TRAFFIC IMPACT STUDY
FOR
FOOTHILLS MIXED-USE DEVELOPMENT AT JASPER VILLAGE

JASPER, GEORGIA

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1.0 INTRODUCTION

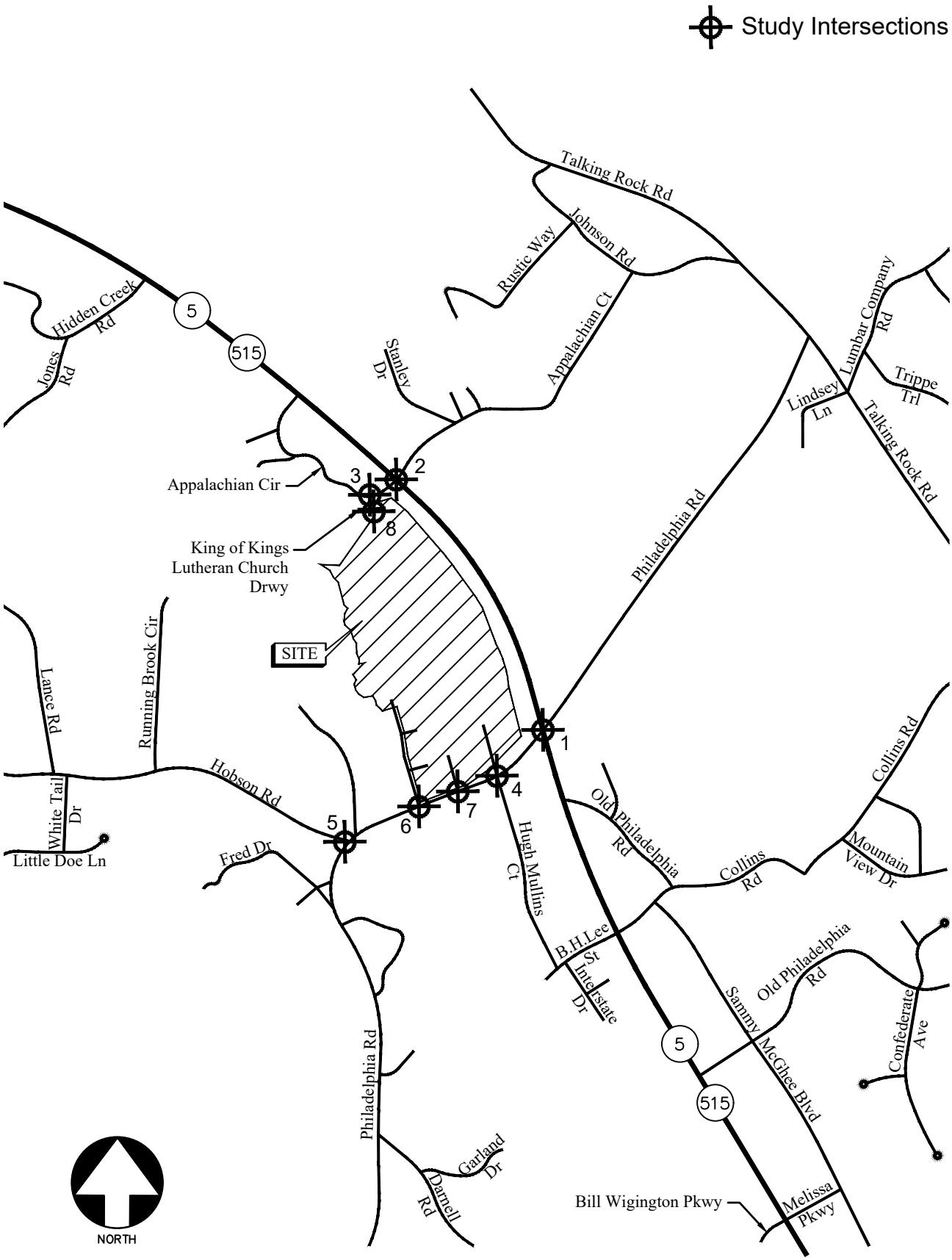
The purpose of this study is to determine the traffic impact that will result from the proposed Foothills mixed-use development at Jasper Village located to the northwest of the intersection of SR 5/SR 515 at Philadelphia Road in Jasper, Georgia. The traffic analysis evaluates the current operations compared to the future conditions with the traffic generated by the development. The proposed development will consist of:

- Multifamily homes: 270 Units
- Hotel: 90 Rooms
- Grocery Store: 50,000 SF
- Retail space: 4,250 SF
- Sit-down Restaurant space: 14,250 SF
- Fast Food Restaurant with Drive-Through: 5,400 SF
- Office space: 95,000 SF
- Climate Control Storage: 60,000 SF

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. SR 5/SR 515 at Philadelphia Road
2. SR 5/SR 515 at Appalachian Circle / Appalachian Court
3. Appalachian Circle at King of Kings Lutheran Church Driveway
4. Philadelphia Road at Hugh Mullins Court
5. Philadelphia Road at Hobson Road

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network is shown in Figure 1.



LOCATION MAP

FIGURE 1

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2.0 EXISTING FACILITIES / CONDITIONS

2.1 Roadway Facilities

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 State Route 5/State Route 515 (SR 5/SR 515)

SR 5/SR 515 is a north-south, four-lane, median-divided roadway with a posted speed limit of 55 mph in the vicinity of the site. From 970 feet north of Philadelphia Road, SR 5/SR 515 is posted with a speed limit of 65 mph as it travels northward. Georgia Department of Transportation (GDOT) traffic counts (Station ID's 227-0239, 227-0241 & 227-0243) indicate that the daily traffic volume on SR 5/SR 515 in 2019 was 26,700 vehicles per day south of SR 53 (W. Church Street), 25,800 vehicles north of SR 53 (W. Church Street) and 19,500 vehicles per day southeast of Antioch Church Road. GDOT classifies SR 5/SR 515 as an Urban Principal Arterial roadway.

2.1.2 Philadelphia Road

Philadelphia Road is an east-west, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site. To the east of SR 5/SR 515, Philadelphia Road is posted with a speed limit of 45 mph. GDOT traffic counts (Station ID 227-0192) indicate that the daily traffic volume on Philadelphia Road in 2019 was 1,010 vehicles per day between Hugh Mullins Court and Hobson Road. GDOT classifies Philadelphia Road as an Urban Minor Collector roadway.

2.1.3 Appalachian Circle

Appalachian Circle is an east-west, two-lane, undivided roadway with no posted speed limit.

2.1.4 Appalachian Court

Appalachian Court is an east-west, two-lane, undivided roadway with a posted speed limit of 15 mph.

2.1.5 Hugh Mullins Court

Hugh Mullins Court is a north-south, two-lane, undivided roadway without any posted speed limit.

2.1.6 Hobson Road

Hobson Road is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph. GDOT traffic counts (Station ID 227-8005) indicate that the daily traffic volume on Hobson Road in 2019 was 2,290 vehicles per day northwest of Philadelphia Road. GDOT classifies Hobson Road as an Urban Local roadway.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's Highway Capacity Manual, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections at which the side street or minor street is controlled by a stop sign, the criteria for evaluating traffic operations are the level-of-service (LOS) for the turning movements at the intersection and the level-of-service for the overall intersection. Level-of-service is based on the control delay incurred at the intersection. Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level-of-service is assigned a letter designation from "A" through "F". Level-of-service "A" indicates excellent operations with little delay to motorists, while level-of-service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross safely, resulting in extremely long total delays and long queues. The level-of-service criteria for two-way stop-controlled and all-way stop-controlled (unsignalized) intersections are given in Table 1.

TABLE 1 – LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level-of-service	Control Delay (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: Highway Capacity Manual

3.2 Signalized Intersections

For signalized intersections, it is necessary to evaluate both capacity and level-of-service in order to evaluate the overall operation of the intersection. The capacity analysis of an intersection is performed by comparing the volume of traffic using the various lane groups at the intersection to the capacity of those lane groups. This results in a volume/capacity (v/c) ratio for each lane group. A v/c ratio greater than 1.0 indicates that the volume of traffic has exceeded the capacity available, resulting in a temporary excess of demand. Although the capacity of the entire intersection is not defined, a composite v/c ratio for the sum of the critical lane groups within the intersection is computed. This composite v/c ratio is an indication of the overall intersection sufficiency.

Level-of-service for a signalized intersection is defined in terms of control delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The level-of-service criteria for signalized intersections, based on control delay, are shown in Table 2. Level-of-service "A" indicates operations with very low control delay, while level-of-service "F" describes operations with extremely high control delay. Level-of-service "E" is typically considered to be the limit of acceptable delay, and level-of-service "F" is considered unacceptable by most drivers.

TABLE 2 – LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level-of-service	Control Delay (sec)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Source: Highway Capacity Manual

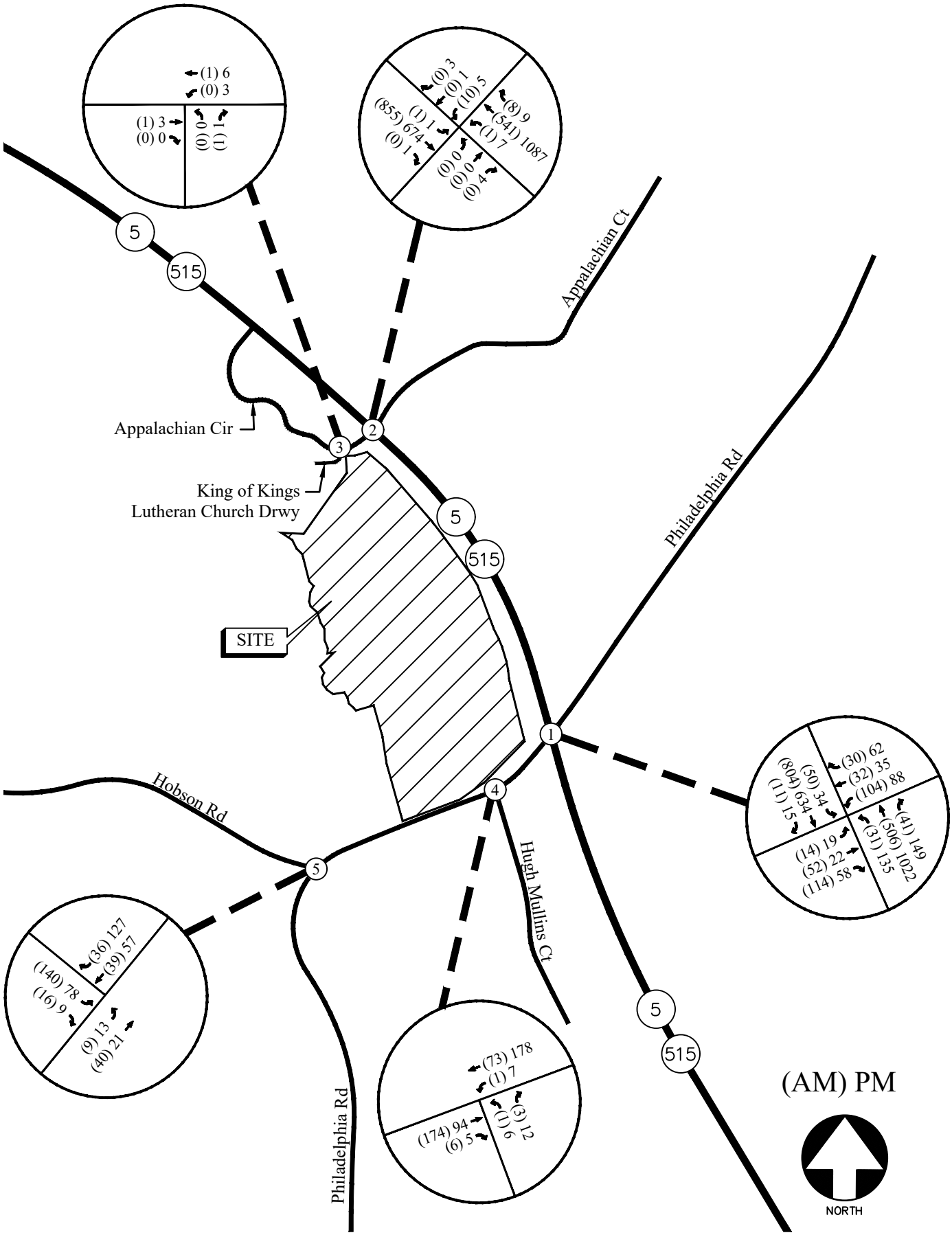
4.0 EXISTING 2021 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. SR 5/SR 515 at Philadelphia Road
2. SR 5/SR 515 at Appalachian Circle / Appalachian Court
3. Appalachian Circle at King of Kings Lutheran Church Driveway
4. Philadelphia Road at Hugh Mullins Court
5. Philadelphia Road at Hobson Road

Turning movement counts were collected on Thursday, September 9, 2021. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 2

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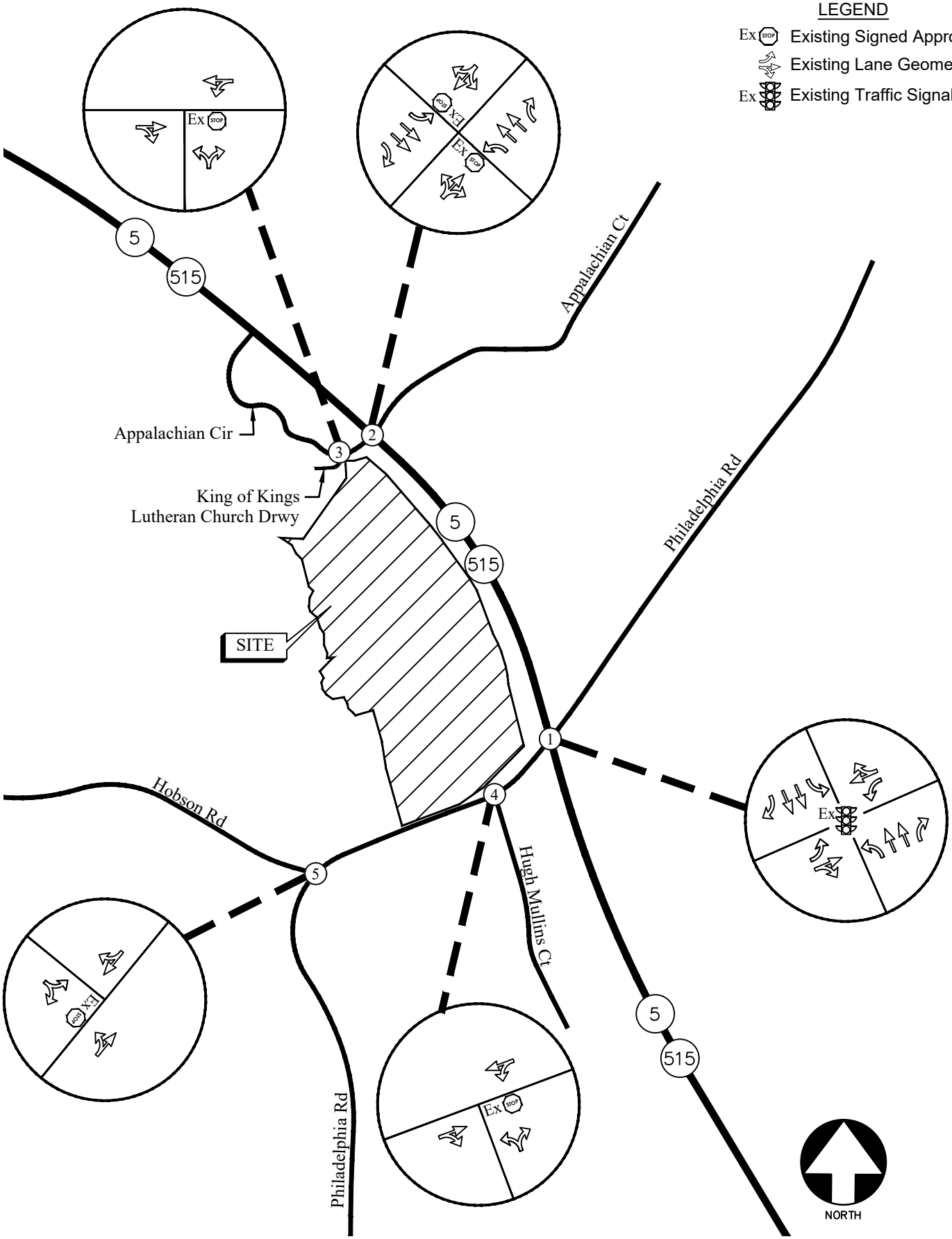
4.2 Existing Traffic Operations

Existing 2021 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3.

TABLE 3 – EXISTING INTERSECTION OPERATIONS

	Intersection	Traffic Control	LOS (Delay)	
			AM Peak Hour	PM Peak Hour
1	**SR 5/SR 515 @ Philadelphia Road**	Signalized	**B (12.2)**	**A (9.6)**
	-Eastbound Approach		D (47.7)	D (50.9)
	-Westbound Approach		D (53.4)	D (54.5)
	-Northbound Approach		A (6.4)	A (6.0)
	-Southbound Approach		A (7.0)	A (5.8)
2	**SR 5/SR 515 @ Appalachian Circle / Appalachian Court**	Stop Controlled on EB and WB Approaches		
	-Eastbound Approach		A (0.0)	B (10.6)
	-Westbound Approach		D (25.5)	E (37.0)
	-Northbound Left		A (9.8)	A (9.1)
	-Southbound Left		A (8.6)	B (10.9)
3	**Appalachian Circle @ King of Kings Lutheran Church Driveway**	Stop Controlled on NB Approach		
	-Westbound Left		A (0.0)	A (7.2)
	-Northbound Approach		A (8.3)	A (8.3)
4	**Philadelphia Road @ Hugh Mullins Court**	Stop Controlled on NB Approach		
	-Westbound Left		A (7.6)	A (7.4)
	-Northbound Approach		A (8.2)	A (7.5)
5	**Philadelphia Road @ Hobson Road**	Stop Controlled on SB Approach		
	-Eastbound Left		A (7.4)	A (7.6)
	-Southbound Approach		B (10.1)	A (10.0)

The results of existing traffic operations analysis indicate that the signalized intersections of SR 5/SR 515 and Philadelphia Road is operating at levels-of-service of "B" and "A" during the AM and PM peak hours, respectively. All other study intersections are stop sign controlled at the side street. It is not unusual for side streets to experience a delay due to the time required for a vehicle to find an adequate gap in traffic to turn onto the main line. These areas are addressed in the Future Traffic Operations section. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 3

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5.0 PROPOSED DEVELOPMENT

The proposed Foothills mixed-use development, Jasper Village, will be located to the northwest of the intersection of SR 5/SR 515 at Philadelphia Road in Jasper, Georgia. The development will consist of:

- Multifamily homes: 270 Units
- Hotel: 90 Rooms
- Grocery Store: 50,000 SF
- Retail space: 4,250 SF
- Sit-down Restaurant space: 14,250 SF
- Fast Food Restaurant with Drive-Through: 5,400 SF
- Office space: 95,000 SF
- Climate Control Storage: 60,000 SF

The development proposes access at the following locations:

- Site Driveway 1: Full-access driveway on King of Kings Lutheran Church Driveway on Appalachian Circle
- Site Driveway 2: Full-access eastern driveway on Philadelphia Road aligning with Hugh Mullins Court
- Site Driveway 3: Full-access middle driveway on Philadelphia Road, west of Hugh Mullins Court
- Site Driveway 4: Full-access western driveway on Philadelphia Road, west of Site Driveway 3

A site plan is shown in Figure 4.

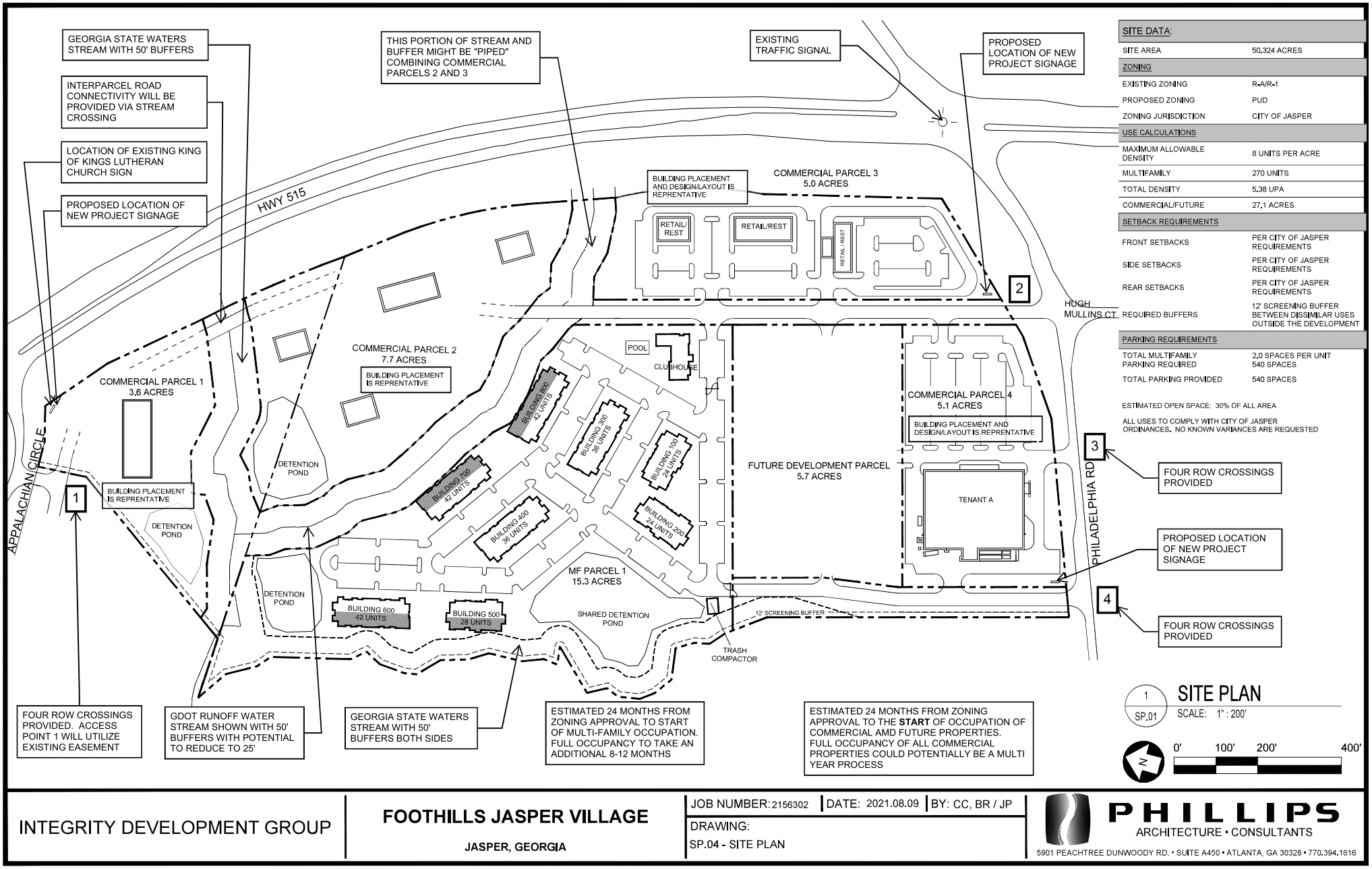


Figure 4 – Site Plan

5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 10th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE Land Uses: *151 – Mini-Warehouse, 220 – Multifamily Housing (Low-Rise), 310 – Hotel, 710 – General Office Building, 820 – Shopping Center, 850 – Supermarket, 932 – High-Turnover (Sit-Down) Restaurant* and *934 – Fast-Food Restaurant with Drive-Through Window*. Due to the nature of the development, pass-by and mixed-use reductions have been applied per ITE standards. The calculated total trip generation for the proposed development is shown in Table 4.

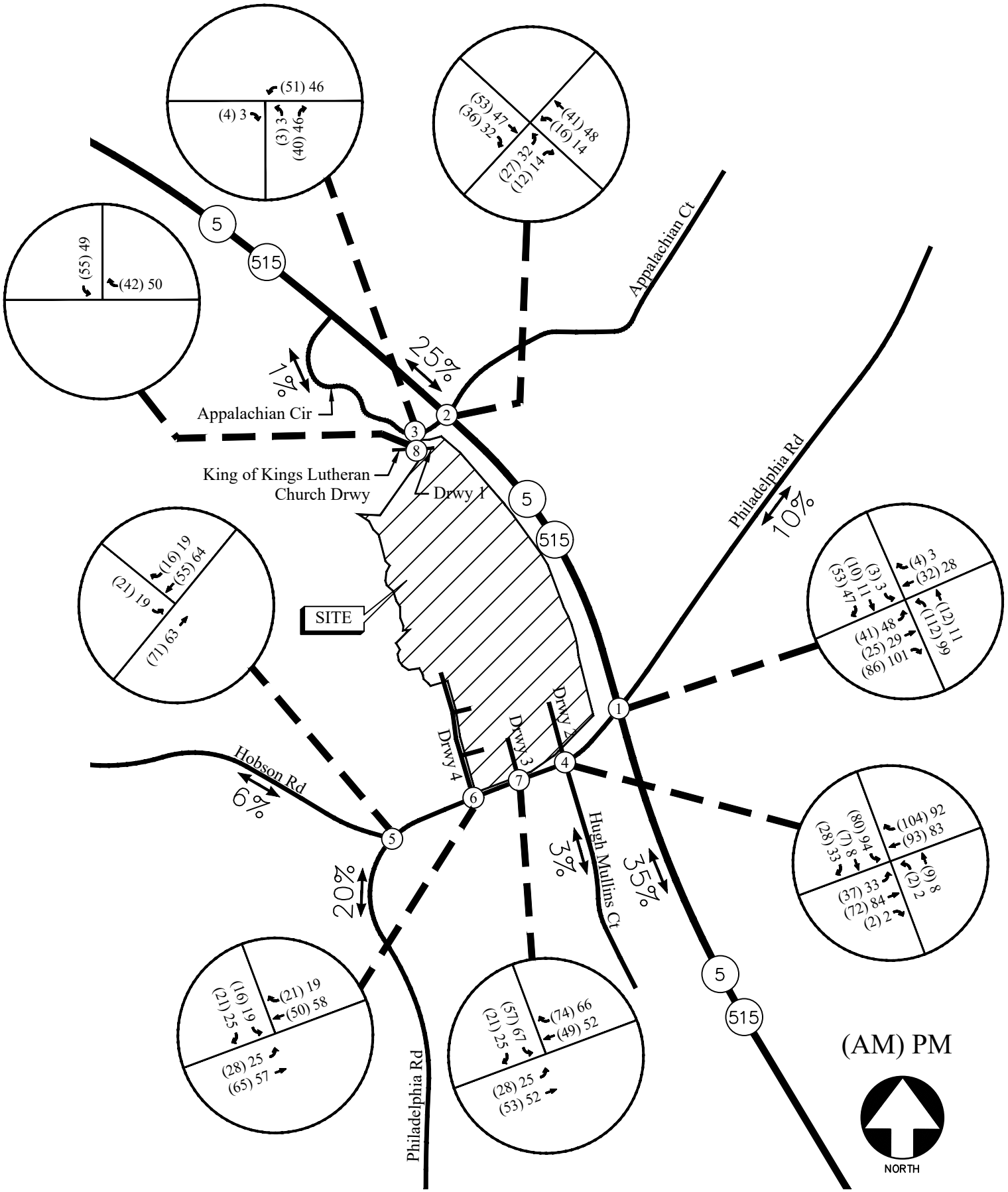
TABLE 4 – TRIP GENERATION

Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	Two-way
ITE 151 – Mini-Warehouse	60,000 sf	4	2	6	5	5	10	91
Mixed-Use Reduction		0	0	0	0	0	0	-10
ITE 220 – Multifamily Housing (Low-Rise)	270 units	28	95	123	90	53	143	2,000
Mixed-Use Reduction		-12	-22	-34	-28	-30	-58	-656
ITE 310 – Hotel	90 rooms	23	17	40	21	20	41	589
Mixed-Use Reduction		-4	-6	-10	-8	-9	-17	-193
ITE 710 – General Office Building	95,000 sf	100	16	116	17	91	108	1,010
Mixed-Use Reduction		-8	-4	-12	-5	-11	-16	-197
ITE 820 – Shopping Center	4,250 sf	2	2	4	8	8	16	160
Mixed-Use Reduction		-1	0	-1	-1	-1	-2	-18
Pass-by Trips (0%) 34%		0	0	0	-2	-2	-4	-40
ITE 850 – Supermarket	50,000 sf	115	76	191	238	228	466	4,757
Mixed-Use Reduction		-17	-12	-29	-25	-20	-45	-533
Pass-by Trips (0%) 36%		0	0	0	-77	-75	-152	-1,520
ITE 932 – High-Turnover (Sit-Down) Restaurant	14,250 sf	78	64	142	86	53	139	1,599
Mixed-Use Reduction		-6	-4	-10	-8	-7	-15	-179
Pass-by Trips (0%) 43%		0	0	0	-34	-20	-54	-540
ITE 934 – Fast-Food Restaurant with Drive-Through Window	5,400 sf	111	106	217	91	85	176	2,543
Mixed-Use Reduction		-8	-8	-16	-14	-11	-25	-286
Pass-by Trips (49%) 50%		-50	-48	-98	-39	-37	-76	-760
Total Trips (without Reductions)		461	378	839	556	543	1,099	12,749
New External Trips (with Reductions)		355	274	629	315	320	635	7,817

*pass-by trips (AM) [PM]; Daily pass-by reduction estimated to be least of the applied PM peak hour pass-by rate or ten times the PM pass-by volume

5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of the existing travel patterns in the area and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5. Pass-by volumes have also been distributed based on existing travel patterns and are shown in Figure 6.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

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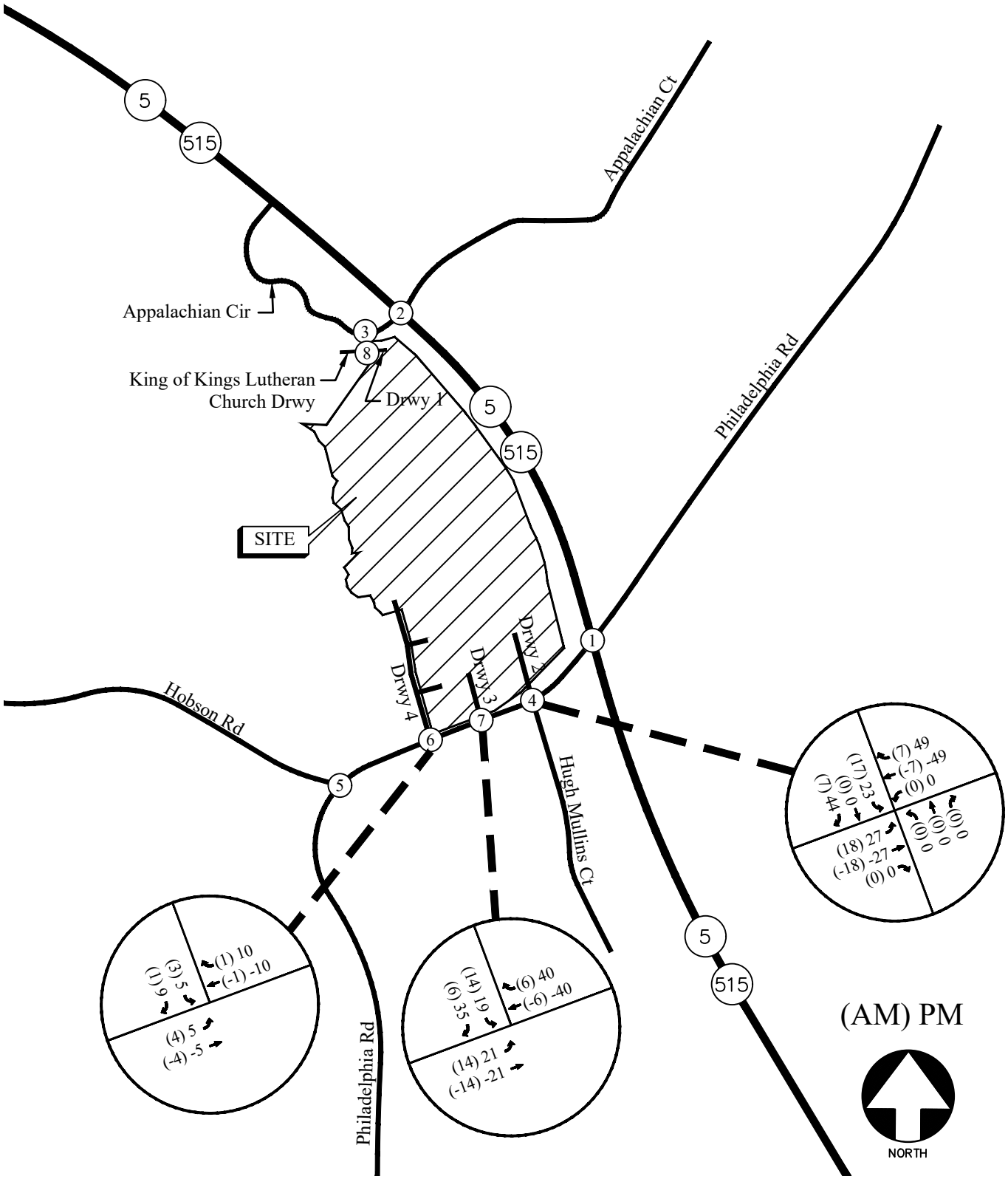

SITE PEAK HOUR PASS-BY VOLUMES FIGURE 6

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6.0 FUTURE 2024 TRAFFIC ANALYSIS

The future 2024 traffic operations are analyzed for the "Build" and "No-Build" conditions.

6.1 Future "No-Build" Conditions

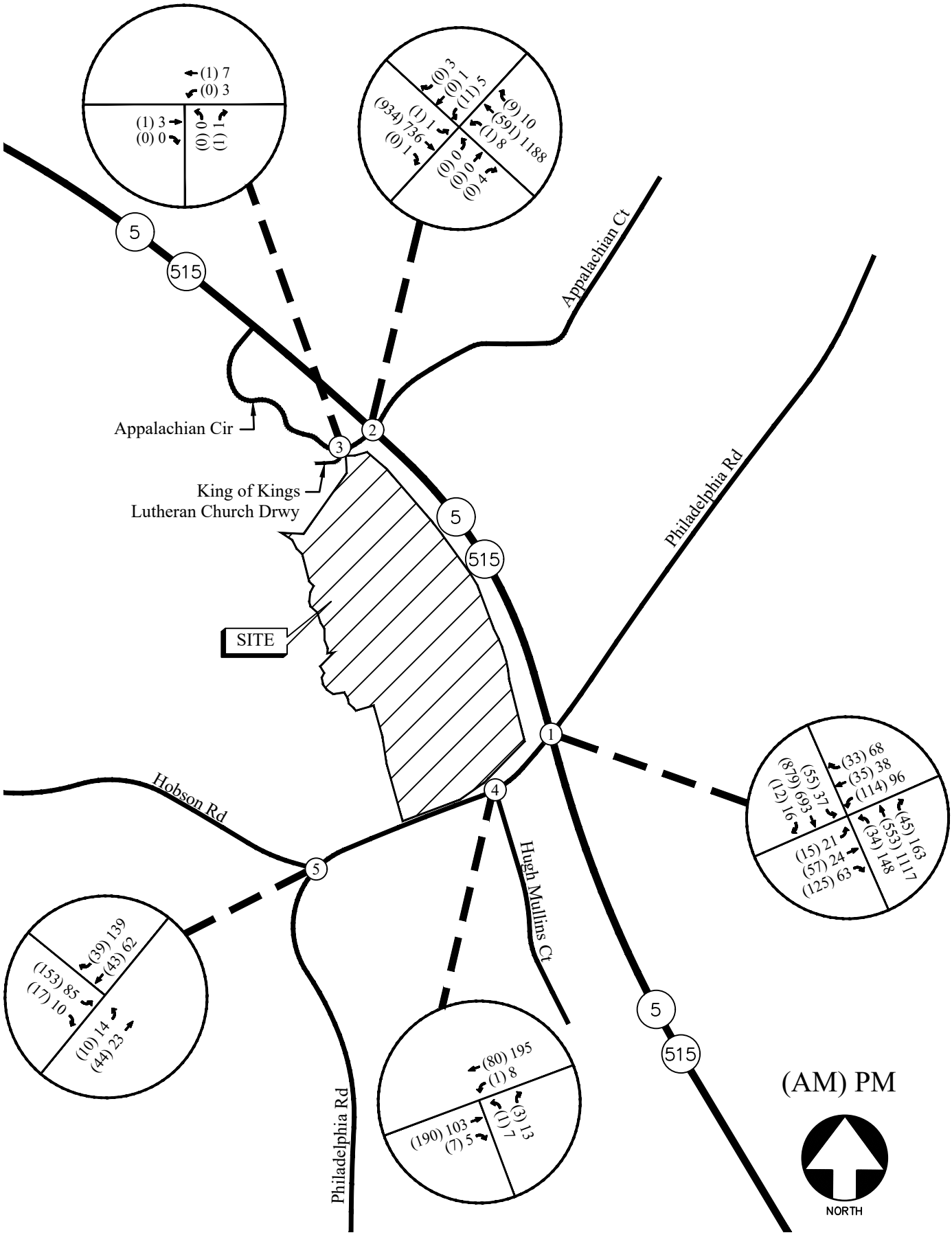
The "No-Build" (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future "No-Build" volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of through traffic.

6.1.1 Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three years revealed growth of approximately 3% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways in order to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting Future "No-Build" volumes on the roadway are shown in Figure 7.

6.2 Future "Build" Conditions

The "Build" or development conditions include the estimated background traffic from the "No-Build" conditions plus the added traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) and pass-by volumes (Figure 6) were added to base traffic volumes (Figure 7) to calculate the future traffic volumes after the construction of the development. These total future "Build" traffic volumes are shown in Figure 8.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 7

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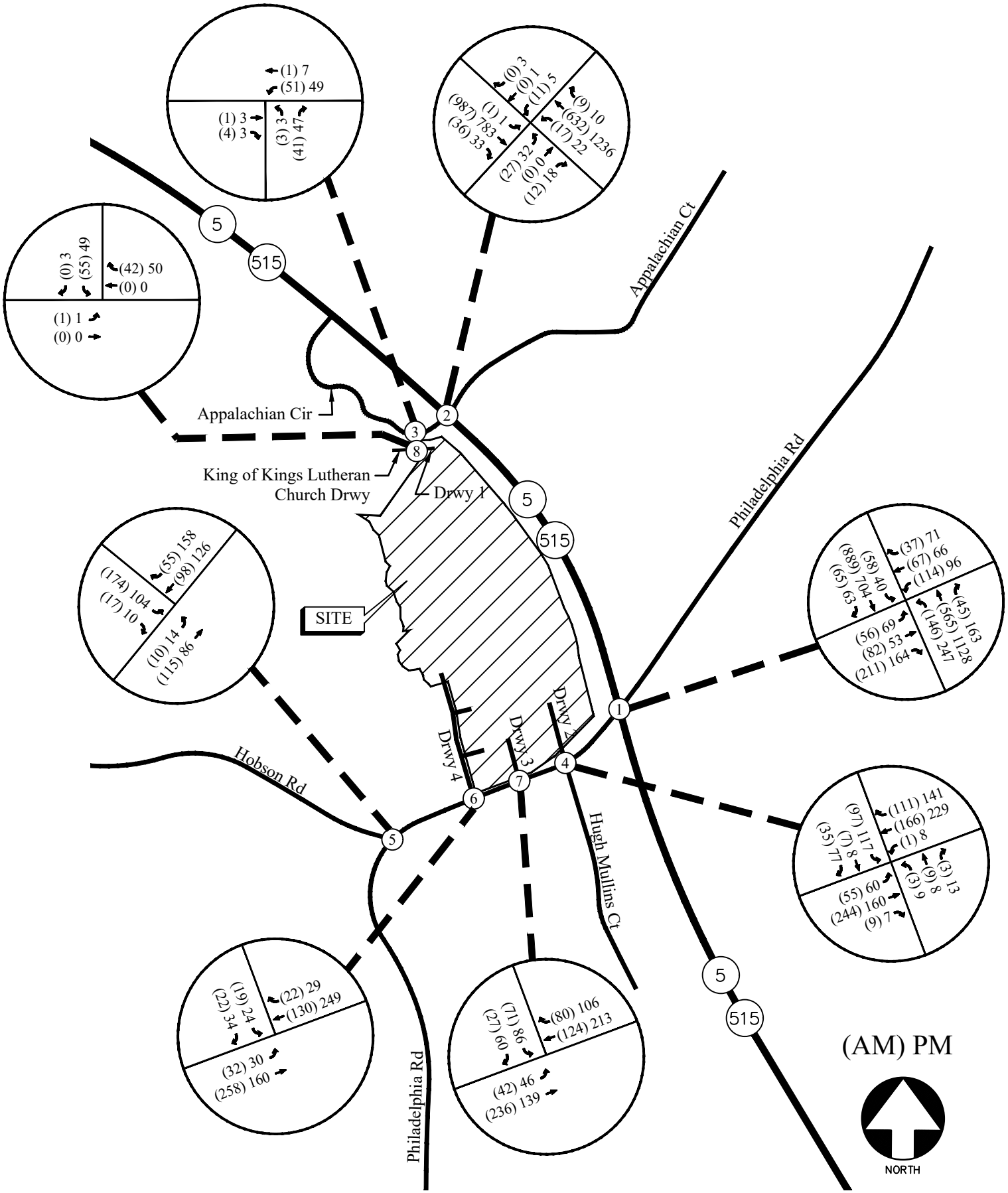

FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES FIGURE 8

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6.3 Future Traffic Operations

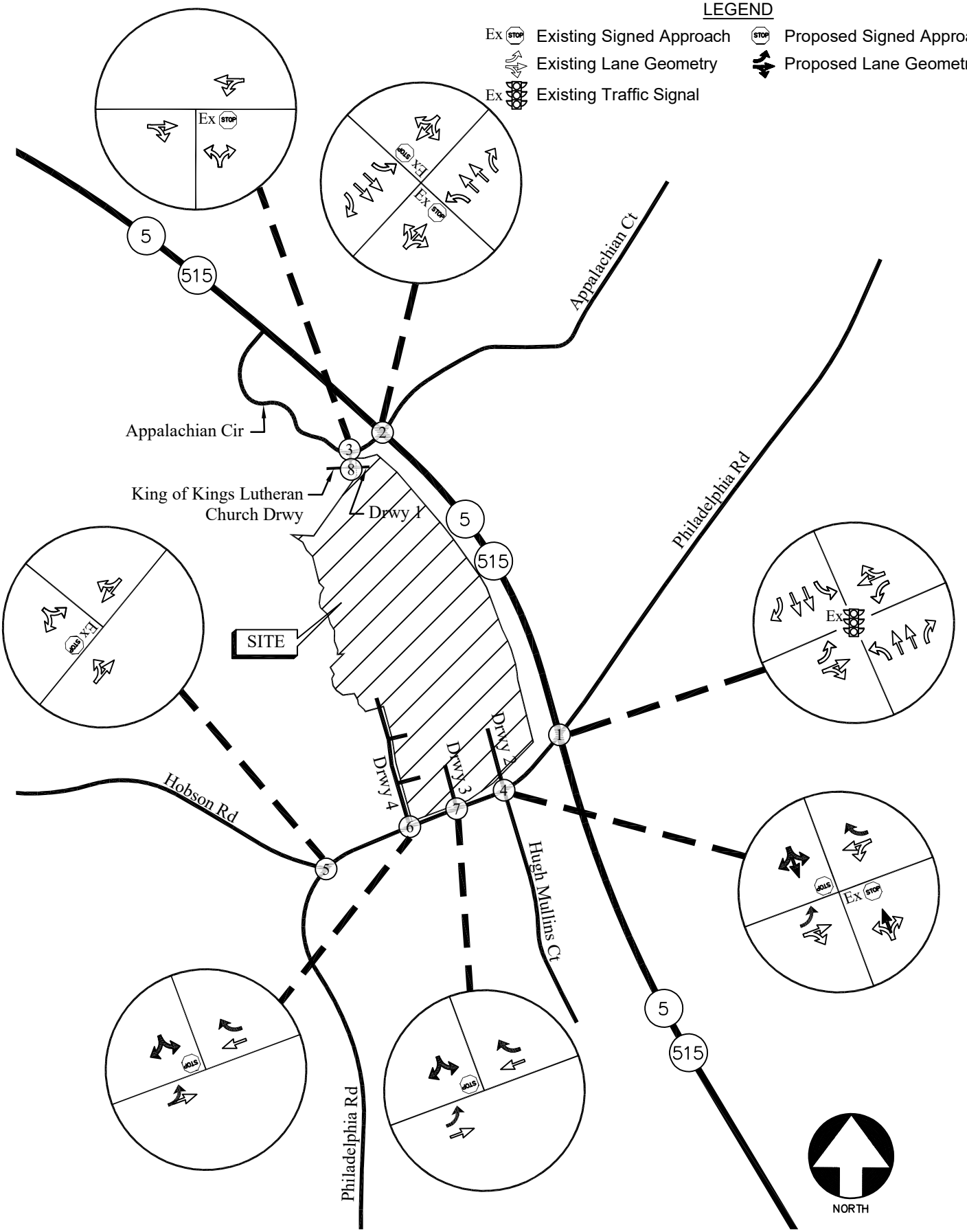
The future "No-Build" and "Build" traffic operations were analyzed using the volumes in Figure 7 and Figure 8, respectively. The results of the future traffic operations analysis are shown below in Table 5.

TABLE 5 – FUTURE INTERSECTION OPERATIONS

Intersection		Future Condition: LOS (Delay)			
		NO-BUILD		BUILD	
		AM Peak	PM Peak	AM Peak	PM Peak
1	**SR 5/SR 515 @ Philadelphia Road**	**B (12.8)**	**B (10.1)**	**B (14.9)**	**B (12.6)**
	-Eastbound Approach	D (46.6)	D (50.2)	D (47.1)	D (51.6)
	-Westbound Approach	D (52.8)	D (54.1)	D (51.1)	D (52.7)
	-Northbound Approach	A (7.0)	A (6.7)	A (7.8)	A (7.7)
	-Southbound Approach	A (7.8)	A (6.2)	A (9.4)	A (8.1)
2	**SR 5/SR 515 @ Appalachian Circle / Appalachian Court**				
	-Eastbound Approach	A (0.0)	B (10.9)	E (42.7)	F (54.2)
	-Westbound Approach	D (29.6)	E (47.0)	E (36.2)	F (58.9)
	-Northbound Left	B (10.2)	A (9.3)	B (10.6)	A (9.6)
	-Southbound Left	A (8.8)	B (11.5)	A (8.9)	B (11.8)
3	**Appalachian Circle @ King of Kings Lutheran Church Driveway**				
	-Westbound Left	A (0.0)	A (7.2)	A (7.4)	A (7.3)
	-Northbound Approach	A (8.3)	A (8.3)	A (9.0)	A (8.7)
4	**Philadelphia Road @ Hugh Mullins Court / Site Driveway 2 (Eastern)**				
	-Eastbound Left	-	-	A (8.1)	A (8.2)
	-Westbound Left	A (7.7)	A (7.5)	A (7.8)	A (7.6)
	-Northbound Approach	A (8.3)	A (7.5)	B (14.2)	B (11.6)
	-Southbound Approach	-	-	C (17.7)	C (17.2)
5	**Philadelphia Road @ Hobson Road**				
	-Eastbound Left	A (7.4)	A (7.7)	A (7.6)	A (7.9)
	-Southbound Approach	B (10.3)	B (10.2)	B (12.1)	B (11.7)
6	**Philadelphia Road @ Site Driveway 4 (Western)**	-	-		
	-Eastbound Left			A (7.6)	A (7.9)
	-Southbound Approach			B (10.7)	B (11.3)
7	**Philadelphia Road @ Site Driveway 3 (Middle)**	-	-		
	-Eastbound Left			A (7.8)	A (8.1)
	-Southbound Approach			B (12.4)	B (13.0)
8	**King of Kings Lutheran Church Driveway @ Site Driveway 1**	-	-		
	-Eastbound Left			A (7.3)	A (7.3)
	-Southbound Approach			A (8.9)	A (8.9)

The signalized intersection of SR 5/SR 515 and Philadelphia Road will continue to operate at a satisfactory level of service in the "No-Build" and "Build" scenarios. The side streets at the intersection of SR 5/SR 515 and Appalachian Circle/Appalachian Court will experience increased delay given the time

gap required for a vehicle to cross a busy, multilane highway. It is not unusual for stop-controlled site-streets along arterial roadways to have elevated delays during peak periods. Therefore, no improvements are identified at this intersection. Recommendations for future traffic control and lane geometry is shown in Figure 9.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 9

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7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the added traffic from the proposed Foothills mixed-use development at Jasper Village that will be located to the northwest of the intersection of SR 5/SR 515 at Philadelphia Road in Jasper, Georgia.

The development proposes one full-access driveway on King of Kings Lutheran Church Driveway on Appalachian Circle and three full-access driveways on Philadelphia Road to the west of SR 5/ SR 515. The eastern driveway (Driveway 2) on Philadelphia Road will align with Hugh Mullins Court.

The analysis included the evaluation of Future operations for "No-Build" and "Build" conditions, both of which account for increases in annual growth of through traffic. The signalized intersection of SR 5/SR 515 and Philadelphia Road is operating at and will continue to operate at a satisfactory level-of-service during the AM and PM peak hours in the existing, "No-Build" and "Build" scenarios. The stop-controlled side-streets (Appalachian Circle/Appalachian Court) to the intersection of SR 515 at Appalachian Circle/Appalachian Court will operate at level-of-service "E" or "F" in the future. It is not unusual for stop-controlled site-streets along arterial roadways to have elevated delays during peak periods. Therefore, no improvements are identified at this intersection.

7.1 Recommendation for Site Access Configuration

It is recommended that all site driveways consist of one entering lane and one existing lane and are to be stop-sign controlled on the driveway approach. Driveways 2, 3, and 4 are recommended to accommodate deceleration lanes. Driveways 2 and 3 are recommended to accommodate left turn lanes. Also, available sight distance should be verified per AASHTO standards during driveway design.

Appendix

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Appalachian Ct
7-9 am | 4-6 pm

File Name : 20210287
Site Code : 20210287
Start Date : 09-09-2021
Page No : 1

Groups Printed- Cars, Buses & Trucks

	SR 515 Northbound				SR 515 Southbound				Appalachian Cir Eastbound				Appalachian Ct Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	95	2	97	0	201	0	201	0	0	0	0	0	0	0	0	298
07:15 AM	0	136	1	137	0	237	0	237	0	0	0	0	1	0	0	1	375
07:30 AM	1	133	0	134	1	223	0	224	0	0	0	0	2	0	0	2	360
07:45 AM	0	146	4	150	0	208	0	208	0	0	0	0	1	0	0	1	359
Total	1	510	7	518	1	869	0	870	0	0	0	0	4	0	0	4	1392
08:00 AM	0	126	3	129	0	187	0	187	0	0	0	0	6	0	0	6	322
08:15 AM	0	132	3	135	0	194	0	194	0	0	0	0	4	0	0	4	333
08:30 AM	0	151	4	155	0	184	0	184	0	0	0	0	2	0	1	3	342
08:45 AM	1	142	5	148	1	192	0	193	0	0	1	1	6	0	0	6	348
Total	1	551	15	567	1	757	0	758	0	0	1	1	18	0	1	19	1345
*** BREAK ***																	
04:00 PM	0	287	6	293	1	166	0	167	0	0	0	0	7	0	2	9	469
04:15 PM	0	247	7	254	1	157	0	158	0	0	0	0	5	0	2	7	419
04:30 PM	0	257	5	262	1	134	0	135	0	0	0	0	7	0	1	8	405
04:45 PM	2	230	4	236	1	182	0	183	0	0	2	2	3	1	2	6	427
Total	2	1021	22	1045	4	639	0	643	0	0	2	2	22	1	7	30	1720
05:00 PM	1	301	1	303	0	156	1	157	0	0	1	1	1	0	1	2	463
05:15 PM	2	281	1	284	0	183	0	183	0	0	1	1	0	0	0	0	468
05:30 PM	2	275	3	280	0	153	0	153	0	0	0	0	1	0	0	1	434
05:45 PM	0	233	0	233	0	153	0	153	0	0	0	0	2	0	0	2	388
Total	5	1090	5	1100	0	645	1	646	0	0	2	2	4	0	1	5	1753
Grand Total	9	3172	49	3230	6	2910	1	2917	0	0	5	5	48	1	9	58	6210
Apprch %	0.3	98.2	1.5		0.2	99.8	0		0	0	100		82.8	1.7	15.5		
Total %	0.1	51.1	0.8	52	0.1	46.9	0	47	0	0	0.1	0.1	0.8	0	0.1	0.9	

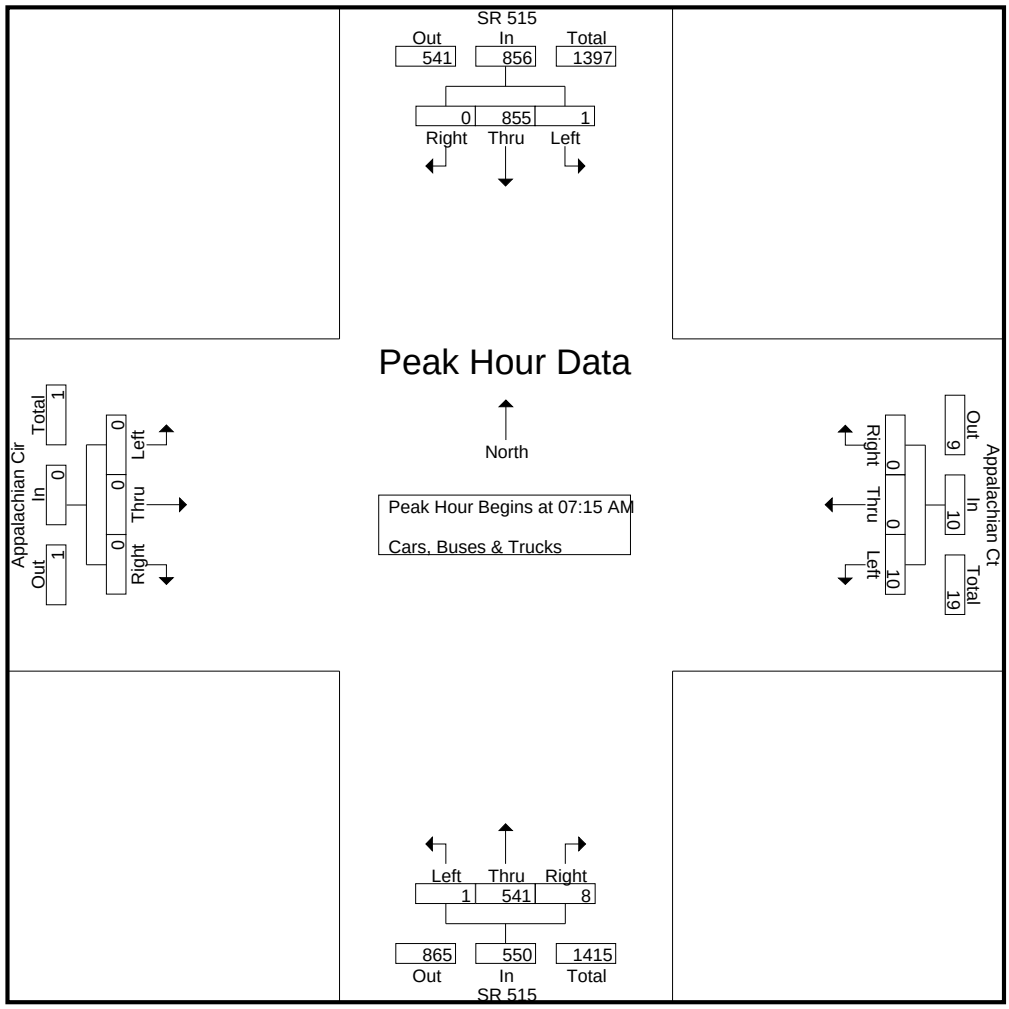
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Appalachian Ct
7-9 am | 4-6 pm

File Name : 20210287
Site Code : 20210287
Start Date : 09-09-2021
Page No : 2

	SR 515 Northbound				SR 515 Southbound				Appalachian Cir Eastbound				Appalachian Ct Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	136	1	137	0	**237**	0	**237**	0	0	0	0	1	0	0	1	**375**
07:30 AM	**1**	133	0	134	**1**	223	0	224	0	0	0	0	2	0	0	2	360
07:45 AM	0	**146**	**4**	**150**	0	208	0	208	0	0	0	0	1	0	0	1	359
08:00 AM	0	126	3	129	0	187	0	187	0	0	0	0	**6**	0	0	**6**	322
Total Volume	1	541	8	550	1	855	0	856	0	0	0	0	10	0	0	10	1416
% App. Total	0.2	98.4	1.5		0.1	99.9	0		0	0	0		100	0	0		
PHF	.250	.926	.500	.917	.250	.902	.000	.903	.000	.000	.000	.000	.417	.000	.000	.417	.944



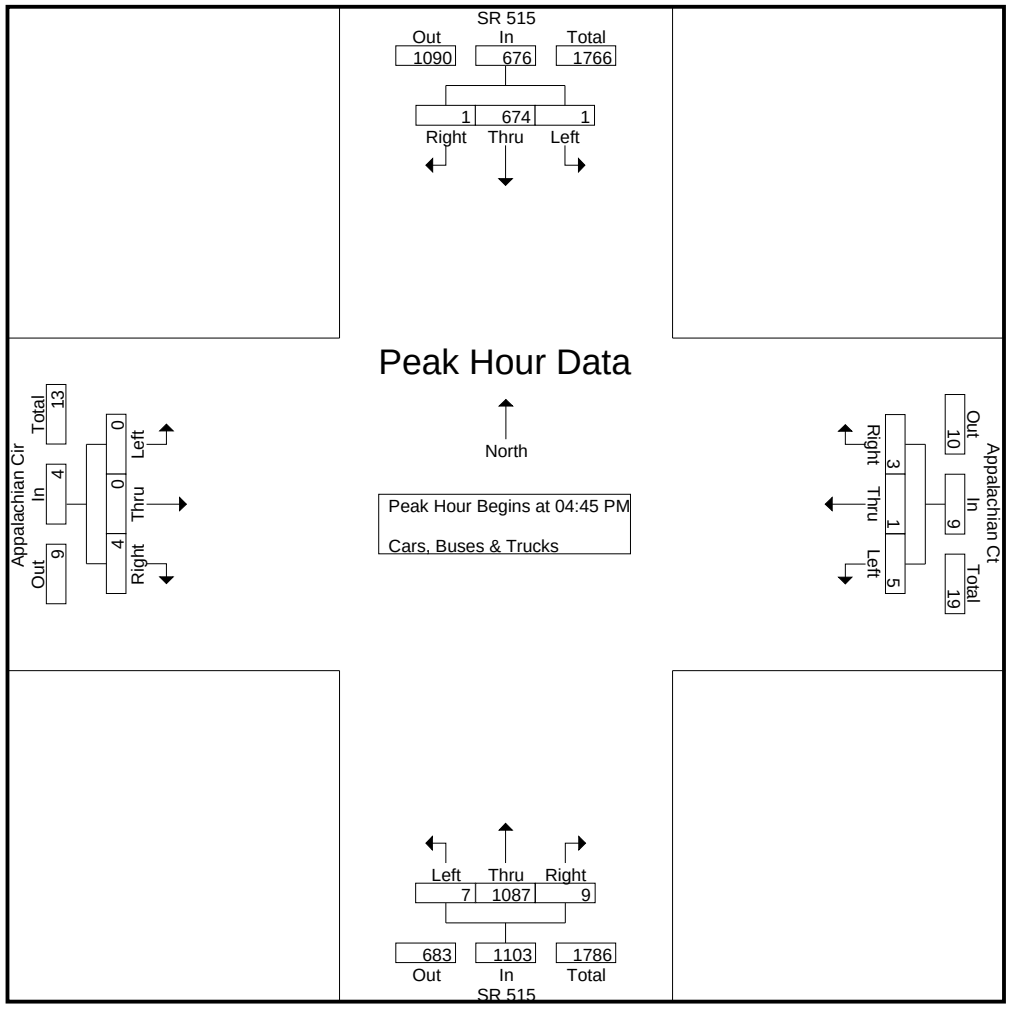
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Appalachian Ct
7-9 am | 4-6 pm

File Name : 20210287
Site Code : 20210287
Start Date : 09-09-2021
Page No : 3

	SR 515 Northbound				SR 515 Southbound				Appalachian Cir Eastbound				Appalachian Ct Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	230	**4**	236	**1**	182	0	**183**	0	0	**2**	**2**	**3**	**1**	**2**	**6**	427
05:00 PM	1	**301**	1	**303**	0	156	**1**	157	0	0	1	1	1	0	1	2	463
05:15 PM	2	281	1	284	0	**183**	0	183	0	0	1	1	0	0	0	0	**468**
05:30 PM	2	275	3	280	0	153	0	153	0	0	0	0	1	0	0	1	434
Total Volume	7	1087	9	1103	1	674	1	676	0	0	4	4	5	1	3	9	1792
% App. Total	0.6	98.5	0.8		0.1	99.7	0.1		0	0	100		55.6	11.1	33.3		
PHF	.875	.903	.563	.910	.250	.921	.250	.923	.000	.000	.500	.500	.417	.250	.375	.375	.957



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Philadelphia Rd
7-9 am | 4-6 pm

File Name : 20210288
Site Code : 20210288
Start Date : 09-09-2021
Page No : 1

Groups Printed- Cars, Buses & Trucks

	SR 515 Northbound				SR 515 Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	92	2	102	14	187	0	201	2	6	27	35	21	6	3	30	368
07:15 AM	9	122	6	137	16	219	3	238	6	9	31	46	35	9	9	53	474
07:30 AM	7	130	7	144	14	209	2	225	1	16	26	43	22	5	3	30	442
07:45 AM	6	135	12	153	13	192	4	209	7	10	33	50	23	12	8	43	455
Total	30	479	27	536	57	807	9	873	16	41	117	174	101	32	23	156	1739
08:00 AM	9	119	16	144	7	184	2	193	0	17	24	41	24	6	10	40	418
08:15 AM	8	118	13	139	12	185	1	198	6	6	13	25	19	8	11	38	400
08:30 AM	11	145	14	170	7	177	2	186	4	10	7	21	23	5	6	34	411
08:45 AM	10	133	20	163	11	185	3	199	5	2	15	22	18	2	10	30	414
Total	38	515	63	616	37	731	8	776	15	35	59	109	84	21	37	142	1643
*** BREAK ***																	
04:00 PM	22	269	38	329	6	165	2	173	7	1	18	26	26	9	17	52	580
04:15 PM	30	237	29	296	9	150	3	162	5	4	15	24	25	8	12	45	527
04:30 PM	24	244	23	291	7	134	0	141	3	7	14	24	32	9	15	56	512
04:45 PM	40	219	39	298	7	174	6	187	4	9	7	20	19	6	13	38	543
Total	116	969	129	1214	29	623	11	663	19	21	54	94	102	32	57	191	2162
05:00 PM	36	277	37	350	9	143	6	158	5	4	16	25	20	7	21	48	581
05:15 PM	32	267	35	334	10	173	1	184	4	5	17	26	26	13	13	52	596
05:30 PM	27	259	38	324	8	144	2	154	6	4	18	28	23	9	15	47	553
05:45 PM	23	221	29	273	7	146	2	155	4	4	20	28	16	7	8	31	487
Total	118	1024	139	1281	34	606	11	651	19	17	71	107	85	36	57	178	2217
Grand Total	302	2987	358	3647	157	2767	39	2963	69	114	301	484	372	121	174	667	7761
Apprch %	8.3	81.9	9.8		5.3	93.4	1.3		14.3	23.6	62.2		55.8	18.1	26.1		
Total %	3.9	38.5	4.6	47	2	35.7	0.5	38.2	0.9	1.5	3.9	6.2	4.8	1.6	2.2	8.6	

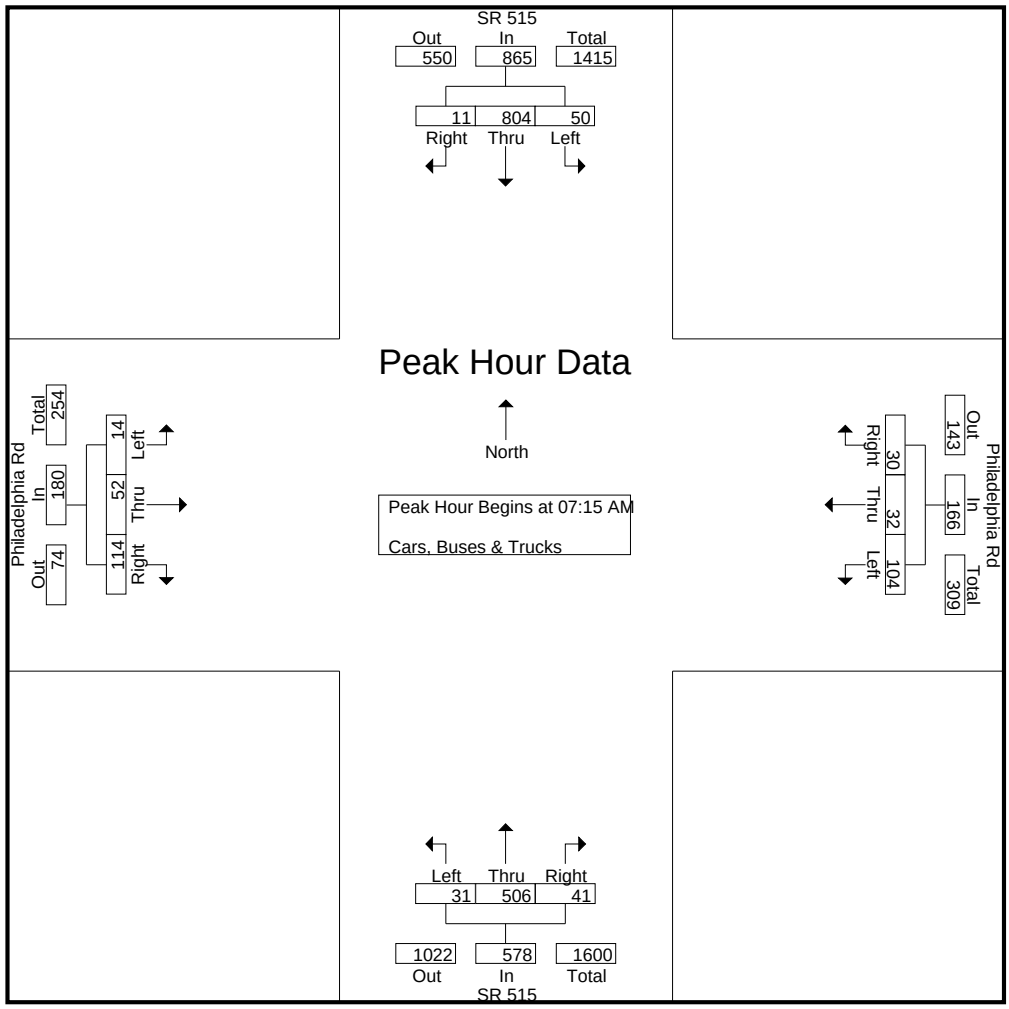
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Philadelphia Rd
7-9 am | 4-6 pm

File Name : 20210288
Site Code : 20210288
Start Date : 09-09-2021
Page No : 2

	SR 515 Northbound				SR 515 Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**9**	122	6	137	**16**	**219**	3	**238**	6	9	31	46	**35**	9	9	**53**	**474**
07:30 AM	7	130	7	144	14	209	2	225	1	16	26	43	22	5	3	30	442
07:45 AM	6	**135**	12	**153**	13	192	**4**	209	**7**	10	**33**	**50**	23	**12**	8	43	455
08:00 AM	9	119	**16**	144	7	184	2	193	0	**17**	24	41	24	6	**10**	40	418
Total Volume	31	506	41	578	50	804	11	865	14	52	114	180	104	32	30	166	1789
% App. Total	5.4	87.5	7.1		5.8	92.9	1.3		7.8	28.9	63.3		62.7	19.3	18.1		
PHF	.861	.937	.641	.944	.781	.918	.688	.909	.500	.765	.864	.900	.743	.667	.750	.783	.944



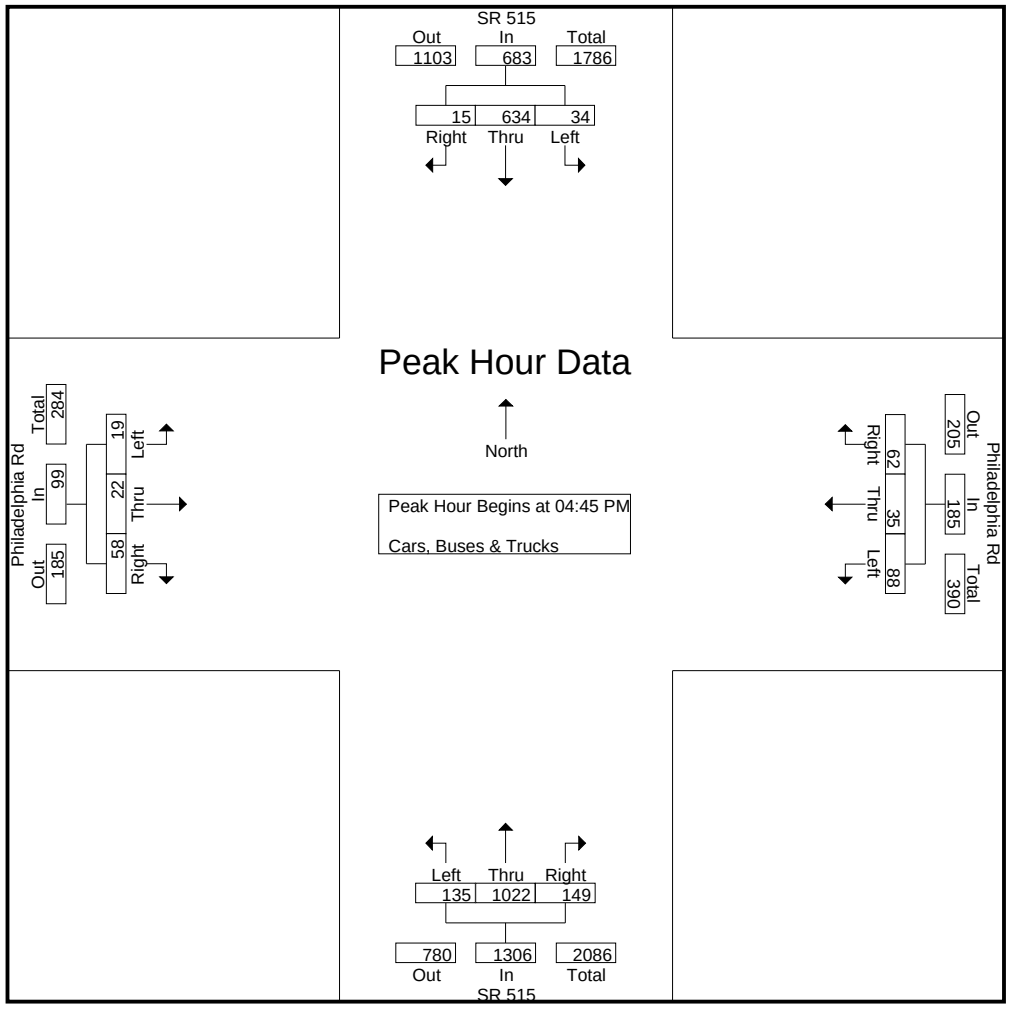
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
SR 515 @ Philadelphia Rd
7-9 am | 4-6 pm

File Name : 20210288
Site Code : 20210288
Start Date : 09-09-2021
Page No : 3

	SR 515 Northbound				SR 515 Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**40**	219	**39**	298	7	**174**	**6**	**187**	4	**9**	7	20	19	6	13	38	543
05:00 PM	36	**277**	37	**350**	9	143	6	158	5	4	16	25	20	7	**21**	48	581
05:15 PM	32	267	35	334	**10**	173	1	184	4	5	17	26	**26**	**13**	13	**52**	**596**
05:30 PM	27	259	38	324	8	144	2	154	**6**	4	**18**	**28**	23	9	15	47	553
Total Volume	135	1022	149	1306	34	634	15	683	19	22	58	99	88	35	62	185	2273
% App. Total	10.3	78.3	11.4		5	92.8	2.2		19.2	22.2	58.6		47.6	18.9	33.5		
PHF	.844	.922	.955	.933	.850	.911	.625	.913	.792	.611	.806	.884	.846	.673	.738	.889	.953



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hugh Mullins Ct
7-9 am | 4-6 pm

File Name : 20210289
Site Code : 20210289
Start Date : 09-09-2021
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Hugh Mullins Ct Northbound				Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	0	0	0	0	0	34	1	35	0	14	0	14	51
07:15 AM	1	0	1	2	0	0	0	0	0	46	0	46	0	21	0	21	69
07:30 AM	0	0	0	0	0	0	0	0	0	42	1	43	0	14	0	14	57
07:45 AM	0	0	2	2	0	0	0	0	0	45	5	50	1	21	0	22	74
Total	2	0	4	6	0	0	0	0	0	167	7	174	1	70	0	71	251
08:00 AM	0	0	0	0	0	0	0	0	0	41	0	41	0	17	0	17	58
08:15 AM	0	0	1	1	0	0	0	0	0	24	1	25	2	15	0	17	43
08:30 AM	0	0	1	1	0	0	0	0	0	21	0	21	0	18	0	18	40
08:45 AM	1	0	3	4	0	0	0	0	0	22	0	22	4	11	0	15	41
Total	1	0	5	6	0	0	0	0	0	108	1	109	6	61	0	67	182
*** BREAK ***																	
04:00 PM	1	0	3	4	0	0	0	0	0	24	2	26	3	30	0	33	63
04:15 PM	4	0	3	7	0	0	0	0	0	23	1	24	1	40	0	41	72
04:30 PM	3	0	2	5	0	0	0	0	0	24	0	24	1	32	0	33	62
04:45 PM	3	0	4	7	0	0	0	0	0	19	1	20	2	50	0	52	79
Total	11	0	12	23	0	0	0	0	0	90	4	94	7	152	0	159	276
05:00 PM	0	0	4	4	0	0	0	0	0	23	2	25	2	47	0	49	78
05:15 PM	2	0	1	3	0	0	0	0	0	25	1	26	1	45	0	46	75
05:30 PM	1	0	3	4	0	0	0	0	0	27	1	28	2	36	0	38	70
05:45 PM	1	0	1	2	0	0	0	0	0	27	1	28	1	31	0	32	62
Total	4	0	9	13	0	0	0	0	0	102	5	107	6	159	0	165	285
Grand Total	18	0	30	48	0	0	0	0	0	467	17	484	20	442	0	462	994
Apprch %	37.5	0	62.5		0	0	0		0	96.5	3.5		4.3	95.7	0		
Total %	1.8	0	3	4.8	0	0	0	0	0	47	1.7	48.7	2	44.5	0	46.5	

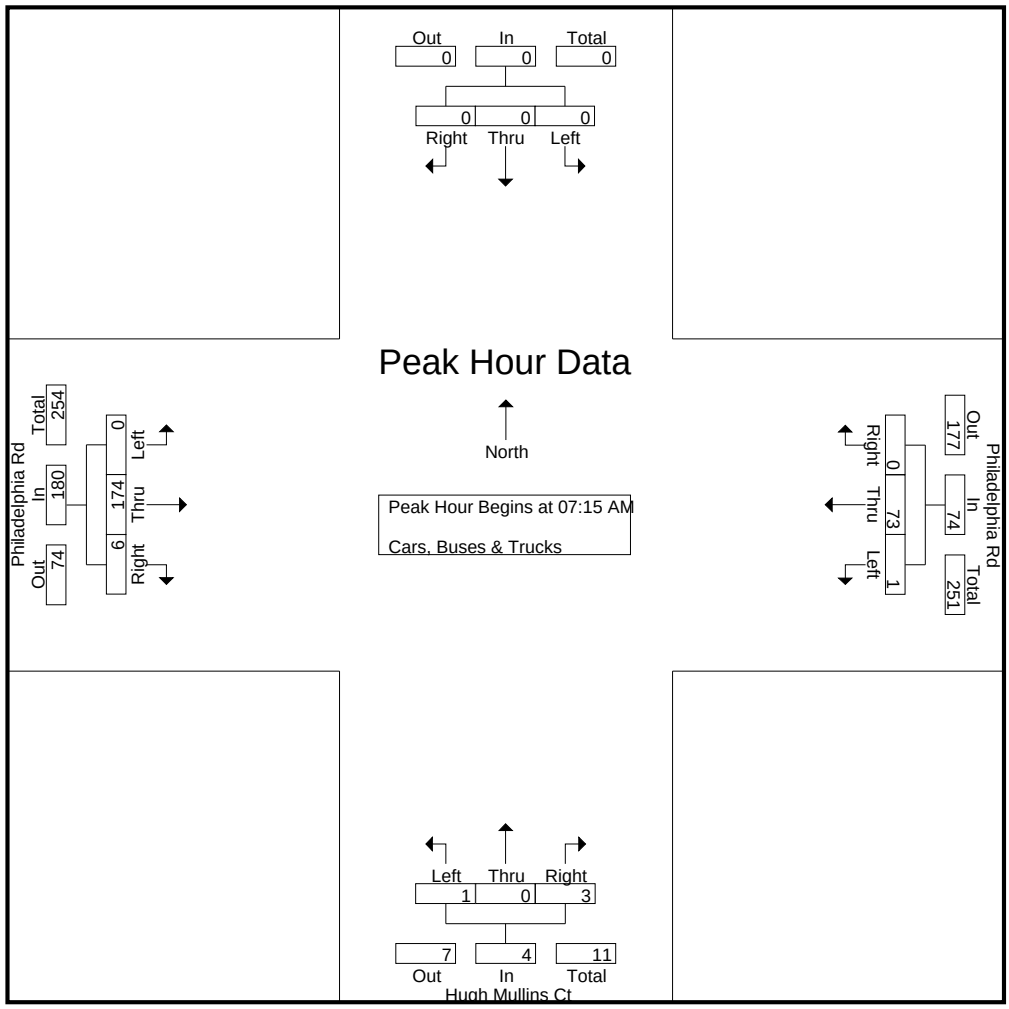
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hugh Mullins Ct
7-9 am | 4-6 pm

File Name : 20210289
Site Code : 20210289
Start Date : 09-09-2021
Page No : 2

	Hugh Mullins Ct Northbound				Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	0	1	**2**	0	0	0	0	0	**46**	0	46	0	**21**	0	21	69
07:30 AM	0	0	0	0	0	0	0	0	0	42	1	43	0	14	0	14	57
07:45 AM	0	0	**2**	2	0	0	0	0	0	45	**5**	**50**	**1**	21	0	**22**	**74**
08:00 AM	0	0	0	0	0	0	0	0	0	41	0	41	0	17	0	17	58
Total Volume	1	0	3	4	0	0	0	0	0	174	6	180	1	73	0	74	258
% App. Total	25	0	75		0	0	0		0	96.7	3.3		1.4	98.6	0		
PHF	.250	.000	.375	.500	.000	.000	.000	.000	.000	.946	.300	.900	.250	.869	.000	.841	.872



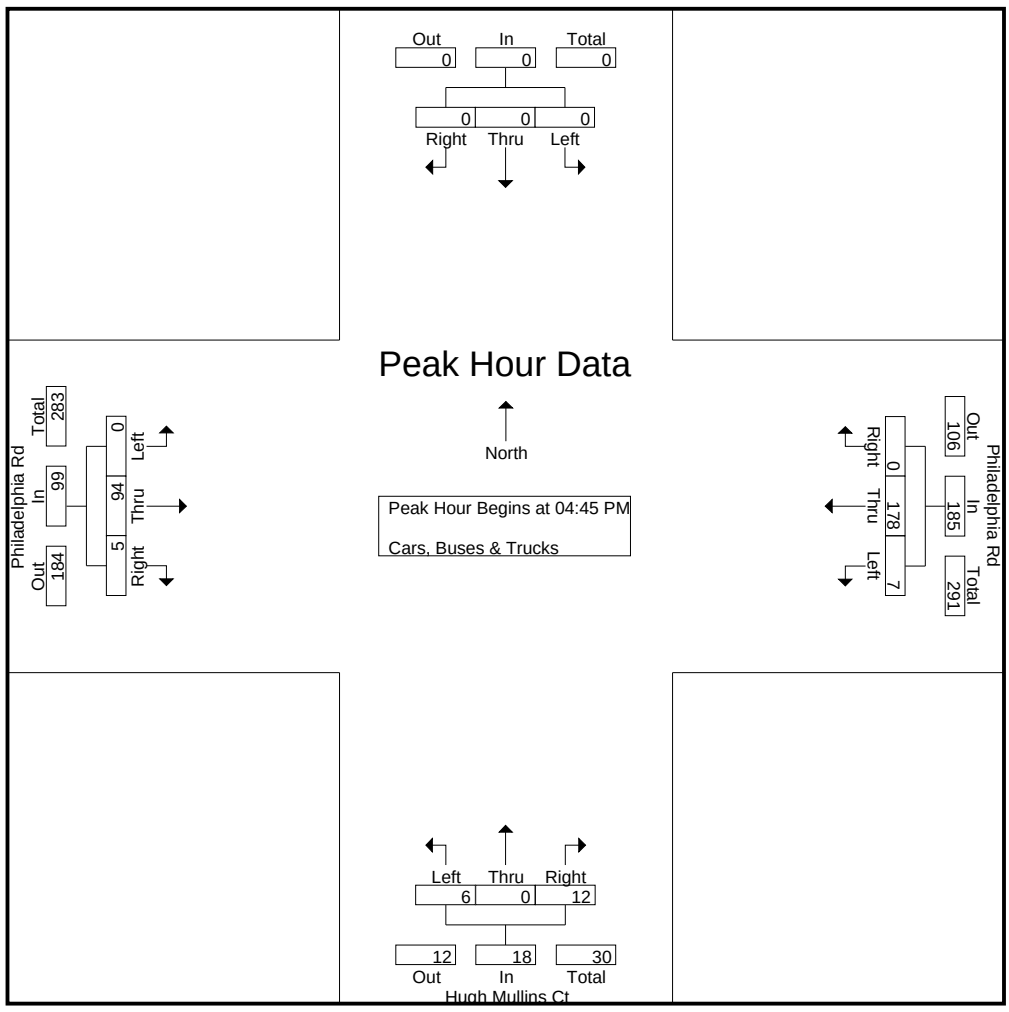
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hugh Mullins Ct
7-9 am | 4-6 pm

File Name : 20210289
Site Code : 20210289
Start Date : 09-09-2021
Page No : 3

	Hugh Mullins Ct Northbound				Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	0	**4**	**7**	0	0	0	0	0	19	1	20	**2**	**50**	0	**52**	**79**
05:00 PM	0	0	4	4	0	0	0	0	0	23	**2**	25	2	47	0	49	78
05:15 PM	2	0	1	3	0	0	0	0	0	25	1	26	1	45	0	46	75
05:30 PM	1	0	3	4	0	0	0	0	0	**27**	1	**28**	2	36	0	38	70
Total Volume	6	0	12	18	0	0	0	0	0	94	5	99	7	178	0	185	302
% App. Total	33.3	0	66.7		0	0	0		0	94.9	5.1		3.8	96.2	0		
PHF	.500	.000	.750	.643	.000	.000	.000	.000	.000	.870	.625	.884	.875	.890	.000	.889	.956



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Appalachian Cir @ King of
Kings Church Drwy
7-9 am | 4-6 pm

File Name : 20210290
Site Code : 20210290
Start Date : 09-09-2021
Page No : 1

Groups Printed- Cars, Buses & Trucks

	King of Kings Church Drwy Northbound				Southbound				Appalachian Cir Eastbound				Appalachian Cir Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
*** BREAK ***																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
*** BREAK ***																	
08:30 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Total	0	0	1	1	0	0	0	0	0	1	0	1	0	1	0	1	3
*** BREAK ***																	
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
*** BREAK ***																	
04:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	1	2	0	3	5
Total	0	0	1	1	0	0	0	0	0	1	0	1	1	2	0	3	5
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
*** BREAK ***																	
Total	0	0	0	0	0	0	0	0	0	2	0	2	2	4	0	6	8
Grand Total	0	0	3	3	0	0	0	0	0	4	0	4	4	8	0	12	19
Apprch %	0	0	100		0	0	0		0	100	0		33.3	66.7	0		
Total %	0	0	15.8	15.8	0	0	0	0	0	21.1	0	21.1	21.1	42.1	0	63.2	

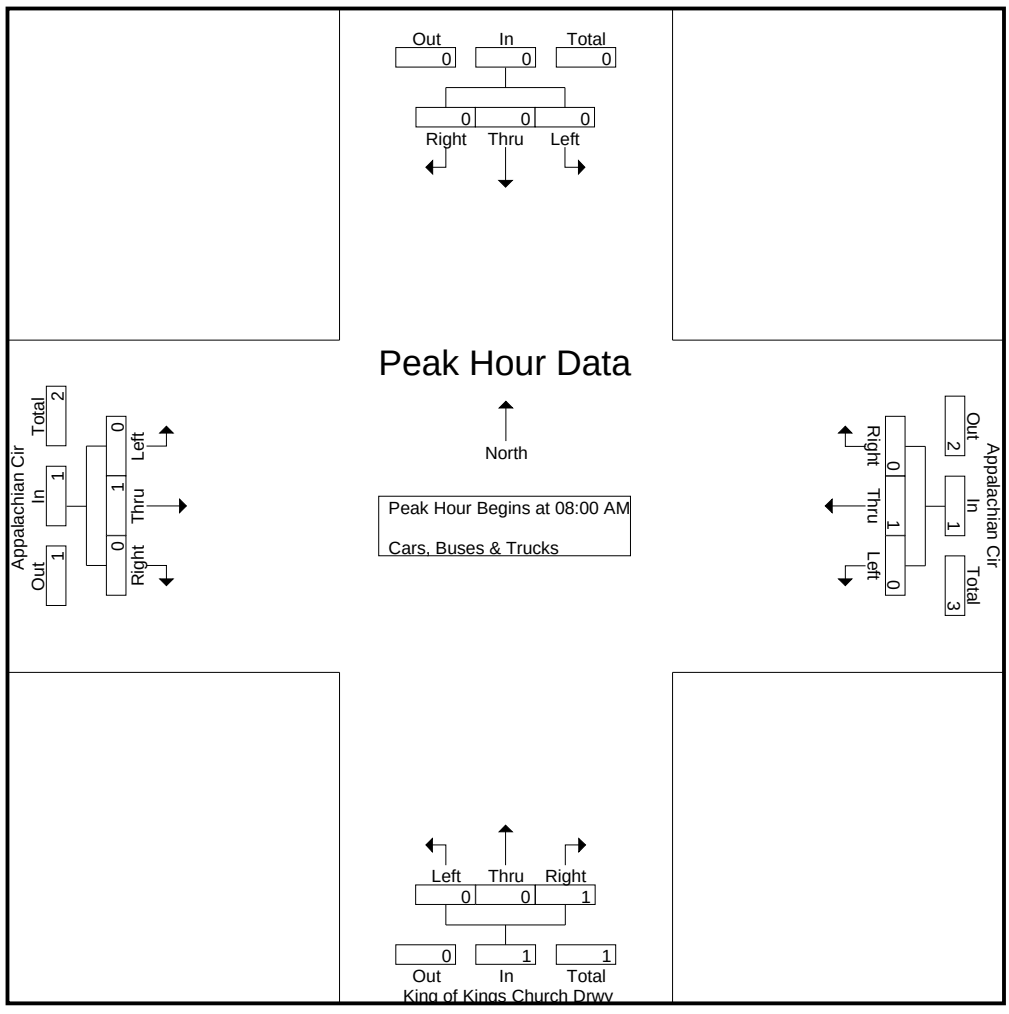
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Appalachian Cir @ King of
Kings Church Drwy
7-9 am | 4-6 pm

File Name : 20210290
Site Code : 20210290
Start Date : 09-09-2021
Page No : 2

	King of Kings Church Drwy Northbound				Southbound				Appalachian Cir Eastbound				Appalachian Cir Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	**1**	0	**1**	**2**
Total Volume	0	0	1	1	0	0	0	0	0	1	0	1	0	1	0	1	3
% App. Total	0	0	100		0	0	0		0	100	0		0	100	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.000	.250	.375



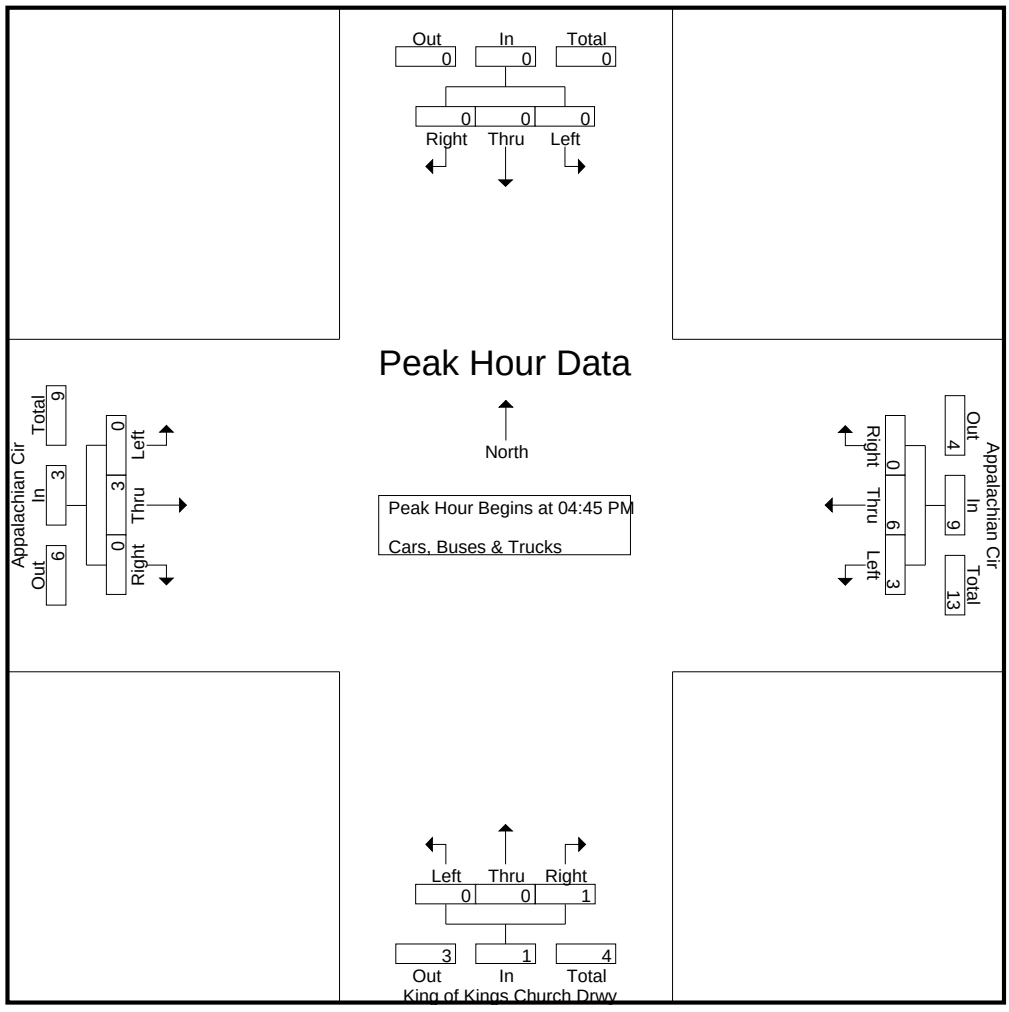
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Appalachian Cir @ King of
Kings Church Drwy
7-9 am | 4-6 pm

File Name : 20210290
Site Code : 20210290
Start Date : 09-09-2021
Page No : 3

	King of Kings Church Drwy Northbound				Southbound				Appalachian Cir Eastbound				Appalachian Cir Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	**1**	**1**	0	0	0	0	0	**1**	0	**1**	**1**	**2**	0	**3**	**5**
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
Total Volume	0	0	1	1	0	0	0	0	0	3	0	3	3	6	0	9	13
% App. Total	0	0	100		0	0	0		0	100	0		33.3	66.7	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.750	.000	.750	.750	.750	.000	.750	.650



A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hobson Rd
7-9 am | 4-6 pm

File Name : 20210291
Site Code : 20210291
Start Date : 09-09-2021
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Northbound				Hobson Rd Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	26	0	2	28	2	9	0	11	0	6	9	15	54
07:15 AM	0	0	0	0	41	0	4	45	0	5	0	5	0	11	11	22	72
07:30 AM	0	0	0	0	32	0	4	36	4	11	0	15	0	8	7	15	66
07:45 AM	0	0	0	0	40	0	5	45	1	10	0	11	0	14	7	21	77
Total	0	0	0	0	139	0	15	154	7	35	0	42	0	39	34	73	269
08:00 AM	0	0	0	0	27	0	3	30	4	14	0	18	0	6	11	17	65
08:15 AM	0	0	0	0	16	0	1	17	1	9	0	10	0	7	8	15	42
08:30 AM	0	0	0	0	15	0	2	17	5	6	0	11	0	5	13	18	46
08:45 AM	0	0	0	0	18	0	3	21	4	4	0	8	0	4	9	13	42
Total	0	0	0	0	76	0	9	85	14	33	0	47	0	22	41	63	195
*** BREAK ***																	
04:00 PM	0	0	0	0	18	0	2	20	10	8	0	18	0	10	18	28	66
04:15 PM	0	0	0	0	15	0	0	15	6	9	0	15	0	10	34	44	74
04:30 PM	0	0	0	0	14	0	1	15	2	10	0	12	0	9	26	35	62
04:45 PM	0	0	0	0	15	0	2	17	1	5	0	6	0	19	35	54	77
Total	0	0	0	0	62	0	5	67	19	32	0	51	0	48	113	161	279
05:00 PM	0	0	0	0	24	0	2	26	2	1	0	3	0	12	35	47	76
05:15 PM	0	0	0	0	17	0	2	19	7	9	0	16	0	14	33	47	82
05:30 PM	0	0	0	0	22	0	3	25	3	6	0	9	0	12	24	36	70
05:45 PM	0	0	0	0	23	0	3	26	3	5	0	8	0	10	22	32	66
Total	0	0	0	0	86	0	10	96	15	21	0	36	0	48	114	162	294
Grand Total	0	0	0	0	363	0	39	402	55	121	0	176	0	157	302	459	1037
Apprch %	0	0	0		90.3	0	9.7		31.2	68.8	0		0	34.2	65.8		
Total %	0	0	0	0	35	0	3.8	38.8	5.3	11.7	0	17	0	15.1	29.1	44.3	

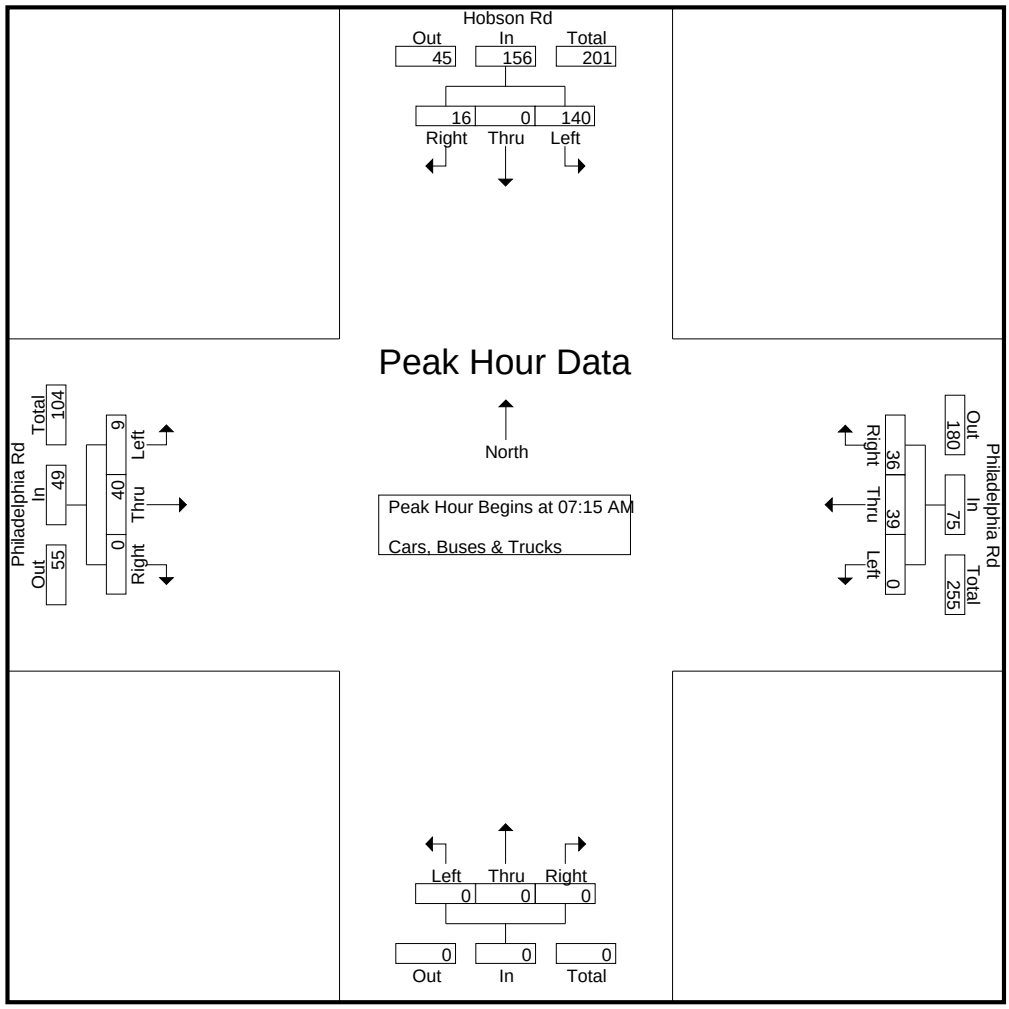
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hobson Rd
7-9 am | 4-6 pm

File Name : 20210291
Site Code : 20210291
Start Date : 09-09-2021

	Northbound				Hobson Rd Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	**41**	0	4	**45**	0	5	0	5	0	11	**11**	**22**	72
07:30 AM	0	0	0	0	32	0	4	36	**4**	11	0	15	0	8	7	15	66
07:45 AM	0	0	0	0	40	0	**5**	45	1	10	0	11	0	**14**	7	21	**77**
08:00 AM	0	0	0	0	27	0	3	30	4	**14**	0	**18**	0	6	11	17	65
Total Volume	0	0	0	0	140	0	16	156	9	40	0	49	0	39	36	75	280
% App. Total	0	0	0		89.7	0	10.3		18.4	81.6	0		0	52	48		
PHF	.000	.000	.000	.000	.854	.000	.800	.867	.563	.714	.000	.681	.000	.696	.818	.852	.909



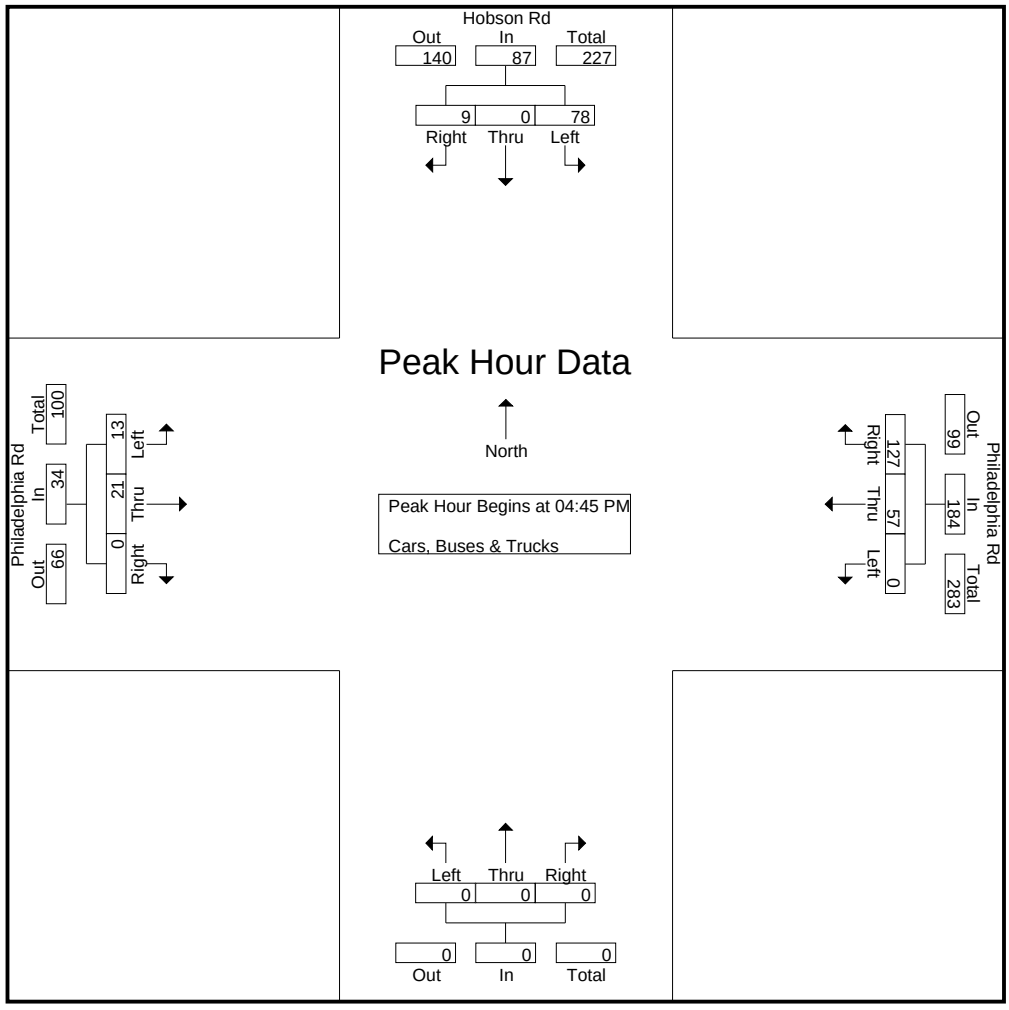
A & R Engineering, Inc.

2160 Kingston Court, Suite 'O',
Marietta, GA 30067

TMC DATA
Philadelphia Rd @ Hobson Rd
7-9 am | 4-6 pm

File Name : 20210291
Site Code : 20210291
Start Date : 09-09-2021
Page No : 3

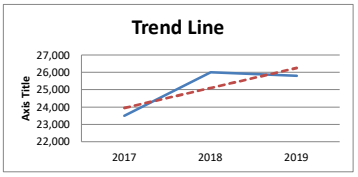
	Northbound				Hobson Rd Southbound				Philadelphia Rd Eastbound				Philadelphia Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	15	0	2	17	1	5	0	6	0	**19**	**35**	**54**	77
05:00 PM	0	0	0	0	**24**	0	2	**26**	2	1	0	3	0	12	35	47	76
05:15 PM	0	0	0	0	17	0	2	19	**7**	**9**	0	**16**	0	14	33	47	**82**
05:30 PM	0	0	0	0	22	0	**3**	25	3	6	0	9	0	12	24	36	70
Total Volume	0	0	0	0	78	0	9	87	13	21	0	34	0	57	127	184	305
% App. Total	0	0	0		89.7	0	10.3		38.2	61.8	0		0	31	69		
PHF	.000	.000	.000	.000	.813	.000	.750	.837	.464	.583	.000	.531	.000	.750	.907	.852	.930



LINEAR REGRESSION OF DAILY TRAFFIC

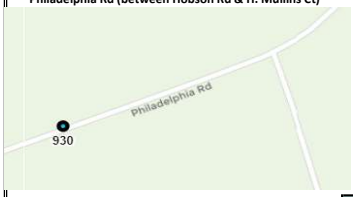
Location	Growth Rate	R Squared	Station ID	Route	2017	2018	2019
SR 5/SR 515 (between Old Phila	4.7%	0.69	227-0241	00051500	23,500	26,000	25,800
Philadelphia Rd (between Hobs	2.0%	1.00	227-0192	00030000	970	990	1,010
Hobson Rd (Northwest of Philac	1.8%	0.98	227-8005	00012900	2,210	2,240	2,290
SR 5/SR 515 (Southeast of Antic	7.2%	0.84	227-0243	00051500	17,000	17,300	19,500
W. Church St (West of Bryant St	-6.2%	0.79	227-0136	000053BU	15,200	13,500	13,400
Weighted Average	**2.6%**	0.98	Sum of Count Stations =		58,880	60,030	62,000

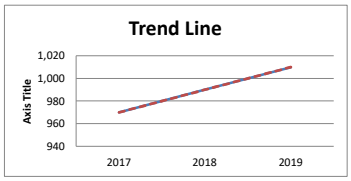
Location	Traffic Counter	RCLINK	2017	2018	2019
SR 5/SR 515 (between Old Philadelphia Rd & Melissa Pkwy)	227-0241	00051500	23,500	26,000	25,800



Growth Rate	4.7%	Intercept	-2,295,600	Slope	1,150.00
Trend Line			23,950	25,100	26,250

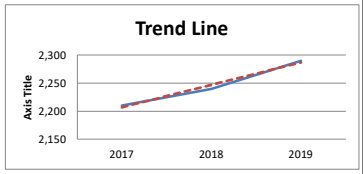
Location	Traffic Counter	RCLINK	2017	2018	2019
Philadelphia Rd (between Hobson Rd & H. Mullins Ct)	227-0192	00030000	970	990	1,010





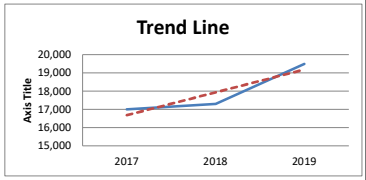
Growth Rate	2.0%	Intercept	-39,370	Slope	20.00
Trend Line			970	990	1,010

Location	Traffic Counter	RCLINK	2017	2018	2019
Hobson Rd (Northwest of Philadelphia Rd)	227-8005	00012900	2,210	2,240	2,290



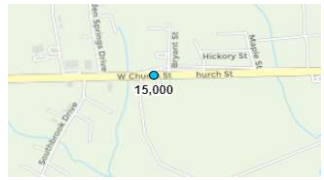
Growth Rate	1.8%	Intercept	-78,473	Slope	40.00
Trend Line			2,207	2,247	2,287

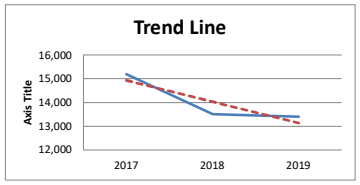
Location	Traffic Counter	RCLINK	2017	2018	2019
SR 5/SR 515 (Southeast of Antioch Church Rd)	227-0243	00051500	17,000	17,300	19,500



Growth Rate	7.2%	Intercept	-2,504,567	Slope	1,250.00
Trend Line			16,683	17,933	19,183

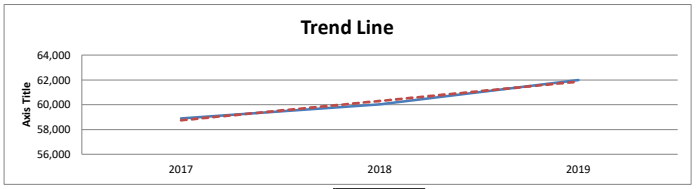
Location	Traffic Counter	RCLINK	2017	2018	2019
W. Church St (West of Bryant St)	227-0136	000053BU	15,200	13,500	13,400





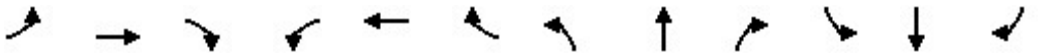
Growth Rate	-6.2%	Intercept	1,830,233	Slope	-900.00
Trend Line			14,933	14,033	13,133

Weighted Average	2017	2018	2019
Sum of Count Stations	58,880	60,030	62,000



Growth Rate	2.6%	Intercept	-3,087,777	Slope	1,560.00
Trend Line			58,743	60,303	61,863

EXISTING INTERSECTION ANALYSIS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	52	114	104	32	30	31	506	41	50	804	11
Future Volume (veh/h)	14	52	114	104	32	30	31	506	41	50	804	11
Initial Q (Qb), 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	15	55	0	111	34	0	33	538	44	53	855	12
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	238		196	238		502	2489	1110	660	2513	1121
Arrive On Green	0.13	0.13	0.00	0.13	0.13	0.00	0.03	0.70	0.70	0.03	0.71	0.71
Sat Flow, veh/h	1375	1870	0	1349	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	15	55	0	111	34	0	33	538	44	53	855	12
Grp Sat Flow(s),veh/h/ln	1375	1870	0	1349	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.2	3.2	0.0	9.7	1.9	0.0	0.6	6.4	1.0	1.0	11.1	0.3
Cycle Q Clear(g_c), s	3.1	3.2	0.0	12.8	1.9	0.0	0.6	6.4	1.0	1.0	11.1	0.3
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	238		196	238		502	2489	1110	660	2513	1121
V/C Ratio(X)	0.07	0.23		0.57	0.14		0.07	0.22	0.04	0.08	0.34	0.01
Avail Cap(c_a), veh/h	616	787		592	787		593	2489	1110	740	2513	1121
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(I)	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	47.9	47.1	0.0	52.8	46.5	0.0	5.0	6.3	5.5	4.5	6.8	5.2
Incr Delay (d2), s/veh	0.1	0.5	0.0	2.5	0.3	0.0	0.1	0.2	0.1	0.1	0.4	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	0.4	1.5	0.0	3.3	0.9	0.0	0.2	2.0	0.3	0.3	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	47.6	0.0	55.4	46.8	0.0	5.0	6.5	5.6	4.6	7.1	5.2
LnGrp LOS	D	D		E	D		A	A	A	A	A	A
Approach Vol, veh/h		70	A		145	A		615			920	
Approach Delay, s/veh		47.7			53.4			6.4			7.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	89.6		20.8	8.8	90.4		20.8				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	4.5	43.5		50.5	9.5	43.5		50.5				
Max Q Clear Time (g_c+I1), s	3.0	8.4		5.2	2.6	13.1		14.8				
Green Ext Time (p_c), s	0.0	7.1		0.3	0.0	11.2		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	10	0	0	1	541	8	1	855	0
Future Vol, veh/h	0	0	0	10	0	0	1	541	8	1	855	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	11	0	0	1	576	9	1	910	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1202	1490	455	1035	1490	288	910	0	0	576	0	0
Stage 1	912	912	-	578	578	-	-	-	-	-	-	-
Stage 2	290	578	-	457	912	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	140	123	552	186	123	709	744	-	-	993	-	-
Stage 1	295	351	-	468	499	-	-	-	-	-	-	-
Stage 2	694	499	-	553	351	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	123	552	186	123	709	744	-	-	993	-	-
Mov Cap-2 Maneuver	140	123	-	186	123	-	-	-	-	-	-	-
Stage 1	295	351	-	468	499	-	-	-	-	-	-	-
Stage 2	693	499	-	552	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	25.5	0	0
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	744	-	-	-	186	993	-	-
HCM Lane V/C Ratio	0.001	-	-	-	0.057	0.001	-	-
HCM Control Delay (s)	9.8	-	-	0	25.5	8.6	-	-
HCM Lane LOS	A	-	-	A	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	1	0	1
Future Vol, veh/h	1	0	0	1	0	1
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	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	3	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	3	0	6	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1619	-	1015	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1020	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	1015	1081
Mov Cap-2 Maneuver	-	-	-	-	1015	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1020	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1081	-	-	1619	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8.3	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	174	6	1	73	1	3
Future Vol, veh/h	174	6	1	73	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	7	1	84	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	207	0	290	204
Stage 1	-	-	-	-	204	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1364	-	701	837
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1364	-	700	837
Mov Cap-2 Maneuver	-	-	-	-	700	-
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	936	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1116	-	-	1364	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s)	8.2	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	40	39	36	140	16
Future Vol, veh/h	9	40	39	36	140	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	44	43	40	154	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	-	0	127	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	64	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1514	-	-	-	868	1002
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1514	-	-	-	862	1002
Mov Cap-2 Maneuver	-	-	-	-	862	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	959	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1514	-	-	-	875
HCM Lane V/C Ratio	0.007	-	-	-	0.196
HCM Control Delay (s)	7.4	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	4	5	1	3	7	1087	9	1	674	1
Future Vol, veh/h	0	0	4	5	1	3	7	1087	9	1	674	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	5	1	3	7	1132	9	1	702	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1285	1850	351	1499	1850	566	702	0	0	1132	0	0
Stage 1	704	704	-	1146	1146	-	-	-	-	-	-	-
Stage 2	581	1146	-	353	704	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	122	74	645	84	74	467	891	-	-	613	-	-
Stage 1	394	438	-	212	272	-	-	-	-	-	-	-
Stage 2	467	272	-	637	438	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	119	73	645	83	73	467	891	-	-	613	-	-
Mov Cap-2 Maneuver	119	73	-	83	73	-	-	-	-	-	-	-
Stage 1	391	437	-	210	270	-	-	-	-	-	-	-
Stage 2	458	270	-	632	437	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	37	0.1	0
HCM LOS	B	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	891	-	-	645	122	613	-	-
HCM Lane V/C Ratio	0.008	-	-	0.006	0.077	0.002	-	-
HCM Control Delay (s)	9.1	-	-	10.6	37	10.9	-	-
HCM Lane LOS	A	-	-	B	E	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	3	6	0	1
Future Vol, veh/h	3	0	3	6	0	1
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	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	0	5	9	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	24	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	19	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1616	-	992	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1004	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1616	-	989	1078
Mov Cap-2 Maneuver	-	-	-	-	989	-
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1078	-	-	1616	-
HCM Lane V/C Ratio	0.001	-	-	0.003	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	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	94	5	7	178	6	12
Future Vol, veh/h	94	5	7	178	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	5	7	185	6	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	103	0	300	101
Stage 1	-	-	-	-	101	-
Stage 2	-	-	-	-	199	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1489	-	691	954
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	835	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1489	-	688	954
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	923	-
Stage 2	-	-	-	-	831	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	7.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1431	-	-	1489	-
HCM Lane V/C Ratio	0.013	-	-	0.005	-
HCM Control Delay (s)	7.5	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.2

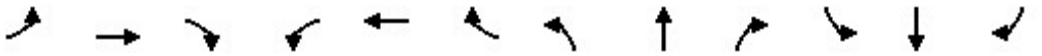
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	21	57	127	78	9
Future Vol, veh/h	13	21	57	127	78	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	23	61	137	84	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	198	0	-	0	181	130
Stage 1	-	-	-	-	130	-
Stage 2	-	-	-	-	51	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1375	-	-	-	808	920
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	971	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1375	-	-	-	800	920
Mov Cap-2 Maneuver	-	-	-	-	800	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	971	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1375	-	-	-	811
HCM Lane V/C Ratio	0.01	-	-	-	0.115
HCM Control Delay (s)	7.6	0	-	-	10
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

FUTURE "NO-BUILD" INTERSECTION ANALYSIS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	57	125	114	35	33	34	553	45	55	879	12
Future Volume (veh/h)	15	57	125	114	35	33	34	553	45	55	879	12
Initial Q (Qb), 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	16	61	0	121	37	0	36	588	48	59	935	13
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	259		206	259		459	2447	1091	620	2470	1102
Arrive On Green	0.14	0.14	0.00	0.14	0.14	0.00	0.03	0.69	0.69	0.04	0.70	0.70
Sat Flow, veh/h	1371	1870	0	1341	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	16	61	0	121	37	0	36	588	48	59	935	13
Grp Sat Flow(s),veh/h/ln	1371	1870	0	1341	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.2	3.5	0.0	10.6	2.1	0.0	0.7	7.4	1.2	1.1	13.1	0.3
Cycle Q Clear(g_c), s	3.3	3.5	0.0	14.1	2.1	0.0	0.7	7.4	1.2	1.1	13.1	0.3
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	259		206	259		459	2447	1091	620	2470	1102
V/C Ratio(X)	0.07	0.24		0.59	0.14		0.08	0.24	0.04	0.10	0.38	0.01
Avail Cap(c_a), veh/h	607	779		580	779		548	2447	1091	697	2470	1102
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(I)	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	46.9	46.1	0.0	52.3	45.5	0.0	5.6	7.0	6.0	5.0	7.6	5.6
Incr Delay (d2), s/veh	0.1	0.5	0.0	2.6	0.3	0.0	0.1	0.2	0.1	0.1	0.4	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	0.4	1.6	0.0	3.6	1.0	0.0	0.2	2.3	0.3	0.3	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	46.5	0.0	55.0	45.7	0.0	5.6	7.2	6.1	5.0	8.0	5.6
LnGrp LOS	D	D		D	D		A	A	A	A	A	A
Approach Vol, veh/h		77	A		158	A		672			1007	
Approach Delay, s/veh		46.6			52.8			7.0			7.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	88.1		22.1	9.0	88.9		22.1				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	5.5	44.0		50.0	9.5	44.0		50.0				
Max Q Clear Time (g_c+I1), s	3.1	9.4		5.5	2.7	15.1		16.1				
Green Ext Time (p_c), s	0.0	7.8		0.4	0.0	12.2		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	11	0	0	1	591	9	1	934	0
Future Vol, veh/h	0	0	0	11	0	0	1	591	9	1	934	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	0	1	629	10	1	994	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1313	1627	497	1130	1627	315	994	0	0	629	0	0
Stage 1	996	996	-	631	631	-	-	-	-	-	-	-
Stage 2	317	631	-	499	996	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	116	101	519	158	101	681	692	-	-	949	-	-
Stage 1	262	320	-	436	473	-	-	-	-	-	-	-
Stage 2	669	473	-	522	320	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	116	101	519	158	101	681	692	-	-	949	-	-
Mov Cap-2 Maneuver	116	101	-	158	101	-	-	-	-	-	-	-
Stage 1	262	320	-	436	473	-	-	-	-	-	-	-
Stage 2	668	473	-	521	320	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	29.6	0	0
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	692	-	-	-	158	949	-	-
HCM Lane V/C Ratio	0.002	-	-	-	0.074	0.001	-	-
HCM Control Delay (s)	10.2	-	-	0	29.6	8.8	-	-
HCM Lane LOS	B	-	-	A	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	1	0	1
Future Vol, veh/h	1	0	0	1	0	1
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	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	0	0	3	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	3	0	6	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	3	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1619	-	1015	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1020	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1619	-	1015	1081
Mov Cap-2 Maneuver	-	-	-	-	1015	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1020	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1081	-	-	1619	-
HCM Lane V/C Ratio	0.002	-	-	-	-
HCM Control Delay (s)	8.3	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	7	1	80	1	3
Future Vol, veh/h	190	7	1	80	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	218	8	1	92	1	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	226	0	316	222
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	94	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1342	-	677	818
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1342	-	676	818
Mov Cap-2 Maneuver	-	-	-	-	676	-
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	929	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1091	-	-	1342	-
HCM Lane V/C Ratio	0.004	-	-	0.001	-
HCM Control Delay (s)	8.3	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

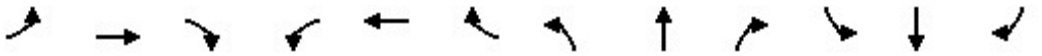
Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	44	43	39	153	17
Future Vol, veh/h	10	44	43	39	153	17
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	48	47	43	168	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	90	0	-	0	139	69
Stage 1	-	-	-	-	69	-
Stage 2	-	-	-	-	70	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1505	-	-	-	854	994
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	953	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1505	-	-	-	847	994
Mov Cap-2 Maneuver	-	-	-	-	847	-
Stage 1	-	-	-	-	946	-
Stage 2	-	-	-	-	953	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1505	-	-	-	860
HCM Lane V/C Ratio	0.007	-	-	-	0.217
HCM Control Delay (s)	7.4	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	24	63	96	38	68	148	1117	163	37	693	16
Future Volume (veh/h)	21	24	63	96	38	68	148	1117	163	37	693	16
Initial Q (Qb), 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	22	25	0	101	40	0	156	1176	172	39	729	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	194		187	194		594	2589	1155	354	2549	1137
Arrive On Green	0.10	0.10	0.00	0.10	0.10	0.00	0.04	0.73	0.73	0.03	0.72	0.72
Sat Flow, veh/h	1367	1870	0	1386	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	22	25	0	101	40	0	156	1176	172	39	729	17
Grp Sat Flow(s),veh/h/ln	1367	1870	0	1386	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.8	1.5	0.0	8.6	2.4	0.0	2.8	16.1	4.0	0.7	8.8	0.4
Cycle Q Clear(g_c), s	4.1	1.5	0.0	10.0	2.4	0.0	2.8	16.1	4.0	0.7	8.8	0.4
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	194		187	194		594	2589	1155	354	2549	1137
V/C Ratio(X)	0.13	0.13		0.54	0.21		0.26	0.45	0.15	0.11	0.29	0.01
Avail Cap(c_a), veh/h	603	779		621	779		691	2589	1155	442	2549	1137
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(I)	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	51.1	48.8	0.0	53.4	49.2	0.0	4.2	6.6	5.0	4.9	6.0	4.8
Incr Delay (d2), s/veh	0.3	0.3	0.0	2.4	0.5	0.0	0.2	0.6	0.3	0.1	0.3	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	0.6	0.7	0.0	3.0	1.1	0.0	0.7	4.6	1.1	0.2	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	49.1	0.0	55.8	49.8	0.0	4.5	7.2	5.2	5.1	6.3	4.9
LnGrp LOS	D	D		E	D		A	A	A	A	A	A
Approach Vol, veh/h		47	A		141	A		1504			785	
Approach Delay, s/veh		50.2			54.1			6.7			6.2	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	92.9		18.0	10.5	91.6		18.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	3.5	44.0		50.0	11.5	42.0		50.0				
Max Q Clear Time (g_c+I1), s	2.7	18.1		6.1	4.8	10.8		12.0				
Green Ext Time (p_c), s	0.0	16.1		0.2	0.2	9.4		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	4	5	1	3	8	1188	10	1	736	1
Future Vol, veh/h	0	0	4	5	1	3	8	1188	10	1	736	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage,-#		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	5	1	3	8	1238	10	1	767	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1405	2023	384	1640	2023	619	767	0	0	1238	0	0
Stage 1	769	769	-	1254	1254	-	-	-	-	-	-	-
Stage 2	636	1254	-	386	769	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	99	57	614	66	57	432	842	-	-	558	-	-
Stage 1	360	409	-	182	242	-	-	-	-	-	-	-
Stage 2	433	242	-	609	409	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	96	56	614	65	56	432	842	-	-	558	-	-
Mov Cap-2 Maneuver	96	56	-	65	56	-	-	-	-	-	-	-
Stage 1	356	408	-	180	240	-	-	-	-	-	-	-
Stage 2	424	240	-	604	408	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	47	0.1	0
HCM LOS	B	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	842	-	-	614	95	558	-	-
HCM Lane V/C Ratio	0.01	-	-	0.007	0.099	0.002	-	-
HCM Control Delay (s)	9.3	-	-	10.9	47	11.5	-	-
HCM Lane LOS	A	-	-	B	E	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.3	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	0	3	7	0	1
Future Vol, veh/h	3	0	3	7	0	1
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	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	0	5	11	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	5	0	26	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	21	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1616	-	989	1078
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	1002	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1616	-	986	1078
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1018	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	8.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1078	-	-	1616	-
HCM Lane V/C Ratio	0.001	-	-	0.003	-
HCM Control Delay (s)	8.3	-	-	7.2	0
HCM Lane LOS	A	-	-	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	103	5	8	195	7	13
Future Vol, veh/h	103	5	8	195	7	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	107	5	8	203	7	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	112	0	329	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	219	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1478	-	665	943
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	817	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1478	-	661	943
Mov Cap-2 Maneuver	-	-	-	-	661	-
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	7.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1451	-	-	1478	-
HCM Lane V/C Ratio	0.014	-	-	0.006	-
HCM Control Delay (s)	7.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.2

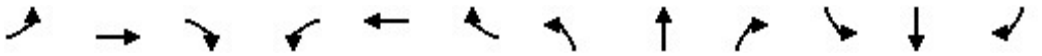
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	23	62	139	85	10
Future Vol, veh/h	14	23	62	139	85	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	25	67	149	91	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	216	0	-	0	197	142
Stage 1	-	-	-	-	142	-
Stage 2	-	-	-	-	55	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1354	-	-	-	792	906
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	968	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1354	-	-	-	783	906
Mov Cap-2 Maneuver	-	-	-	-	783	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	968	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1354	-	-	-	794
HCM Lane V/C Ratio	0.011	-	-	-	0.129
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

FUTURE "BUILD" INTERSECTION ANALYSIS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	82	211	114	67	37	146	565	45	58	889	65
Future Volume (veh/h)	56	82	211	114	67	37	146	565	45	58	889	65
Initial Q (Qb), 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	87	0	121	71	0	155	601	48	62	946	69
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	283		195	283		446	2482	1107	608	2450	1093
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.00	0.04	0.70	0.70	0.03	0.69	0.69
Sat Flow, veh/h	1329	1870	0	1310	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	60	87	0	121	71	0	155	601	48	62	946	69
Grp Sat Flow(s),veh/h/ln	1329	1870	0	1310	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.8	5.8	0.0	12.7	4.7	0.0	3.6	8.6	1.3	1.4	15.8	2.0
Cycle Q Clear(g_c), s	10.5	5.8	0.0	18.5	4.7	0.0	3.6	8.6	1.3	1.4	15.8	2.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	283		195	283		446	2482	1107	608	2450	1093
V/C Ratio(X)	0.29	0.31		0.62	0.25		0.35	0.24	0.04	0.10	0.39	0.06
Avail Cap(c_a), veh/h	505	701		489	701		556	2482	1107	671	2450	1093
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(I)	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	57.1	52.9	0.0	61.1	52.4	0.0	6.8	7.7	6.6	5.8	9.2	7.1
Incr Delay (d2), s/veh	0.8	0.6	0.0	3.2	0.5	0.0	0.5	0.2	0.1	0.1	0.5	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	2.0	2.8	0.0	4.3	2.2	0.0	1.1	2.9	0.4	0.4	5.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	53.5	0.0	64.3	52.9	0.0	7.2	7.9	6.6	5.9	9.7	7.2
LnGrp LOS	E	D		E	D		A	A	A	A	A	A
Approach Vol, veh/h		147	A		192	A		804			1077	
Approach Delay, s/veh		55.3			60.1			7.7			9.3	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	103.3		26.7	11.3	102.0		26.7				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	61.5		52.5	14.5	56.5		52.5				
Max Q Clear Time (g_c+I1), s	3.4	10.6		12.5	5.6	17.8		20.5				
Green Ext Time (p_c), s	0.0	8.7		0.6	0.2	14.7		0.7				

Intersection Summary		
HCM 6th Ctrl Delay	16.1	
HCM 6th LOS	B	

Notes

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

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	0	12	11	0	0	17	632	9	1	987	36
Future Vol, veh/h	27	0	12	11	0	0	17	632	9	1	987	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	0	13	12	0	0	18	672	10	1	1050	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1424	1760	525	1235	1760	336	1050	0	0	672	0	0
Stage 1	1052	1052	-	708	708	-	-	-	-	-	-	-
Stage 2	372	708	-	527	1052	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	96	84	497	133	84	660	659	-	-	915	-	-
Stage 1	242	302	-	392	436	-	-	-	-	-	-	-
Stage 2	621	436	-	502	302	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	94	82	497	127	82	660	659	-	-	915	-	-
Mov Cap-2 Maneuver	94	82	-	127	82	-	-	-	-	-	-	-
Stage 1	235	302	-	381	424	-	-	-	-	-	-	-
Stage 2	604	424	-	489	302	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	42.7	36.2	0.3	0
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	659	-	-	136	127	915	-	-
HCM Lane V/C Ratio	0.027	-	-	0.305	0.092	0.001	-	-
HCM Control Delay (s)	10.6	-	-	42.7	36.2	8.9	-	-
HCM Lane LOS	B	-	-	E	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	0.3	0	-	-

Intersection	
Int Delay, s/veh	7.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	4	51	1	3	41
Future Vol, veh/h	1	4	51	1	3	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	11	134	3	8	108

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	14	0	280	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	271	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1604	-	710	1073
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	775	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1604	-	650	1073
Mov Cap-2 Maneuver	-	-	-	-	650	-
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	710	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1027	-	-	1604	-
HCM Lane V/C Ratio	0.113	-	-	0.084	-
HCM Control Delay (s)	9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.3	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	244	9	1	166	111	3	9	3	97	7	35
Future Vol, veh/h	55	244	9	1	166	111	3	9	3	97	7	35
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	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	160	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	280	10	1	191	128	3	10	3	111	8	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	319	0	0	290	0	0	692	732	285	609	609	191
Stage 1	-	-	-	-	-	-	411	411	-	193	193	-
Stage 2	-	-	-	-	-	-	281	321	-	416	416	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1241	-	-	1272	-	-	358	348	754	407	410	851
Stage 1	-	-	-	-	-	-	618	595	-	809	741	-
Stage 2	-	-	-	-	-	-	726	652	-	614	592	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1241	-	-	1272	-	-	323	330	754	380	389	851
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	330	-	380	389	-
Stage 1	-	-	-	-	-	-	586	565	-	768	740	-
Stage 2	-	-	-	-	-	-	683	651	-	570	562	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0	14.2	17.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	410	1241	-	-	1272	-	-	442
HCM Lane V/C Ratio	0.042	0.051	-	-	0.001	-	-	0.361
HCM Control Delay (s)	14.2	8.1	-	-	7.8	0	-	17.7
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	1.6

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	115	98	55	174	17
Future Vol, veh/h	10	115	98	55	174	17
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	126	108	60	191	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	168	0	-	0	286	138
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	148	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1410	-	-	-	704	910
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1410	-	-	-	698	910
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1410	-	-	-	713
HCM Lane V/C Ratio	0.008	-	-	-	0.294
HCM Control Delay (s)	7.6	0	-	-	12.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.2

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	258	130	22	19	22
Future Vol, veh/h	32	258	130	22	19	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	280	141	24	21	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	165	0	-	0	491	141
Stage 1	-	-	-	-	141	-
Stage 2	-	-	-	-	350	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1413	-	-	-	537	907
Stage 1	-	-	-	-	886	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1413	-	-	-	521	907
Mov Cap-2 Maneuver	-	-	-	-	521	-
Stage 1	-	-	-	-	860	-
Stage 2	-	-	-	-	713	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1413	-	-	-	675
HCM Lane V/C Ratio	0.025	-	-	-	0.066
HCM Control Delay (s)	7.6	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	236	124	80	71	27
Future Vol, veh/h	42	236	124	80	71	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	160	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	257	135	87	77	29

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	222	0	-	0	484	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	349	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1347	-	-	-	542	914
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	714	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1347	-	-	-	524	914
Mov Cap-2 Maneuver	-	-	-	-	524	-
Stage 1	-	-	-	-	861	-
Stage 2	-	-	-	-	714	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1347	-	-	-	594
HCM Lane V/C Ratio	0.034	-	-	-	0.179
HCM Control Delay (s)	7.8	-	-	-	12.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

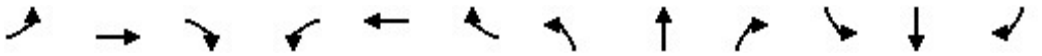
Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	42	55	0
Future Vol, veh/h	1	0	0	42	55	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	0	46	60	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	25	23
Stage 1	-	-	-	-	23	-
Stage 2	-	-	-	-	2	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1562	-	-	-	991	1054
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	1021	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	990	1054
Mov Cap-2 Maneuver	-	-	-	-	990	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1021	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	990
HCM Lane V/C Ratio	0.001	-	-	-	0.06
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	53	164	96	66	71	247	1128	163	40	704	63
Future Volume (veh/h)	69	53	164	96	66	71	247	1128	163	40	704	63
Initial Q (Qb), 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	73	56	0	101	69	0	260	1187	172	42	741	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	228		188	228		573	2519	1124	341	2403	1072
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.00	0.06	0.71	0.71	0.03	0.68	0.68
Sat Flow, veh/h	1332	1870	0	1348	1870	0	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	73	56	0	101	69	0	260	1187	172	42	741	66
Grp Sat Flow(s),veh/h/ln	1332	1870	0	1348	1870	0	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.3	3.3	0.0	8.8	4.0	0.0	5.3	17.5	4.3	0.8	10.2	1.7
Cycle Q Clear(g_c), s	10.4	3.3	0.0	12.0	4.0	0.0	5.3	17.5	4.3	0.8	10.2	1.7
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	228		188	228		573	2519	1124	341	2403	1072
V/C Ratio(X)	0.41	0.25		0.54	0.30		0.45	0.47	0.15	0.12	0.31	0.06
Avail Cap(c_a), veh/h	570	779		585	779		689	2519	1124	427	2403	1072
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(I)	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	52.7	47.7	0.0	53.1	48.0	0.0	5.4	7.6	5.7	6.1	7.9	6.6
Incr Delay (d2), s/veh	1.5	0.6	0.0	2.4	0.7	0.0	0.6	0.6	0.3	0.2	0.3	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	2.2	1.5	0.0	3.0	1.9	0.0	1.5	5.3	1.2	0.3	3.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.2	48.2	0.0	55.5	48.7	0.0	5.9	8.3	6.0	6.3	8.3	6.7
LnGrp LOS	D	D		E	D		A	A	A	A	A	A
Approach Vol, veh/h		129	A		170	A		1619			849	
Approach Delay, s/veh		51.6			52.7			7.7			8.1	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	90.6		20.2	13.2	86.6		20.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	44.0		50.0	15.5	38.0		50.0				
Max Q Clear Time (g_c+I1), s	2.8	19.5		12.4	7.3	12.2		14.0				
Green Ext Time (p_c), s	0.0	15.6		0.5	0.4	9.3		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		12.6	
HCM 6th LOS		B	

Notes

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

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	18	5	1	3	22	1236	10	1	783	33
Future Vol, veh/h	32	0	18	5	1	3	22	1236	10	1	783	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	-	-	-	-	500	-	275	520	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	19	5	1	3	23	1288	10	1	816	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1509	2152	408	1744	2152	644	816	0	0	1288	0	0
Stage 1	818	818	-	1334	1334	-	-	-	-	-	-	-
Stage 2	691	1334	-	410	818	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	83	47	593	55	47	416	807	-	-	534	-	-
Stage 1	336	388	-	162	221	-	-	-	-	-	-	-
Stage 2	401	221	-	589	388	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	79	46	593	52	46	416	807	-	-	534	-	-
Mov Cap-2 Maneuver	79	46	-	52	46	-	-	-	-	-	-	-
Stage 1	326	387	-	157	215	-	-	-	-	-	-	-
Stage 2	385	215	-	569	387	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	54.2	58.9	0.2	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	807	-	-	123	76	534	-	-
HCM Lane V/C Ratio	0.028	-	-	0.423	0.123	0.002	-	-
HCM Control Delay (s)	9.6	-	-	54.2	58.9	11.8	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	0.4	0	-	-

Intersection	
Int Delay, s/veh	7.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	3	49	7	3	47
Future Vol, veh/h	3	3	49	7	3	47
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	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	75	11	5	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	10	0	169	8
Stage 1	-	-	-	-	8	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1610	-	821	1074
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1610	-	782	1074
Mov Cap-2 Maneuver	-	-	-	-	782	-
Stage 1	-	-	-	-	1015	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.4	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1050	-	-	1610	-
HCM Lane V/C Ratio	0.073	-	-	0.047	-
HCM Control Delay (s)	8.7	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	160	7	8	229	141	9	8	13	117	8	77
Future Vol, veh/h	60	160	7	8	229	141	9	8	13	117	8	77
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	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	160	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	167	7	8	239	147	9	8	14	122	8	80

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	386	0	0	174	0	0	670	699	171	556	555	239
Stage 1	-	-	-	-	-	-	297	297	-	255	255	-
Stage 2	-	-	-	-	-	-	373	402	-	301	300	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1172	-	-	1403	-	-	371	364	873	442	440	800
Stage 1	-	-	-	-	-	-	712	668	-	749	696	-
Stage 2	-	-	-	-	-	-	648	600	-	708	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1172	-	-	1403	-	-	313	342	873	408	413	800
Mov Cap-2 Maneuver	-	-	-	-	-	-	313	342	-	408	413	-
Stage 1	-	-	-	-	-	-	674	632	-	709	691	-
Stage 2	-	-	-	-	-	-	572	596	-	651	630	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.2	0.2	11.6	17.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	575	1172	-	-	1403	-	-	502
HCM Lane V/C Ratio	0.054	0.053	-	-	0.006	-	-	0.419
HCM Control Delay (s)	11.6	8.2	-	-	7.6	0	-	17.2
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0	-	-	2

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	86	126	158	104	10
Future Vol, veh/h	14	86	126	158	104	10
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	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	92	135	170	112	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	305	0	-	0	342	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1256	-	-	-	654	820
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	903	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1256	-	-	-	645	820
Mov Cap-2 Maneuver	-	-	-	-	645	-
Stage 1	-	-	-	-	806	-
Stage 2	-	-	-	-	903	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1256	-	-	-	657
HCM Lane V/C Ratio	0.012	-	-	-	0.187
HCM Control Delay (s)	7.9	0	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.7

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	160	249	29	24	34
Future Vol, veh/h	30	160	249	29	24	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	174	271	32	26	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	303	0	-	0	511	271
Stage 1	-	-	-	-	271	-
Stage 2	-	-	-	-	240	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1258	-	-	-	523	768
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	800	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1258	-	-	-	508	768
Mov Cap-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	800	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1258	-	-	-	634
HCM Lane V/C Ratio	0.026	-	-	-	0.099
HCM Control Delay (s)	7.9	0	-	-	11.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	46	139	213	106	86	60
Future Vol, veh/h	46	139	213	106	86	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	160	-	-	100	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	151	232	115	93	65

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	347	0	-	0	483	232
Stage 1	-	-	-	-	232	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1212	-	-	-	542	807
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	791	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1212	-	-	-	520	807
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	774	-
Stage 2	-	-	-	-	791	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1212	-	-	-	609
HCM Lane V/C Ratio	0.041	-	-	-	0.261
HCM Control Delay (s)	8.1	-	-	-	13
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	50	49	3
Future Vol, veh/h	1	0	0	50	49	3
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	0	54	53	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	54	0	-	0	29	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	2	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1551	-	-	-	986	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1021	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1551	-	-	-	985	1048
Mov Cap-2 Maneuver	-	-	-	-	985	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	1021	-

Approach	EB	WB	SB
HCM Control Delay, s	7.3	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1551	-	-	-	988
HCM Lane V/C Ratio	0.001	-	-	-	0.057
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

TRAFFIC VOLUME WORKSHEETS

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

1. SR 515 @ Philadelphia

A.M. Peak Hour

	SR 5/SR 515 **Northbound**				SR 5/SR 515 **Southbound**				Philadelphia Road **Eastbound**				Philadelphia Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	31	506	41	578	50	804	11	865	14	52	114	180	104	32	30	166
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	34	553	45	632	55	879	12	946	15	57	125	197	114	35	33	182
Total New Trips:	112	12	0	124	3	10	53	66	41	25	86	152	0	32	4	36
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	146	565	45	756	58	889	65	1012	56	82	211	349	114	67	37	218

P.M. Peak Hour

	SR 5/SR 515 **Northbound**				SR 5/SR 515 **Southbound**				Philadelphia Road **Eastbound**				Philadelphia Road **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	135	1022	149	1306	34	634	15	683	19	22	58	99	88	35	62	185
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	148	1117	163	1428	37	693	16	746	21	24	63	108	96	38	68	202
Total New Trips:	99	11	0	110	3	11	47	61	48	29	101	178	0	28	3	31
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	247	1128	163	1538	40	704	63	807	69	53	164	286	96	66	71	233

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

Traffic Volumes

A&R Engineering
September 2021

2. SR 515 @ Appalachian

A.M. Peak Hour

	SR 5/SR 515 **Northbound**				SR 5/SR 515 **Southbound**				Appalachian Circle **Eastbound**				Appalachian Court **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	1	541	8	550	1	855	0	856	0	0	0	0	10	0	0	10
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	1	591	9	601	1	934	0	935	0	0	0	0	11	0	0	11
Total New Trips:	16	41	0	57	0	53	36	89	27	0	12	39	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	17	632	9	658	1	987	36	1024	27	0	12	39	11	0	0	11

P.M. Peak Hour

	SR 5/SR 515 **Northbound**				SR 5/SR 515 **Southbound**				Appalachian Circle **Eastbound**				Appalachian Court **Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	7	1087	9	1103	1	674	1	676	0	0	4	4	5	1	3	9
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	8	1188	10	1206	1	736	1	738	0	0	4	4	5	1	3	9
Total New Trips:	14	48	0	62	0	47	32	79	32	0	14	46	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	22	1236	10	1268	1	783	33	817	32	0	18	50	5	1	3	9

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

3. Appalachian @ Church Drwy

A.M. Peak Hour

	King of Kings Lutheran Church					-				Appalachian Circle				Appalachian Circle			
	Northbound					**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot		L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	1	1		0	0	0	0	0	1	0	1	0	1	0	1
Growth Factor (%):	3	3	3			3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	1	1		0	0	0	0	0	1	0	1	0	1	0	1
Total New Trips:	3	0	40	43		0	0	0	0	0	0	4	4	51	0	0	51
Pass-by Trips:	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	3	0	41	44		0	0	0	0	0	1	4	5	51	1	0	52

P.M. Peak Hour

	King of Kings Lutheran Church					-				Appalachian Circle				Appalachian Circle			
	Northbound					**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot		L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	1	1		0	0	0	0	0	3	0	3	3	6	0	9
Growth Factor (%):	3	3	3			3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	1	1		0	0	0	0	0	3	0	3	3	7	0	10
Total New Trips:	3	0	46	49		0	0	0	0	0	0	3	3	46	0	0	46
Pass-by Trips:	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	3	0	47	50		0	0	0	0	0	3	3	6	49	7	0	56

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

4. Philadelphia @ H. Mullins

A.M. Peak Hour

	Hugh Mullins Court				Site Driveway 2 (Eastern)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	1	0	3	4	0	0	0	0	0	174	6	180	1	73	0	74
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	1	0	3	4	0	0	0	0	0	190	7	197	1	80	0	81
Total New Trips:	2	9	0	11	80	7	28	115	37	72	2	111	0	93	104	197
Pass-by Trips:	0	0	0	0	17	0	7	24	18	-18	0	0	0	-7	7	0
Future 2024 Traffic Volumes:	3	9	3	15	97	7	35	139	55	244	9	308	1	166	111	278

P.M. Peak Hour

	Hugh Mullins Court				Site Driveway 2 (Eastern)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	6	0	12	18	0	0	0	0	0	94	5	99	7	178	0	185
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	7	0	13	20	0	0	0	0	0	103	5	108	8	195	0	203
Total New Trips:	2	8	0	10	94	8	33	135	33	84	2	119	0	83	92	175
Pass-by Trips:	0	0	0	0	23	0	44	67	27	-27	0	0	0	-49	49	0
Future 2024 Traffic Volumes:	9	8	13	30	117	8	77	202	60	160	7	227	8	229	141	378

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

5. Philadelphia @ Hobson

A.M. Peak Hour

	-				Hobson Road				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	140	0	16	156	9	40	0	49	0	39	36	75
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	153	0	17	170	10	44	0	54	0	43	39	82
Total New Trips:	0	0	0	0	21	0	0	21	0	71	0	71	0	55	16	71
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	0	0	0	0	174	0	17	191	10	115	0	125	0	98	55	153

P.M. Peak Hour

	-				Hobson Road				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	78	0	9	87	13	21	0	34	0	57	127	184
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	85	0	10	95	14	23	0	37	0	62	139	201
Total New Trips:	0	0	0	0	19	0	0	19	0	63	0	63	0	64	19	83
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	0	0	0	0	104	0	10	114	14	86	0	100	0	126	158	284

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

6. Philadelphia @ Drwy 4 (W)

A.M. Peak Hour

	-				Site Driveway 4 (Western)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	0	0	0	180	0	180	0	74	0	74
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	197	0	197	0	81	0	81
Total New Trips:	0	0	0	0	16	0	21	37	28	65	0	93	0	50	21	71
Pass-by Trips:	0	0	0	0	3	0	1	4	4	-4	0	0	0	-1	1	0
Future 2024 Traffic Volumes:	0	0	0	0	19	0	22	41	32	258	0	290	0	130	22	152

P.M. Peak Hour

	-				Site Driveway 4 (Western)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	0	0	0	99	0	99	0	184	0	184
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	108	0	108	0	201	0	201
Total New Trips:	0	0	0	0	19	0	25	44	25	57	0	82	0	58	19	77
Pass-by Trips:	0	0	0	0	5	0	9	14	5	-5	0	0	0	-10	10	0
Future 2024 Traffic Volumes:	0	0	0	0	24	0	34	58	30	160	0	190	0	249	29	278

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

7. Philadelphia @ Drwy 3 (M)

A.M. Peak Hour

	-				Site Driveway 3 (Middle)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	0	0	0	180	0	180	0	74	0	74
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	197	0	197	0	81	0	81
Total New Trips:	0	0	0	0	57	0	21	78	28	53	0	81	0	49	74	123
Pass-by Trips:	0	0	0	0	14	0	6	20	14	-14	0	0	0	-6	6	0
Future 2024 Traffic Volumes:	0	0	0	0	71	0	27	98	42	236	0	278	0	124	80	204

P.M. Peak Hour

	-				Site Driveway 3 (Middle)				Philadelphia Road				Philadelphia Road			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	0	0	0	99	0	99	0	184	0	184
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	0	108	0	108	0	201	0	201
Total New Trips:	0	0	0	0	67	0	25	92	25	52	0	77	0	52	66	118
Pass-by Trips:	0	0	0	0	19	0	35	54	21	-21	0	0	0	-40	40	0
Future 2024 Traffic Volumes:	0	0	0	0	86	0	60	146	46	139	0	185	0	213	106	319

Number of Years = 3
Growth Factor (%) = 3

21-144 Foothills Mixed Use Development at Jasper Village - SR 515 and Philadelphia Road, Jasper, GA

A&R Engineering

Traffic Volumes

September 2021

8. Church Drwy @ Drwy 1

A.M. Peak Hour

	-				Church - Site Joint Driveway				King of Kings Lutheran Church				Site Driveway 1			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Total New Trips:	0	0	0	0	55	0	0	55	0	0	0	0	0	0	42	42
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	0	0	0	0	55	0	0	55	1	0	0	1	0	0	42	42

P.M. Peak Hour

	-				Church - Site Joint Driveway				King of Kings Lutheran Church				Site Driveway 1			
	Northbound				**Southbound**				**Eastbound**				**Westbound**			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing 2021 Volumes:	0	0	0	0	0	0	3	3	1	0	0	1	0	0	0	0
Growth Factor (%):	3	3	3		3	3	3		3	3	3		3	3	3	
No-Build 2024 Volumes:	0	0	0	0	0	0	3	3	1	0	0	1	0	0	0	0
Total New Trips:	0	0	0	0	49	0	0	49	0	0	0	0	0	0	50	50
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2024 Traffic Volumes:	0	0	0	0	49	0	3	52	1	0	0	1	0	0	50	50

Number of Years = 3
Growth Factor (%) = 3