2	0	118	275
3:15 PM	0	0	19	0	19	16	111	5	0	132	0	1	1	0	2	1	112	2	0	115	268
3:30 PM	2	0	36	0	38	14	117	4	0	135	2	1	0	0	3	1	122	0	0	123	299
3:45 PM	0	1	19	0	20	25	124	6	0	155	3	1	1	0	5	0	111	0	0	111	291
Total	2	4	95	0	101	76	456	18	0	550	8	4	3	0	15	3	460	4	0	467	1133
4:00 PM	2	2	17	0	21	22	124	4	0	150	2	1	0	0	3	0	105	0	0	105	279
4:15 PM	1	1	19	0	21	30	130	7	0	167	4	1	0	0	5	1	124	1	0	126	319
4:30 PM	1	0	22	0	23	24	130	4	0	158	4	0	1	0	5	2	116	0	0	118	304
4:45 PM	0	0	14	0	14	30	135	9	0	174	7	0	1	0	8	4	155	3	0	162	358
Total	4	3	72	0	79	106	519	24	0	649	17	2	2	0	21	7	500	4	0	511	1260
5:00 PM	1	2	28	0	31	31	105	7	0	143	3	1	2	0	6	1	155	0	0	156	336
5:15 PM	2	0	28	0	30	28	153	4	0	185	7	2	2	0	11	4	156	1	0	161	387
5:30 PM	3	3	60	0	66	25	145	7	0	177	6	0	0	0	6	3	139	0	0	142	391
5:45 PM	0	3	19	0	22	21	135	7	0	163	4	0	2	0	6	0	131	2	0	133	324
Total	6	8	135	0	149	105	538	25	0	668	20	3	6	0	29	8	581	3	0	592	1438
6:00 PM	0	1	11	0	12	15	114	9	0	138	4	0	2	0	6	1	107	2	0	110	266
6:15 PM	0	2	16	0	18	17	92	4	0	113	3	3	0	0	6	4	100	0	0	104	241
6:30 PM	0	0	19	0	19	18	89	7	0	114	5	0	3	0	8	0	84	1	0	85	226
6:45 PM	2	0	18	0	20	19	97	2	0	118	5	0	4	0	9	3	76	0	0	79	226
Total	2	3	64	0	69	69	392	22	0	483	17	3	9	0	29	8	367	3	0	378	959

VOLUME

Windy Ln S/O Arthur K Bolton Pkwy

Day: Tuesday

Date: 5/23/2017

City: Jackson

Project #: GA17_9342_002

DAILY TOTALS	NB	SB		EB	WB		Total
	393	351		0	0		744
AM Period	NB	SB	TOTAL	PM Period	NB	SB	TOTAL
0:00	1	0	1	12:00	11	2	13
0:15	0	0	0	12:15	10	3	13
0:30	1	1	2	12:30	2	2	4
0:45	0	2	1 2	12:45	5	28 5	10 40
1:00	0	0	0	13:00	4	8	12
1:15	1	2	3	13:15	11	3	14
1:30	0	1	1	13:30	5	3	8
1:45	0	1	1 4	13:45	5	25 5	10 44
2:00	1	0	1	14:00	6	3	9
2:15	0	1	1	14:15	1	4	5
2:30	1	0	1	14:30	4	4	8
2:45	2	4	1 2	14:45	8	19 7	15 37
3:00	0	0	0	15:00	6	2	8
3:15	1	0	1	15:15	5	6	11
3:30	0	1	1	15:30	2	9	11
3:45	0	1	0 1	15:45	5	18 9	14 44
4:00	1	1	2	16:00	6	11	17
4:15	1	0	1	16:15	5	9	14
4:30	3	1	4	16:30	5	12	17
4:45	1	6	0 2	16:45	6	22 6	12 60
5:00	5	0	5	17:00	7	8	15
5:15	6	0	6	17:15	6	18	24
5:30	3	1	4	17:30	5	13	18
5:45	7	21	0 1	17:45	3	21 6	9 66
6:00	8	0	8	18:00	5	9	14
6:15	9	2	11	18:15	7	15	22
6:30	11	0	11	18:30	9	12	21
6:45	7	35	1 3	18:45	4	25 6	10 67
7:00	11	2	13	19:00	4	5	9
7:15	10	1	11	19:15	8	7	15
7:30	15	2	17	19:30	2	5	7
7:45	6	42	3 8	19:45	7	21 4	11 42
8:00	3	2	5	20:00	2	5	7
8:15	3	1	4	20:15	1	1	2
8:30	3	3	6	20:30	3	7	10
8:45	1	10	5 11	20:45	4	10 1	5 24
9:00	9	4	13	21:00	1	5	6
9:15	4	3	7	21:15	3	5	8
9:30	7	3	10	21:30	2	5	7
9:45	4	24	2 12	21:45	2	8 4	6 27
10:00	8	2	10	22:00	2	2	4
10:15	3	4	7	22:15	2	3	5
10:30	5	4	9	22:30	1	3	4
10:45	4	20	3 13	22:45	3	8 2	5 18
11:00	3	2	5	23:00	1	2	3
11:15	5	1	6	23:15	2	3	5
11:30	1	11	12	23:30	1	1	2
11:45	7	16	6 20	23:45	2	6 2	4 14

VOLUME

Jackson Rd/Windy Ln N/O Arthur K Bolton Pkwy

Day: Tuesday**Date:** 5/23/2017

DAILY TOTALS	NB	SB		EB	WB		Total
	393	351		0	0		744
AM Period	NB	SB	TOTAL	PM Period	NB	SB	TOTAL
0:00	1	0	1	12:00	11	2	13
0:15	0	0	0	12:15	10	3	13
0:30	1	1	2	12:30	2	2	4
0:45	0	2	1 2	12:45	5	28 5	12 10 40
1:00	0	0	0	13:00	4	8	12
1:15	1	2	3	13:15	11	3	14
1:30	0	1	1	13:30	5	3	8
1:45	0	1	1 4	13:45	5	25 5	19 10 44
2:00	1	0	1	14:00	6	3	9
2:15	0	1	1	14:15	1	4	5
2:30	1	0	1	14:30	4	4	8
2:45	2	4	1 2	14:45	8	19 7	18 15 37
3:00	0	0	0	15:00	6	2	8
3:15	1	0	1	15:15	5	6	11
3:30	0	1	1	15:30	2	9	11
3:45	0	1	0 1	15:45	5	18 9	26 14 44
4:00	1	1	2	16:00	6	11	17
4:15	1	0	1	16:15	5	9	14
4:30	3	1	4	16:30	5	12	17
4:45	1	6	0 2	16:45	6	22 6	38 12 60
5:00	5	0	5	17:00	7	8	15
5:15	6	0	6	17:15	6	18	24
5:30	3	1	4	17:30	5	13	18
5:45	7	21	0 1	17:45	3	21 6	45 9 66
6:00	8	0	8	18:00	5	9	14
6:15	9	2	11	18:15	7	15	22
6:30	11	0	11	18:30	9	12	21
6:45	7	35	1 3	18:45	4	25 6	42 10 67
7:00	11	2	13	19:00	4	5	9
7:15	10	1	11	19:15	8	7	15
7:30	15	2	17	19:30	2	5	7
7:45	6	42	3 8	19:45	7	21 4	21 11 42
8:00	3	2	5	20:00	2	5	7
8:15	3	1	4	20:15	1	1	2
8:30	3	3	6	20:30	3	7	10
8:45	1	10	5 11	20:45	4	10 1	14 5 24
9:00	9	4	13	21:00	1	5	6
9:15	4	3	7	21:15	3	5	8
9:30	7	3	10	21:30	2	5	7
9:45	4	24	2 12	21:45	2	8 4	19 6 27
10:00	8	2	10	22:00	2	2	4
10:15	3	4	7	22:15	2	3	5
10:30	5	4	9	22:30	1	3	4
10:45	4	20	3 13	22:45	3	8 2	10 5 18
11:00	3	2	5	23:00	1	2	3
11:15	5	1	6	23:15	2	3	5
11:30	1	11	12	23:30	1	1	2
11:45	7	16	6 20	23:45	2	6 2	8 4 14

VOLUME

Arthur K Bolton Pkwy Bet. Shawn's Transmission Dwy & Steele Rd

Day: Thursday

City: Jackson

Date: 5/25/2017

Project #: GA17_9342_001

DAILY TOTALS		NB 0	SB 0	EB 8,272	WB 8,434	Total 16,706	
AM Period	EB	WB	TOTAL	PM Period	EB	WB	TOTAL
0:00	21	19	40	12:00	113	106	219
0:15	10	13	23	12:15	125	137	262
0:30	7	10	17	12:30	108	117	225
0:45	19	57	54	12:45	97	443	211
1:00	8	16	24	13:00	108	105	213
1:15	7	15	22	13:15	102	109	211
1:30	5	15	20	13:30	114	105	219
1:45	8	28	19	13:45	119	443	234
2:00	10	10	20	14:00	119	121	240
2:15	6	18	24	14:15	123	121	244
2:30	11	14	25	14:30	134	136	270
2:45	9	36	15	14:45	144	520	276
3:00	5	23	28	15:00	151	131	282
3:15	11	24	35	15:15	133	140	273
3:30	28	15	43	15:30	168	147	315
3:45	15	59	11	15:45	142	594	301
4:00	18	16	34	16:00	126	157	283
4:15	27	12	39	16:15	149	166	315
4:30	33	24	57	16:30	145	157	302
4:45	24	102	23	16:45	182	602	354
5:00	49	28	77	17:00	196	141	337
5:15	76	51	127	17:15	191	182	373
5:30	78	84	162	17:30	208	181	389
5:45	74	277	89	17:45	161	756	321
6:00	88	100	188	18:00	123	136	259
6:15	125	128	253	18:15	118	111	229
6:30	133	148	281	18:30	118	110	228
6:45	128	474	140	18:45	96	455	211
7:00	153	125	278	19:00	97	93	190
7:15	177	135	312	19:15	68	88	156
7:30	153	160	313	19:30	74	81	155
7:45	145	628	183	19:45	67	306	141
8:00	126	131	257	20:00	79	101	180
8:15	122	127	249	20:15	72	75	147
8:30	111	121	232	20:30	73	66	139
8:45	115	474	129	20:45	63	287	126
9:00	97	106	203	21:00	59	68	127
9:15	116	105	221	21:15	51	80	131
9:30	125	119	244	21:30	36	49	85
9:45	110	448	111	21:45	32	178	91
10:00	113	105	218	22:00	25	48	73
10:15	128	118	246	22:15	25	37	62
10:30	106	113	219	22:30	20	26	46
10:45	119	466	110	22:45	24	94	49
11:00	113	103	216	23:00	29	33	62
11:15	106	97	203	23:15	17	28	45
11:30	122	103	225	23:30	10	31	41
11:45	129	470	114	23:45	19	75	38
			417		19	111	186
			243		75	19	
			887		111		

Prepared by National Data & Surveying Services

CLASSIFICATION

Arthur K Bolton Pkwy Bet. Shawn's Transmission Dwy & Steele Rd

Day: Thursday

Date: 5/25/2017

City: Jackson

Project #: GA17_9342_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	77	17	0	10	0	0	2	5	0	0	0	0	111
1:00	0	55	11	1	13	0	0	1	10	2	0	0	0	93
2:00	0	59	12	0	8	1	0	1	12	0	0	0	0	93
3:00	0	80	20	0	12	2	0	4	14	0	0	0	0	132
4:00	0	101	32	0	15	1	0	10	18	0	0	0	0	177
5:00	0	308	91	1	63	10	0	21	35	0	0	0	0	529
6:00	1	576	163	2	138	17	0	25	67	1	0	0	0	990
7:00	2	734	214	11	136	26	0	28	78	2	0	0	0	1231
8:00	2	560	157	6	125	24	0	29	78	1	0	0	0	982
9:00	0	524	152	4	98	21	0	20	70	0	0	0	0	889
10:00	1	535	145	7	113	21	0	20	69	1	0	0	0	912
11:00	1	528	148	7	96	13	0	19	74	1	0	0	0	887
12:00 PM	1	543	156	4	113	17	0	21	61	1	0	0	0	917
13:00	5	525	137	3	100	23	0	33	51	0	0	0	0	877
14:00	1	617	180	8	113	25	0	30	56	0	0	0	0	1030
15:00	2	731	181	7	123	20	0	32	74	1	0	0	0	1171
16:00	1	795	203	6	141	14	0	32	62	0	0	0	0	1254
17:00	2	902	227	8	168	15	0	31	66	1	0	0	0	1420
18:00	0	597	159	1	97	11	0	18	43	1	0	0	0	927
19:00	1	413	108	0	69	8	0	16	27	0	0	0	0	642
20:00	0	370	107	0	64	5	0	15	31	0	0	0	0	592
21:00	1	285	67	0	46	2	0	16	17	0	0	0	0	434
22:00	0	150	33	0	19	1	0	7	19	1	0	0	0	230
23:00	0	121	25	0	18	1	0	6	14	1	0	0	0	186
Totals	21	10186	2745	76	1898	278		437	1051	14				16706
% of Totals	0%	61%	16%	0%	11%	2%		3%	6%	0%				100%

Classification Definitions

1 Motorcycles

4 Buses

7 >=4-Axle Single Units

10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

2 Passenger Cars

5 2-Axle, 6-Tire Single Units

8 <=4-Axle Single Trailers

11 <=5-Axle Multi-Trailers

3 2-Axle, 4-Tire Single Units

6 3-Axle Single Units

9 5-Axle Single Trailers

12 6-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Arthur K Bolton Pkwy Bet. Shawn's Transmission Dwy & Steele Rd

Day: Thursday

Date: 5/25/2017

City: Jackson

Project #: GA17_9342_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	36	8	0	7	0	0	2	4	0	0	0	0	57
1:00	0	19	6	0	1	0	0	0	2	0	0	0	0	28
2:00	0	23	6	0	1	1	0	0	5	0	0	0	0	36
3:00	0	33	13	0	5	1	0	3	4	0	0	0	0	59
4:00	0	60	22	0	9	0	0	5	6	0	0	0	0	102
5:00	0	172	53	1	24	5	0	11	11	0	0	0	0	277
6:00	0	298	95	1	43	6	0	11	20	0	0	0	0	474
7:00	1	383	131	7	51	12	0	13	30	0	0	0	0	628
8:00	1	283	91	1	51	9	0	13	25	0	0	0	0	474
9:00	0	270	91	2	37	7	0	11	30	0	0	0	0	448
10:00	0	282	91	2	46	11	0	8	26	0	0	0	0	466
11:00	1	284	94	2	45	8	0	8	28	0	0	0	0	470
12:00 PM	1	269	85	3	47	8	0	11	19	0	0	0	0	443
13:00	3	264	80	2	45	14	0	15	20	0	0	0	0	443
14:00	1	303	108	6	53	10	0	12	27	0	0	0	0	520
15:00	1	380	104	2	45	12	0	16	34	0	0	0	0	594
16:00	1	381	113	3	54	7	0	16	27	0	0	0	0	602
17:00	2	473	139	3	78	7	0	19	35	0	0	0	0	756
18:00	0	290	94	1	35	5	0	10	20	0	0	0	0	455
19:00	1	192	62	0	27	4	0	9	11	0	0	0	0	306
20:00	0	183	61	0	23	2	0	7	11	0	0	0	0	287
21:00	0	121	30	0	13	0	0	7	7	0	0	0	0	178
22:00	0	62	15	0	4	0	0	5	8	0	0	0	0	94
23:00	0	49	13	0	5	0	0	3	5	0	0	0	0	75
Totals	13	5110	1605	36	749	129		215	415					8272
% of Totals	0%	62%	19%	0%	9%	2%		3%	5%					100%

Classification Definitions

1 Motorcycles

4 Buses

7 >=4-Axle Single Units

10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

2 Passenger Cars

5 2-Axle, 6-Tire Single Units

8 <=4-Axle Single Trailers

11 <=5-Axle Multi-Trailers

3 2-Axle, 4-Tire Single Units

6 3-Axle Single Units

9 5-Axle Single Trailers

12 6-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Arthur K Bolton Pkwy Bet. Shawn's Transmission Dwy & Steele Rd

Day: Thursday

Date: 5/25/2017

City: Jackson

Project #: GA17_9342_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	41	9	0	3	0	0	0	1	0	0	0	0	54
1:00	0	36	5	1	12	0	0	1	8	2	0	0	0	65
2:00	0	36	6	0	7	0	0	1	7	0	0	0	0	57
3:00	0	47	7	0	7	1	0	1	10	0	0	0	0	73
4:00	0	41	10	0	6	1	0	5	12	0	0	0	0	75
5:00	0	136	38	0	39	5	0	10	24	0	0	0	0	252
6:00	1	278	68	1	95	11	0	14	47	1	0	0	0	516
7:00	1	351	83	4	85	14	0	15	48	2	0	0	0	603
8:00	1	277	66	5	74	15	0	16	53	1	0	0	0	508
9:00	0	254	61	2	61	14	0	9	40	0	0	0	0	441
10:00	1	253	54	5	67	10	0	12	43	1	0	0	0	446
11:00	0	244	54	5	51	5	0	11	46	1	0	0	0	417
12:00 PM	0	274	71	1	66	9	0	10	42	1	0	0	0	474
13:00	2	261	57	1	55	9	0	18	31	0	0	0	0	434
14:00	0	314	72	2	60	15	0	18	29	0	0	0	0	510
15:00	1	351	77	5	78	8	0	16	40	1	0	0	0	577
16:00	0	414	90	3	87	7	0	16	35	0	0	0	0	652
17:00	0	429	88	5	90	8	0	12	31	1	0	0	0	664
18:00	0	307	65	0	62	6	0	8	23	1	0	0	0	472
19:00	0	221	46	0	42	4	0	7	16	0	0	0	0	336
20:00	0	187	46	0	41	3	0	8	20	0	0	0	0	305
21:00	1	164	37	0	33	2	0	9	10	0	0	0	0	256
22:00	0	88	18	0	15	1	0	2	11	1	0	0	0	136
23:00	0	72	12	0	13	1	0	3	9	1	0	0	0	111
Totals	8	5076	1140	40	1149	149		222	636	14				8434
% of Totals	0%	60%	14%	0%	14%	2%		3%	8%	0%				100%

Classification Definitions

1 Motorcycles

4 Buses

7 >=4-Axle Single Units

10 >=6-Axle Single Trailers

13 >=7-Axle Multi-Trailers

2 Passenger Cars

5 2-Axle, 6-Tire Single Units

8 <=4-Axle Single Trailers

11 <=5-Axle Multi-Trailers

3 2-Axle, 4-Tire Single Units

6 3-Axle Single Units

9 5-Axle Single Trailers

12 6-Axle Multi-Trailers

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project	Liberty-Butts County Industrial	Project Number	2017075
Client	Eberly and Associates		
Site	Midway Rd at Windy Ln/SR 16/I-75, NW Butts Co, GA	1000 Square Feet	1082.4
Land Use	High-Cube Warehouse	ITE Code	152

Weekdays	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=1.68(#units)-trucks	1,126	50%	50%	563	563
Trucks = 0.64 (#units)	692			346	346
Totals=	1,818			909	909

AM Peak Hour: Weekdays <i>(peak hour of adjacent street)</i>	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.14(#units)-25.62-trucks	94	69%	31%	65	29
Trucks = 0.03 (#units)	32			22	10
Totals=	126			87	39

PM Peak Hour: Weekdays <i>(peak hour of adjacent street)</i>	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.13(#units)-3.73-trucks	94	31%	69%	29	65
Trucks = 0.04 (#units)	43			13	30
Totals=	137			42	95

HCM 6th TWSC 1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection Int Delay, s/veh	3.4	Intersection Metrics											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↓	♣			♣		
Traffic Vol, veh/h	2	498	2	12	487	95	10	5	33	92	3	1	
Future Vol, veh/h	2	498	2	12	487	95	10	5	33	92	3	1	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None	
Storage Length	225	-	175	175	-	185	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	87	87	87	82	82	82	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	2	572	2	15	594	116	11	5	36	100	3	1	
Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	594	0	0	572	0	0	905	1200	286	917	1200	297	
Stage 1	-	-	-	-	-	-	576	576	-	624	624	-	
Stage 2	-	-	-	-	-	-	329	624	-	293	576	-	
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-	
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32	
Pot Cap-1 Maneuver	978	-	-	997	-	-	232	184	711	227	184	699	
Stage 1	-	-	-	-	-	-	470	500	-	440	476	-	
Stage 2	-	-	-	-	-	-	658	476	-	691	500	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	978	-	-	997	-	-	226	181	711	208	181	699	
Mov Cap-2 Maneuver	-	-	-	-	-	-	226	181	-	208	181	-	
Stage 1	-	-	-	-	-	-	469	499	-	439	469	-	
Stage 2	-	-	-	-	-	-	643	469	-	648	499	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0			0.2			15.2			38.3			
HCM LOS	C	A	-	A	-	-	E			E			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1					
Capacity (veh/h)	406	978	-	-	997	-	-	209					
HCM Lane V/C Ratio	0.129	0.002	-	-	0.015	-	-	0.499					
HCM Control Delay (s)	15.2	8.7	-	-	8.7	-	-	38.3					
HCM Lane LOS	C	A	-	-	A	-	-	E					
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	2.5					

HCM 6th TWSC
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 12.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↓	↓	↓	130	5	6
Traffic Vol, veh/h	4	605	12	27	538	114	5	3	23	130	5	6
Future Vol, veh/h	4	605	12	27	538	114	5	3	23	130	5	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	225	-	175	175	-	185	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	630	13	29	585	124	7	4	31	173	7	8

Major/Minor	Major1			Major2			Minor1			Minor2		
	Conflicting Flow All	585	0	0	630	0	0	992	1281	315	968	1281
Stage 1	-	-	-	-	-	-	638	638	-	643	643	-
Stage 2	-	-	-	-	-	-	354	643	-	325	638	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	986	-	-	948	-	-	200	164	681	208	164	703
Stage 1	-	-	-	-	-	-	431	469	-	428	467	-
Stage 2	-	-	-	-	-	-	636	467	-	661	469	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	986	-	-	948	-	-	186	158	681	190	158	703
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	158	-	190	158	-
Stage 1	-	-	-	-	-	-	429	467	-	426	453	-
Stage 2	-	-	-	-	-	-	601	453	-	623	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	15.4	105.2
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	389	986	-	-	948	-	-	195
HCM Lane V/C Ratio	0.106	0.004	-	-	0.031	-	-	0.964
HCM Control Delay (s)	15.4	8.7	-	-	8.9	-	-	105.2
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	8

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	9	32	2	0	9
Future Vol, veh/h	1	9	32	2	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	12	43	3	0	12
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	57	45	0	0	46	0
Stage 1	45	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	950	1025	-	-	1562	-
Stage 1	977	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	950	1025	-	-	1562	-
Mov Cap-2 Maneuver	950	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.6		0		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	1017	1562	-	
HCM Lane V/C Ratio	-	-	0.013	-	-	
HCM Control Delay (s)	-	-	8.6	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection

Int Delay, s/veh

1.7

Movement

WBL

WBR

NBT

NBR

SBL

SBT

Lane Configurations



Traffic Vol, veh/h

3

4

20

0

8

37

Future Vol, veh/h

3

4

20

0

8

37

Conflicting Peds, #/hr

0

0

0

0

0

0

Sign Control

Stop

Stop

Free

Free

Free

Free

RT Channelized

-

None

-

None

-

None

Storage Length

0

-

-

-

-

-

Veh in Median Storage, #

0

-

0

-

-

0

Grade, %

0

-

0

-

-

0

Peak Hour Factor

75

75

75

75

75

75

Heavy Vehicles, %

2

2

2

2

2

2

Mvmt Flow

4

5

27

0

11

49

Major/Minor

Minor1

Major1

Major2

Conflicting Flow All

98

27

0

0

27

0

Stage 1

27

-

-

-

-

-

Stage 2

71

-

-

-

-

-

Critical Hdwy

6.42

6.22

-

-

4.12

-

Critical Hdwy Stg 1

5.42

-

-

-

-

-

Critical Hdwy Stg 2

5.42

-

-

-

-

-

Follow-up Hdwy

3.518

3.318

-

-

2.218

-

Pot Cap-1 Maneuver

901

1048

-

-

1587

-

Stage 1

996

-

-

-

-

-

Stage 2

952

-

-

-

-

-

Platoon blocked, %

-

-

-

-

-

-

Mov Cap-1 Maneuver

895

1048

-

-

1587

-

Mov Cap-2 Maneuver

895

-

-

-

-

-

Stage 1

989

-

-

-

-

-

Stage 2

952

-

-

-

-

-

Approach

WB

NB

SB

HCM Control Delay, s

8.7

0

1.3

HCM LOS

A

A

A

Minor Lane/Major Mvmt

NBT

NBR

WBL

N

B

L

n

1

SBL

SBT

Capacity (veh/h)

-

-

976

1587

-

-

HCM Lane V/C Ratio

-

-

0.01

0.007

-

-

HCM Control Delay (s)

-

-

8.7

7.3

0

-

HCM Lane LOS

-

-

A

A

A

-

HCM 95th %tile Q(veh)

-

-

0

0

-

-

Intersection Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↓	↓↑		123	3	8
Traffic Vol, veh/h	10	548	2	12	537	130	10	5	34			
Future Vol, veh/h	10	548	2	12	537	130	10	5	34	123	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	225	-	175	175	-	185	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	630	2	15	655	159	11	5	37	134	3	9
<hr/>												
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	655	0	0	630	0	0	1011	1337	315	1025	1337	328
Stage 1	-	-	-	-	-	-	652	652	-	685	685	-
Stage 2	-	-	-	-	-	-	359	685	-	340	652	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	928	-	-	948	-	-	194	152	681	189	152	668
Stage 1	-	-	-	-	-	-	423	462	-	404	447	-
Stage 2	-	-	-	-	-	-	632	447	-	648	462	-
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	928	-	-	948	-	-	184	148	681	170	148	668
Mov Cap-2 Maneuver	-	-	-	-	-	-	184	148	-	170	148	-
Stage 1	-	-	-	-	-	-	418	456	-	399	440	-
Stage 2	-	-	-	-	-	-	609	440	-	598	456	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			0.2			16.9			81		
HCM LOS							C			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	355	928	-	-	948	-	-	177				
HCM Lane V/C Ratio	0.15	0.012	-	-	0.015	-	-	0.823				
HCM Control Delay (s)	16.9	8.9	-	-	8.9	-	-	81				
HCM Lane LOS	C	A	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	5.7				

HCM 6th TWSC
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 61.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↓	↓	↓	180	5	22
Traffic Vol, veh/h	58	623	12	28	554	271	5	3	24	180	5	22
Future Vol, veh/h	58	623	12	28	554	271	5	3	24	180	5	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	None	-	-	None
Storage Length	225	-	175	175	-	185	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	649	13	30	602	295	7	4	32	240	7	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	649	0	0	1134	1431	325	1109	1431	301
Stage 1	-	-	-	-	-	-	769	769	-	662	662	-
Stage 2	-	-	-	-	-	-	365	662	-	447	769	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	971	-	-	933	-	-	157	133	671	~ 164	133	695
Stage 1	-	-	-	-	-	-	360	409	-	417	457	-
Stage 2	-	-	-	-	-	-	627	457	-	560	409	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	971	-	-	933	-	-	134	121	671	~ 142	121	695
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	121	-	~ 142	121	-
Stage 1	-	-	-	-	-	-	338	384	-	391	442	-
Stage 2	-	-	-	-	-	-	572	442	-	495	384	-

Approach	EB	WB				NB	SB		
HCM Control Delay, s	0.7				0.3		17.7		\$ 431.6
HCM LOS							C		F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	327	971	-	-	933	-	-	154
HCM Lane V/C Ratio	0.13	0.062	-	-	0.033	-	-	1.792
HCM Control Delay (s)	17.7	9	-	-	9	-	-	\$ 431.6
HCM Lane LOS	C	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0.1	-	-	20.3

Notes

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

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	9	33	2	0	9
Future Vol, veh/h	1	9	33	2	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	12	44	3	0	12
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	58	46	0	0	47	0
Stage 1	46	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	949	1023	-	-	1560	-
Stage 1	976	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	949	1023	-	-	1560	-
Mov Cap-2 Maneuver	949	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.6		0		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	1015	1560	-	
HCM Lane V/C Ratio	-	-	0.013	-	-	
HCM Control Delay (s)	-	-	8.6	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	4	21	0	8	38
Future Vol, veh/h	3	4	21	0	8	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	5	28	0	11	51
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	101	28	0	0	28	0
Stage 1	28	-	-	-	-	-
Stage 2	73	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	898	1047	-	-	1585	-
Stage 1	995	-	-	-	-	-
Stage 2	950	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	892	1047	-	-	1585	-
Mov Cap-2 Maneuver	892	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	950	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.7		0		1.3	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	974	1585	-	
HCM Lane V/C Ratio	-	-	0.01	0.007	-	
HCM Control Delay (s)	-	-	8.7	7.3	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Intersection Int Delay, s/veh	8.2	EBL EBT EBR			WBL WBT WBR			NBL NBT NBR			SBL SBT SBR		
Movement													
Lane Configurations	↖ ↗ ↖	↖ ↗ ↗	↖		↖ ↗ ↗	↖ ↗ ↖		↖ ↗ ↗	↖ ↗ ↗	↖ ↗ ↖	↖ ↗ ↗	↖ ↗ ↗	↖ ↗ ↖
Traffic Vol, veh/h	10	548	2		12	537	130	10	5	34	123	3	8
Future Vol, veh/h	10	548	2		12	537	130	10	5	34	123	3	8
Conflicting Peds, #/hr	0	0	0		0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free		Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield		-	-	Free	-	-	None	-	-	None
Storage Length	350	-	200		175	-	350	-	-	85	-	-	450
Veh in Median Storage, #	-	0	-		-	0	-	-	0	-	-	0	-
Grade, %	-	0	-		-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87		82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2		2	2	2	2	2	2	2	2	2
Mvmt Flow	11	630	2		15	655	159	11	5	37	134	3	9
Major/Minor		Major1		Major2		Minor1			Minor2				
Conflicting Flow All	655	0	0	630	0	0	1011	1337	315	1025	1337	328	
Stage 1	-	-	-	-	-	-	652	652	-	685	685	-	
Stage 2	-	-	-	-	-	-	359	685	-	340	652	-	
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-	
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32	
Pot Cap-1 Maneuver	928	-	-	948	-	0	194	152	681	189	152	668	
Stage 1	-	-	-	-	-	0	423	462	-	404	447	-	
Stage 2	-	-	-	-	-	0	632	447	-	648	462	-	
Platoon blocked, %	-	-	-	-	-	-							
Mov Cap-1 Maneuver	928	-	-	948	-	-	184	148	681	170	148	668	
Mov Cap-2 Maneuver	-	-	-	-	-	-	184	148	-	170	148	-	
Stage 1	-	-	-	-	-	-	418	456	-	399	440	-	
Stage 2	-	-	-	-	-	-	609	440	-	598	456	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.2			0.2			16			77.4			
HCM LOS							C			F			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)	170	681	928	-	-	948	-	169	668				
HCM Lane V/C Ratio	0.096	0.054	0.012	-	-	0.015	-	0.81	0.013				
HCM Control Delay (s)	28.4	10.6	8.9	-	-	8.9	-	81.6	10.5				
HCM Lane LOS	D	B	A	-	-	A	-	F	B				
HCM 95th %tile Q(veh)	0.3	0.2	0	-	-	0	-	5.4	0				

Intersection												
Int Delay, s/veh	62.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↗	↗	↑ ↗	↑ ↗	↗	↑ ↗	↑ ↗	↗	180	5	22
Traffic Vol, veh/h	58	623	12	28	554	271	5	3	24			
Future Vol, veh/h	58	623	12	28	554	271	5	3	24	180	5	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Free	-	-	None	-	-	None
Storage Length	350	-	200	175	-	350	-	-	85	-	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	649	13	30	602	295	7	4	32	240	7	29
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Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	602	0	0	649	0	0	1134	1431	325	1109	1431	301
Stage 1	-	-	-	-	-	-	769	769	-	662	662	-
Stage 2	-	-	-	-	-	-	365	662	-	447	769	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	971	-	-	933	-	0	157	133	671	~ 164	133	695
Stage 1	-	-	-	-	-	0	360	409	-	417	457	-
Stage 2	-	-	-	-	-	0	627	457	-	560	409	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	971	-	-	933	-	-	134	121	671	~ 142	121	695
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	121	-	~ 142	121	-
Stage 1	-	-	-	-	-	-	338	384	-	391	442	-
Stage 2	-	-	-	-	-	-	572	442	-	495	384	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.4			16.8			\$ 375.9		
HCM LOS							C			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	129	671	971	-	-	933	-	141	695
HCM Lane V/C Ratio	0.083	0.048	0.062	-	-	0.033	-	1.749	0.042
HCM Control Delay (s)	35.4	10.6	9	-	-	9	-\$ 419.4	10.4	
HCM Lane LOS	E	B	A	-	-	A	-	F	B
HCM 95th %tile Q(veh)	0.3	0.1	0.2	-	-	0.1	-	18.3	0.1

Notes

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

HCM 6th TWSC
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 22.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	123	11	8
Traffic Vol, veh/h	10	548	24	69	537	130	20	8	60			
Future Vol, veh/h	10	548	24	69	537	130	20	8	60			
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Free	-	-	None	-	-	None
Storage Length	350	-	200	175	-	350	-	-	85	-	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	82	82	82	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	630	28	84	655	159	22	9	65	134	12	9

Major/Minor	Major1			Major2			Minor1			Minor2		
	Conflicting Flow All	655	0	0	630	0	0	1154	1475	315	1165	1475
Stage 1	-	-	-	-	-	-	652	652	-	823	823	-
Stage 2	-	-	-	-	-	-	502	823	-	342	652	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	928	-	-	948	-	0	152	125	681	149	125	668
Stage 1	-	-	-	-	-	0	423	462	-	334	386	-
Stage 2	-	-	-	-	-	0	520	386	-	646	462	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	928	-	-	948	-	-	128	113	681	~ 117	113	668
Mov Cap-2 Maneuver	-	-	-	-	-	-	128	113	-	~ 117	113	-
Stage 1	-	-	-	-	-	-	418	456	-	330	352	-
Stage 2	-	-	-	-	-	-	452	352	-	566	456	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	1	21.2	220.7
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	123	681	928	-	-	948	-	117	668
HCM Lane V/C Ratio	0.247	0.096	0.012	-	-	0.089	-	1.245	0.013
HCM Control Delay (s)	43.6	10.8	8.9	-	-	9.2	-	233.3	10.5
HCM Lane LOS	E	B	A	-	-	A	-	F	B
HCM 95th %tile Q(veh)	0.9	0.3	0	-	-	0.3	-	9.4	0

Notes

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

HCM 6th TWSC
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 113.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	180	9	22
Traffic Vol, veh/h	58	623	22	56	554	271	28	11	88			
Future Vol, veh/h	58	623	22	56	554	271	28	11	88	180	9	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Free	-	-	None	-	-	None
Storage Length	350	-	200	175	-	350	-	-	85	-	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	92	92	92	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	649	23	61	602	295	37	15	117	240	12	29

Major/Minor	Major1			Major2			Minor1			Minor2		
	Conflicting Flow All	602	0	0	649	0	0	1198	1493	325	1176	1493
Stage 1	-	-	-	-	-	-	769	769	-	724	724	-
Stage 2	-	-	-	-	-	-	429	724	-	452	769	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	971	-	-	933	-	0	141	122	671	~ 147	122	695
Stage 1	-	-	-	-	-	0	360	409	-	383	429	-
Stage 2	-	-	-	-	-	0	574	429	-	557	409	-
Platoon blocked, %	-	-	-	-	-	-						
Mov Cap-1 Maneuver	971	-	-	933	-	-	112	107	671	~ 98	107	695
Mov Cap-2 Maneuver	-	-	-	-	-	-	112	107	-	~ 98	107	-
Stage 1	-	-	-	-	-	-	338	384	-	359	401	-
Stage 2	-	-	-	-	-	-	498	401	-	415	384	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	27.4	\$ 721.8
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	111	671	971	-	-	933	-	98	695
HCM Lane V/C Ratio	0.468	0.175	0.062	-	-	0.065	-	2.571	0.042
HCM Control Delay (s)	63.2	11.5	9	-	-	9.1	-\$	804.6	10.4
HCM Lane LOS	F	B	A	-	-	A	-	F	B
HCM 95th %tile Q(veh)	2.1	0.6	0.2	-	-	0.2	-	23.3	0.1

Notes

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

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	48	33	2	87	9
Future Vol, veh/h	1	48	33	2	87	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	64	44	3	116	12
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	290	46	0	0	47	0
Stage 1	46	-	-	-	-	-
Stage 2	244	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	701	1023	-	-	1560	-
Stage 1	976	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	648	1023	-	-	1560	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	797	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	8.8		0		6.8	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	1011	1560	-	
HCM Lane V/C Ratio	-	-	0.065	0.074	-	
HCM Control Delay (s)	-	-	8.8	7.5	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-	

Intersection						
Int Delay, s/veh	6.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	99	21	0	50	38
Future Vol, veh/h	3	99	21	0	50	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	132	28	0	67	51
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	213	28	0	0	28	0
Stage 1	28	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	775	1047	-	-	1585	-
Stage 1	995	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	742	1047	-	-	1585	-
Mov Cap-2 Maneuver	742	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9		0		4.2	
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	1034	1585	-	
HCM Lane V/C Ratio	-	-	0.132	0.042	-	
HCM Control Delay (s)	-	-	9	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-	

Intersection
Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	9	0	45	4	0
Future Vol, veh/h	80	9	0	45	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	107	12	0	60	5	0

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	107	107
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	-	4.12	6.42
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	3.518
Pot Cap-1 Maneuver	-	0	1484	823
Stage 1	-	0	-	917
Stage 2	-	0	-	963
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1484	823
Mov Cap-2 Maneuver	-	-	-	823
Stage 1	-	-	-	917
Stage 2	-	-	-	963

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	823	-	1484	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	9.4	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0	-	0	-

Intersection
Int Delay, s/veh 0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	80	5	0	90	12	0
Future Vol, veh/h	80	5	0	90	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	107	7	0	120	16	0

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	107	0
Stage 1	-	-	-	107
Stage 2	-	-	-	120
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	0	1484	-
Stage 1	-	0	-	917
Stage 2	-	0	-	905
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1484	-
Mov Cap-2 Maneuver	-	-	-	761
Stage 1	-	-	-	917
Stage 2	-	-	-	905

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

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	761	-	1484	-
HCM Lane V/C Ratio	0.021	-	-	-
HCM Control Delay (s)	9.8	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.1	-	0	-

HCM 6th TWSC
4: West Emp Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↓	↑	
Traffic Vol, veh/h	54	26	0	33	12	0
Future Vol, veh/h	54	26	0	33	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	35	0	44	16	0

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	72	0
Stage 1	-	-	-	72
Stage 2	-	-	-	44
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	0	1528	-
Stage 1	-	0	-	951
Stage 2	-	0	-	978
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1528	-
Mov Cap-2 Maneuver	-	-	-	880
Stage 1	-	-	-	951
Stage 2	-	-	-	978

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

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	880	-	1528	-
HCM Lane V/C Ratio	0.018	-	-	-
HCM Control Delay (s)	9.2	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.1	-	0	-

HCM 6th TWSC
4: West Emp Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	54	12		0	64	26
Future Vol, veh/h	54	12		0	64	26
Conflicting Peds, #/hr	0	0		0	0	0
Sign Control	Free	Free		Free	Free	Stop
RT Channelized	-	Free		-	None	-
Storage Length	-	-		-	-	0
Veh in Median Storage, #	0	-		-	0	0
Grade, %	0	-		-	0	0
Peak Hour Factor	75	75		75	75	75
Heavy Vehicles, %	2	2		2	2	2
Mvmt Flow	72	16		0	85	35

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	72	0
Stage 1	-	-	-	72
Stage 2	-	-	-	85
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	0	1528	-
Stage 1	-	0	-	951
Stage 2	-	0	-	938
Platoon blocked, %	-		-	-
Mov Cap-1 Maneuver	-	-	1528	-
Mov Cap-2 Maneuver	-	-	-	834
Stage 1	-	-	-	951
Stage 2	-	-	-	938

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	834	-	1528	-
HCM Lane V/C Ratio	0.042	-	-	-
HCM Control Delay (s)	9.5	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.1	-	0	-

Intersection
Int Delay, s/veh 1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	0	21	↑	↑
Traffic Vol, veh/h	28	26	0	21	12	0
Future Vol, veh/h	28	26	0	21	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Stop
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	35	0	28	16	0

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	37	0
Stage 1	-	-	-	37
Stage 2	-	-	-	28
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	0	1574	-
Stage 1	-	0	-	985
Stage 2	-	0	-	995
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1574	-
Mov Cap-2 Maneuver	-	-	-	941
Stage 1	-	-	-	985
Stage 2	-	-	-	995

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

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	941	-	1574	-
HCM Lane V/C Ratio	0.017	-	-	-
HCM Control Delay (s)	8.9	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.1	-	0	-

HCM 6th TWSC
5: Center Emp Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh

2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	28	12		0	38	26
Future Vol, veh/h	28	12		0	38	26
Conflicting Peds, #/hr	0	0		0	0	0
Sign Control	Free	Free		Free	Free	Stop
RT Channelized	-	Free		-	None	-
Storage Length	-	-		-	-	0
Veh in Median Storage, #	0	-		-	0	0
Grade, %	0	-		-	0	0
Peak Hour Factor	75	75		75	75	75
Heavy Vehicles, %	2	2		2	2	2
Mvmt Flow	37	16		0	51	35

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	-	37	0
Stage 1	-	-	-	37
Stage 2	-	-	-	51
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	0	1574	-
Stage 1	-	0	-	985
Stage 2	-	0	-	971
Platoon blocked, %	-		-	-
Mov Cap-1 Maneuver	-	-	1574	-
Mov Cap-2 Maneuver	-	-	-	913
Stage 1	-	-	-	985
Stage 2	-	-	-	971

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	913	-	1574	-
HCM Lane V/C Ratio	0.038	-	-	-
HCM Control Delay (s)	9.1	-	0	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0.1	-	0	-

HCM 6th TWSC
6: East Truck Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	13	0	15	6	0
Future Vol, veh/h	15	13	0	15	6	0
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	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	17	0	20	8	0

Major/Minor	Major1	Major2		Minor1	
Conflicting Flow All	0	0	37	0	49
Stage 1	-	-	-	-	29
Stage 2	-	-	-	-	20
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1574	-	960
Stage 1	-	-	-	-	994
Stage 2	-	-	-	-	1003
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1574	-	960
Mov Cap-2 Maneuver	-	-	-	-	960
Stage 1	-	-	-	-	994
Stage 2	-	-	-	-	1003

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	960	-	-	1574	-
HCM Lane V/C Ratio	0.008	-	-	-	-
HCM Control Delay (s)	8.8	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th TWSC
6: East Truck Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh

2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	8	0	20	18	0
Future Vol, veh/h	15	8	0	20	18	0
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	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	11	0	27	24	0

Major/Minor	Major1	Major2		Minor1	
Conflicting Flow All	0	0	31	0	53
Stage 1	-	-	-	-	26
Stage 2	-	-	-	-	27
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1582	-	955
Stage 1	-	-	-	-	997
Stage 2	-	-	-	-	996
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1582	-	955
Mov Cap-2 Maneuver	-	-	-	-	955
Stage 1	-	-	-	-	997
Stage 2	-	-	-	-	996

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	955	-	-	1582	-
HCM Lane V/C Ratio	0.025	-	-	-	-
HCM Control Delay (s)	8.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th TWSC
7: East Emp Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection					
Int Delay, s/veh	1.5				
Movement	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Vol, veh/h	2	13	0	10	5
Future Vol, veh/h	2	13	0	10	5
Conflicting Peds, #/hr	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop
RT Channelized	-	Yield	-	None	-
Storage Length	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0
Grade, %	0	-	-	0	0
Peak Hour Factor	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2
Mvmt Flow	3	17	0	13	7
Major/Minor	Major1		Major2		Minor1
Conflicting Flow All	0	0	3	0	25
Stage 1	-	-	-	-	12
Stage 2	-	-	-	-	13
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1619	-	991
Stage 1	-	-	-	-	1011
Stage 2	-	-	-	-	1010
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1619	-	991
Mov Cap-2 Maneuver	-	-	-	-	991
Stage 1	-	-	-	-	1011
Stage 2	-	-	-	-	1010
Approach	EB		WB		NB
HCM Control Delay, s	0		0		8.7
HCM LOS					A
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	991	-	-	1619	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	8.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 6th TWSC
7: East Emp Access & Midway Rd

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

Intersection
Int Delay, s/veh 4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↓	↑	
Traffic Vol, veh/h	2	5	0	7	13	0
Future Vol, veh/h	2	5	0	7	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Free
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	7	0	9	17	0

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	0	3	0
Stage 1	-	-	-	7
Stage 2	-	-	-	9
Critical Hdwy	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-
Pot Cap-1 Maneuver	-	-	1619	-
Stage 1	-	-	-	1016
Stage 2	-	-	-	1014
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	1619	-
Mov Cap-2 Maneuver	-	-	-	1002
Stage 1	-	-	-	1016
Stage 2	-	-	-	1014

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1002	-	-	1619	-
HCM Lane V/C Ratio	0.017	-	-	-	-
HCM Control Delay (s)	8.7	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

HCM 6th Signalized Intersection Summary
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

Liberty-Butts Co DRI 2678 TIS
Synchro 10 Report

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	10	548	24	69	537	130	20	8	60	123	11	8
Traffic Volume (veh/h)	10	548	24	69	537	130	20	8	60	123	11	8
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Initial Q (Q _b), veh	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No				No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	630	0	84	655	0	22	9	65	134	12	9
Peak Hour Factor	0.87	0.87	0.87	0.82	0.82	0.82	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	1212		334	1212		782	822	696	755	822	696
Arrive On Green	0.34	0.34	0.00	0.34	0.34	0.00	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	778	3554	1585	796	3554	1585	1391	1870	1585	1326	1870	1585
Grp Volume(v), veh/h	11	630	0	84	655	0	22	9	65	134	12	9
Grp Sat Flow(s),veh/h/ln	778	1777	1585	796	1777	1585	1391	1870	1585	1326	1870	1585
Q Serve(g_s), s	0.5	5.8	0.0	3.9	6.1	0.0	0.4	0.1	1.0	2.6	0.1	0.1
Cycle Q Clear(g_c), s	6.6	5.8	0.0	9.7	6.1	0.0	0.5	0.1	1.0	2.7	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	1212		334	1212		782	822	696	755	822	696
V/C Ratio(X)	0.03	0.52		0.25	0.54		0.03	0.01	0.09	0.18	0.01	0.01
Avail Cap(c_a), veh/h	402	1561		412	1561		782	822	696	755	822	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	10.8	0.0	14.7	10.9	0.0	6.6	6.5	6.7	7.2	6.5	6.5
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.4	0.4	0.0	0.1	0.0	0.3	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.4	0.0	0.5	1.5	0.0	0.1	0.0	0.3	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	11.2	0.0	15.1	11.3	0.0	6.7	6.5	7.0	7.7	6.5	6.5
LnGrp LOS	B	B		B	B		A	A	A	A	A	A
Approach Vol, veh/h	641		A		739	A		96			155	
Approach Delay, s/veh	11.2				11.7			6.9			7.6	
Approach LOS	B				B			A			A	
Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	22.5		18.5		22.5		18.5					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	18.0		18.0		18.0		18.0					
Max Q Clear Time (g_c+l1), s	3.0		8.6		4.7		11.7					
Green Ext Time (p_c), s	0.2		2.6		0.3		2.3					

Intersection Summary

HCM 6th Ctrl Delay 10.8
HCM 6th LOS B

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑
Traffic Volume (veh/h)	58	623	22	56	554	271	28	11	88	180	9	22
Future Volume (veh/h)	58	623	22	56	554	271	28	11	88	180	9	22
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	649	0	61	602	0	37	15	117	240	12	29
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	334	1159		317	1159		789	840	712	739	840	712
Arrive On Green	0.33	0.33	0.00	0.33	0.33	0.00	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	817	3554	1585	782	3554	1585	1366	1870	1585	1258	1870	1585
Grp Volume(v), veh/h	60	649	0	61	602	0	37	15	117	240	12	29
Grp Sat Flow(s),veh/h/ln	817	1777	1585	782	1777	1585	1366	1870	1585	1258	1870	1585
Q Serve(g_s), s	2.6	6.0	0.0	2.8	5.5	0.0	0.6	0.2	1.8	5.2	0.1	0.4
Cycle Q Clear(g_c), s	8.1	6.0	0.0	8.8	5.5	0.0	0.8	0.2	1.8	5.4	0.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	1159		317	1159		789	840	712	739	840	712
V/C Ratio(X)	0.18	0.56		0.19	0.52		0.05	0.02	0.16	0.32	0.01	0.04
Avail Cap(c_a), veh/h	435	1597		413	1597		789	840	712	739	840	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	11.1	0.0	14.8	11.0	0.0	6.3	6.1	6.6	7.6	6.1	6.2
Incr Delay (d2), s/veh	0.3	0.4	0.0	0.3	0.4	0.0	0.1	0.0	0.5	1.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.5	0.0	0.4	1.3	0.0	0.1	0.1	0.5	0.9	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	11.6	0.0	15.1	11.3	0.0	6.4	6.2	7.1	8.8	6.1	6.3
LnGrp LOS	B	B		B	B		A	A	A	A	A	A
Approach Vol, veh/h		709	A		663	A		169			281	
Approach Delay, s/veh		11.8			11.7			6.8			8.4	
Approach LOS		B			B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		17.6		22.5		17.6				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0				
Max Q Clear Time (g_c+l1), s		3.8		10.1		7.4		10.8				
Green Ext Time (p_c), s		0.4		2.6		0.6		2.2				

Intersection Summary

HCM 6th Ctrl Delay 10.8
HCM 6th LOS B

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Intersection

Intersection Delay, s/veh 11.7

Intersection LOS B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	669	898	96	155
Demand Flow Rate, veh/h	683	916	97	158
Vehicles Circulating, veh/h	235	42	791	776
Vehicles Exiting, veh/h	699	846	127	182
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	12.1	12.2	7.8	9.1
Approach LOS	B	B	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	683	916	97	158
Cap Entry Lane, veh/h	1086	1322	616	625
Entry HV Adj Factor	0.980	0.980	0.988	0.980
Flow Entry, veh/h	669	898	96	155
Cap Entry, veh/h	1064	1296	608	613
V/C Ratio	0.629	0.693	0.158	0.253
Control Delay, s/veh	12.1	12.2	7.8	9.1
LOS	B	B	A	A
95th %tile Queue, veh	5	6	1	1

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Intersection

Intersection Delay, s/veh 16.3

Intersection LOS C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	732	958	169	281
Demand Flow Rate, veh/h	746	977	172	287
Vehicles Circulating, veh/h	319	114	968	714
Vehicles Exiting, veh/h	682	1026	97	377
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	17.5	17.4	12.4	11.8
Approach LOS	C	C	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	746	977	172	287
Cap Entry Lane, veh/h	997	1228	514	666
Entry HV Adj Factor	0.981	0.981	0.981	0.978
Flow Entry, veh/h	732	958	169	281
Cap Entry, veh/h	978	1204	504	652
V/C Ratio	0.749	0.795	0.335	0.431
Control Delay, s/veh	17.5	17.4	12.4	11.8
LOS	C	C	B	B
95th %tile Queue, veh	7	9	1	2

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Intersection

Intersection Delay, s/veh 6.9

Intersection LOS A

Approach	EB	WB	NB	SB			
Entry Lanes	2	2	1	1			
Conflicting Circle Lanes	2	2	2	2			
Adj Approach Flow, veh/h	801	1043	112	149			
Demand Flow Rate, veh/h	817	1064	115	152			
Vehicles Circulating, veh/h	242	39	925	930			
Vehicles Exiting, veh/h	839	1000	134	173			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	7.0	6.5	7.8	8.6			
Approach LOS	A	A	A	A			
Lane	Left	Right	Left	Right	Left	Left	Bypass
Designated Moves	LT	TR	LT	TR	LTR	LT	R
Assumed Moves	LT	TR	LT	TR	LTR	LT	R
RT Channelized							Yield
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	1
Entry Flow, veh/h	384	433	500	564	115	151	586
Cap Entry Lane, veh/h	1080	1156	1302	1374	647	644	0.980
Entry HV Adj Factor	0.980	0.980	0.980	0.980	0.972	0.978	1
Flow Entry, veh/h	376	424	490	553	112	148	575
Cap Entry, veh/h	1059	1133	1277	1347	629	630	0.002
V/C Ratio	0.355	0.375	0.384	0.411	0.178	0.234	6.3
Control Delay, s/veh	7.0	6.9	6.5	6.6	7.8	8.6	A
LOS	A	A	A	A	A	A	0
95th %tile Queue, veh	2	2	2	2	1	1	

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Intersection

Intersection Delay, s/veh 17.8
Intersection LOS C

Approach	EB	WB	NB	SB			
Entry Lanes	2	2	1	1			
Conflicting Circle Lanes	2	2	2	2			
Adj Approach Flow, veh/h	1269	1571	205	437			
Demand Flow Rate, veh/h	1294	1603	209	446			
Vehicles Circulating, veh/h	496	128	1652	1241			
Vehicles Exiting, veh/h	1154	1733	138	490			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	17.7	11.5	28.1	35.6			
Approach LOS	C	B	D	E			
Lane	Left	Right	Left	Right	Left	Left	Bypass
Designated Moves	LT	TR	LT	TR	LTR	LT	R
Assumed Moves	LT	TR	LT	TR	LTR	LT	R
RT Channelized							Yield
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328	37
Entry Flow, veh/h	608	686	753	850	209	409	533
Cap Entry Lane, veh/h	855	932	1200	1274	349	494	0.980
Entry HV Adj Factor	0.981	0.980	0.981	0.980	0.979	0.980	36
Flow Entry, veh/h	596	672	738	833	205	401	522
Cap Entry, veh/h	839	913	1177	1248	341	484	0.069
V/C Ratio	0.711	0.736	0.628	0.667	0.599	0.827	7.7
Control Delay, s/veh	17.7	17.8	11.2	11.8	28.1	38.1	A
LOS	C	C	B	B	D	E	0
95th %tile Queue, veh	6	7	5	5	4	8	

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Synchro 10 Report

Intersection

Intersection Delay, s/veh 16.1

Intersection LOS C

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	801	1043	112	149
Demand Flow Rate, veh/h	817	1064	115	152
Vehicles Circulating, veh/h	242	39	925	930
Vehicles Exiting, veh/h	840	1000	134	173
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	17.0	16.9	9.8	11.0
Approach LOS	C	C	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	817	1064	115	152
Cap Entry Lane, veh/h	1078	1326	537	534
Entry HV Adj Factor	0.980	0.980	0.972	0.979
Flow Entry, veh/h	801	1043	112	149
Cap Entry, veh/h	1056	1300	522	523
V/C Ratio	0.758	0.802	0.214	0.284
Control Delay, s/veh	17.0	16.9	9.8	11.0
LOS	C	C	A	B
95th %tile Queue, veh	8	9	1	1

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Synchro 10 Report

Intersection

Intersection Delay, s/veh 43.9

Intersection LOS E

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	935	1190	183	342
Demand Flow Rate, veh/h	954	1214	187	349
Vehicles Circulating, veh/h	387	119	1227	914
Vehicles Exiting, veh/h	876	1295	114	419
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	57.9	43.1	19.8	21.3
Approach LOS	F	E	C	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	954	1214	187	349
Cap Entry Lane, veh/h	930	1222	395	543
Entry HV Adj Factor	0.980	0.980	0.977	0.979
Flow Entry, veh/h	935	1190	183	342
Cap Entry, veh/h	911	1198	386	532
V/C Ratio	1.026	0.993	0.474	0.642
Control Delay, s/veh	57.9	43.1	19.8	21.3
LOS	F	E	C	C
95th %tile Queue, veh	20	21	2	5

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Synchro 10 Report

Intersection

Intersection Delay, s/veh 70.9

Intersection LOS F

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	1099	1417	140	203
Demand Flow Rate, veh/h	1121	1445	143	207
Vehicles Circulating, veh/h	303	51	1280	1258
Vehicles Exiting, veh/h	1162	1372	144	238
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	81.4	74.9	17.7	23.1
Approach LOS	F	F	C	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	1121	1445	143	207
Cap Entry Lane, veh/h	1013	1310	374	383
Entry HV Adj Factor	0.980	0.981	0.977	0.979
Flow Entry, veh/h	1099	1417	140	203
Cap Entry, veh/h	993	1284	366	375
V/C Ratio	1.107	1.103	0.382	0.541
Control Delay, s/veh	81.4	74.9	17.7	23.1
LOS	F	F	C	C
95th %tile Queue, veh	28	33	2	3

HCM 6th Roundabout
1: Windy Ln/Jackson Rd & SR 16 Arthur Bolton Pkwy

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Intersection

Intersection Delay, s/veh 192.5

Intersection LOS F

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	1269	1571	205	437
Demand Flow Rate, veh/h	1294	1603	209	446
Vehicles Circulating, veh/h	496	128	1652	1241
Vehicles Exiting, veh/h	1191	1733	138	490
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	271.1	165.2	60.7	124.4
Approach LOS	F	F	F	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	1294	1603	209	446
Cap Entry Lane, veh/h	832	1211	256	389
Entry HV Adj Factor	0.980	0.980	0.979	0.979
Flow Entry, veh/h	1269	1571	205	437
Cap Entry, veh/h	816	1187	251	381
V/C Ratio	1.555	1.324	0.817	1.146
Control Delay, s/veh	271.1	165.2	60.7	124.4
LOS	F	F	F	F
95th %tile Queue, veh	64	58	6	17

Existing 2017		6/12/2017							
Hour of Day	No RTs Main Street Volume	No RTs Minor Street Volume	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
					A	B		3A	3B
7:00	1048	100	MAIN	BOTH	MAIN	BOTH		YES	
8:00	850	84	MAIN	SIDE	MAIN	BOTH			
9:00	696	73	MAIN		MAIN	SIDE			
10:00	727	54	MAIN		MAIN	MAIN			
11:00	663	106	MAIN	SIDE	MAIN	SIDE		YES	
12:00	747	73	MAIN		MAIN	BOTH			
13:00	726	58	MAIN		MAIN	MAIN			
14:00	859	76	MAIN	SIDE	MAIN	BOTH			
15:00	971	103	MAIN	BOTH	MAIN	BOTH		YES	
16:00	1071	78	MAIN	BOTH	MAIN	BOTH			
17:00	1183	148	MAIN	BOTH	BOTH	BOTH	YES	YES	
18:00	820	72	MAIN		MAIN	BOTH			

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720			
SIDE STREET	150	75	120	60			
HOURS REQUIRED	8	8	8	8	4	1	1
HOURS MET	0	4	1	8	1	4	0

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	1

NO. OF APPROACHE (3 or 4) 4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ? N

Existing 2017	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	2	498	15	61	487	95	16	7	53	92	8	1
8:00	0	374	18	54	422	64	9	10	33	76	8	0
9:00	5	321	16	42	328	55	19	8	61	66	7	3
10:00	5	353	19	50	319	36	20	8	48	50	4	6
11:00	3	319	28	51	290	56	26	8	59	92	14	9
12:00	2	345	21	60	340	83	18	18	51	68	5	2
13:00	3	330	19	63	330	59	20	9	63	53	5	3
14:00	1	402	15	56	400	60	22	8	61	69	7	3
15:00	4	460	15	51	456	76	15	9	51	95	8	2
16:00	4	500	15	48	519	106	15	7	61	72	6	4
17:00	3	581	21	61	538	105	21	9	71	135	13	6
18:00	3	367	21	58	392	69	20	7	53	64	8	2

Build		2018	3% Annual Growth Rate			6/12/2017			
Hour of Day	No RTs	No RTs	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant 3A	Warrant 3B
	Main Street Volume	Minor Street Volume			A	B			
7:00	1086	132	MAIN	BOTH	MAIN	BOTH			
8:00	879	123	MAIN	SIDE	MAIN	BOTH			
9:00	720	106	MAIN	SIDE	MAIN	BOTH			
10:00	754	87	MAIN		MAIN	BOTH			
11:00	685	140	MAIN	SIDE	MAIN	SIDE			
12:00	775	102	MAIN	SIDE	MAIN	BOTH			
13:00	752	92	MAIN		MAIN	BOTH			
14:00	889	121	MAIN	SIDE	MAIN	BOTH			
15:00	1009	200	BOTH	BOTH	BOTH	BOTH	YES	YES	
16:00	1118	124	MAIN	BOTH	MAIN	BOTH			
17:00	1273	193	MAIN	BOTH	BOTH	BOTH	YES	YES	
18:00	864	101	MAIN	SIDE	MAIN	BOTH			

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720			
SIDE STREET	200	100	160	80			
HOURS REQUIRED	8	8	8	8	4	1	1
HOURS MET	1	4	2	11	2	2	0

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	2

NO. OF APPROACHE (3 or 4)

4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ?

N

Build 2018	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	10	513	15	61	502	129	16	7	54	124	8	7
8:00	5	385	18	54	435	87	9	10	33	115	8	6
9:00	9	331	16	42	338	76	19	8	62	99	7	10
10:00	11	364	19	50	329	62	20	8	48	83	4	12
11:00	6	329	28	51	299	69	26	8	60	126	14	17
12:00	10	355	21	60	350	105	18	18	51	97	5	12
13:00	8	340	19	64	340	81	20	9	64	87	5	13
14:00	6	414	15	57	412	80	22	8	62	114	7	20
15:00	13	474	15	52	470	107	15	9	51	192	8	49
16:00	19	515	15	49	535	147	15	7	62	118	6	23
17:00	59	598	21	62	554	247	21	9	72	180	13	23
18:00	23	378	21	59	404	132	20	7	54	93	8	8

Build		2018	3% Annual Growth Rate			6/12/2017				
Hour of Day	Main Street Volume	No RTs	No RTs	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
		Minor Street Volume	Warrant			A	B		3A	3B
7:00	1084	136	Main	Both	Both	Both	Both	Yes	Yes	
8:00	879	101	Main	Side	Main	Both	Both		Yes	
9:00	716	94	Main	Side	Main	Main	Side			
10:00	750	88	Main	Side	Main	Both	Both			
11:00	683	111	Main	Side	Main	Side			Yes	
12:00	773	94	Main	Side	Main	Both	Both			
13:00	750	91	Main	Side	Main	Both	Both			
14:00	889	109	Main	Side	Main	Both	Both		Yes	
15:00	1007	187	Both	Both	Both	Both	Both	Yes	Yes	
16:00	1117	134	Main	Both	Both	Both	Both	Yes	Yes	
17:00	1271	152	Both	Both	Both	Both	Both	Yes	Yes	
18:00	863	94	Main	Side	Main	Both	Both			

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720			
SIDE STREET	150	75	120	60			
HOURS REQUIRED	8	8	8	8	4	1	1
HOURS MET	2	4	4	10	4	7	0

NO. OF LANES:

MAIN STRE(1 or 2)	2
SIDE STRE(1 or 2)	1

NO. OF APPROACH (3 or 4) 4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ? N

Build 2018	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	8	513	15	61	502	113	16	7	54	128	8	6
8:00	5	385	18	54	435	61	9	10	33	93	8	6
9:00	5	331	16	42	338	61	19	8	62	87	7	8
10:00	7	364	19	50	329	53	20	8	48	84	4	9
11:00	4	329	28	51	299	47	26	8	60	97	14	10
12:00	8	355	21	60	350	69	18	18	51	89	5	10
13:00	6	340	19	64	340	73	20	9	64	86	5	11
14:00	6	414	15	57	412	67	22	8	62	102	7	18
15:00	11	474	15	52	470	110	15	9	51	179	8	49
16:00	18	515	15	49	535	137	15	7	62	128	6	21
17:00	57	598	21	62	554	233	21	9	72	139	13	20
18:00	22	378	21	59	404	139	20	7	54	86	8	9

Build		2018		3% Annual Growth Rate		6/12/2017			
Hour of Day	No RTs Main Street Volume	No RTs Minor Street Volume	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
					A	B		3A	3B
7:00	1086	132	MAIN	BOTH	BOTH	BOTH	YES	YES	
8:00	879	123	MAIN	SIDE	BOTH	BOTH		YES	
9:00	720	106	MAIN	SIDE	MAIN	BOTH		YES	
10:00	754	87	MAIN	SIDE	MAIN	BOTH			
11:00	685	140	MAIN	SIDE	BOTH	SIDE		YES	
12:00	775	102	MAIN	SIDE	MAIN	BOTH		YES	
13:00	752	92	MAIN	SIDE	MAIN	BOTH			
14:00	889	121	MAIN	SIDE	BOTH	BOTH		YES	
15:00	1009	200	BOTH	BOTH	BOTH	BOTH	YES	YES	
16:00	1118	124	MAIN	BOTH	BOTH	BOTH	YES	YES	
17:00	1273	193	BOTH	BOTH	BOTH	BOTH	YES	YES	
18:00	864	101	MAIN	SIDE	MAIN	BOTH		YES	

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720				
SIDE STREET	150	75	120	60				
HOURS REQUIRED	8	8	8	8	4	1	1	
HOURS MET	2	4	7	11	4	10	0	

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	1

NO. OF APPROACHE (3 or 4)

4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ?

N

Build 2018	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	10	513	15	61	502	129	16	7	54	124	8	7
8:00	5	385	18	54	435	87	9	10	33	115	8	6
9:00	9	331	16	42	338	76	19	8	62	99	7	10
10:00	11	364	19	50	329	62	20	8	48	83	4	12
11:00	6	329	28	51	299	69	26	8	60	126	14	17
12:00	10	355	21	60	350	105	18	18	51	97	5	12
13:00	8	340	19	64	340	81	20	9	64	87	5	13
14:00	6	414	15	57	412	80	22	8	62	114	7	20
15:00	13	474	15	52	470	107	15	9	51	192	8	49
16:00	19	515	15	49	535	147	15	7	62	118	6	23
17:00	59	598	21	62	554	247	21	9	72	180	13	23
18:00	23	378	21	59	404	132	20	7	54	93	8	8

Build		2021		3% Annual Growth Rate		6/12/2017			
Hour of Day	No RTs	No RTs	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
	Main Street Volume	Minor Street Volume			A	B		3A	3B
7:00	1182	141	MAIN	BOTH	MAIN	BOTH	YES		
8:00	956	131	MAIN	BOTH	MAIN	BOTH			
9:00	783	112	MAIN	SIDE	MAIN	BOTH			
10:00	820	91	MAIN		MAIN	BOTH			
11:00	744	150	MAIN	SIDE	MAIN	BOTH		YES	
12:00	843	109	MAIN	SIDE	MAIN	BOTH			
13:00	815	97	MAIN		MAIN	BOTH			
14:00	967	128	MAIN	BOTH	MAIN	BOTH			
15:00	1098	210	BOTH	BOTH	BOTH	BOTH	YES	YES	
16:00	1218	131	MAIN	BOTH	MAIN	BOTH	YES		
17:00	1383	207	BOTH	BOTH	BOTH	BOTH	YES	YES	
18:00	938	107	MAIN	BOTH	MAIN	BOTH			

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720				
SIDE STREET	200	100	160	80				
HOURS REQUIRED	8	8	8	8	4	1	1	
HOURS MET	2	7	2	12	4	3	0	

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	2

NO. OF APPROACHE (3 or 4)

4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ?

N

Build 2021	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	10	561	15	63	548	138	17	8	57	133	8	7
8:00	5	421	19	55	475	93	9	11	34	123	8	6
9:00	10	361	17	43	369	81	20	8	64	105	7	10
10:00	12	397	20	52	359	66	21	9	50	87	4	13
11:00	6	359	30	53	326	74	28	9	61	135	15	18
12:00	10	388	22	62	383	113	19	20	52	104	5	12
13:00	8	371	20	65	371	86	21	10	66	92	5	13
14:00	6	452	15	59	450	86	23	8	63	121	7	20
15:00	14	518	15	53	513	115	15	10	52	201	9	49
16:00	20	563	16	51	584	157	15	7	63	125	6	24
17:00	59	654	22	64	606	257	22	9	74	193	14	24
18:00	23	413	22	61	441	139	21	7	55	99	8	8

Build		2023		3% Annual Growth Rate		6/12/2017			
Hour of Day	No RTs Main Street Volume	No RTs Minor Street Volume	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
					A	B		3A	3B
7:00	1250	148	MAIN	BOTH	BOTH	BOTH	YES	YES	
8:00	1012	137	MAIN	BOTH	BOTH	BOTH		YES	
9:00	828	118	MAIN	SIDE	MAIN	BOTH		YES	
10:00	868	95	MAIN	SIDE	MAIN	BOTH			
11:00	788	157	BOTH	SIDE	BOTH	BOTH		YES	
12:00	891	113	MAIN	SIDE	MAIN	BOTH		YES	
13:00	864	100	MAIN	SIDE	MAIN	BOTH		YES	
14:00	1024	133	MAIN	BOTH	BOTH	BOTH		YES	
15:00	1161	216	BOTH	BOTH	BOTH	BOTH	YES	YES	
16:00	1290	137	MAIN	BOTH	BOTH	BOTH	YES	YES	
17:00	1462	217	BOTH	BOTH	BOTH	BOTH	YES	YES	YES
18:00	992	112	MAIN	BOTH	MAIN	BOTH		YES	

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720			
SIDE STREET	150	75	120	60			
HOURS REQUIRED	8	8	8	8	4	1	1
HOURS MET	3	7	7	12	4	11	1

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	1

NO. OF APPROACHE (3 or 4)

4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ?

N

Build 2023	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	10	595	15	63	582	144	18	8	59	139	9	7
8:00	5	447	19	56	504	97	9	11	35	128	9	6
9:00	10	383	17	43	392	85	20	9	66	110	8	11
10:00	12	422	20	53	381	68	22	9	51	91	4	13
11:00	7	381	31	54	346	78	29	9	62	141	16	19
12:00	10	412	22	63	406	119	19	21	53	108	5	12
13:00	9	394	20	67	394	90	21	10	67	95	5	14
14:00	6	480	16	60	478	90	24	9	64	125	8	21
15:00	14	549	16	54	544	120	16	10	53	207	9	49
16:00	20	597	16	53	620	165	15	7	64	130	7	24
17:00	60	694	23	66	642	264	22	10	75	202	15	24
18:00	24	438	23	62	468	143	22	8	56	103	9	8

Build	2024	3% Annual Growth Rate			6/12/2017				
Hour of Day	No RTs	No RTs	Warrant 1A	Warrant 1B	Combo 80%		Warrant 2	Warrant	
	Main Street Volume	Minor Street Volume			A	B		3A	3B
7:00	1285	151	MAIN	BOTH	MAIN	BOTH	YES	YES	
8:00	1040	139	MAIN	BOTH	MAIN	BOTH			
9:00	851	120	MAIN	SIDE	MAIN	BOTH			
10:00	891	96	MAIN		MAIN	BOTH			
11:00	810	160	MAIN	SIDE	BOTH	BOTH		YES	
12:00	915	116	MAIN	BOTH	MAIN	BOTH			
13:00	888	102	MAIN	SIDE	MAIN	BOTH			
14:00	1053	136	MAIN	BOTH	MAIN	BOTH			
15:00	1196	220	BOTH	BOTH	BOTH	BOTH	YES	YES	
16:00	1327	140	MAIN	BOTH	MAIN	BOTH	YES		
17:00	1504	222	BOTH	BOTH	BOTH	BOTH	YES	YES	YES
18:00	1020	115	MAIN	BOTH	MAIN	BOTH			

REQUIRED VOLUMES:

MAIN STREET	600	900	480	720			
SIDE STREET	200	100	160	80			
HOURS REQUIRED	8	8	8	8	4	1	1
HOURS MET	2	8	3	12	4	4	1

NO. OF LANES:

MAIN STREET (1 or 2)	2
SIDE STREET (1 or 2)	2

NO. OF APPROACHE (3 or 4) 4

DOES MAIN STREET SPEED EXCEED 40 MPH, Y or N ? N

Build 2024	SR 16						Windy Ln			Jackson Rd		
	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
7:00	10	612	15	64	599	148	18	8	61	142	9	7
8:00	5	460	19	56	519	100	9	12	35	130	9	6
9:00	10	395	17	43	403	87	20	9	67	112	8	11
10:00	12	434	20	53	392	69	22	9	51	92	4	13
11:00	7	392	32	54	357	80	29	9	63	144	16	19
12:00	10	424	22	63	418	122	19	21	53	111	5	12
13:00	9	406	20	67	406	93	21	10	68	97	5	14
14:00	6	494	16	61	492	92	24	9	65	128	8	21
15:00	14	566	16	55	561	122	16	10	53	211	9	49
16:00	20	615	17	54	638	168	15	7	65	133	7	24
17:00	60	715	23	67	662	268	22	10	76	207	15	24
18:00	24	451	23	63	482	146	22	8	57	106	9	8