ATTACHMENT 7

Traffic Impact Analysis

Buck Island Road Apartments
Bluffton, SC

Prepared for:
Crowne Partners

BIHL ENGINEERING

ATTACHMENT 7

Traffic Impact Analysis
Buck Island Road Apartments
Charleston County, SC

Prepared for:
Crowne Apartments

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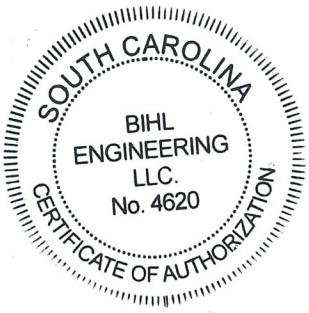


May 2022

TABLE OF CONTENTS

LIST OF TABLES

1.0 Executive Summary

The Buck Island Road Apartments development is proposed to be located on Buck Island Road between Simmonsville Road and May River Road in Bluffton, SC. The development is proposed to include 200 multifamily housing (mid-rise) units and will be accessed via one new full access driveway on Little Aaron Road and one right-in, right-out (RIRO) driveway on Buck Island Road. For the purposes of this traffic impact analysis (TIA), the development is assumed to be complete in 2025.

The study area for the TIA includes the following intersections:

- Bluffton Parkway at Simmonsville Road (signalized)
- Buck Island Road at Simmonsville Road (unsignalized)
- Buck Island Road at Little Aaron Road (unsignalized)
- May River Road at Buck Island Road (signalized)
- Little Aaron Road at Site Driveway #1 (unsignalized) (2025 Build conditions only)
- Buck Island Road at Site Driveway #2 (unsignalized) (2025 Build conditions only)

The capacity analysis shows that all study area intersections currently operate acceptably during the AM and PM peak hour conditions. All study area intersections are projected to operate acceptably during the AM and PM peak hours in the 2025 No Build and 2025 Build conditions.

Based on the results of the analysis, the following transportation-related improvements are recommended as a part of this project:

- Coordination with Town of Bluffton and SCDOT staff on driveway locations and design details

Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.

2.0 Introduction

The Buck Island Road Apartments development is proposed to be located on Buck Island Road between Simmonsville Road and May River Road in Bluffton, SC. The development is proposed to include 200 multifamily housing (mid-rise) units and will be accessed via one new full access driveway on Little Aaron Road and one RIRO driveway on Buck Island Road. For the purposes of this TIA, the development is assumed to be complete in 2025.

This report presents the trip generation, distribution, traffic analyses, and any recommendations for transportation improvements required to meet anticipated traffic demands.

3.0 Inventory

3.1 Study Area

The study area for the TIA includes the following existing intersections.

- Bluffton Parkway at Simmonsville Road (signalized)
- Buck Island Road at Simmonsville Road (unsignalized)
- Buck Island Road at Little Aaron Road (unsignalized)
- May River Road at Buck Island Road (signalized)

Figure 1 (Appendix) shows the proposed development location and **Figure 2 (Appendix)** shows the project conceptual site plan.

3.2 Existing Conditions

Roadways in the project vicinity include Bluffton Parkway, May River Road, Buck Island Road, Simmonsville Road, and Little Aaron Road.

Bluffton Parkway is a four lane, divided roadway with a posted speed limit of 45 miles per hour (mph). Per the South Carolina Department of Transportation (SCDOT) Bluffton Parkway has a 2021 Annual Average Daily Traffic (AADT) of 23,800 vehicles per day (vpd) in the vicinity of the site.

May River Road (SC-46) is a two lane, undivided, minor arterial roadway with a posted speed limit of 45 mph west of Buck Island Road and a posted speed limit of 30 mph east of Buck Island Road. It has a 2021 SCDOT AADT of 13,800 vpd in the vicinity of the site.

Buck Island Road (S-29) is a two lane, undivided, major collector roadway with a posted speed limit of 40 mph. It has a 2021 SCDOT AADT of 7,300 vpd in the vicinity of the site.

Simmonsville Road (S-474) is a two lane, undivided, major collector roadway with a posted speed limit of 40 mph south of Bluffton Parkway and a posted speed limit of 45 mph north of Bluffton Parkway. It has a 2021 SCDOT AADT of 12,100 vpd in the vicinity of the site.

Little Aaron Road provides access to this site and to the development to the north.

Figure 3 (Appendix) shows the existing roadway laneage in the study area.

4.0 Traffic Generation

The potential trip generation of the proposed development was determined using trip generation information from the Institute of Transportation Engineers' (ITE) *Trip Generation, 11th Edition* (2021).

Due to the nature of the development, no internal capture or pass-by trips were assumed in the analysis. **Table 1** summarizes the AM and PM peak hour trips associated with the proposed development.

Table 1:
Projected Trip Generation

Land Use and Intensity	ITE Land Use Code	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Multifamily Housing (Mid Rise) (Not Close to Rail) – 200 Dwelling Units	221	76	17	59	78	47	31
New Trips		**76**	**17**	**59**	**78**	**47**	**31**

Source: *ITE Trip Generation, 11th Edition*

As shown in **Table 1**, the proposed development is projected to generate 76 new trips (17 entering, 59 exiting) during the AM peak hour and 78 new trips (47 entering, 31 exiting) during the PM peak hour.

5.0 Site Traffic Distribution

The proposed development traffic was assigned to the surrounding roadway network. The directional distribution and assignment were based on qualitative knowledge of the project area, quantitative application of existing traffic patterns, and expected trip length.

The following general trip distribution was applied to the project trips associated with the proposed development.

- 16% to/from the north on Simmonsville Road
- 5% to/from the west on Bluffton Parkway
- 30% to/from the east on Bluffton Parkway
- 3% to/from the west on Buck Island Road
- 30% to/from the west on May River Road
- 16% to/from the east on May River Road

Figure 4 (**Appendix**) shows the traffic distribution for the proposed development in the study area.

6.0 Traffic Volumes

6.1 Existing Traffic

Peak hour intersection turning movement counts including vehicular, pedestrian, and heavy vehicle traffic were performed in April 2022 from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM at the following intersections:

- Bluffton Parkway at Simmonsville Road
- Buck Island Road at Simmonsville Road
- Buck Island Road at Little Aaron Road
- May River Road at Buck Island Road

Existing peak hour intersection turning movement volumes are shown on **Figure 5 (Appendix)**. The turning movement count data is included in the **Appendix.**

6.2 2025 No Build Traffic

Historic growth is the increase in existing traffic volumes due to usage increases and non-specific growth throughout the area. An overall growth rate of 2.0% per year was applied to the study area in the analysis.

The 2025 No Build traffic volumes include existing traffic grown to the buildout year. **Figure 6** (**Appendix**) and **Figure 7** (**Appendix**) show the 2025 No Build AM and PM peak hour traffic volumes, respectively.

6.3 Project Traffic

The AM peak hour and PM peak hour projected proposed development trips were assigned based on the trip distribution discussed in **Section 5.**

6.4 2025 Build Traffic

The 2025 total traffic volumes include the 2025 background traffic and the proposed development traffic at buildout. The 2025 AM and PM peak hour total traffic volumes are shown in **Figure 6** (**Appendix**) and **Figure 7** (**Appendix**), respectively.

Intersection volume development worksheets are included in the **Appendix**.

7.0 Capacity Analysis

Capacity analyses were performed for the AM and PM peak hours in the Existing, 2025 No Build, and 2025 Build conditions using the Synchro, Version 10 software program to determine the operating characteristics of the adjacent roadway network and the impacts of the proposed development. The analyses were conducted with methodologies contained in the *Highway Capacity Manual, 6th Edition* (HCM 6) (Transportation Research Board, December 2016). The Synchro output sheets are included in the **Appendix**.

Capacity of an intersection is defined as the maximum number of vehicles that can pass through an intersection during a specified time, typically an hour. Capacity is described by level of service (LOS) for the operating characteristics of an intersection. LOS is a qualitative measure that describes operational conditions and motorist perceptions within a traffic stream. HCM 6 defines six levels of service, LOS A through LOS F, with A being the best and F being the worst.

LOS for signalized intersections is determined by the overall intersection operations and is reflected in average delay per vehicle. LOS D or better is typically considered acceptable for signalized intersections.

LOS for a two-way stop-controlled (TWSC) intersection is determined by the delay of the poorest performing minor approach, as LOS is not defined for TWSC intersections as a whole. At a TWSC intersection, the major street experiences little to no delay.

Capacity analyses were performed for the Existing, 2025 No Build, and 2025 Build AM and PM peak hour traffic conditions at the following intersections:

- Bluffton Parkway at Simmonsville Road (signalized)
- Buck Island Road at Simmonsville Road (unsignalized)
- Buck Island Road at Little Aaron Road (unsignalized)
- May River Road at Buck Island Road (signalized)
- Little Aaron Road at Site Driveway #1 (unsignalized) (2025 Build conditions only)
- Buck Island Road at Site Driveway #2 (unsignalized) (2025 Build conditions only)

Any peak hour factors (PHF) above 0.95 were adjusted to 0.95 in all conditions for the purposes of the analysis. Any heavy vehicle percentages (HV%) below 2.0% were adjusted to 2.0% in all conditions for the purposes of the analysis.

Existing signal timings were applied to the intersections of May River Road at Buck Island Road and Bluffton Parkway at Simmonsville Road in the Existing, 2025 No Build, and 2025 Build conditions.

Table 2 summarizes LOS and control delay (average seconds of delay per vehicle) for the projected Existing, 2025 No Build, and 2025 Build AM and PM peak hour conditions at the study area locations.

Table 2:
Level of Service and Delay (average seconds per vehicle)

Intersection	Traffic Control[1]	Existing Conditions		2025 No Build Conditions		2025 Build Conditions	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Bluffton Parkway at Simmonsville Road	S	D (42.7)	D (35.4)	D (51.1)	D (43.8)	D (52.5)	D (44.4)
Buck Island Road at Simmonsville Road	U	B (14.3) – EB	C (15.2) – EB	C (15.3) – EB	C (16.4) – EB	C (15.8) – EB	C (17.3) – EB
Buck Island Road at Little Aaron Road	U	B (13.0) – EB	C (15.1) – EB	B (13.4) – EB	C (16.1) – EB	C (20.4) – EB	C (22.1) – EB
May River Road at Buck Island Road	S	C (20.5)	C (26.8)	C (22.2)	C (31.0)	C (22.6)	C (31.8)
Little Aaron Road at Site Driveway #1	U	N/A	N/A	N/A	N/A	A (8.5) – NB	A (8.6) – NB
Buck Island Road at Site Driveway #2	U	N/A	N/A	N/A	N/A	B (11.2) – EB	B (11.5) – EB

N/A = Not Applicable
1. S = Signalized, U = Unsignalized

7.1 Bluffton Parkway at Simmonsville Road

As shown in **Table 2**, the signalized intersection of Bluffton Parkway at Simmonsville Road currently operates acceptably at LOS D during the AM and PM peak hours. The intersection is projected to continue to operate acceptably at LOS D during the AM and PM peak hours in the 2025 No Build and 2025 Build conditions.

7.2 Buck Island Road at Simmonsville Road

As shown in **Table 2**, the unsignalized intersection of Buck Island Road at Simmonsville Road currently operates acceptably at LOS B during the AM peak hour and at LOS C during the PM peak hour. The intersection is projected to operate acceptably at LOS C during the AM and PM peak hours in the 2025 No Build and 2025 Build conditions.

7.3 Buck Island Road at Little Aaron Road

SCDOT *Roadway Design Manual (2021)* guidelines were reviewed at the unsignalized intersection of Buck Island Road at Little Aaron Road to determine if criteria were met for the installation of a northbound left-turn lane or a southbound right-turn lane. Based on a comparison of the projected 2025 Build conditions AM and PM peak hour traffic volumes to the criteria, it was determined that a northbound left-turn lane and a

southbound right-turn lane are not necessary and are therefore not recommended. The turn lane analysis charts are included in the **Appendix**.

As shown in **Table 2**, the unsignalized intersection of Buck Island Road at Little Aaron Road currently operates acceptably at LOS B during the AM peak hour and at LOS C during the PM peak hour. The intersection is projected to operate acceptably at LOS B during the AM peak hour and at LOS C during the PM peak hour in the 2025 No Build conditions. The intersection is projected to operate at LOS C during the AM and PM peak hours in the 2025 Build conditions.

7.4 May River Road at Buck Island Road

As shown in **Table 2**, the signalized intersection of May River Road at Buck Island Road currently operates acceptably at LOS C in the AM and PM peak hours. The intersection is projected to operate at LOS C during the AM and PM peak hours during the 2025 No Build and 2025 Build conditions.

7.5 Little Aaron Road at Site Driveway #1

As shown in **Table 2**, the unsignalized intersection of Little Aaron Road at Site Driveway #1 is projected to operate acceptably at LOS A during the AM and PM peak hours in the 2025 Build conditions.

It is recommended that the driveway design details be confirmed to meet Town of Bluffton and SCDOT standards as the project moves forward.

7.6 Buck Island Road at Site Driveway #2

SCDOT *Roadway Design Manual (2021)* guidelines were reviewed at the unsignalized intersection of Buck Island Road at Site Driveway #2 to determine if criteria were met for the installation of a southbound right-turn lane. Based on the projected 2025 Build conditions AM and PM peak hour traffic volumes to the criteria, it was determined that a southbound right-turn lane may not be necessary at the intersection and is therefore not recommended. The turn lane analysis charts are included in the **Appendix**.

As shown in **Table 2**, the unsignalized intersection of Buck Island Road at Site Driveway #2 is projected to operate acceptably at LOS B during the AM and PM peak hours in the 2025 Build conditions.

It is recommended that the driveway design details be confirmed to meet Town of Bluffton and SCDOT standards as the project moves forward.

8.0 Conclusion

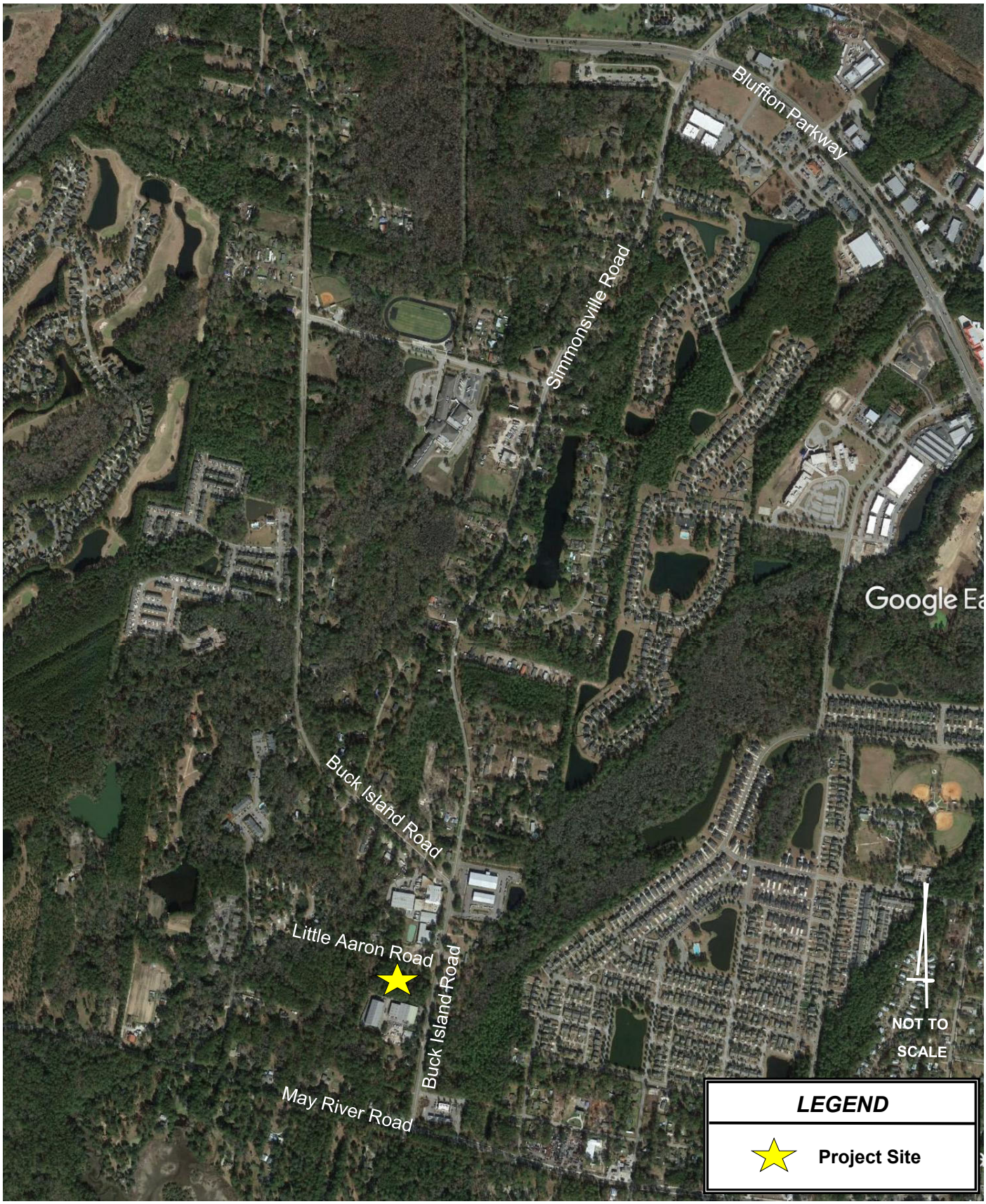
The Buck Island Road Apartments development is proposed to be located on Buck Island Road between Simmonsville Road and May River Road in Bluffton, SC. The development is proposed to include 200 multifamily housing (mid-rise) units. The development will be accessed via one new full access driveway on Little Aaron Road and one RIRO driveway on Buck Island Road. For the purposes of this TIA, the development is assumed to be complete in 2025.

Based on results of the analysis, the following transportation-related improvements are recommended as a part of this project:

- Coordination with Town of Bluffton and SCDOT staff on driveway locations and design details

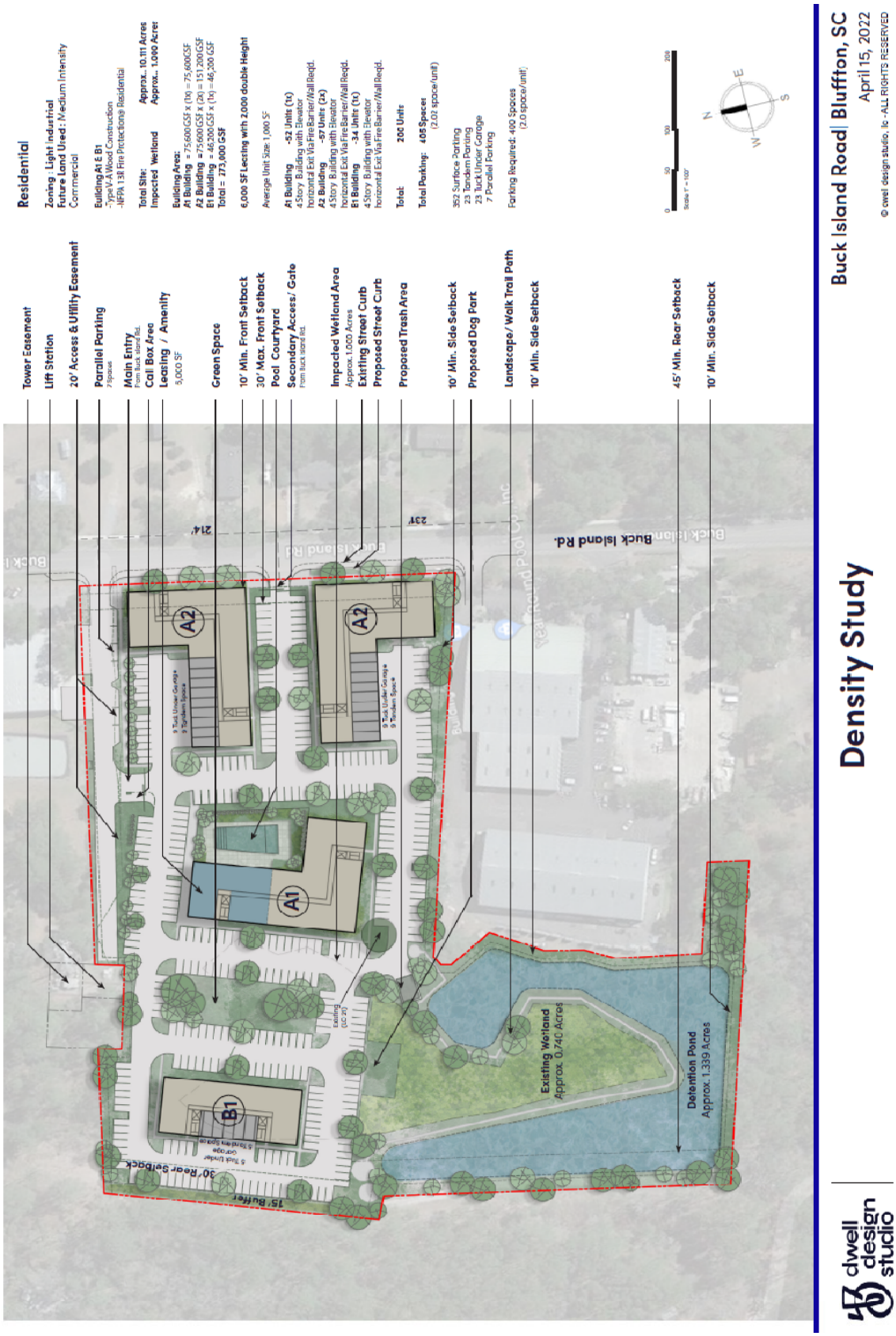
Results in this report are based solely on traffic studies and are considered input into final design considerations. The final design will be determined by the project engineer after other design elements (such as, but not limited to, utilities, stormwater, etc.) are taken into consideration.

Appendix

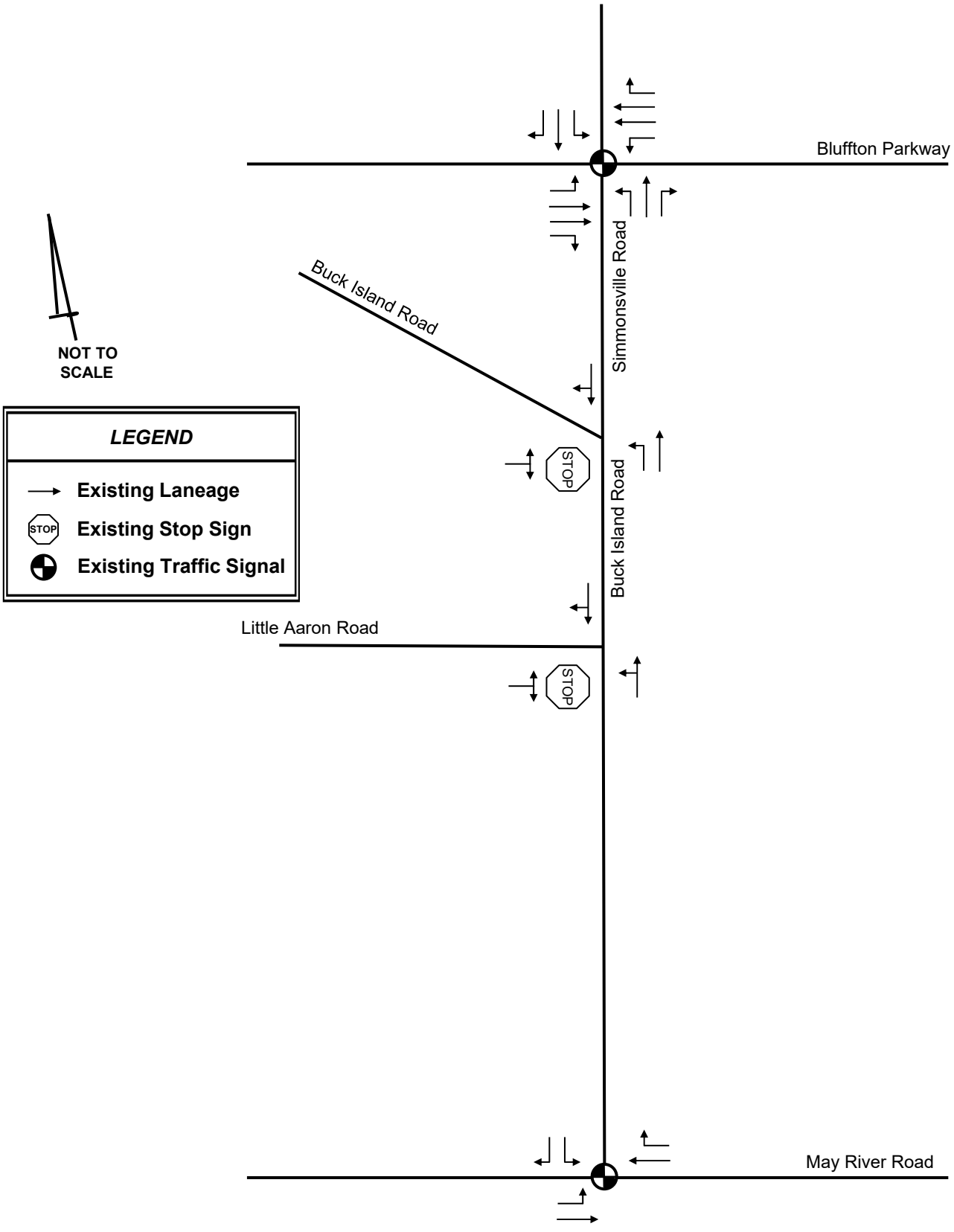


Aerial Source: Google Earth

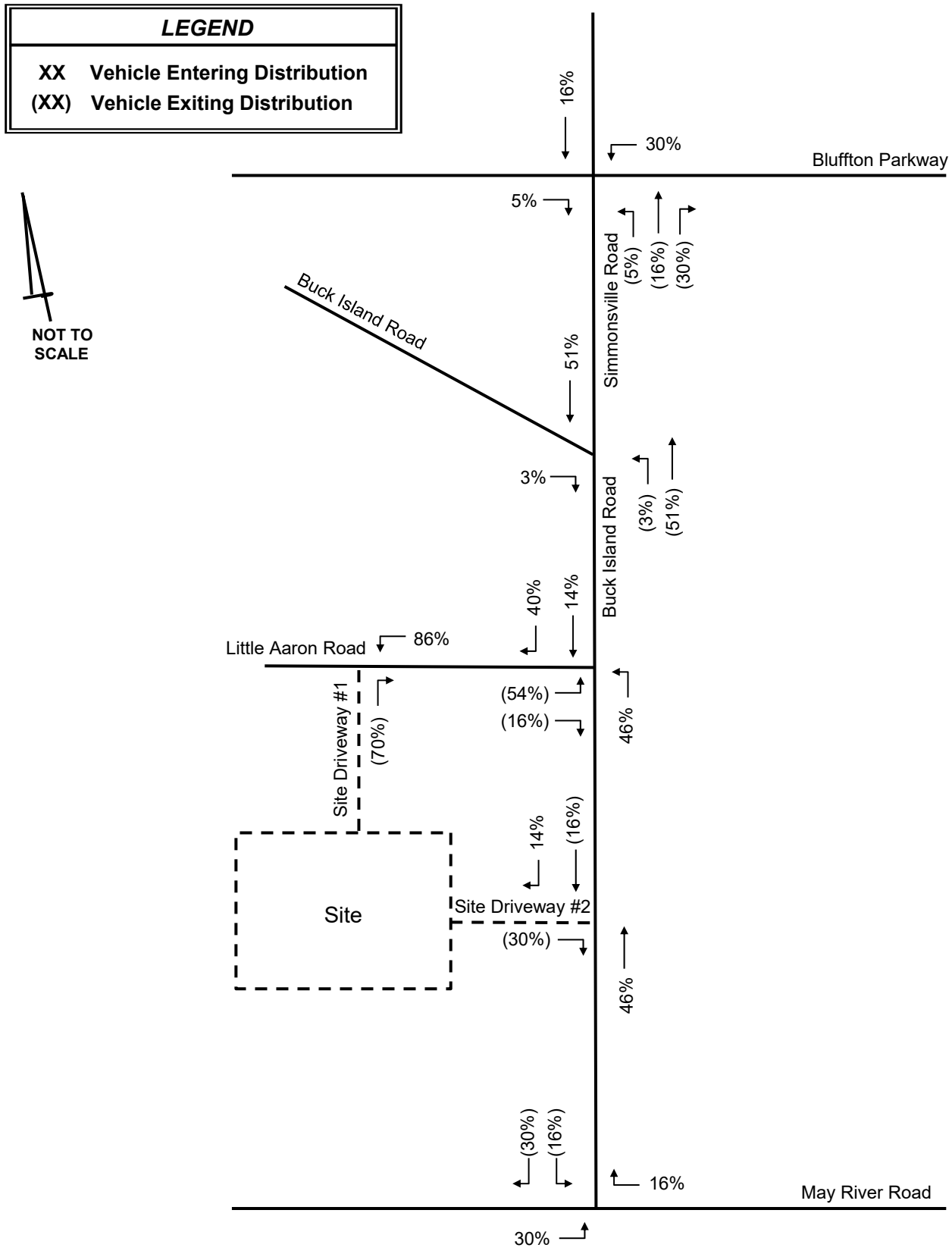
BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**Site Location**	**Figure 1**



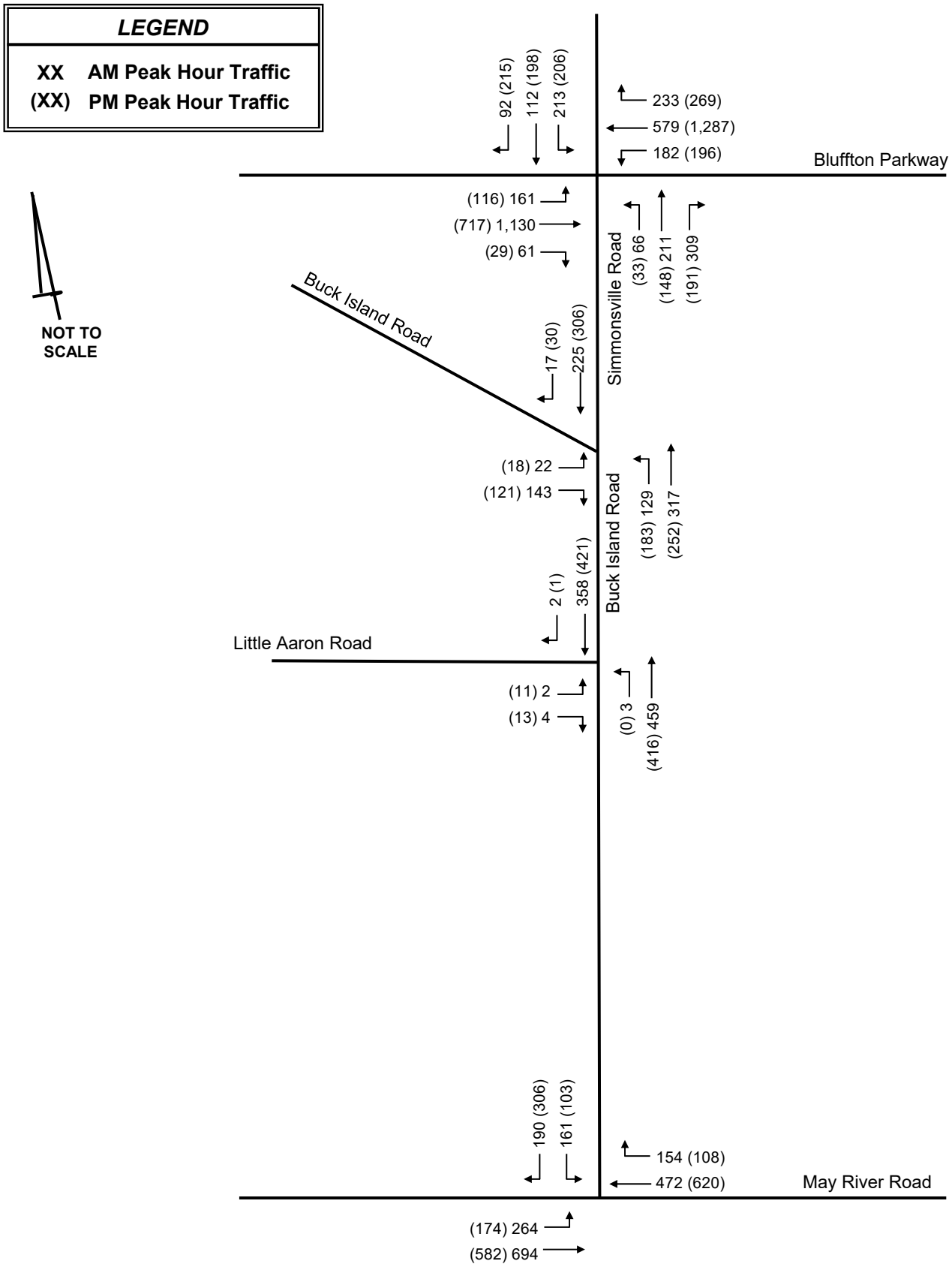
Source: Dwell Design Studios	Buck Island Road Apartments Traffic Impact Analysis	Conceptual Site Plan	Figure 2



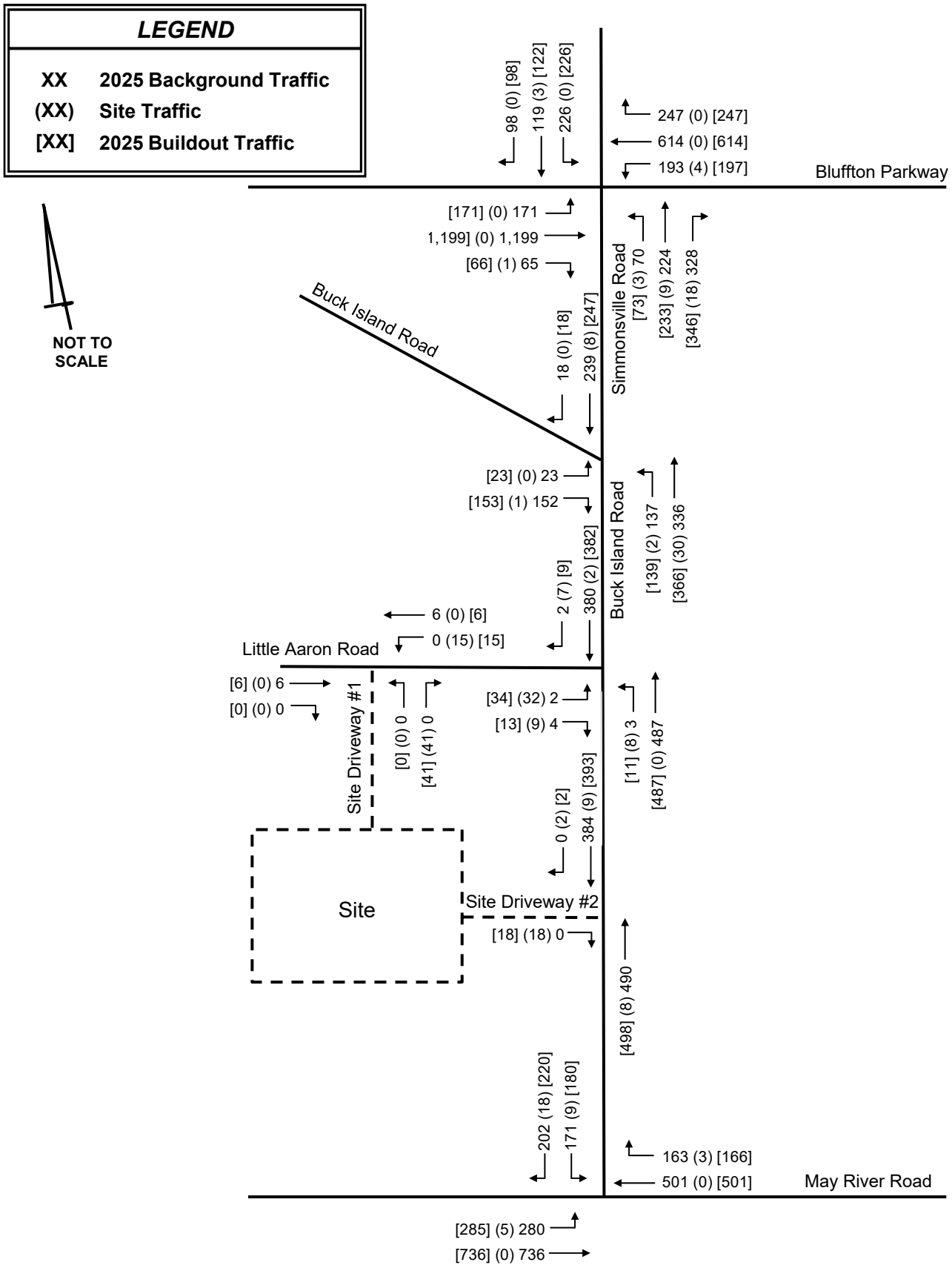
BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**Existing Laneage**	**Figure 3**



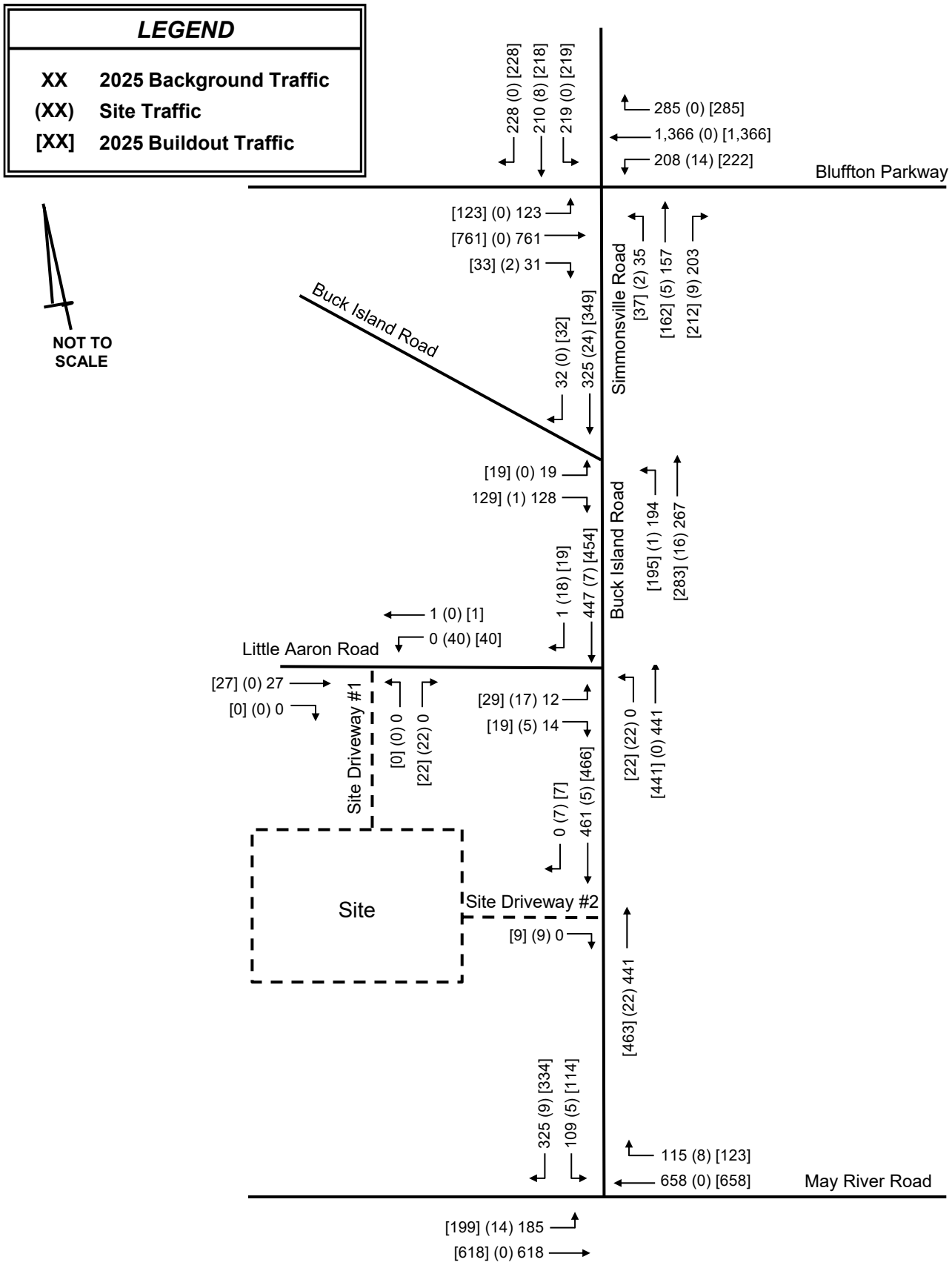
BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**Trip Distribution**	**Figure 4**



BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**Existing Traffic Volumes**	**Figure 5**



BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**2025 AM Peak Traffic Volumes**	**Figure 6**



BIHL ENGINEERING	**Buck Island Road Apartments Traffic Impact Analysis**	**2025 PM Peak Traffic Volumes**	**Figure 7**

ATTACHMENT 7

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Short Counts

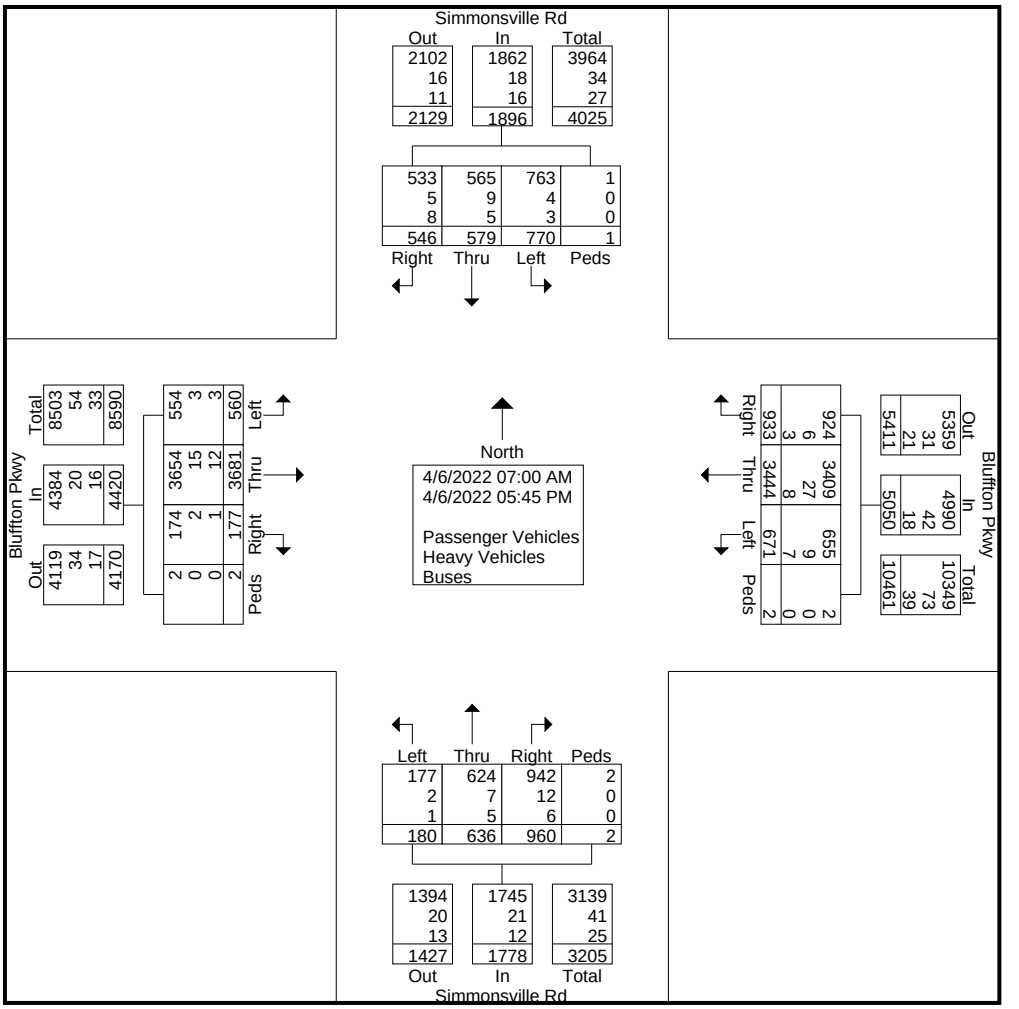
File Name : Bluffton Pkwy @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Simmonsville Rd From North				Bluffton Pkwy From East				Simmonsville Rd From South				Bluffton Pkwy From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	47	14	10	0	17	61	31	0	11	28	52	1	25	203	3	0	503
07:15 AM	67	27	21	0	13	102	62	0	7	39	62	0	30	259	5	0	694
07:30 AM	69	27	24	0	38	145	60	0	20	55	88	0	39	285	9	0	859
07:45 AM	59	29	18	0	53	136	80	0	10	48	77	0	51	276	16	0	853
Total	242	97	73	0	121	444	233	0	48	170	279	1	145	1023	33	0	2909
08:00 AM	43	22	20	0	40	132	50	0	13	50	55	0	33	295	16	0	769
08:15 AM	42	34	30	0	51	166	43	0	23	58	89	0	38	274	20	0	868
08:30 AM	41	31	20	0	53	166	37	0	15	51	83	0	47	260	20	0	824
08:45 AM	37	26	17	0	34	101	58	0	14	25	75	0	60	301	26	0	774
Total	163	113	87	0	178	565	188	0	65	184	302	0	178	1130	82	0	3235
04:00 PM	35	47	45	0	44	291	62	1	10	41	64	1	42	267	13	1	964
04:15 PM	45	40	33	1	43	265	58	0	9	24	70	0	38	236	10	0	872
04:30 PM	42	53	41	0	54	273	73	0	6	41	57	0	31	193	3	1	868
04:45 PM	47	50	60	0	55	305	71	0	4	38	45	0	29	165	8	0	877
Total	169	190	179	1	196	1134	264	1	29	144	236	1	140	861	34	2	3581
05:00 PM	68	49	57	0	39	341	63	0	12	35	48	0	32	182	8	0	934
05:15 PM	49	46	57	0	48	368	62	1	11	34	41	0	24	177	10	0	928
05:30 PM	42	48	50	0	47	320	64	0	5	24	21	0	22	172	7	0	822
05:45 PM	37	36	43	0	42	272	59	0	10	45	33	0	19	136	3	0	735
Total	196	179	207	0	176	1301	248	1	38	138	143	0	97	667	28	0	3419
Grand Total	770	579	546	1	671	3444	933	2	180	636	960	2	560	3681	177	2	13144
Apprch %	40.6	30.5	28.8	0.1	13.3	68.2	18.5	0	10.1	35.8	54	0.1	12.7	83.3	4	0	
Total %	5.9	4.4	4.2	0	5.1	26.2	7.1	0	1.4	4.8	7.3	0	4.3	28	1.3	0	
Passenger Vehicles	763	565	533	1	655	3409	924	2	177	624	942	2	554	3654	174	2	12981
% Passenger Vehicles	99.1	97.6	97.6	100	97.6	99	99	100	98.3	98.1	98.1	100	98.9	99.3	98.3	100	98.8
Heavy Vehicles	4	9	5	0	9	27	6	0	2	7	12	0	3	15	2	0	101
% Heavy Vehicles	0.5	1.6	0.9	0	1.3	0.8	0.6	0	1.1	1.1	1.2	0	0.5	0.4	1.1	0	0.8
Buses	3	5	8	0	7	8	3	0	1	5	6	0	3	12	1	0	62
% Buses	0.4	0.9	1.5	0	1	0.2	0.3	0	0.6	0.8	0.6	0	0.5	0.3	0.6	0	0.5

Short Counts

File Name : Bluffton Pkwy @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 2



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File Name : Bluffton Pkwy @ Simmonsville Rd
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Start Date : 4/6/2022
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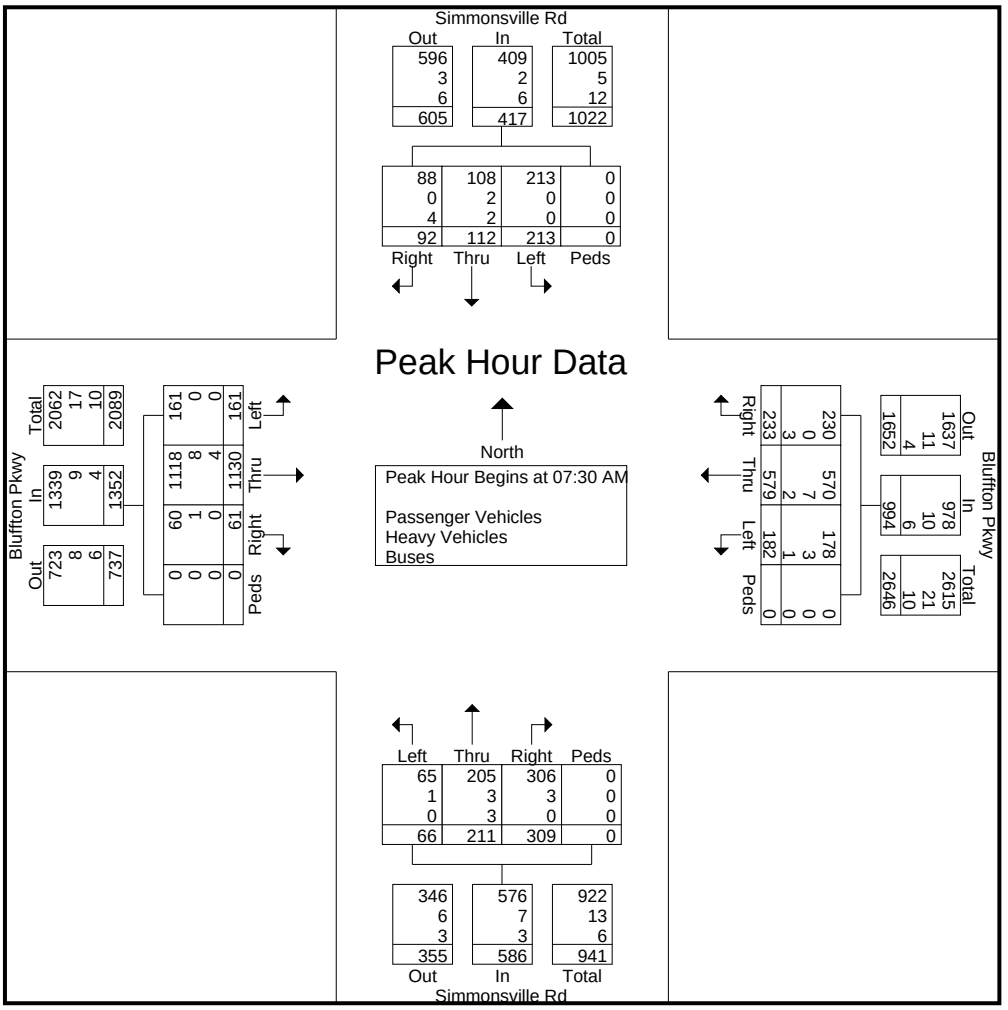
	Simmonsville Rd From North					Bluffton Pkwy From East					Simmonsville Rd From South					Bluffton Pkwy From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**69**	**27**	**24**	**0**	**120**	38	145	60	0	243	20	55	88	0	163	39	285	9	0	333	859
07:45 AM	59	29	18	0	106	**53**	136	**80**	**0**	**269**	10	48	77	0	135	**51**	**276**	**16**	**0**	**343**	**853**
08:00 AM	**43**	**22**	**20**	**0**	**85**	**40**	**132**	**50**	**0**	**222**	**13**	**50**	**55**	**0**	**118**	**33**	**295**	16	0	**344**	769
08:15 AM	42	**34**	**30**	**0**	**106**	**51**	**166**	**43**	**0**	**260**	**23**	**58**	**89**	0	**170**	38	274	**20**	**0**	**332**	**868**
Total Volume	213	112	92	0	417	182	579	233	0	994	66	211	309	0	586	161	1130	61	0	1352	3349
% App. Total	51.1	26.9	22.1	0		18.3	58.2	23.4	0		11.3	36	52.7	0		11.9	83.6	4.5	0		
PHF	.772	.824	.767	.000	.869	.858	.872	.728	.000	.924	.717	.909	.868	.000	.862	.789	.958	.763	.000	.983	.965
Passenger Vehicles	213	108	88	0	409	178	570	230	0	978	65	205	306	0	576	161	1118	60	0	1339	3302
% Passenger Vehicles	100	96.4	95.7	0	98.1	97.8	98.4	98.7	0	98.4	98.5	97.2	99.0	0	98.3	100	98.9	98.4	0	99.0	98.6
Heavy Vehicles																					
% Heavy Vehicles	0	1.8	0	0	0.5	1.6	1.2	0	0	1.0	1.5	1.4	1.0	0	1.2	0	0.7	1.6	0	0.7	0.8
Buses	0	2	4	0	6	1	2	3	0	6	0	3	0	0	3	0	4	0	0	4	19
% Buses	0	1.8	4.3	0	1.4	0.5	0.3	1.3	0	0.6	0	1.4	0	0	0.5	0	0.4	0	0	0.3	0.6



Short Counts

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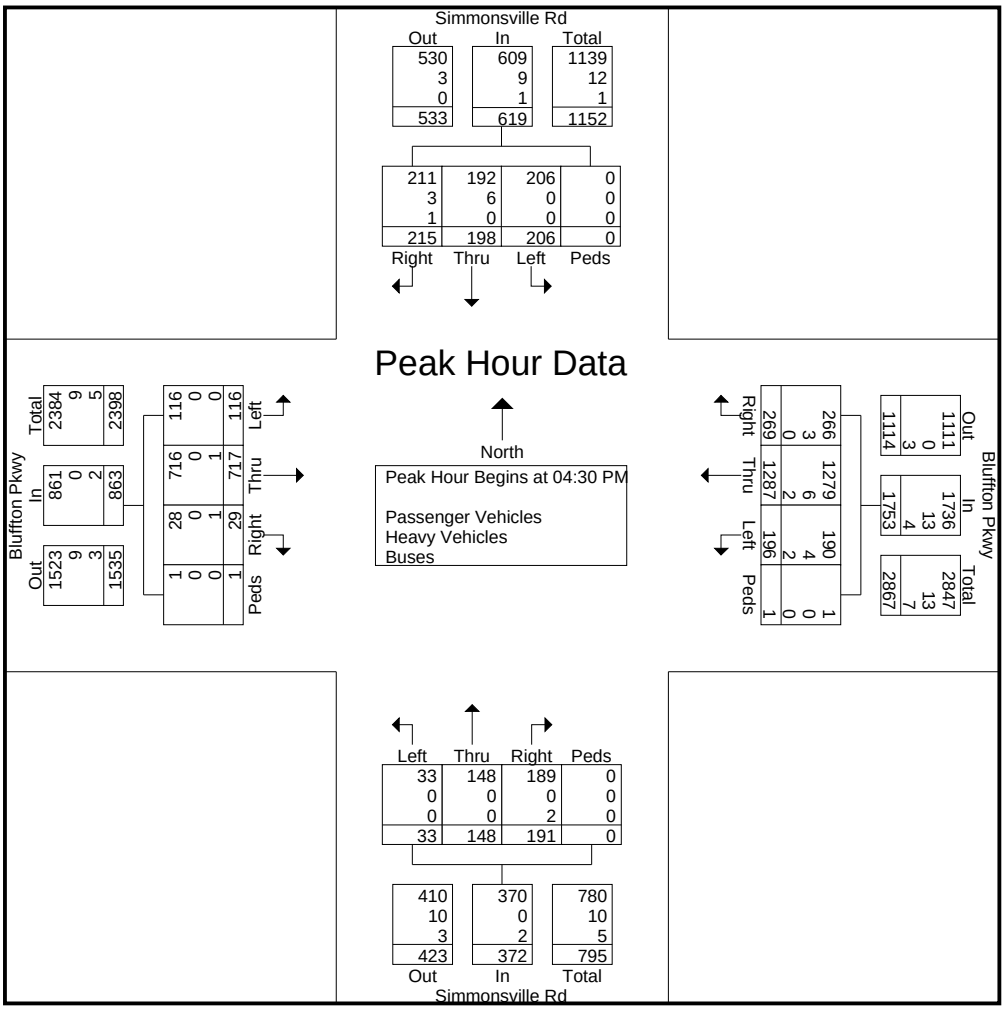
Start Date : 4/6/2022
Page No : 4

	Simmonsville Rd From North					Bluffton Pkwy From East					Simmonsville Rd From South					Bluffton Pkwy From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 04:30 PM																					
04:30 PM	42	**53**	41	0	136	54	273	**73**	**0**	**400**	**6**	**41**	**57**	0	**104**	31	**193**	3	**1**	**228**	868
04:45 PM	47	50	**60**	**0**	**157**	**55**	305	71	0	431	4	38	45	0	87	29	165	8	0	202	877
05:00 PM	**68**	**49**	**57**	**0**	**174**	39	341	63	0	443	**12**	**35**	**48**	**0**	**95**	**32**	**182**	**8**	**0**	**222**	**934**
05:15 PM	49	46	57	0	152	48	**368**	**62**	**1**	**479**	11	34	41	0	86	24	177	**10**	**0**	**211**	**928**
Total Volume	206	198	215	0	619	196	1287	269	1	1753	33	148	191	0	372	116	717	29	1	863	3607
% App. Total																					
PHF	.757	.934	.896	.000	.889	.891	.874	.921	.250	.915	.688	.902	.838	.000	.894	.906	.929	.725	.250	.946	.965
Passenger Vehicles	206	192	211	0	609	190	1279	266	1	1736	33	148	189	0	370	116	716	28	1	861	3576
% Passenger Vehicles	100	97.0	98.1	0	98.4	96.9	99.4	98.9	100	99.0	100	100	99.0	0	99.5	100	99.9	96.6	100	99.8	99.1
Heavy Vehicles																					
% Heavy Vehicles	0	3.0	1.4	0	1.5	2.0	0.5	1.1	0	0.7	0	0	0	0	0	0	0	0	0	0	0.6
Buses	0	0	1	0	1	2	2	0	0	4	0	0	2	0	2	0	1	1	0	2	9
% Buses	0	0	0.5	0	0.2	1.0	0.2	0	0	0.2	0	0	1.0	0	0.5	0	0.1	3.4	0	0.2	0.2



ATTACHMENT 7

Short Counts

File Name : Buck Island Rd @ Little Aaron
Site Code :
Start Date : 4/6/2022
Page No : 1

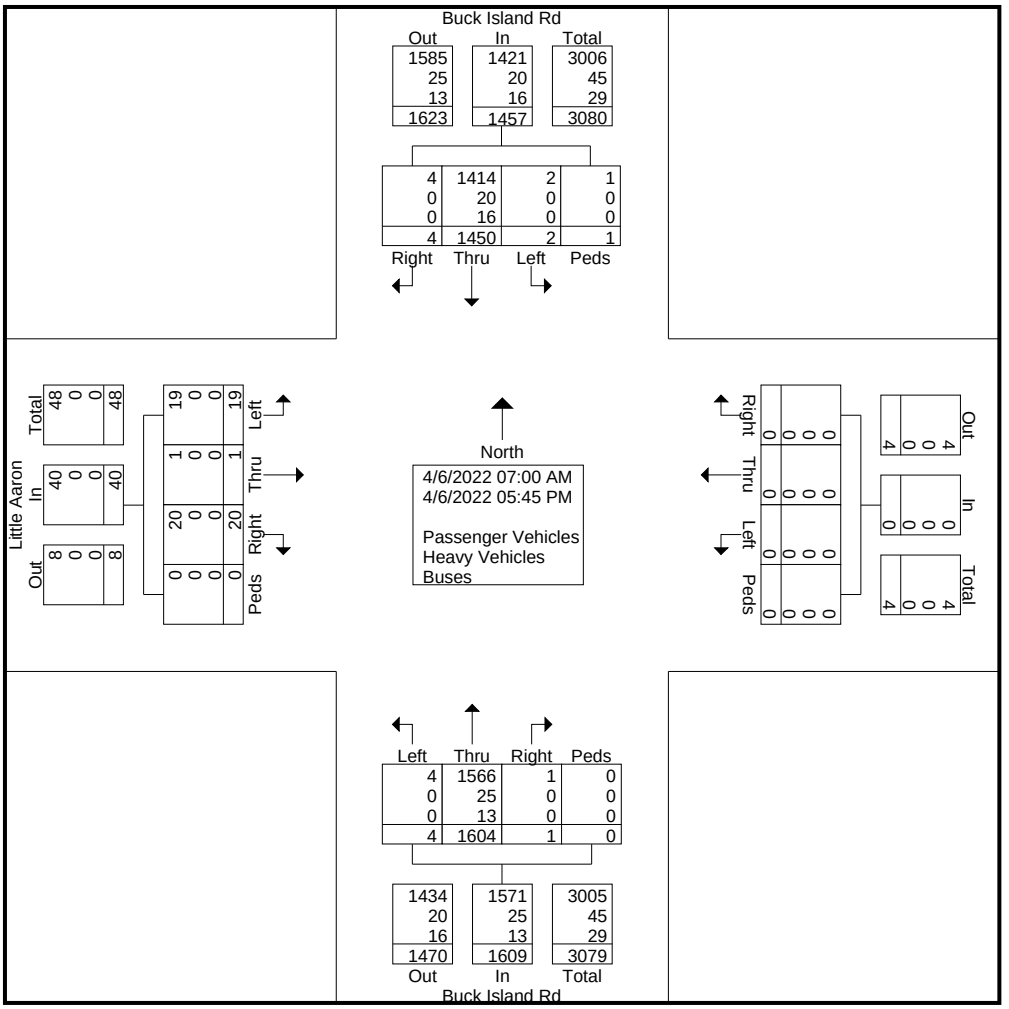
Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Buck Island Rd From North				From East				Buck Island Rd From South				Little Aaron From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	0	51	0	1	0	0	0	0	0	80	0	0	1	0	1	0	134
07:15 AM	1	82	1	0	0	0	0	0	0	91	0	0	0	0	0	0	175
07:30 AM	0	76	0	0	0	0	0	0	1	109	0	0	1	0	0	0	187
07:45 AM	0	100	1	0	0	0	0	0	2	123	1	0	2	0	0	0	229
Total	1	309	2	1	0	0	0	0	3	403	1	0	4	0	1	0	725
08:00 AM	0	64	1	0	0	0	0	0	0	111	0	0	0	0	3	0	179
08:15 AM	0	89	0	0	0	0	0	0	1	107	0	0	0	1	0	0	198
08:30 AM	0	105	0	0	0	0	0	0	0	118	0	0	0	0	1	0	224
08:45 AM	0	60	0	0	0	0	0	0	0	89	0	0	0	0	0	0	149
Total	0	318	1	0	0	0	0	0	1	425	0	0	0	1	4	0	750
04:00 PM	0	112	0	0	0	0	0	0	0	91	0	0	2	0	2	0	207
04:15 PM	0	99	0	0	0	0	0	0	0	94	0	0	2	0	0	0	195
04:30 PM	0	113	1	0	0	0	0	0	0	95	0	0	8	0	5	0	222
04:45 PM	0	111	0	0	0	0	0	0	0	100	0	0	0	0	5	0	216
Total	0	435	1	0	0	0	0	0	0	380	0	0	12	0	12	0	840
05:00 PM	0	93	0	0	0	0	0	0	0	124	0	0	3	0	2	0	222
05:15 PM	1	104	0	0	0	0	0	0	0	97	0	0	0	0	1	0	203
05:30 PM	0	93	0	0	0	0	0	0	0	89	0	0	0	0	0	0	182
05:45 PM	0	98	0	0	0	0	0	0	0	86	0	0	0	0	0	0	184
Total	1	388	0	0	0	0	0	0	0	396	0	0	3	0	3	0	791
Grand Total	2	1450	4	1	0	0	0	0	4	1604	1	0	19	1	20	0	3106
Apprch %	0.1	99.5	0.3	0.1	0	0	0	0	0.2	99.7	0.1	0	47.5	2.5	50	0	
Total %	0.1	46.7	0.1	0	0	0	0	0	0.1	51.6	0	0	0.6	0	0.6	0	
Passenger Vehicles	2	1414	4	1	0	0	0	0	4	1566	1	0	19	1	20	0	3032
% Passenger Vehicles	100	97.5	100	100	0	0	0	0	100	97.6	100	0	100	100	100	0	97.6
Heavy Vehicles	0	20	0	0	0	0	0	0	0	25	0	0	0	0	0	0	45
% Heavy Vehicles	0	1.4	0	0	0	0	0	0	0	1.6	0	0	0	0	0	0	1.4
Buses	0	16	0	0	0	0	0	0	0	13	0	0	0	0	0	0	29
% Buses	0	1.1	0	0	0	0	0	0	0	0.8	0	0	0	0	0	0	0.9

ATTACHMENT 7

Short Counts

File Name : Buck Island Rd @ Little Aaron
Site Code :
Start Date : 4/6/2022
Page No : 2

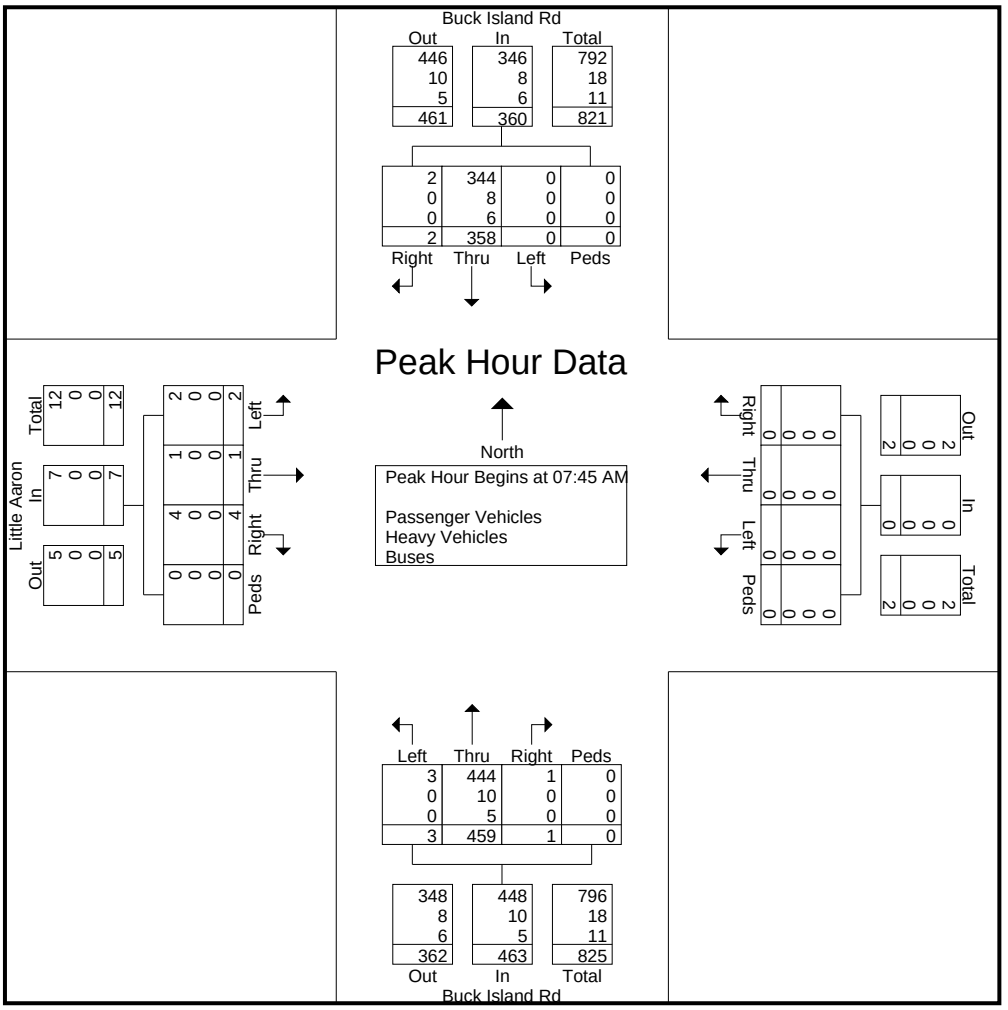


ATTACHMENT 7

Short Counts

File Name : Buck Island Rd @ Little Aaron
Site Code :
Start Date : 4/6/2022
Page No : 3

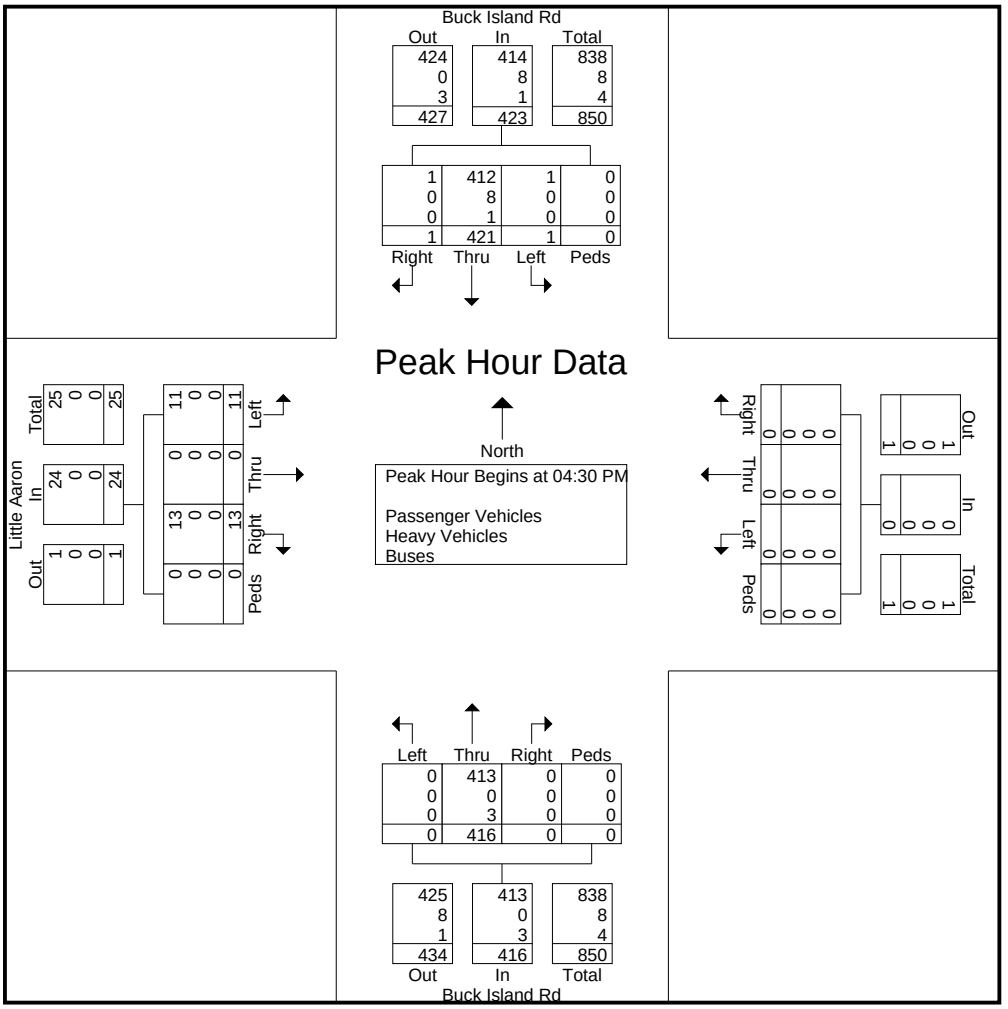
	Buck Island Rd From North					From East					Buck Island Rd From South					Little Aaron From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	100	**1**	**0**	**101**	**0**	**0**	**0**	**0**	**0**	**2**	**123**	**1**	0	**126**	**2**	**0**	**0**	**0**	**2**	**229**
08:00 AM	0	64	1	0	65	0	0	0	0	0	0	111	0	0	111	0	0	**3**	**0**	**3**	179
08:15 AM	0	89	0	0	89	0	0	0	0	0	1	107	0	0	108	0	**1**	0	0	1	198
08:30 AM	0	**105**	0	0	**105**	0	0	0	0	0	0	118	0	0	118	0	0	1	0	1	224
Total Volume	0	358	2	0	360	0	0	0	0	0	3	459	1	0	463	2	1	4	0	7	830
% App. Total	0	99.4	0.6	0		0	0	0	0		0.6	99.1	0.2	0		28.6	14.3	57.1	0		
PHF	.000	.852	.500	.000	.857	.000	.000	.000	.000	.000	.375	.933	.250	.000	.919	.250	.250	.333	.000	.583	.906
Passenger Vehicles	0	344	2	0	346	0	0	0	0	0	3	444	1	0	448	2	1	4	0	7	801
% Passenger Vehicles	0	96.1	100	0	96.1	0	0	0	0	0	100	96.7	100	0	96.8	100	100	100	0	100	96.5
Heavy Vehicles																					
% Heavy Vehicles	0	2.2	0	0	2.2	0	0	0	0	0	0	2.2	0	0	2.2	0	0	0	0	0	2.2
Buses	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	11
% Buses	0	1.7	0	0	1.7	0	0	0	0	0	0	1.1	0	0	1.1	0	0	0	0	0	1.3



Short Counts

File Name : Buck Island Rd @ Little Aaron
Site Code :
Start Date : 4/6/2022
Page No : 4

	Buck Island Rd From North					From East					Buck Island Rd From South					Little Aaron From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 04:30 PM																					
04:30 PM	0	**113**	**1**	**0**	**114**	0	0	0	0	0	0	95	0	0	95	**8**	**0**	**5**	**0**	**13**	**222**
04:45 PM	0	111	0	0	111	0	0	0	0	0	0	100	0	0	100	0	0	5	0	5	216
05:00 PM	0	93	0	0	93	0	0	0	0	0	0	**124**	**0**	**0**	**124**	3	0	2	0	5	222
05:15 PM	**1**	**104**	**0**	**0**	**105**	**0**	**0**	**0**	**0**	**0**	**0**	**97**	**0**	**0**	**97**	**0**	**0**	**1**	**0**	**1**	**203**
Total Volume	1	421	1	0	423	0	0	0	0	0	0	416	0	0	416	11	0	13	0	24	863
% App. Total	0.2	99.5	0.2	0		0	0	0	0		0	100	0	0		45.8	0	54.2	0		
PHF	.250	.931	.250	.000	.928	.000	.000	.000	.000	.000	.000	.839	.000	.000	.839	.344	.000	.650	.000	.462	.972
Passenger Vehicles	1	412	1	0	414	0	0	0	0	0	0	413	0	0	413	11	0	13	0	24	851
% Passenger Vehicles	100	97.9	100	0	97.9	0	0	0	0	0	0	99.3	0	0	99.3	100	0	100	0	100	98.6
Heavy Vehicles																					
% Heavy Vehicles	0	1.9	0	0	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9
Buses	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
% Buses	0	0.2	0	0	0.2	0	0	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0	0.5



ATTACHMENT 7

Short Counts

File Name : May River Rd @ Buck Island Rd
Site Code :
Start Date : 4/6/2022
Page No : 1

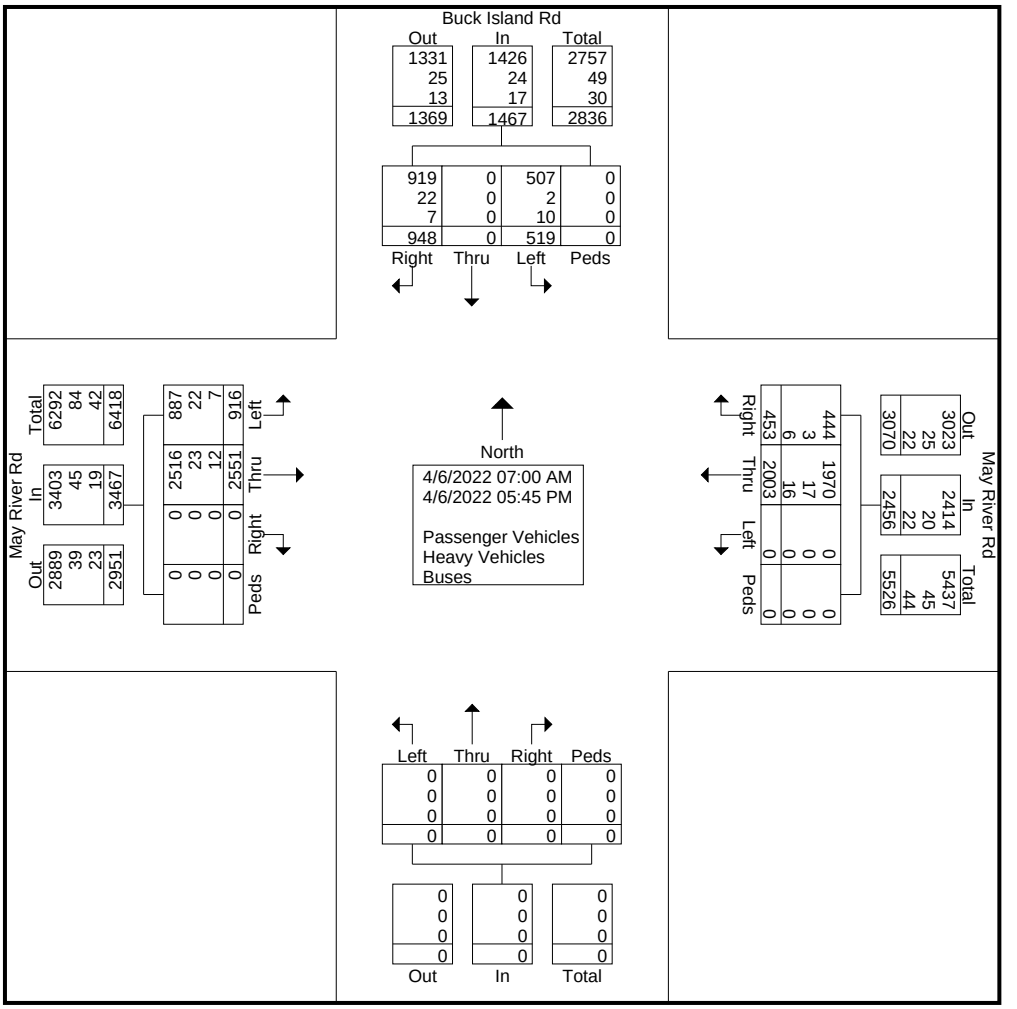
Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Buck Island Rd From North				May River Rd From East				From South				May River Rd From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	13	0	33	0	0	85	18	0	0	0	0	0	57	153	0	0	359
07:15 AM	26	0	37	0	0	96	24	0	0	0	0	0	64	180	0	0	427
07:30 AM	24	0	48	0	0	111	31	0	0	0	0	0	80	168	0	0	462
07:45 AM	38	0	52	0	0	122	37	0	0	0	0	0	68	159	0	0	476
Total	101	0	170	0	0	414	110	0	0	0	0	0	269	660	0	0	1724
08:00 AM	34	0	37	0	0	117	39	0	0	0	0	0	68	179	0	0	474
08:15 AM	36	0	45	0	0	119	33	0	0	0	0	0	65	178	0	0	476
08:30 AM	53	0	56	0	0	114	45	0	0	0	0	0	63	178	0	0	509
08:45 AM	41	0	43	0	0	76	20	0	0	0	0	0	66	206	0	0	452
Total	164	0	181	0	0	426	137	0	0	0	0	0	262	741	0	0	1911
04:00 PM	46	0	68	0	0	144	28	0	0	0	0	0	53	157	0	0	496
04:15 PM	43	0	58	0	0	122	24	0	0	0	0	0	55	149	0	0	451
04:30 PM	28	0	95	0	0	133	25	0	0	0	0	0	51	130	0	0	462
04:45 PM	22	0	92	0	0	142	29	0	0	0	0	0	49	149	0	0	483
Total	139	0	313	0	0	541	106	0	0	0	0	0	208	585	0	0	1892
05:00 PM	24	0	76	0	0	152	22	0	0	0	0	0	50	112	0	0	436
05:15 PM	31	0	77	0	0	172	19	0	0	0	0	0	47	160	0	0	506
05:30 PM	26	0	61	0	0	154	38	0	0	0	0	0	28	161	0	0	468
05:45 PM	34	0	70	0	0	144	21	0	0	0	0	0	52	132	0	0	453
Total	115	0	284	0	0	622	100	0	0	0	0	0	177	565	0	0	1863
Grand Total	519	0	948	0	0	2003	453	0	0	0	0	0	916	2551	0	0	7390
Apprch %	35.4	0	64.6	0	0	81.6	18.4	0	0	0	0	0	26.4	73.6	0	0	
Total %	7	0	12.8	0	0	27.1	6.1	0	0	0	0	0	12.4	34.5	0	0	
Passenger Vehicles	507	0	919	0	0	1970	444	0	0	0	0	0	887	2516	0	0	7243
% Passenger Vehicles	97.7	0	96.9	0	0	98.4	98	0	0	0	0	0	96.8	98.6	0	0	98
Heavy Vehicles	2	0	22	0	0	17	3	0	0	0	0	0	22	23	0	0	89
% Heavy Vehicles	0.4	0	2.3	0	0	0.8	0.7	0	0	0	0	0	2.4	0.9	0	0	1.2
Buses	10	0	7	0	0	16	6	0	0	0	0	0	7	12	0	0	58
% Buses	1.9	0	0.7	0	0	0.8	1.3	0	0	0	0	0	0.8	0.5	0	0	0.8

ATTACHMENT 7

Short Counts

File Name : May River Rd @ Buck Island Rd
Site Code :
Start Date : 4/6/2022
Page No : 2

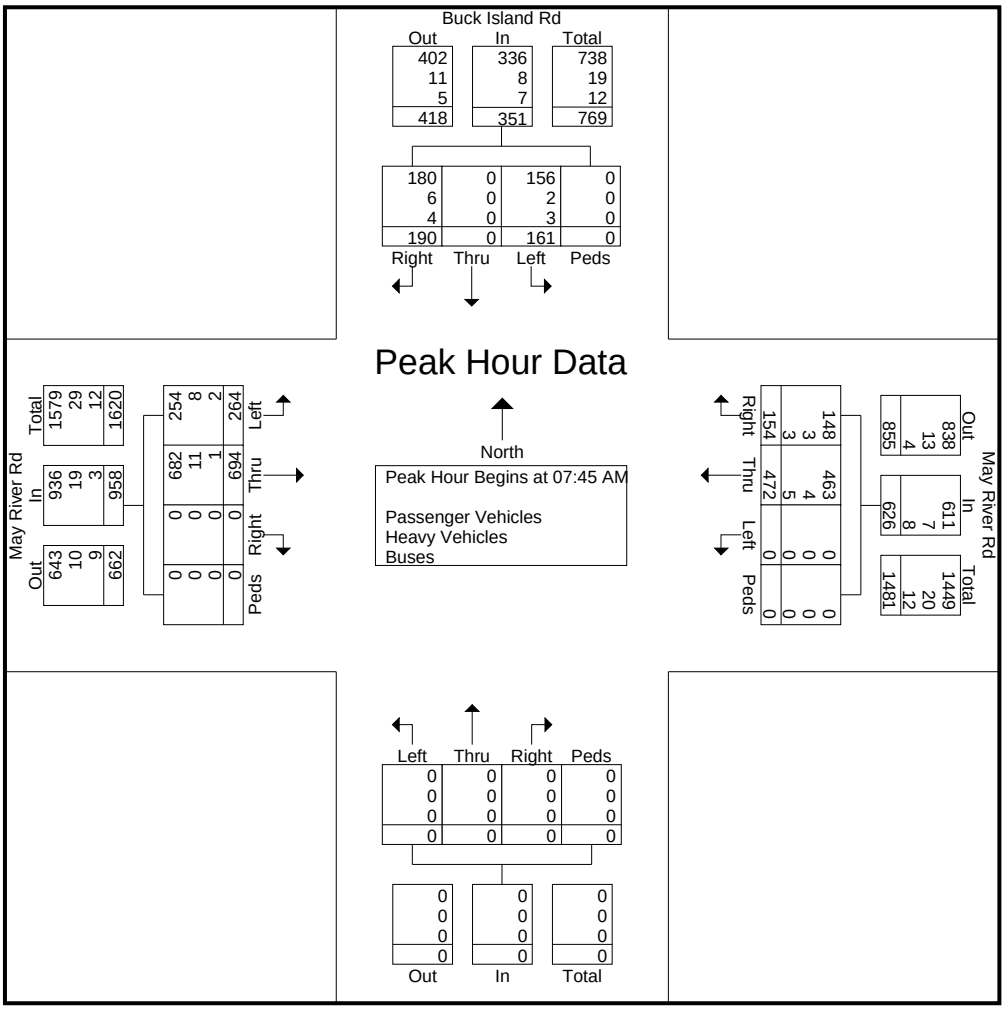


ATTACHMENT 7

Short Counts

File Name : May River Rd @ Buck Island Rd
Site Code :
Start Date : 4/6/2022
Page No : 3

	Buck Island Rd From North					May River Rd From East					From South					May River Rd From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 07:45 AM																					
07:45 AM	38	0	52	0	90	0	**122**	**37**	**0**	**159**	0	0	0	0	0	**68**	**159**	**0**	**0**	**227**	**476**
08:00 AM	**34**	**0**	**37**	**0**	**71**	**0**	**117**	**39**	**0**	**156**	**0**	**0**	**0**	**0**	**0**	**68**	**179**	0	0	**247**	474
08:15 AM	36	0	45	0	81	0	119	33	0	152	0	0	0	0	0	65	178	0	0	243	476
08:30 AM	**53**	**0**	**56**	**0**	**109**	0	114	**45**	**0**	**159**	**0**	**0**	**0**	**0**	**0**	**63**	**178**	**0**	**0**	**241**	**509**
Total Volume	161	0	190	0	351	0	472	154	0	626	0	0	0	0	0	264	694	0	0	958	1935
% App. Total	45.9	0	54.1	0		0	75.4	24.6	0		0	0	0	0		27.6	72.4	0	0		
PHF	.759	.000	.848	.000	.805	.000	.967	.856	.000	.984	.000	.000	.000	.000	.000	.971	.969	.000	.000	.970	.950
Passenger Vehicles	156	0	180	0	336	0	463	148	0	611	0	0	0	0	0	254	682	0	0	936	1883
% Passenger Vehicles	96.9	0	94.7	0	95.7	0	98.1	96.1	0	97.6	0	0	0	0	0	96.2	98.3	0	0	97.7	97.3
Heavy Vehicles																					
% Heavy Vehicles	1.2	0	3.2	0	2.3	0	0.8	1.9	0	1.1	0	0	0	0	0	3.0	1.6	0	0	2.0	1.8
Buses	3	0	4	0	7	0	5	3	0	8	0	0	0	0	0	2	1	0	0	3	18
% Buses	1.9	0	2.1	0	2.0	0	1.1	1.9	0	1.3	0	0	0	0	0	0.8	0.1	0	0	0.3	0.9

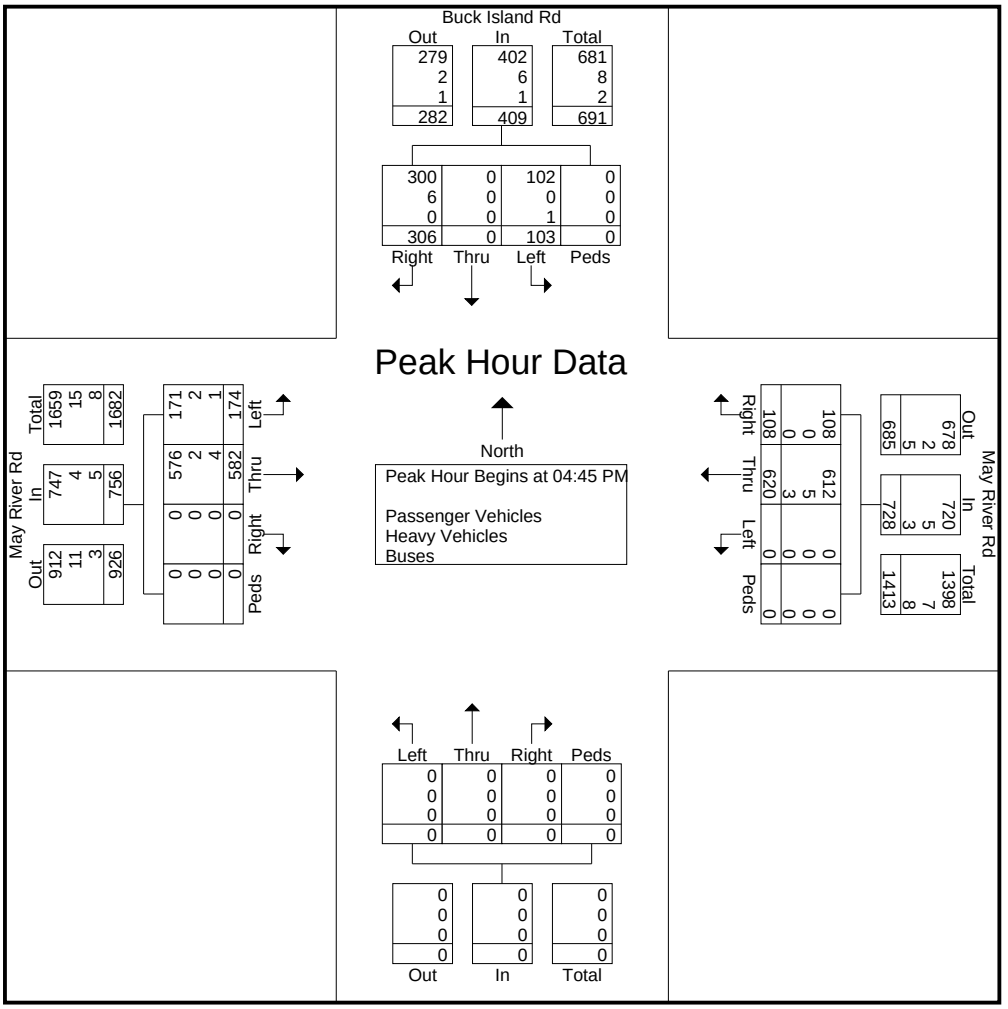


ATTACHMENT 7

Short Counts

File Name : May River Rd @ Buck Island Rd
Site Code :
Start Date : 4/6/2022
Page No : 4

	Buck Island Rd From North					May River Rd From East					From South					May River Rd From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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	22	0	**92**	**0**	**114**	0	142	29	0	171	0	0	0	0	0	49	149	0	0	198	483
05:00 PM	24	0	76	0	100	0	152	22	0	174	0	0	0	0	0	**50**	**112**	**0**	**0**	**162**	**436**
05:15 PM	**31**	**0**	**77**	**0**	**108**	**0**	**172**	**19**	**0**	**191**	**0**	**0**	**0**	**0**	**0**	**47**	**160**	**0**	**0**	**207**	**506**
05:30 PM	26	0	61	0	87	0	154	**38**	**0**	**192**	0	0	0	0	0	28	**161**	0	0	189	468
Total Volume	103	0	306	0	409	0	620	108	0	728	0	0	0	0	0	174	582	0	0	756	1893
% App. Total	25.2	0	74.8	0		0	85.2	14.8	0		0	0	0	0		23	77	0	0		
PHF	.831	.000	.832	.000	.897	.000	.901	.711	.000	.948	.000	.000	.000	.000	.000	.870	.904	.000	.000	.913	.935
Passenger Vehicles	102	0	300	0	402	0	612	108	0	720	0	0	0	0	0	171	576	0	0	747	1869
% Passenger Vehicles	99.0	0	98.0	0	98.3	0	98.7	100	0	98.9	0	0	0	0	0	98.3	99.0	0	0	98.8	98.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	2.0	0	1.5	0	0.8	0	0	0.7	0	0	0	0	0	1.1	0.3	0	0	0.5	0.8
Buses	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	4	0	0	5	9
% Buses	1.0	0	0	0	0.2	0	0.5	0	0	0.4	0	0	0	0	0	0.6	0.7	0	0	0.7	0.5



ATTACHMENT 7

Short Counts

File Name : Buck Island Rd @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 1

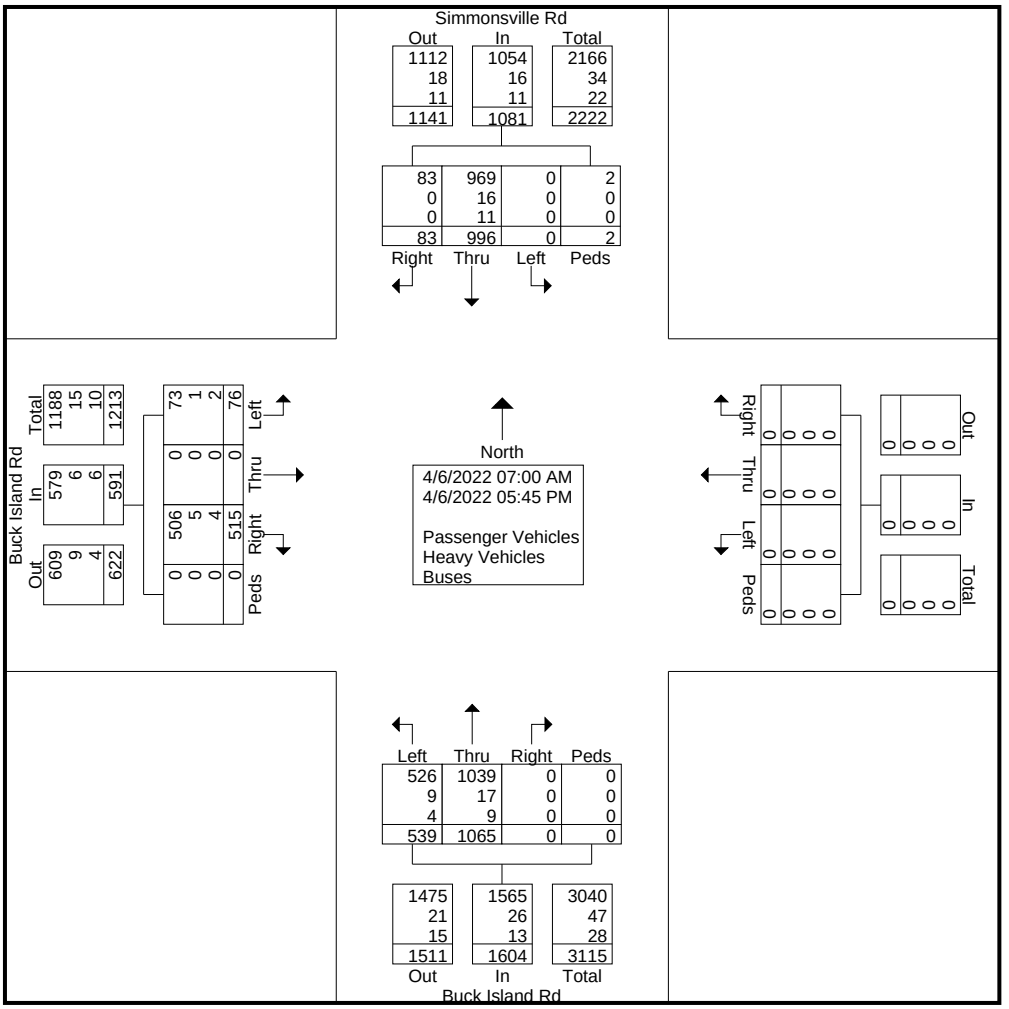
Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Simmonsville Rd From North				From East				Buck Island Rd From South				Buck Island Rd From West				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	0	26	2	0	0	0	0	0	29	47	0	0	4	0	26	0	134
07:15 AM	0	44	2	0	0	0	0	0	22	59	0	0	4	0	34	0	165
07:30 AM	0	44	6	0	0	0	0	0	25	89	0	0	7	0	39	0	210
07:45 AM	0	57	7	0	0	0	0	0	33	80	0	0	6	0	49	0	232
Total	0	171	17	0	0	0	0	0	109	275	0	0	21	0	148	0	741
08:00 AM	0	41	3	0	0	0	0	0	32	83	0	0	8	0	33	0	200
08:15 AM	0	52	6	1	0	0	0	0	23	83	0	0	6	0	30	0	201
08:30 AM	0	75	1	0	0	0	0	0	41	71	0	0	2	0	31	0	221
08:45 AM	0	64	2	0	0	0	0	0	17	73	0	0	2	0	33	0	191
Total	0	232	12	1	0	0	0	0	113	310	0	0	18	0	127	0	813
04:00 PM	0	86	8	0	0	0	0	0	36	61	0	0	3	0	31	0	225
04:15 PM	0	74	2	1	0	0	0	0	33	57	0	0	7	0	20	0	194
04:30 PM	0	88	8	0	0	0	0	0	35	68	0	0	9	0	31	0	239
04:45 PM	0	83	8	0	0	0	0	0	44	57	0	0	0	0	28	0	220
Total	0	331	26	1	0	0	0	0	148	243	0	0	19	0	110	0	878
05:00 PM	0	66	7	0	0	0	0	0	62	68	0	0	5	0	31	0	239
05:15 PM	0	69	7	0	0	0	0	0	42	59	0	0	4	0	31	0	212
05:30 PM	0	61	6	0	0	0	0	0	36	47	0	0	3	0	31	0	184
05:45 PM	0	66	8	0	0	0	0	0	29	63	0	0	6	0	37	0	209
Total	0	262	28	0	0	0	0	0	169	237	0	0	18	0	130	0	844
Grand Total	0	996	83	2	0	0	0	0	539	1065	0	0	76	0	515	0	3276
Apprch %	0	92.1	7.7	0.2	0	0	0	0	33.6	66.4	0	0	12.9	0	87.1	0	
Total %	0	30.4	2.5	0.1	0	0	0	0	16.5	32.5	0	0	2.3	0	15.7	0	
Passenger Vehicles	0	969	83	2	0	0	0	0	526	1039	0	0	73	0	506	0	3198
% Passenger Vehicles	0	97.3	100	100	0	0	0	0	97.6	97.6	0	0	96.1	0	98.3	0	97.6
Heavy Vehicles	0	16	0	0	0	0	0	0	9	17	0	0	1	0	5	0	48
% Heavy Vehicles	0	1.6	0	0	0	0	0	0	1.7	1.6	0	0	1.3	0	1	0	1.5
Buses	0	11	0	0	0	0	0	0	4	9	0	0	2	0	4	0	30
% Buses	0	1.1	0	0	0	0	0	0	0.7	0.8	0	0	2.6	0	0.8	0	0.9

ATTACHMENT 7

Short Counts

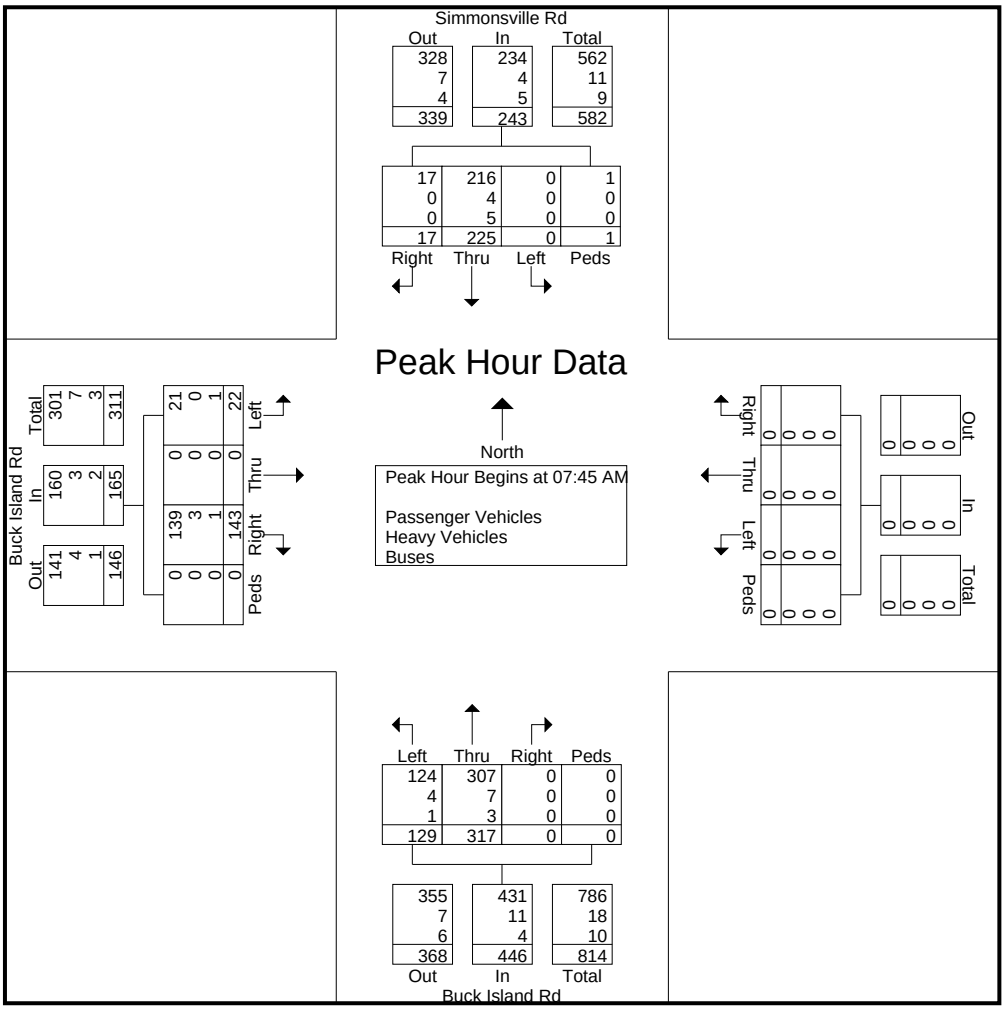
File Name : Buck Island Rd @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 2



Short Counts

File Name : Buck Island Rd @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 3

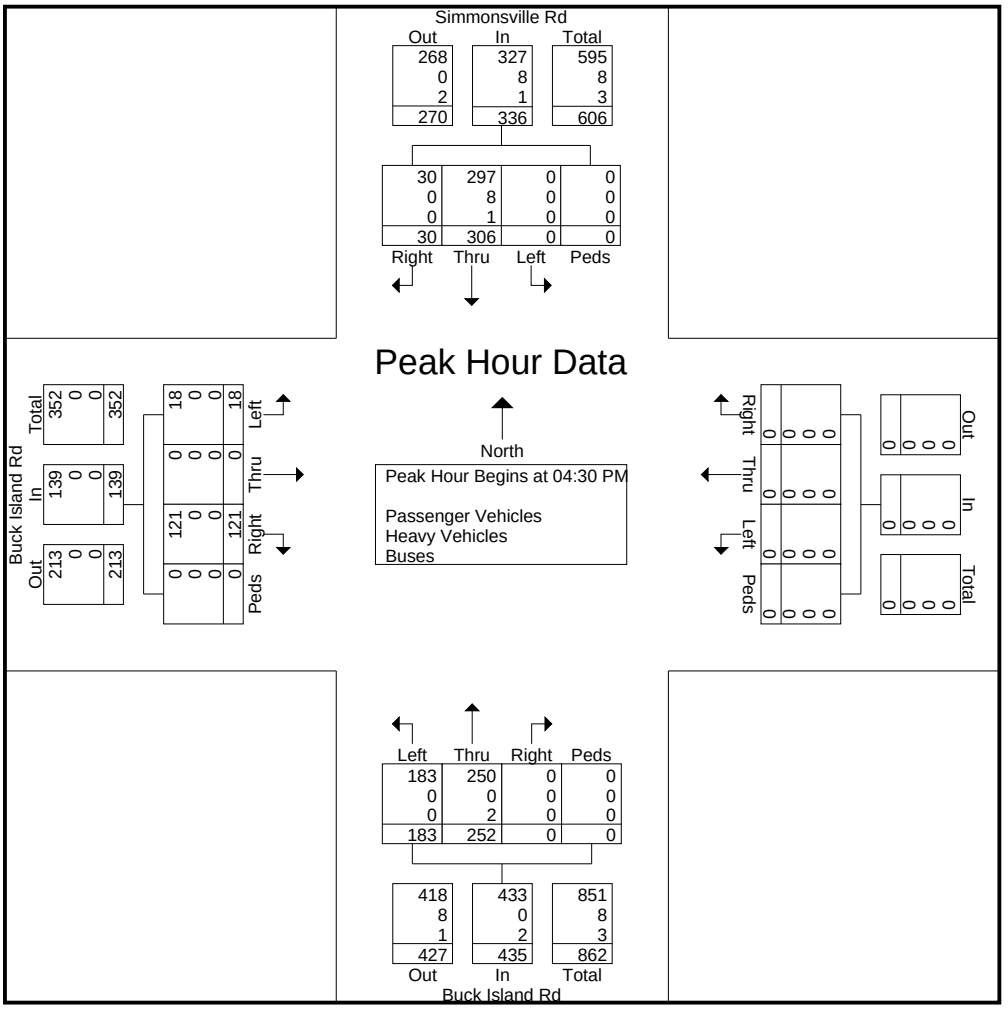
	Simmonsville Rd From North					From East					Buck Island Rd From South					Buck Island Rd From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	57	**7**	**0**	**64**	**0**	**0**	**0**	**0**	**0**	**33**	**80**	**0**	**0**	**113**	**6**	**0**	**49**	**0**	**55**	**232**
08:00 AM	0	41	3	0	44	0	0	0	0	0	32	**83**	**0**	**0**	**115**	**8**	**0**	**33**	**0**	**41**	**200**
08:15 AM	**0**	**52**	**6**	**1**	**59**	**0**	**0**	**0**	**0**	**0**	**23**	**83**	**0**	**0**	**106**	**6**	**0**	**30**	**0**	**36**	**201**
08:30 AM	**0**	**75**	1	0	**76**	0	0	0	0	0	**41**	**71**	**0**	**0**	**112**	**2**	**0**	**31**	**0**	**33**	**221**
Total Volume	0	225	17	1	243	0	0	0	0	0	129	317	0	0	446	22	0	143	0	165	854
% App. Total	0	92.6	7	0.4		0	0	0	0		28.9	71.1	0	0		13.3	0	86.7	0		
PHF	.000	.750	.607	.250	.799	.000	.000	.000	.000	.000	.787	.955	.000	.000	.970	.688	.000	.730	.000	.750	.920
Passenger Vehicles	0	216	17	1	234	0	0	0	0	0	124	307	0	0	431	21	0	139	0	160	825
% Passenger Vehicles	0	96.0	100	100	96.3	0	0	0	0	0	96.1	96.8	0	0	96.6	95.5	0	97.2	0	97.0	96.6
Heavy Vehicles																					
% Heavy Vehicles	0	1.8	0	0	1.6	0	0	0	0	0	3.1	2.2	0	0	2.5	0	0	2.1	0	1.8	2.1
Buses	0	5	0	0	5	0	0	0	0	0	1	3	0	0	4	1	0	1	0	2	11
% Buses	0	2.2	0	0	2.1	0	0	0	0	0	0.8	0.9	0	0	0.9	4.5	0	0.7	0	1.2	1.3



Short Counts

File Name : Buck Island Rd @ Simmonsville Rd
Site Code :
Start Date : 4/6/2022
Page No : 4

	Simmonsville Rd From North					From East					Buck Island Rd From South					Buck Island Rd From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	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 04:30 PM																					
04:30 PM	0	**88**	**8**	**0**	**96**	0	0	0	0	0	35	**68**	**0**	**0**	**103**	**9**	**0**	**31**	**0**	**40**	**239**
04:45 PM	0	83	8	0	91	0	0	0	0	0	44	57	0	0	101	0	0	28	0	28	220
05:00 PM	0	66	7	0	73	0	0	0	0	0	**62**	**68**	**0**	**0**	**130**	5	0	31	0	36	239
05:15 PM	0	69	7	0	76	0	0	0	0	0	42	59	0	0	101	4	0	31	0	35	212
Total Volume	0	306	30	0	336	0	0	0	0	0	183	252	0	0	435	18	0	121	0	139	910
% App. Total	0	91.1	8.9	0		0	0	0	0		42.1	57.9	0	0		12.9	0	87.1	0		
PHF	.000	.869	.938	.000	.875	.000	.000	.000	.000	.000	.738	.926	.000	.000	.837	.500	.000	.976	.000	.869	.952
Passenger Vehicles	0	297	30	0	327	0	0	0	0	0	183	250	0	0	433	18	0	121	0	139	899
% Passenger Vehicles	0	97.1	100	0	97.3	0	0	0	0	0	100	99.2	0	0	99.5	100	0	100	0	100	98.8
Heavy Vehicles																					
% Heavy Vehicles	0	2.6	0	0	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9
Buses	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
% Buses	0	0.3	0	0	0.3	0	0	0	0	0	0	0.8	0	0	0.5	0	0	0	0	0	0.3



INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
Buck Island Road at Simmonsville Road
AM PEAK HOUR (7:45 AM TO 8:45 AM)

Description	Buck Island Road Northbound			Simmonsville Road Southbound			Buck Island Road Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes	129	317	0	0	225	17	22	0	143			
Pedestrians		0			1			0			0	
Heavy Vehicle %		3.4%			3.7%			3.0%				
Peak Hour Factor		0.97 (0.95)			0.80			0.75				
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	137	336	0	0	239	18	23	0	152	0	0	0
Trip Distribution												
New Trips IN					51%				3%			
New Trips OUT	3%	51%										
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	2	30	0	0	8	0	0	0	1	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	2	30	0	0	8	0	0	0	1	0	0	0
2025 Buildout Total	**139**	**366**	**0**	**0**	**247**	**18**	**23**	**0**	**153**	**0**	**0**	**0**

PM PEAK HOUR (4:30 PM TO 5:30 PM)

Description	Buck Island Road Northbound			Simmonsville Road Southbound			Buck Island Road Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes	183	252	0	0	306	30	18	0	121			
Pedestrians		0			0			0				
Heavy Vehicle %		0.5% (2.0%)			2.7%			0% (2.0%)				
Peak Hour Factor		0.84			0.88			0.87				
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	194	267	0	0	325	32	19	0	128	0	0	0
Trip Distribution												
New Trips IN					51%				3%			
New Trips OUT	3%	51%										
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	1	16	0	0	24	0	0	0	1	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	1	16	0	0	24	0	0	0	1	0	0	0
2025 Buildout Total	**195**	**283**	**0**	**0**	**349**	**32**	**19**	**0**	**129**	**0**	**0**	**0**

INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
May River Road at Buck Island Road
AM PEAK HOUR (7:45 AM TO 8:45 AM)

Description	- Northbound			Buck Island Road Southbound			May River Road Eastbound			May River Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes				161	0	190	264	694	0	0	472	154
Pedestrians					0			0			0	
Heavy Vehicle %					4.3%			2.3%			2.4%	
Peak Hour Factor					0.81			0.97 (0.95)			0.98 (0.95)	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	171	0	202	280	736	0	0	501	163
Trip Distribution												
New Trips IN							30%					16%
New Trips OUT				16%		30%						
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	0	9	0	18	5	0	0	0	0	3
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	9	0	18	5	0	0	0	0	3
2025 Buildout Total	**0**	**0**	**0**	**180**	**0**	**220**	**285**	**736**	**0**	**0**	**501**	**166**

PM PEAK HOUR (4:45 PM TO 5:45 PM)

Description	- Northbound			Buck Island Road Southbound			May River Road Eastbound			May River Road Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes				103	0	306	174	582	0	0	620	108
Pedestrians					0			0			0	
Heavy Vehicle %					1.7% (2.0%)			1.2% (2.0%)			1.1% (2.0%)	
Peak Hour Factor					0.90			0.91			0.95	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	109	0	325	185	618	0	0	658	115
Trip Distribution												
New Trips IN							30%					16%
New Trips OUT				16%		30%						
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	0	5	0	9	14	0	0	0	0	8
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	5	0	9	14	0	0	0	0	8
2025 Buildout Total	**0**	**0**	**0**	**114**	**0**	**334**	**199**	**618**	**0**	**0**	**658**	**123**

INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
Bluffton Parkway at Simmonsville Road
AM PEAK HOUR (7:30 AM TO 8:30 AM)

Description	Simmonsville Road Northbound			Simmonsville Road Southbound			Bluffton Parkway Eastbound			Bluffton Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes	66	211	309	213	112	92	161	1,130	61	182	579	233
Pedestrians		0			0			0			0	
Heavy Vehicle %		1.7% (2.0%)			1.9% (2.0%)			1% (2.0%)			1.6% (2.0%)	
Peak Hour Factor		0.86			0.87			0.98 (0.95)			0.92	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	70	224	328	226	119	98	171	1,199	65	193	614	247
Trip Distribution												
New Trips IN					16%				5%	30%		
New Trips OUT	5%	16%	30%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	3	9	18	0	3	0	0	0	1	4	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	3	9	18	0	3	0	0	0	1	4	0	0
2025 Buildout Total	**73**	**233**	**346**	**226**	**122**	**98**	**171**	**1,199**	**66**	**197**	**614**	**247**

PM PEAK HOUR (4:30 PM TO 5:30 PM)

Description	Simmonsville Road Northbound			Simmonsville Road Southbound			Bluffton Parkway Eastbound			Bluffton Parkway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes	33	148	191	206	198	215	116	717	29	196	1,287	269
Pedestrians		0			0			1			1	
Heavy Vehicle %		0.5% (2.0%)			1.7% (2.0%)			0.2% (2.0%)			0.9% (2.0%)	
Peak Hour Factor		0.89			0.89			0.95			0.92	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	35	157	203	219	210	228	123	761	31	208	1,366	285
Trip Distribution												
New Trips IN					16%				5%	30%		
New Trips OUT	5%	16%	30%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	2	5	9	0	8	0	0	0	2	14	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	2	5	9	0	8	0	0	0	2	14	0	0
2025 Buildout Total	**37**	**162**	**212**	**219**	**218**	**228**	**123**	**761**	**33**	**222**	**1,366**	**285**

INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
Buck Island Road at Little Aaron
AM PEAK HOUR (7:45 AM TO 8:45 AM)

Description	Buck Island Road Northbound			Buck Island Road Southbound			Little Aaron Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes	3	459	1	0	358	2	2	1	4			
Pedestrians		0			0			0				
Heavy Vehicle %		3.3%			3.9%			0% (2.0%)				
Peak Hour Factor		0.92			0.86			0.58				
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	3	487	1	0	380	2	2	1	4	0	0	0
Trip Distribution												
New Trips IN	46%				14%	40%						
New Trips OUT							54%		16%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	8	0	0	0	2	7	32	0	9	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	8	0	0	0	2	7	32	0	9	0	0	0
2025 Buildout Total	**11**	**487**	**1**	**0**	**382**	**9**	**34**	**1**	**13**	**0**	**0**	**0**

PM PEAK HOUR (4:30 PM TO 5:30 PM)

Description	Buck Island Road Northbound			Buck Island Road Southbound			Little Aaron Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes	0	416	0	1	421	1	11	0	13			
Pedestrians		0			0			0				
Heavy Vehicle %		0.7% (2.0%)			2.1%			0% (2.0%)				
Peak Hour Factor		0.84			0.93			0.46 (0.50)				
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	441	0	1	447	1	12	0	14	0	0	0
Trip Distribution												
New Trips IN	46%				14%	40%						
New Trips OUT							54%		16%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	22	0	0	0	7	18	17	0	5	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	22	0	0	0	7	18	17	0	5	0	0	0
2025 Buildout Total	**22**	**441**	**0**	**1**	**454**	**19**	**29**	**0**	**19**	**0**	**0**	**0**

INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
Little Aaron at Site Driveway #1
AM PEAK HOUR (7:15 AM TO 8:15 AM)

Description	Site Driveway #1 Northbound			- Southbound			Little Aaron Eastbound			Little Aaron Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes								6			6	
Pedestrians												
Heavy Vehicle %								0% (2.0%)			0% (2.0%)	
Peak Hour Factor								0.50			0.50	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	6	0	0	6	0
Trip Distribution												
New Trips IN										86%		
New Trips OUT			70%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	41	0	0	0	0	0	0	15	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	41	0	0	0	0	0	0	15	0	0
2025 Buildout Total	**0**	**0**	**41**	**0**	**0**	**0**	**0**	**6**	**0**	**15**	**6**	**0**

PM PEAK HOUR (4:15 PM TO 5:15 PM)

Description	Site Driveway #1 Northbound			- Southbound			Little Aaron Eastbound			Little Aaron Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes								25			1	
Pedestrians												
Heavy Vehicle %								0% (2.0%)			0% (2.0%)	
Peak Hour Factor								0.48 (0.50)			0.25 (0.50)	
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	0	0	0	0	0	0	27	0	0	1	0
Trip Distribution												
New Trips IN										86%		
New Trips OUT			70%									
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	0	22	0	0	0	0	0	0	40	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	22	0	0	0	0	0	0	40	0	0
2025 Buildout Total	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**27**	**0**	**40**	**1**	**0**

INTERSECTION VOLUME DEVELOPMENT
Buck Island Road TIA
Buck Island Road at Site Driveway #2
AM PEAK HOUR (7:45 AM TO 8:45 AM)

Description	Buck Island Road Northbound			Buck Island Road Southbound			Site Driveway #2 Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 AM Volumes		462			362							
Pedestrians												
Heavy Vehicle %		3.2%			3.9%							
Peak Hour Factor		0.92			0.85							
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	490	0	0	384	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN		46%				14%						
New Trips OUT					16%				30%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	8	0	0	9	2	0	0	18	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	8	0	0	9	2	0	0	18	0	0	0
2025 Buildout Total	**0**	**498**	**0**	**0**	**393**	**2**	**0**	**0**	**18**	**0**	**0**	**0**

PM PEAK HOUR (4:30 PM TO 5:30 PM)

Description	Buck Island Road Northbound			Buck Island Road Southbound			Site Driveway #2 Eastbound			- Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing 2022 PM Volumes		416			434							
Pedestrians												
Heavy Vehicle %		0.7%			2.1%							
Peak Hour Factor		0.84			0.92							
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
Adjacent Site Development Traffic	0	0	0	0	0	0	0	0	0	0	0	0
2025 Background Traffic	0	441	0	0	461	0	0	0	0	0	0	0
Trip Distribution												
New Trips IN		46%				14%						
New Trips OUT					16%				30%			
Pass By Distribution												
Pass By IN												
Pass By OUT												
New Trips	0	22	0	0	5	7	0	0	9	0	0	0
Pass By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	22	0	0	5	7	0	0	9	0	0	0
2025 Buildout Total	**0**	**463**	**0**	**0**	**466**	**7**	**0**	**0**	**9**	**0**	**0**	**0**

ATTACHMENT 7

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	4	3	459	358	2
Future Vol, veh/h	2	4	3	459	358	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	58	58	92	92	86	86
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	3	7	3	499	416	2

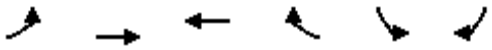
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	922	417	418	0	-	0
Stage 1	417	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	300	636	1136	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	299	636	1136	-	-	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	662	-	-	-	-	-
Stage 2	606	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1136	-	462	-	-
HCM Lane V/C Ratio	0.003	-	0.022	-	-
HCM Control Delay (s)	8.2	-	13	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
Existing AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	264	694	472	154	161	190
Future Volume (veh/h)	264	694	472	154	161	190
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1841
Adj Flow Rate, veh/h	278	731	497	162	199	235
Peak Hour Factor	0.95	0.95	0.95	0.95	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	4	4
Cap, veh/h	390	969	592	501	499	444
Arrive On Green	0.13	0.52	0.32	0.32	0.28	0.28
Sat Flow, veh/h	1781	1870	1870	1585	1753	1560
Grp Volume(v), veh/h	278	731	497	162	199	235
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1753	1560
Q Serve(g_s), s	6.5	20.7	16.5	5.2	6.1	8.5
Cycle Q Clear(g_c), s	6.5	20.7	16.5	5.2	6.1	8.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	390	969	592	501	499	444
V/C Ratio(X)	0.71	0.75	0.84	0.32	0.40	0.53
Avail Cap(c_a), veh/h	430	1198	778	660	499	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	12.7	21.3	17.4	19.3	20.1
Incr Delay (d2), s/veh	4.9	2.2	6.4	0.4	2.4	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.0	7.7	1.8	2.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.4	14.9	27.6	17.8	21.7	24.6
LnGrp LOS	B	B	C	B	C	C
Approach Vol, veh/h		1009	659		434	
Approach Delay, s/veh		16.2	25.2		23.3	
Approach LOS		B	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.8		25.0	13.5	28.3
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		22.7		10.5	8.5	18.5
Green Ext Time (p_c), s		4.6		0.9	0.1	2.6

Intersection Summary		
HCM 6th Ctrl Delay		20.5
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	143	129	317	225	17
Future Vol, veh/h	22	143	129	317	225	17
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	95	95	80	80
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	29	191	136	334	281	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	899	293	303	0	-	0
Stage 1	293	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	308	744	1252	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	274	743	1251	-	-	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	2.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1251	-	605	-	-
HCM Lane V/C Ratio	0.109	-	0.364	-	-
HCM Control Delay (s)	8.2	-	14.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.4	-	1.7	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
Existing AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	1130	61	182	579	233	66	211	309	213	112	92
Future Volume (veh/h)	161	1130	61	182	579	233	66	211	309	213	112	92
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	169	1189	0	198	629	0	77	245	359	245	129	106
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	419	1237		229	1417		375	314	471	327	429	487
Arrive On Green	0.08	0.35	0.00	0.13	0.40	0.00	0.07	0.17	0.17	0.13	0.23	0.23
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	169	1189	0	198	629	0	77	245	359	245	129	106
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.6	36.1	0.0	12.0	14.2	0.0	3.8	13.8	18.5	12.1	6.3	5.5
Cycle Q Clear(g_c), s	6.6	36.1	0.0	12.0	14.2	0.0	3.8	13.8	18.5	12.1	6.3	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	419	1237		229	1417		375	314	471	327	429	487
V/C Ratio(X)	0.40	0.96		0.86	0.44		0.21	0.78	0.76	0.75	0.30	0.22
Avail Cap(c_a), veh/h	426	1239		307	1562		484	314	471	327	429	487
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	20.5	35.2	0.0	47.0	24.2	0.0	33.8	43.8	35.2	31.7	35.1	28.3
Incr Delay (d2), s/veh	0.6	17.1	0.0	17.1	0.2	0.0	0.3	11.8	7.2	9.3	0.4	0.2
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	2.7	17.6	0.0	6.2	5.7	0.0	1.6	7.3	9.4	5.8	2.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	52.3	0.0	64.1	24.4	0.0	34.0	55.7	42.4	41.0	35.5	28.5
LnGrp LOS	C	D		E	C		C	E	D	D	D	C
Approach Vol, veh/h		1358	A		827	A		681			480	
Approach Delay, s/veh		48.4			33.9			46.3			36.7	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	44.9	13.2	31.8	14.6	50.5	20.0	25.0
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	14.0	38.1	5.8	8.3	8.6	16.2	14.1	20.5
Green Ext Time (p_c), s	0.2	0.2	0.1	0.6	0.0	4.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	13	0	416	421	1
Future Vol, veh/h	11	13	0	416	421	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	84	84	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	0	495	453	1

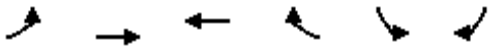
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	949	454	454	0	-	0
Stage 1	454	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	289	606	1107	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	289	606	1107	-	-	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1107	-	403	-	-
HCM Lane V/C Ratio	-	-	0.119	-	-
HCM Control Delay (s)	0	-	15.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
Existing PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	174	582	620	108	103	306
Future Volume (veh/h)	174	582	620	108	103	306
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	640	653	114	114	340
Peak Hour Factor	0.91	0.91	0.95	0.95	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	322	1032	701	594	471	419
Arrive On Green	0.11	0.55	0.37	0.37	0.26	0.26
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	191	640	653	114	114	340
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.2	16.7	24.1	3.5	3.6	14.4
Cycle Q Clear(g_c), s	4.2	16.7	24.1	3.5	3.6	14.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	322	1032	701	594	471	419
V/C Ratio(X)	0.59	0.62	0.93	0.19	0.24	0.81
Avail Cap(c_a), veh/h	378	1114	724	613	471	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	11.0	21.6	15.1	20.8	24.7
Incr Delay (d2), s/veh	1.8	0.9	18.5	0.2	1.2	15.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.5	13.2	1.2	1.5	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.0	11.9	40.1	15.3	22.0	40.3
LnGrp LOS	B	B	D	B	C	D
Approach Vol, veh/h		831	767		454	
Approach Delay, s/veh		13.1	36.4		35.7	
Approach LOS		B	D		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		46.9		25.0	12.7	34.1
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		18.7		16.4	6.2	26.1
Green Ext Time (p_c), s		4.0		0.4	0.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	121	183	252	306	30
Future Vol, veh/h	18	121	183	252	306	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	84	84	88	88
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	21	139	218	300	348	34

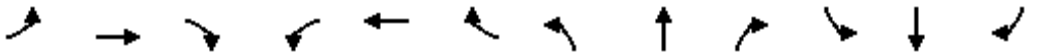
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1101	365	382	0	-	0
Stage 1	365	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	235	680	1176	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	474	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	680	1176	-	-	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	474	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.2	3.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1176	-	512	-	-
HCM Lane V/C Ratio	0.185	-	0.312	-	-
HCM Control Delay (s)	8.8	-	15.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.7	-	1.3	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
Existing PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	717	29	196	1287	269	33	148	191	206	198	215
Future Volume (veh/h)	116	717	29	196	1287	269	33	148	191	206	198	215
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	122	755	0	213	1399	0	37	166	215	231	222	242
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	1271		246	1546		259	260	439	348	402	436
Arrive On Green	0.06	0.36	0.00	0.14	0.44	0.00	0.05	0.14	0.14	0.13	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	122	755	0	213	1399	0	37	166	215	231	222	242
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.5	18.2	0.0	12.3	38.5	0.0	1.8	8.8	11.9	11.2	11.1	13.7
Cycle Q Clear(g_c), s	4.5	18.2	0.0	12.3	38.5	0.0	1.8	8.8	11.9	11.2	11.1	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	1271		246	1546		259	260	439	348	402	436
V/C Ratio(X)	0.60	0.59		0.87	0.90		0.14	0.64	0.49	0.66	0.55	0.55
Avail Cap(c_a), veh/h	248	1300		322	1639		407	330	498	361	402	436
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	25.0	27.5	0.0	44.3	27.6	0.0	35.3	42.7	31.7	31.6	36.7	32.5
Incr Delay (d2), s/veh	2.8	0.7	0.0	17.2	7.3	0.0	0.2	2.7	0.8	4.3	1.6	1.5
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	1.9	7.4	0.0	6.4	16.4	0.0	0.8	4.2	4.5	5.0	5.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	28.2	0.0	61.5	34.9	0.0	35.5	45.4	32.6	35.9	38.4	34.1
LnGrp LOS	C	C		E	C		D	D	C	D	D	C
Approach Vol, veh/h		877	A		1612	A		418			695	
Approach Delay, s/veh		28.1			38.4			37.9			36.0	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	44.1	11.3	29.0	12.4	52.3	19.2	21.1
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	14.3	20.2	3.8	15.7	6.5	40.5	13.2	13.9
Green Ext Time (p_c), s	0.2	4.5	0.0	0.6	0.1	5.2	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	4	3	487	380	2
Future Vol, veh/h	2	4	3	487	380	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	58	58	92	92	86	86
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	3	7	3	529	442	2

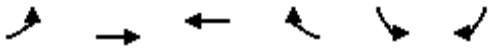
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	978	443	444	0	-	0
Stage 1	443	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	278	615	1111	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	277	615	1111	-	-	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1111	-	437	-	-
HCM Lane V/C Ratio	0.003	-	0.024	-	-
HCM Control Delay (s)	8.2	-	13.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
No Build AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	280	736	501	163	171	202
Future Volume (veh/h)	280	736	501	163	171	202
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1841
Adj Flow Rate, veh/h	295	775	527	172	211	249
Peak Hour Factor	0.95	0.95	0.95	0.95	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	4	4
Cap, veh/h	387	991	610	517	486	433
Arrive On Green	0.13	0.53	0.33	0.33	0.28	0.28
Sat Flow, veh/h	1781	1870	1870	1585	1753	1560
Grp Volume(v), veh/h	295	775	527	172	211	249
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1753	1560
Q Serve(g_s), s	7.0	22.8	18.1	5.6	6.8	9.4
Cycle Q Clear(g_c), s	7.0	22.8	18.1	5.6	6.8	9.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	387	991	610	517	486	433
V/C Ratio(X)	0.76	0.78	0.86	0.33	0.43	0.58
Avail Cap(c_a), veh/h	414	1169	759	643	486	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	12.9	21.6	17.4	20.3	21.3
Incr Delay (d2), s/veh	7.7	3.0	8.5	0.4	2.8	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	7.9	8.3	1.8	2.9	8.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.4	15.9	30.2	17.8	23.1	26.8
LnGrp LOS	C	B	C	B	C	C
Approach Vol, veh/h		1070	699		460	
Approach Delay, s/veh		17.7	27.1		25.1	
Approach LOS		B	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		43.5		25.0	13.9	29.6
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		24.8		11.4	9.0	20.1
Green Ext Time (p_c), s		4.8		0.9	0.1	2.3

Intersection Summary		
HCM 6th Ctrl Delay		22.2
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	152	137	336	239	18
Future Vol, veh/h	23	152	137	336	239	18
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	95	95	80	80
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	31	203	144	354	299	23

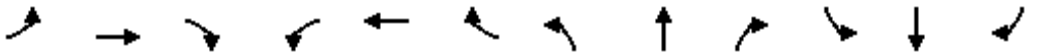
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	954	312	323	0	-	0
Stage 1	312	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	286	726	1231	-	-	-
Stage 1	740	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	725	1230	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.3	2.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1230	-	582	-	-
HCM Lane V/C Ratio	0.117	-	0.401	-	-
HCM Control Delay (s)	8.3	-	15.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1.9	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
No Build AM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	1199	65	193	614	247	70	224	328	226	119	98
Future Volume (veh/h)	171	1199	65	193	614	247	70	224	328	226	119	98
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	180	1262	0	210	667	0	81	260	381	260	137	113
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	410	1229		241	1422		370	312	479	315	424	488
Arrive On Green	0.08	0.35	0.00	0.14	0.40	0.00	0.07	0.17	0.17	0.13	0.23	0.23
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	180	1262	0	210	667	0	81	260	381	260	137	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.2	38.4	0.0	12.8	15.4	0.0	4.1	14.9	18.5	13.1	6.8	5.9
Cycle Q Clear(g_c), s	7.2	38.4	0.0	12.8	15.4	0.0	4.1	14.9	18.5	13.1	6.8	5.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	410	1229		241	1422		370	312	479	315	424	488
V/C Ratio(X)	0.44	1.03		0.87	0.47		0.22	0.83	0.80	0.83	0.32	0.23
Avail Cap(c_a), veh/h	410	1229		305	1549		476	312	479	315	424	488
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	20.8	36.3	0.0	47.1	24.6	0.0	34.2	44.8	35.6	32.6	35.8	28.6
Incr Delay (d2), s/veh	0.7	32.7	0.0	19.4	0.2	0.0	0.3	22.4	12.9	16.3	2.0	1.1
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	2.9	21.2	0.0	6.8	6.2	0.0	1.8	8.7	10.8	6.8	3.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	69.0	0.0	66.5	24.8	0.0	34.5	67.1	48.5	48.9	37.8	29.8
LnGrp LOS	C	F		E	C		C	E	D	D	D	C
Approach Vol, veh/h		1442	A		877	A		722			510	
Approach Delay, s/veh		63.1			34.8			53.6			41.7	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	45.0	13.3	31.7	15.0	51.0	20.0	25.0
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	14.8	40.4	6.1	8.8	9.2	17.4	15.1	20.5
Green Ext Time (p_c), s	0.2	0.0	0.1	0.7	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	14	0	441	447	1
Future Vol, veh/h	12	14	0	441	447	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	84	84	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	28	0	525	481	1

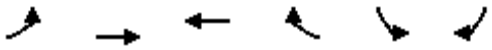
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1007	482	482	0	-	0
Stage 1	482	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	267	584	1081	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	593	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	584	1081	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	621	-	-	-	-	-
Stage 2	593	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1081	-	377	-	-
HCM Lane V/C Ratio	-	-	0.138	-	-
HCM Control Delay (s)	0	-	16.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
No Build PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	185	618	658	115	109	325
Future Volume (veh/h)	185	618	658	115	109	325
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	679	693	121	121	361
Peak Hour Factor	0.91	0.91	0.95	0.95	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	304	1043	715	606	465	414
Arrive On Green	0.11	0.56	0.38	0.38	0.26	0.26
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	203	679	693	121	121	361
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.5	18.4	26.5	3.7	3.9	15.9
Cycle Q Clear(g_c), s	4.5	18.4	26.5	3.7	3.9	15.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	1043	715	606	465	414
V/C Ratio(X)	0.67	0.65	0.97	0.20	0.26	0.87
Avail Cap(c_a), veh/h	358	1100	715	606	465	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	11.2	22.1	15.0	21.3	25.7
Incr Delay (d2), s/veh	3.7	1.3	26.3	0.2	1.4	21.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.1	15.0	1.2	1.7	15.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.3	12.5	48.4	15.2	22.7	47.3
LnGrp LOS	B	B	D	B	C	D
Approach Vol, veh/h		882	814		482	
Approach Delay, s/veh		14.0	43.4		41.1	
Approach LOS		B	D		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.8		25.0	12.8	35.0
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		20.4		17.9	6.5	28.5
Green Ext Time (p_c), s		4.3		0.2	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	128	194	267	325	32
Future Vol, veh/h	19	128	194	267	325	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	84	84	88	88
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	22	147	231	318	369	36

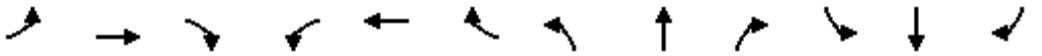
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1167	387	405	0	-	0
Stage 1	387	-	-	-	-	-
Stage 2	780	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	214	661	1154	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	171	661	1154	-	-	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.4	3.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1154	-	482	-	-
HCM Lane V/C Ratio	0.2	-	0.351	-	-
HCM Control Delay (s)	8.9	-	16.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.7	-	1.6	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
No Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	761	31	208	1366	285	35	157	203	219	210	228
Future Volume (veh/h)	123	761	31	208	1366	285	35	157	203	219	210	228
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	129	801	0	226	1485	0	39	176	228	246	236	256
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1234		256	1520		268	306	487	359	444	476
Arrive On Green	0.06	0.35	0.00	0.14	0.43	0.00	0.05	0.16	0.16	0.12	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	129	801	0	226	1485	0	39	176	228	246	236	256
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.2	21.5	0.0	14.1	46.5	0.0	2.0	9.8	13.2	12.6	12.5	15.2
Cycle Q Clear(g_c), s	5.2	21.5	0.0	14.1	46.5	0.0	2.0	9.8	13.2	12.6	12.5	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	1234		256	1520		268	306	487	359	444	476
V/C Ratio(X)	0.71	0.65		0.88	0.98		0.15	0.58	0.47	0.68	0.53	0.54
Avail Cap(c_a), veh/h	211	1234		299	1520		399	306	487	359	444	476
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	28.0	31.1	0.0	47.5	31.8	0.0	35.9	43.7	31.7	32.5	37.7	33.0
Incr Delay (d2), s/veh	8.8	1.2	0.0	23.0	17.8	0.0	0.2	7.7	3.2	5.3	4.5	4.3
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	2.5	9.0	0.0	7.7	22.1	0.0	0.9	5.1	5.3	5.7	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	32.3	0.0	70.5	49.6	0.0	36.1	51.4	34.9	37.8	42.2	37.3
LnGrp LOS	D	C		E	D		D	D	C	D	D	D
Approach Vol, veh/h		930	A		1711	A		443			738	
Approach Delay, s/veh		32.9			52.3			41.6			39.0	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	45.9	11.7	33.3	13.1	55.0	20.0	25.0
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	16.1	23.5	4.0	17.2	7.2	48.5	14.6	15.2
Green Ext Time (p_c), s	0.2	4.4	0.0	0.3	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	13	11	487	382	9
Future Vol, veh/h	34	13	11	487	382	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	58	58	92	92	86	86
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	59	22	12	529	444	10

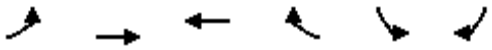
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1002	449	454	0	-	0
Stage 1	449	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	269	610	1101	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	265	610	1101	-	-	-
Mov Cap-2 Maneuver	265	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	576	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.4	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1101	-	314	-	-
HCM Lane V/C Ratio	0.011	-	0.258	-	-
HCM Control Delay (s)	8.3	-	20.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
Build AM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	285	736	501	166	180	220
Future Volume (veh/h)	285	736	501	166	180	220
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1841	1841
Adj Flow Rate, veh/h	300	775	527	175	222	272
Peak Hour Factor	0.95	0.95	0.95	0.95	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	4	4
Cap, veh/h	389	993	610	517	485	432
Arrive On Green	0.13	0.53	0.33	0.33	0.28	0.28
Sat Flow, veh/h	1781	1870	1870	1585	1753	1560
Grp Volume(v), veh/h	300	775	527	175	222	272
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1753	1560
Q Serve(g_s), s	7.1	22.8	18.2	5.7	7.2	10.5
Cycle Q Clear(g_c), s	7.1	22.8	18.2	5.7	7.2	10.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	389	993	610	517	485	432
V/C Ratio(X)	0.77	0.78	0.86	0.34	0.46	0.63
Avail Cap(c_a), veh/h	413	1166	757	642	485	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	12.9	21.7	17.5	20.6	21.8
Incr Delay (d2), s/veh	8.3	3.0	8.6	0.4	3.1	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	7.9	8.3	1.9	3.1	9.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.1	15.9	30.3	17.9	23.7	28.6
LnGrp LOS	C	B	C	B	C	C
Approach Vol, veh/h		1075	702		494	
Approach Delay, s/veh		17.9	27.2		26.4	
Approach LOS		B	C		C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		43.7		25.0	14.1	29.6
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		24.8		12.5	9.1	20.2
Green Ext Time (p_c), s		4.8		0.9	0.1	2.2

Intersection Summary		
HCM 6th Ctrl Delay		22.6
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	6	0	15	6	0	41
Future Vol, veh/h	6	0	15	6	0	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	50	50	50	50	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	30	12	0	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	12	0	84	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	72	-
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	-	-	1607	-	918	1069
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1607	-	901	1069
Mov Cap-2 Maneuver	-	-	-	-	901	-
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	933	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.2	8.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1069	-	-	1607	-
HCM Lane V/C Ratio	0.043	-	-	0.019	-
HCM Control Delay (s)	8.5	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	153	139	366	247	18
Future Vol, veh/h	23	153	139	366	247	18
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	95	95	80	80
Heavy Vehicles, %	3	3	3	3	4	4
Mvmt Flow	31	204	146	385	309	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	999	322	333	0	-	0
Stage 1	322	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-
Pot Cap-1 Maneuver	269	717	1221	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	236	716	1220	-	-	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	502	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	2.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1220	-	566	-	-
HCM Lane V/C Ratio	0.12	-	0.415	-	-
HCM Control Delay (s)	8.4	-	15.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
Build AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	1199	66	197	614	247	73	233	346	226	122	98
Future Volume (veh/h)	171	1199	66	197	614	247	73	233	346	226	122	98
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	180	1262	0	214	667	0	85	271	402	260	140	113
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1226		245	1427		367	311	481	308	421	485
Arrive On Green	0.08	0.35	0.00	0.14	0.40	0.00	0.07	0.17	0.17	0.13	0.23	0.23
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	180	1262	0	214	667	0	85	271	402	260	140	113
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.2	38.4	0.0	13.1	15.4	0.0	4.3	15.7	18.5	13.1	7.0	5.9
Cycle Q Clear(g_c), s	7.2	38.4	0.0	13.1	15.4	0.0	4.3	15.7	18.5	13.1	7.0	5.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	1226		245	1427		367	311	481	308	421	485
V/C Ratio(X)	0.44	1.03		0.87	0.47		0.23	0.87	0.84	0.84	0.33	0.23
Avail Cap(c_a), veh/h	411	1226		304	1545		472	311	481	308	421	485
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	20.9	36.4	0.0	47.1	24.5	0.0	34.4	45.2	36.2	32.8	36.1	28.8
Incr Delay (d2), s/veh	0.7	33.5	0.0	20.2	0.2	0.0	0.3	26.8	15.7	18.9	2.1	1.1
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	2.9	21.3	0.0	7.0	6.2	0.0	1.8	9.4	11.9	7.0	3.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	69.9	0.0	67.3	24.8	0.0	34.7	72.1	51.8	51.7	38.2	30.0
LnGrp LOS	C	F		E	C		C	E	D	D	D	C
Approach Vol, veh/h		1442	A		881	A		758			513	
Approach Delay, s/veh		63.9			35.1			57.1			43.2	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.3	45.0	13.4	31.6	15.0	51.3	20.0	25.0
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	15.1	40.4	6.3	9.0	9.2	17.4	15.1	20.5
Green Ext Time (p_c), s	0.2	0.0	0.1	0.7	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	18	0	498	393	2
Future Vol, veh/h	0	18	0	498	393	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	92	92	85	85
Heavy Vehicles, %	2	2	3	3	4	4
Mvmt Flow	0	20	0	541	462	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	463	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	599	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	599	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	599	-	-
HCM Lane V/C Ratio	-	0.033	-	-
HCM Control Delay (s)	-	11.2	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	19	22	441	454	19
Future Vol, veh/h	29	19	22	441	454	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	84	84	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	38	26	525	488	20

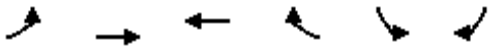
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1075	498	508	0	-	0
Stage 1	498	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	243	572	1057	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	234	572	1057	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	590	-	-	-	-	-
Stage 2	562	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1057	-	305	-	-
HCM Lane V/C Ratio	0.025	-	0.315	-	-
HCM Control Delay (s)	8.5	0	22.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

HCM 6th Signalized Intersection Summary
2: May River Road & Buck Island Road

Buck Island Road Apartments
Build PM



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	199	618	658	123	114	334
Future Volume (veh/h)	199	618	658	123	114	334
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	679	693	129	127	371
Peak Hour Factor	0.91	0.91	0.95	0.95	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	304	1043	714	605	465	414
Arrive On Green	0.11	0.56	0.38	0.38	0.26	0.26
Sat Flow, veh/h	1781	1870	1870	1585	1781	1585
Grp Volume(v), veh/h	219	679	693	129	127	371
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1781	1585
Q Serve(g_s), s	4.9	18.4	26.5	4.0	4.1	16.4
Cycle Q Clear(g_c), s	4.9	18.4	26.5	4.0	4.1	16.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	304	1043	714	605	465	414
V/C Ratio(X)	0.72	0.65	0.97	0.21	0.27	0.90
Avail Cap(c_a), veh/h	358	1100	714	605	465	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	11.2	22.1	15.1	21.4	26.0
Incr Delay (d2), s/veh	5.7	1.3	26.4	0.2	1.4	24.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.1	15.1	1.3	1.8	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	12.5	48.5	15.3	22.9	50.7
LnGrp LOS	C	B	D	B	C	D
Approach Vol, veh/h		898	822		498	
Approach Delay, s/veh		14.6	43.3		43.6	
Approach LOS		B	D		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.8		25.0	12.8	35.0
Change Period (Y+Rc), s		* 7.2		6.0	* 4.9	* 7.2
Max Green Setting (Gmax), s		* 43		19.0	* 10	* 28
Max Q Clear Time (g_c+I1), s		20.4		18.4	6.9	28.5
Green Ext Time (p_c), s		4.3		0.1	0.2	0.0

Intersection Summary		
HCM 6th Ctrl Delay		31.8
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	27	0	40	1	0	22
Future Vol, veh/h	27	0	40	1	0	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	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	0	80	2	0	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	54	0	216	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	162	-
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	-	772	1013
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	867	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1551	-	732	1013
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	822	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1013	-	-	1551	-
HCM Lane V/C Ratio	0.024	-	-	0.052	-
HCM Control Delay (s)	8.6	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	129	195	283	349	32
Future Vol, veh/h	19	129	195	283	349	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	170	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	84	84	88	88
Heavy Vehicles, %	2	2	2	2	3	3
Mvmt Flow	22	148	232	337	397	36

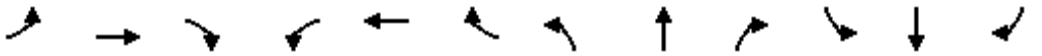
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1216	415	433	0	-	0
Stage 1	415	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	200	637	1127	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	159	637	1127	-	-	-
Mov Cap-2 Maneuver	159	-	-	-	-	-
Stage 1	529	-	-	-	-	-
Stage 2	442	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	3.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1127	-	460	-	-
HCM Lane V/C Ratio	0.206	-	0.37	-	-
HCM Control Delay (s)	9	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.8	-	1.7	-	-

HCM 6th Signalized Intersection Summary
11: Simmonsville Road & Bluffton Parkway

Buck Island Road Apartments
Build PM



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	761	33	222	1366	285	37	162	212	219	218	228
Future Volume (veh/h)	123	761	33	222	1366	285	37	162	212	219	218	228
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	129	801	0	241	1485	0	42	182	238	246	245	256
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	1207		270	1520		264	306	499	355	440	474
Arrive On Green	0.06	0.34	0.00	0.15	0.43	0.00	0.05	0.16	0.16	0.12	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	129	801	0	241	1485	0	42	182	238	246	245	256
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	5.3	21.8	0.0	15.0	46.5	0.0	2.1	10.2	13.7	12.6	13.0	15.3
Cycle Q Clear(g_c), s	5.3	21.8	0.0	15.0	46.5	0.0	2.1	10.2	13.7	12.6	13.0	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	1207		270	1520		264	306	499	355	440	474
V/C Ratio(X)	0.71	0.66		0.89	0.98		0.16	0.60	0.48	0.69	0.56	0.54
Avail Cap(c_a), veh/h	211	1207		299	1520		392	306	499	355	440	474
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	28.2	31.9	0.0	47.1	31.9	0.0	35.8	43.9	31.3	32.6	38.1	33.2
Incr Delay (d2), s/veh	8.7	1.4	0.0	25.3	17.9	0.0	0.3	8.3	3.2	5.7	5.0	4.4
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	2.5	9.1	0.0	8.3	22.2	0.0	0.9	5.3	5.5	5.8	6.4	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	33.2	0.0	72.5	49.7	0.0	36.1	52.2	34.5	38.3	43.1	37.6
LnGrp LOS	D	C		E	D		D	D	C	D	D	D
Approach Vol, veh/h		930	A		1726	A		462			747	
Approach Delay, s/veh		33.7			52.9			41.6			39.6	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	45.0	11.9	33.1	13.2	55.0	20.0	25.0
Change Period (Y+Rc), s	6.0	6.6	6.0	6.5	6.0	6.6	6.0	6.5
Max Green Setting (Gmax), s	19.0	38.4	14.0	18.5	9.0	48.4	14.0	18.5
Max Q Clear Time (g_c+I1), s	17.0	23.8	4.1	17.3	7.3	48.5	14.6	15.7
Green Ext Time (p_c), s	0.1	4.4	0.0	0.3	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

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

Intersection	
Int Delay, s/veh	0.1

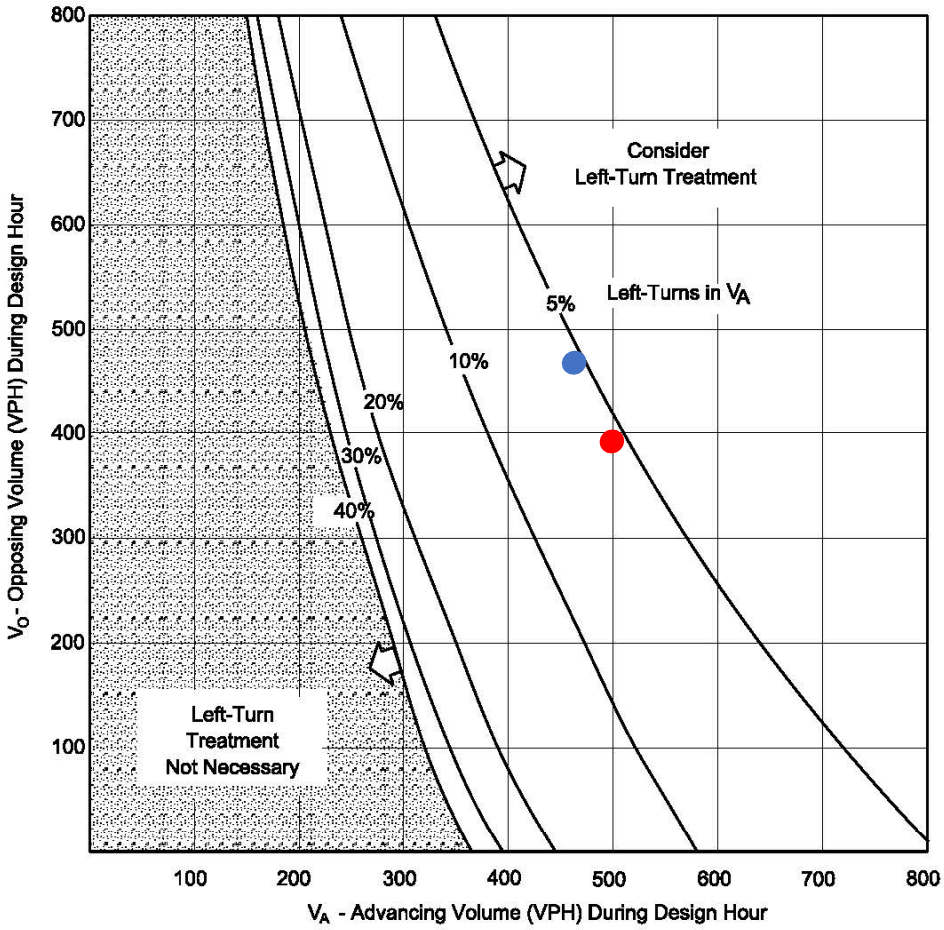
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	0	463	466	7
Future Vol, veh/h	0	9	0	463	466	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	84	84	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	551	507	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	511	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	563	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	563	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	563	-	-
HCM Lane V/C Ratio	-	0.018	-	-
HCM Control Delay (s)	-	11.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

ATTACHMENT 7



V_A =Total advancing traffic volume which includes all turning traffic

V_O=Total opposing traffic volume which includes all turning traffic

● AM Peak Hour ✗

V_A = 498

V_O = 391

% = 11/498 = 2.2%

● PM Peak Hour ✗

V_A = 463

V_O = 473

% = 22/463 = 4.8%

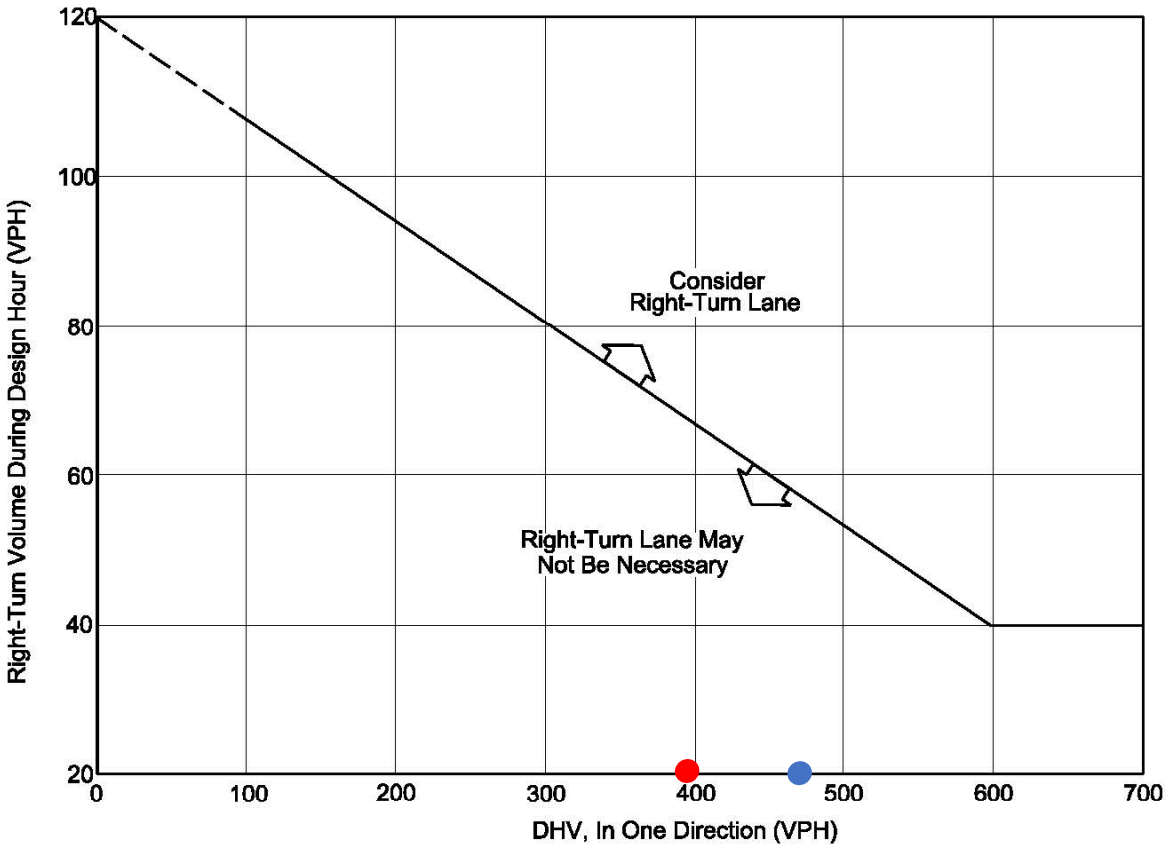
Instructions:

1. *The family of curves represents the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.*

2. *Read V_A and V_O into the chart and locate the intersection of the two volumes.*

3. *Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.*

VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (40 mph)
Figure 9.5-G



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

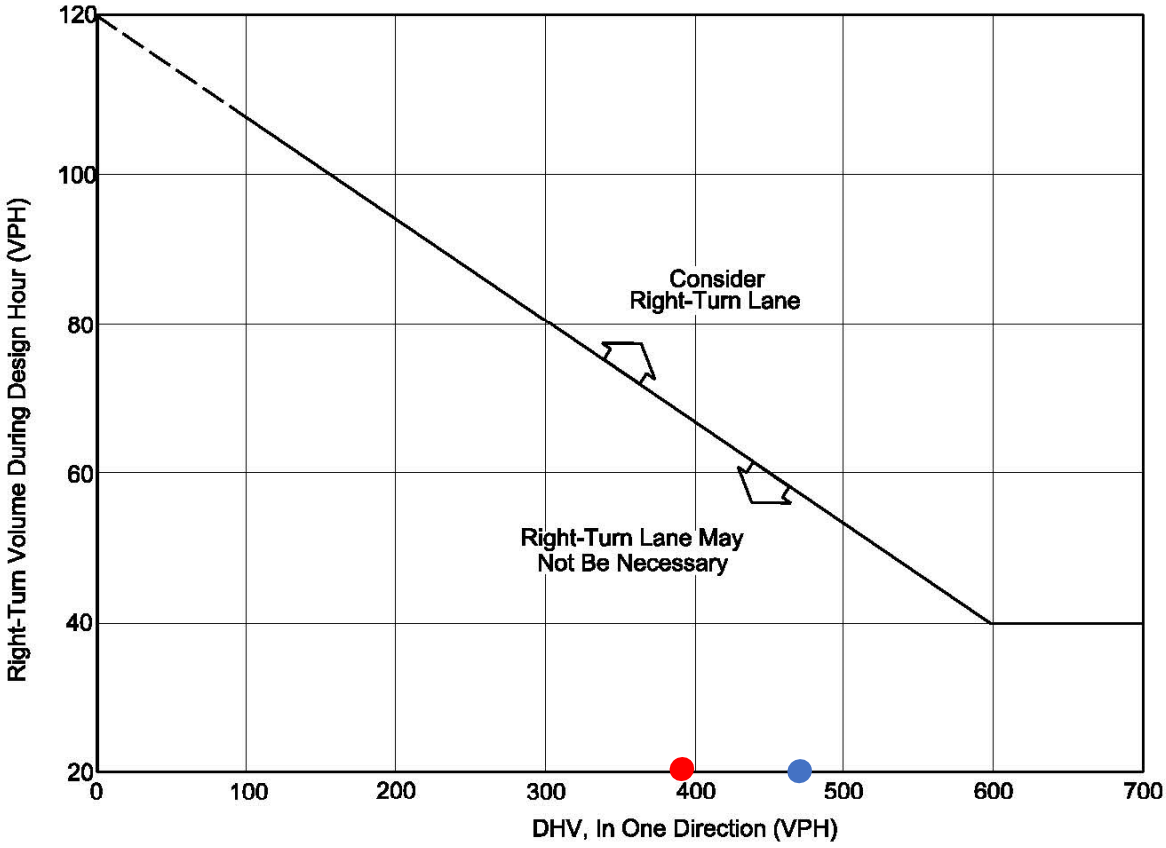
Example

				AM Peak Hour	PM Peak Hour
Given:	Design Speed	=	35 miles per hour	Speed = 40 mph	Speed = 40 mph
	DHV	=	250 vehicles per hour	DHV = 391	DHV = 473
	Right Turns	=	100 vehicles per hour	R-Turns = 9	R-Turns = 19

Problem: Determine if a right-turn lane is necessary.

Solution: To read the vertical axis, use 100 – 20 = 80 vehicles per hour. The figure indicates that a right-turn lane is not necessary, unless other factors (e.g., high crash rate) indicate a lane is needed.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS
Figure 9.5-A



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

Example

Given:

Design Speed	=	35 miles per hour
DHV	=	250 vehicles per hour
Right Turns	=	100 vehicles per hour

Problem: Determine if a right-turn lane is necessary.

Solution: To read the vertical axis, use 100 – 20 = 80 vehicles per hour. The figure indicates that a right-turn lane is not necessary, unless other factors (e.g., high crash rate) indicate a lane is needed.

AM Peak Hour	PM Peak Hour
Speed = 40 mph	Speed = 40 mph
DHV = 395	DHV = 473
R-Turns = 2	R-Turns = 7

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS
Figure 9.5-A

ATTACHMENT 7