

Parcel 12C

Traffic Impact Analysis

Bluffton, South Carolina

Prepared for

University Investments, LLC

Prepared by

Kimley»Horn

September 2024

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115 Fairchild Street, Suite 250
Charleston, South Carolina, 29492

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Executive Summary

The proposed development is in the southern half of the Bluffton Parkway at Buckwalter Parkway intersection in Bluffton, South Carolina. This development is planned to consist of 150,000 square feet of retail space, single family housing, and up to a 100-room hotel. Based on the conceptual site plans provided in **Appendix A**, it is assumed that the project will be accessed through the proposed Parkways project site access at the intersection of Bluffton Parkway at Buckwalter Place Boulevard, a proposed forth leg at the intersection of Bluffton Parkway at Innovation Drive, and a new proposed intersection along Lake Point Drive.

The project is proposed to be constructed and fully occupied by 2028. This study summarizes the results of the traffic analyses at the following study intersections:

1. Buckwalter Parkway at Buckwalter Place Boulevard
2. Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard
3. Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive
4. Bluffton Parkway at Innovation Drive/Site Access 1
5. Bluffton Parkway at Hampton Parkway
6. Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access
7. Lake Point Drive at Site Access 2

Based on the results of the traffic analyses, the following improvements are recommended to mitigate the impact of the proposed development's traffic on the study area intersections:

Buckwalter Parkway at Buckwalter Place Boulevard

- No capacity improvements are recommended at this intersection.

Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard

- No capacity improvements are recommended at this intersection.

Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive

- Construct a second northbound left-turn lane with 200 feet of storage.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.

Bluffton Parkway at Innovation Drive/Site Access 1

- Construct the southern leg with one ingress lane and two egress lanes.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.
- Construct an exclusive southbound left-turn lane with 100 feet of storage.
- Construct an exclusive westbound left-turn lane with 360 feet of storage.

Bluffton Parkway at Hampton Parkway

- No capacity improvements are recommended at this intersection.

Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access

- No capacity improvements are recommended at this intersection.

Lake Point Drive at Site Access 2

- Construct the northern leg with one ingress lane and two egress lanes.
- Construct an exclusive westbound right-turn lane with 100 feet of storage.

1 Introduction

The proposed development is in the southern half of the Bluffton Parkway at Innovation Drive intersection in Bluffton, South Carolina. This development is planned to consist of 150,000 square feet of retail space, single family housing and up to a 100-room hotel. The location of the proposed development and two conceptual site plans are illustrated in **Figure 1**, **Figure 2**, and **Figure 3**, respectively. The conceptual site plans are also provided in **Appendix A**.

The project is proposed to be constructed and fully occupied by 2028. This study summarizes the results of the traffic analyses for the 2024 Existing, 2028 Background, and 2028 Build conditions at the following study intersections:

1. Buckwalter Parkway at Buckwalter Place Boulevard
2. Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard
3. Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive
4. Bluffton Parkway at Innovation Drive/Site Access 1
5. Bluffton Parkway at Hampton Parkway
6. Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access
7. Lake Point Drive at Site Access 2

1.1 Existing Conditions

Buckwalter Parkway (L-1525) is a divided, four-lane urban minor arterial with a posted speed limit of 45 mph. According to SCDOT count station data, Buckwalter Parkway carried an AADT traffic count of 20,400 vpd in 2023.

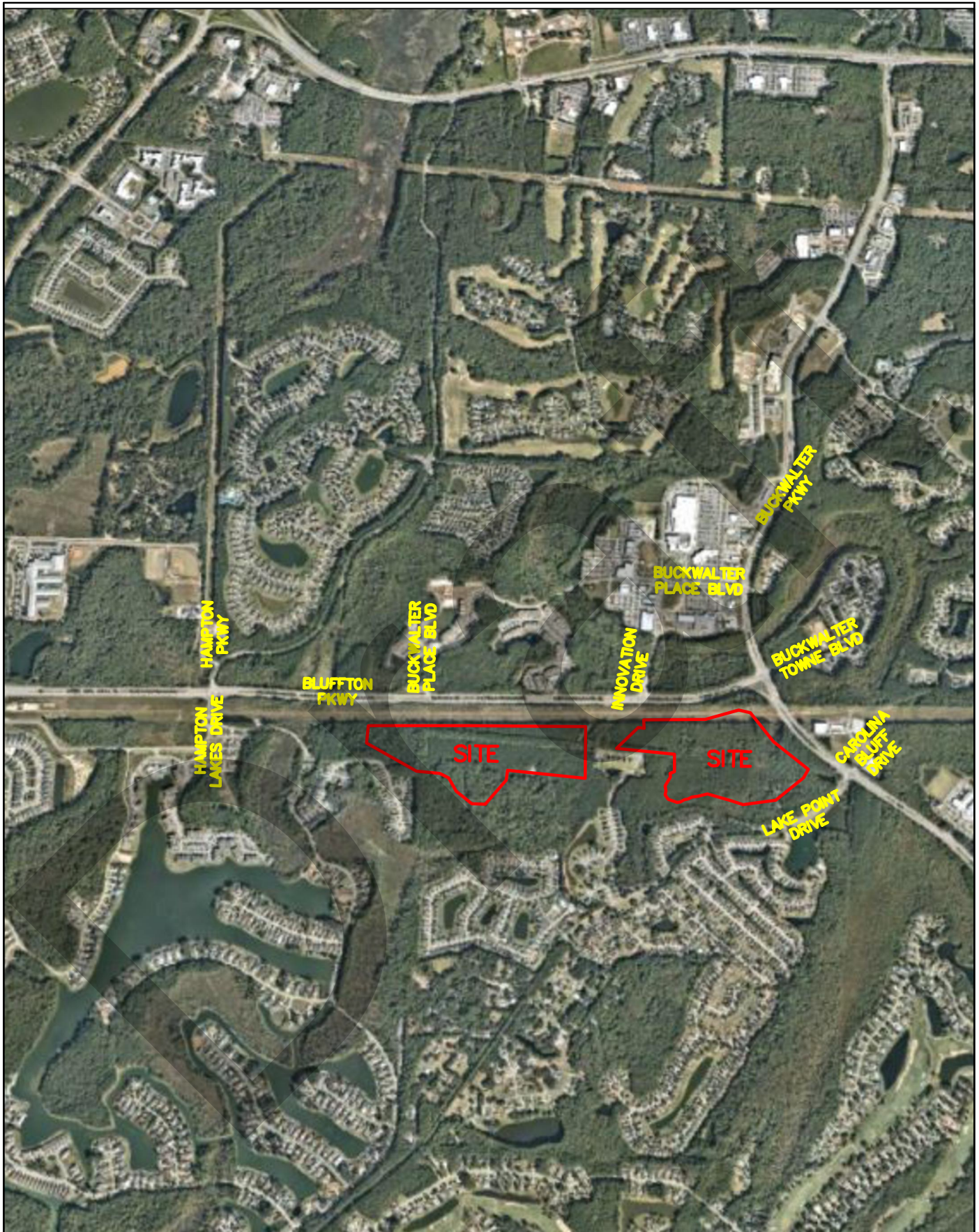
Bluffton Parkway (L-1863) is a divided, four-lane urban minor arterial with a posted speed limit of 45 mph. According to SCDOT count station data, Bluffton Parkway carried an AADT traffic count of 21,200 vpd in 2023.

Buckwalter Place Boulevard is an undivided, two-lane urban local road with a posted speed limit of 30 mph.

Innovation Drive (L-1937) is a two-lane, undivided, urban local with a posted speed limit of 45 mph. No daily count data is available for Innovation Drive.

Hampton Parkway (L-1527) is a two-lane, undivided, rural local road with a posted speed limit of 35 mph within the vicinity of the proposed development. SCDOT does not provide daily traffic data for Hampton Parkway.

The existing roadway geometry and traffic control for the study network is illustrated in **Figure 4**.



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TRAFFIC IMPACT ANALYSIS

SITE LOCATION

FIGURE
1

PRELIMINARY SITE PLAN

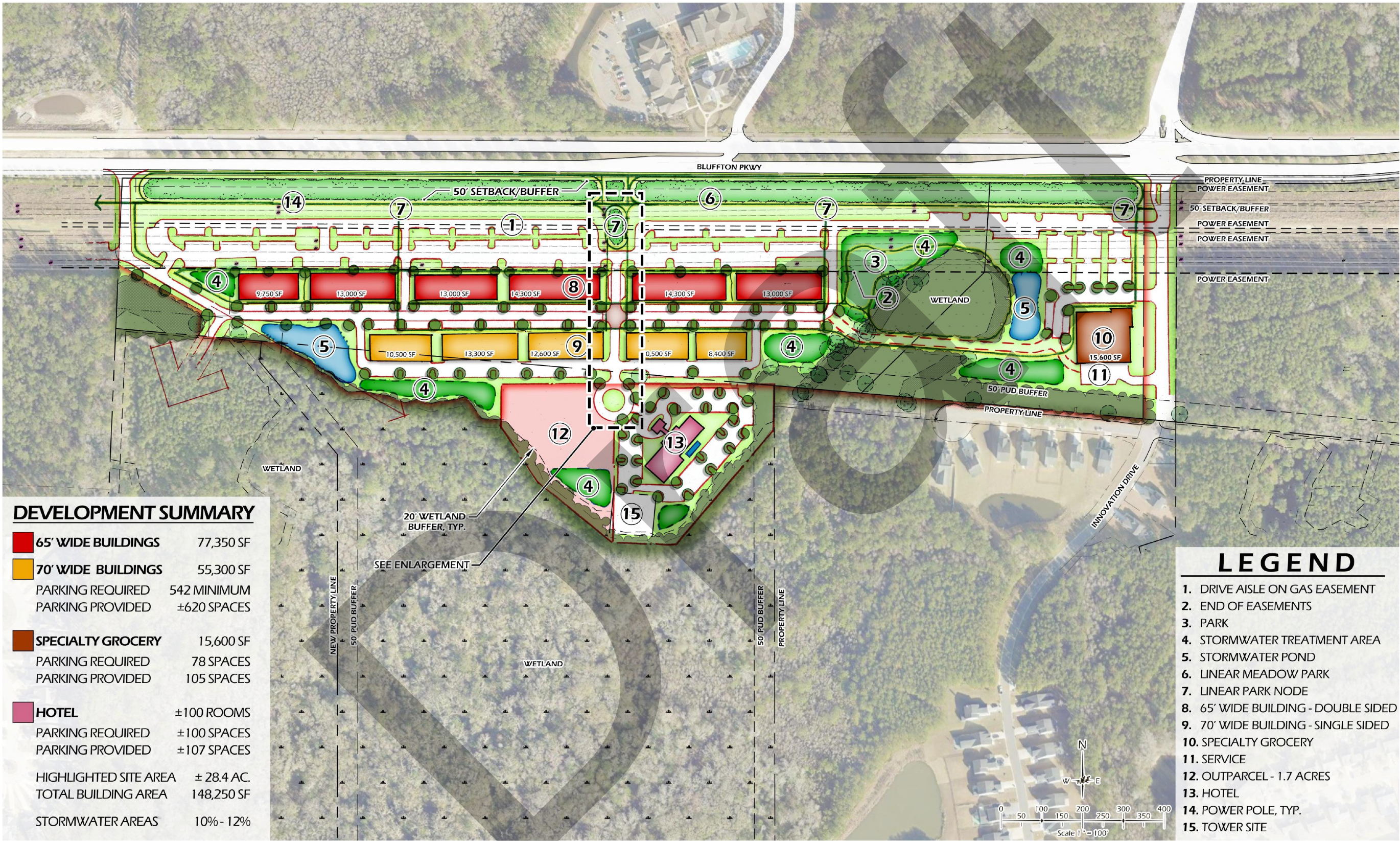


FIGURE
2

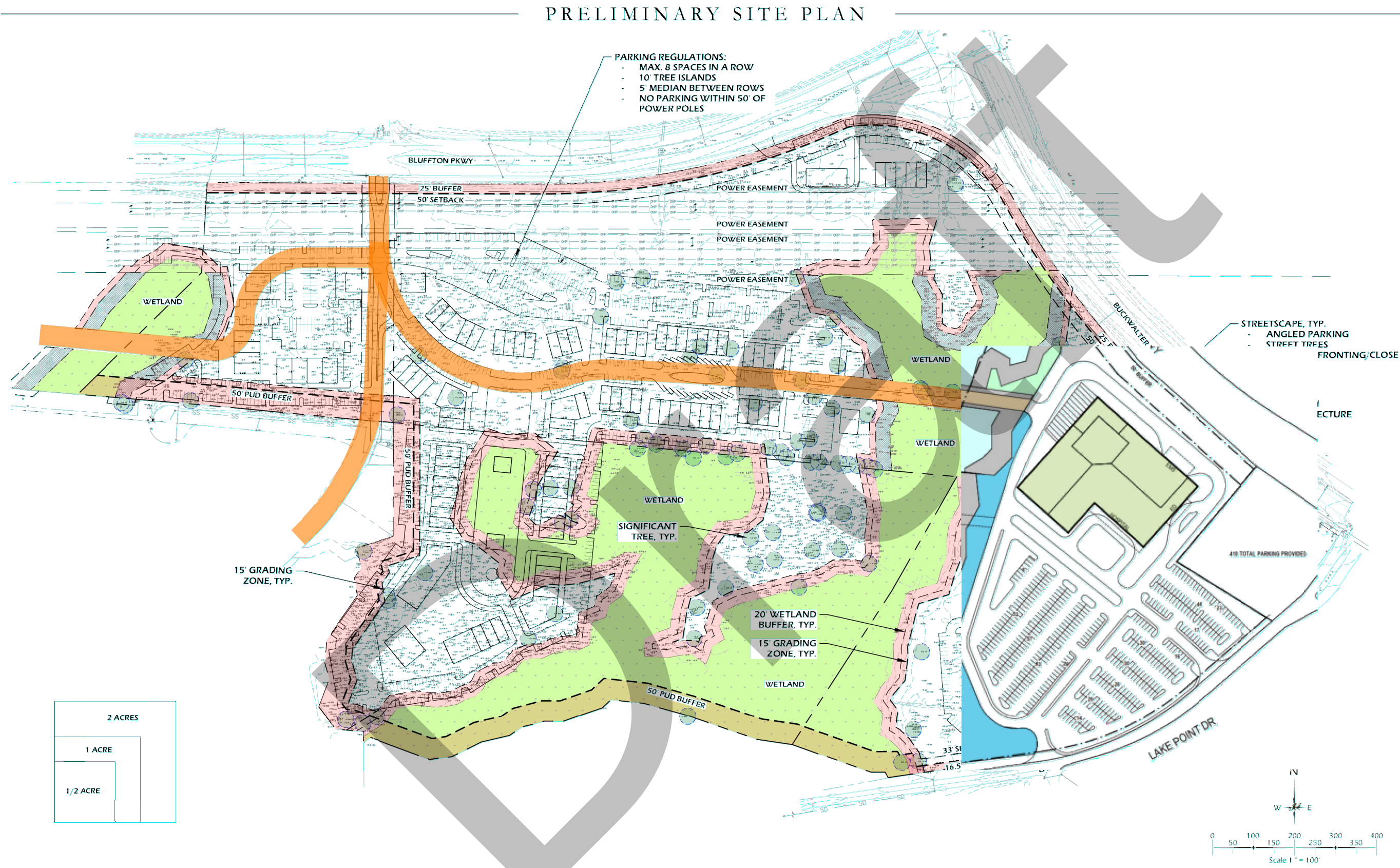
PARCEL 12C CONCEPTUAL SITE PLAN

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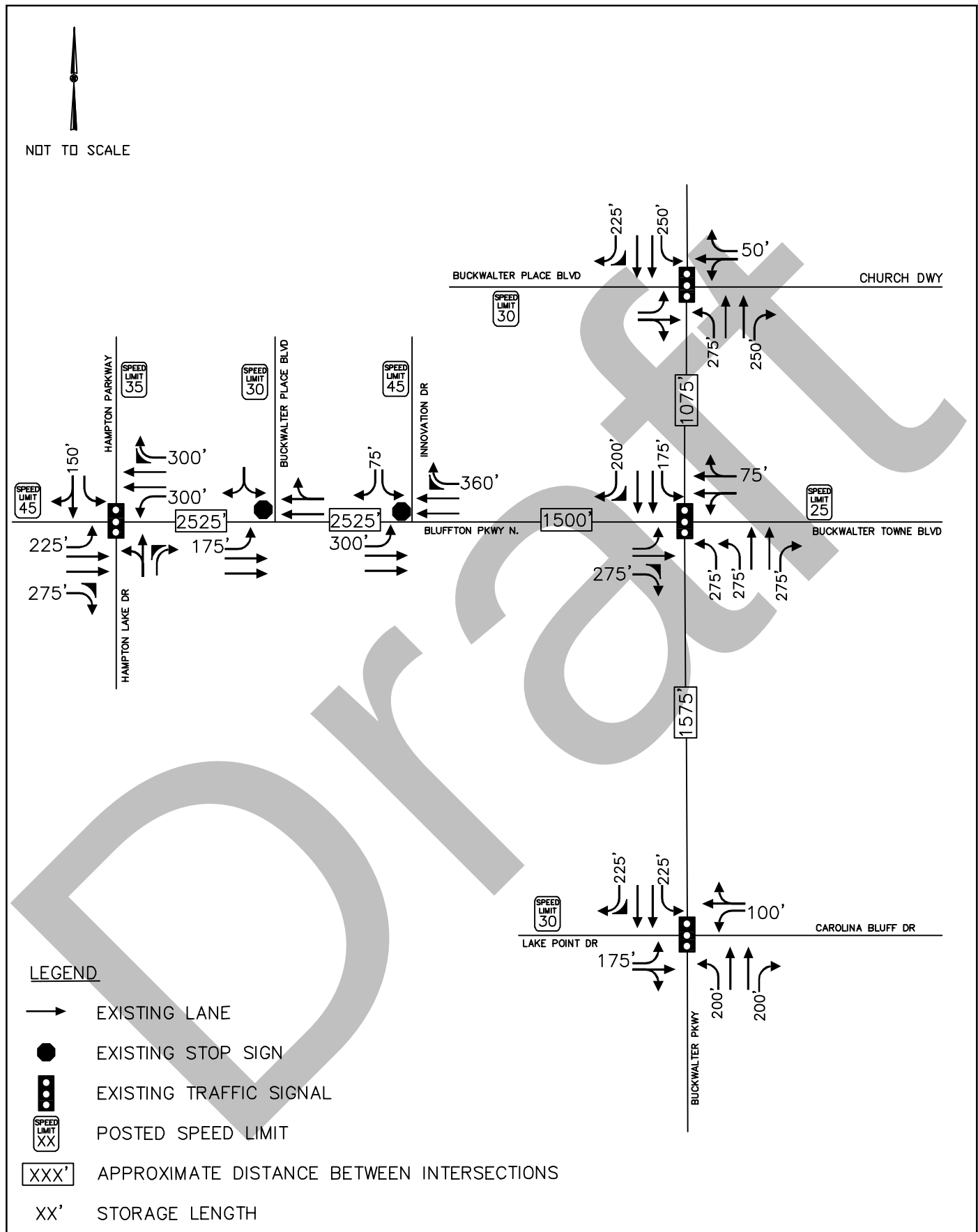
FIGURE
3

MEDICAL DEVELOPMENT CONCEPTUAL SITE
PLAN

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TRAFFIC IMPACT ANALYSIS



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2 Project Traffic

2.1 Trip Generation

The trip generation rates and equations published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual; 11th Edition* were used to estimate the trip generation potential for the development. The analysis was performed using the information for the land use codes (LUC) 495 – Recreational Community Center, 310 – Hotel, 610 – Hospital, 821 – Shopping Plaza, 850 – Supermarket, 932 – High-Turnover Sit-Down Restaurant.

As shown in **Table 1**, the development is anticipated to generate 746 (439 In/307 Out) AM peak hour trips and 638 (313 In/325 Out) PM peak hour trips. The estimated trip generation is summarized in **Table 1**, and the trip generation calculations can be found in **Appendix B**.

Table 1 – Trip Generation Summary

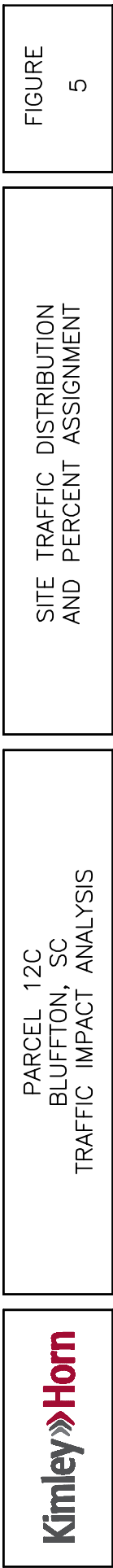
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
215 – Single Family Attached Housing	145	d.u.	1054	70	18	52	83	49	34
310 - Hotel	100	Rooms	660	43	24	19	46	23	23
610 - Hospital	100	beds	2232	179	129	50	169	56	113
821 - Shopping Plaza	99,488	s.f.	6718	172	107	65	516	253	263
850 - Supermarket	15,600	s.f.	1840	45	27	18	140	70	70
932 - High-Turnover Sit-Down Restaurant	33,163	s.f.	3556	317	174	143	300	183	117
Subtotal			16,060	826	479	347	1,254	634	620
<i>Internal Capture – Single Family Attached Housing</i>			410	12	1	11	53	31	22
<i>Internal Capture – Hotel</i>			273	6	1	5	26	13	13
<i>Internal Capture – Shopping Plaza</i>			1,184	21	12	9	115	52	63
<i>Internal Capture – Supermarket</i>			324	5	3	2	31	14	17
<i>Internal Capture – High-Turnover Sit-Down Restaurant</i>			1,541	36	23	13	133	69	64
<i>Internal Capture Total</i>			3,732	80	40	40	358	179	179
Total Net New External Trips			12,328	746	439	307	896	455	441
<i>Pass-By Capture – Shopping Plaza</i>			2,083	0	0	0	160	80	80
<i>Pass-By Capture – Supermarket</i>			342	0	0	0	26	13	13
<i>Pass-By Capture – High-Turnover Sit-Down Restaurant</i>			853	0	0	0	72	49	23
<i>Pass-By Capture Subtotal</i>			3,278	0	0	0	258	142	116
<i>10% Adjacent Street Traffic</i>			3,408	328	164	164	341	170	170
<i>Pass-By Capture Total</i>			3,278	0	0	0	258	142	116
Total Net New External Trips			9,050	746	439	307	638	313	325

2.2 Trip Distribution & Assignment

New external trips generated by the proposed development were distributed and assigned to the surrounding roadway network based on existing travel patterns, surrounding land uses, and the proposed site layout. The trip distribution percentages used in this analysis are as follows.

- 40% to/from the south via Buckwalter Parkway
- 35% to/from the east via Bluffton Parkway
- 20% to/from the north via Buckwalter Parkway
- 5% to/from the east via Lake Point Drive

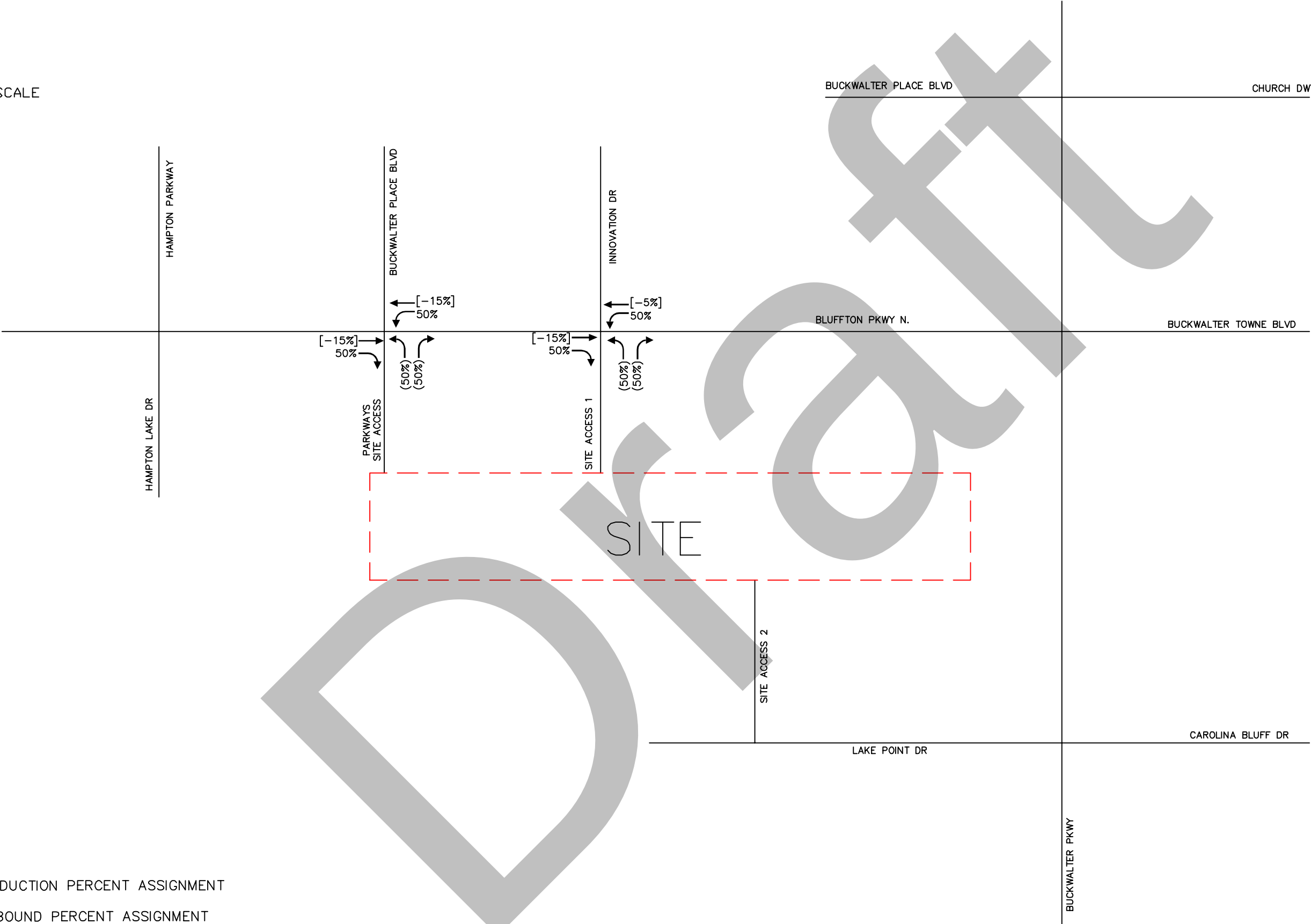
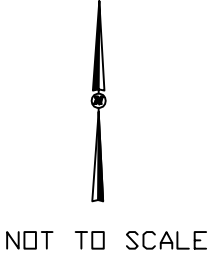
The site traffic distribution and assignment for the development is shown in **Figure 5**. Pass-by capture traffic was assigned to the roadway network based on existing traffic patterns, shown in **Figure 6**.



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LEGEND

- [XX%] REDUCTION PERCENT ASSIGNMENT
- XX% INBOUND PERCENT ASSIGNMENT
- (XX%) OUTBOUND PERCENT ASSIGNMENT



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PM PEAK HOUR PASS-BY PERCENT
ASSIGNMENT

FIGURE
6

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3 Traffic Volume Development

The 2024 Existing traffic volumes were utilized in the analysis to develop future year traffic volumes for the projected 2028 conditions. The future year volumes consisted of the existing traffic volumes adjusted by an annual growth rate and the projected traffic volumes of the proposed development. Worksheets documenting the traffic volume development are provided in **Appendix C**.

3.1 2024 Existing Traffic Development

Peak hour intersection turning movement counts were conducted in the AM peak period (7:00 AM to 9:00 AM) and the PM peak period (4:00 PM to 6:00 PM) at the following intersections:

1. Buckwalter Place Boulevard at Buckwalter Parkway – Tuesday, March 19, 2024
2. Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard – Wednesday, May 15, 2024
3. Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive – Tuesday, May 7, 2024
4. Bluffton Parkway at Innovation Drive – Wednesday, May 15, 2024
5. Bluffton Parkway at Hampton Parkway/Hampton Lakes Drive – Tuesday, November 7, 2023

Figures 7 and 8 illustrate the 2024 Existing Peak Hour Traffic Volumes for the AM and PM peak hours, respectively. The raw turning movement count data is included in **Appendix D**.

3.2 2028 Background Traffic Development

As mentioned previously, the development will be built and operational by 2028. The future-year traffic volumes consist of the 2024 Existing traffic volumes adjusted by a growth rate of 5% for the 2028 Background conditions. To determine the historical growth rate in the area, traffic count data was obtained from SCDOT and includes count stations along Buckwalter Parkway and Bluffton Parkway. Historic growth rate calculations are provided in **Appendix E**.

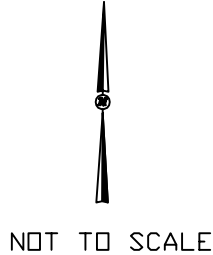
In addition to the historical growth rate, the adjacent development traffic volumes of Bluffton Commons (*Bluffton Commons – Turn Lane and Preliminary Signal Warrant Analysis*, BIHL Engineering, 2018), Elle Apartments, Parkways Multifamily, Buckwalter MOB, Bluffton Community Hospital, Cross Schools, and Grand Oaks were included as part of the 2028 Background AM and PM peaks. The AM and PM peak hour adjacent development volumes are provided in **Appendix E**.

Figures 7 and 8 illustrate the background growth, adjacent development traffic, and 2028 Background traffic volumes for the AM and PM peak hours, respectively.

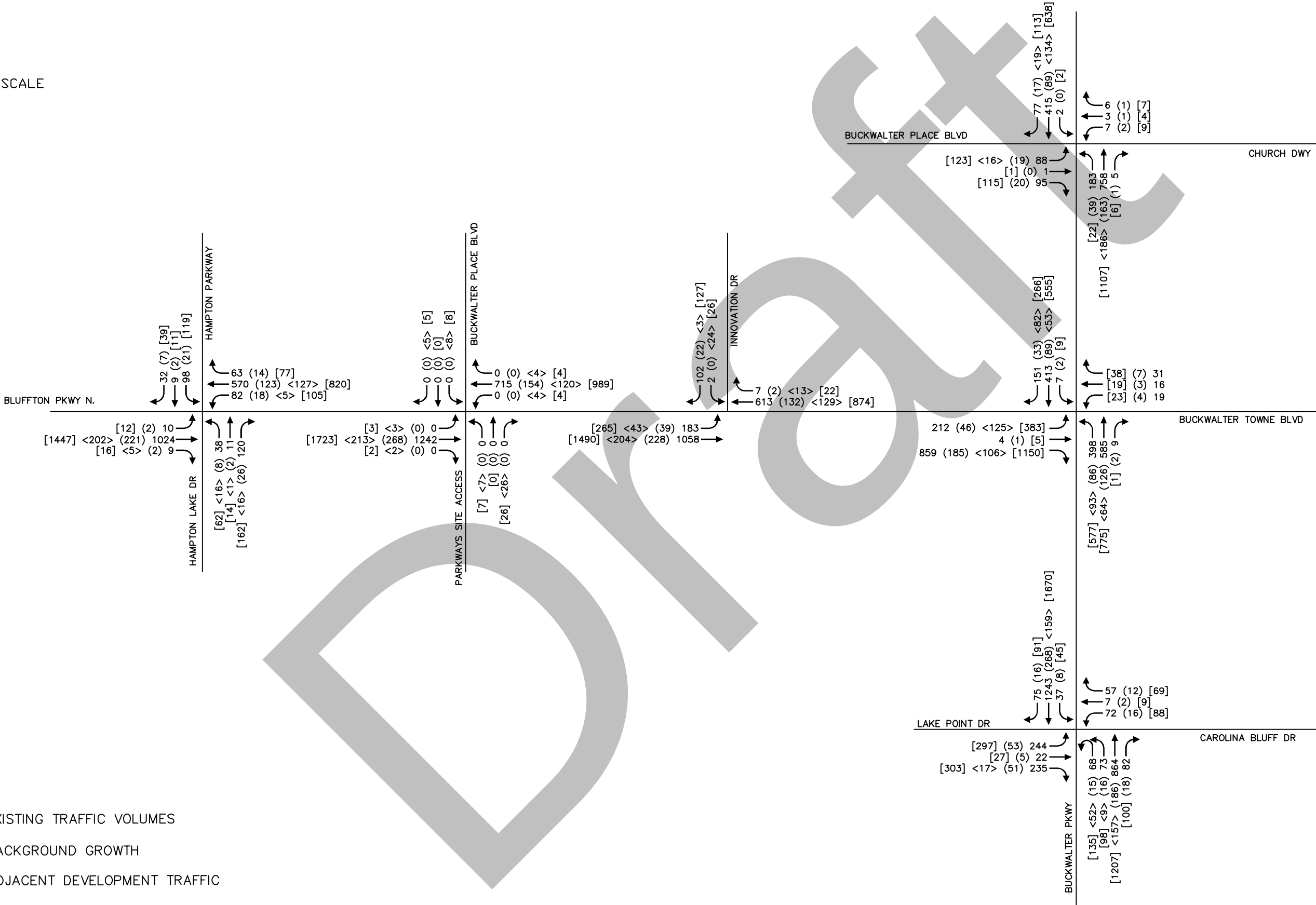
3.3 2028 Build Traffic Development

The proposed development traffic volumes were generated and assigned to the roadway network according to the distributions discussed previously in Section 2.2. The volumes were added to the 2028 Background traffic volumes to develop 2028 Build traffic volumes. **Figures 9 and 10** illustrate the site trips and 2028 Build traffic volumes during the AM and PM peak hours, respectively.

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- LEGEND**
- XX EXISTING TRAFFIC VOLUMES
 - (XX) BACKGROUND GROWTH
 - <XX> ADJACENT DEVELOPMENT TRAFFIC
 - [XX] TOTAL BACKGROUND TRAFFIC



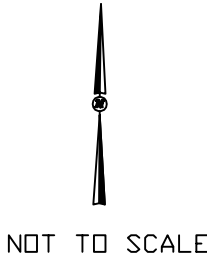
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EXISTING AND PROJECTED (2028)
BACKGROUND AM
PEAK HOUR TRAFFIC VOLUMES

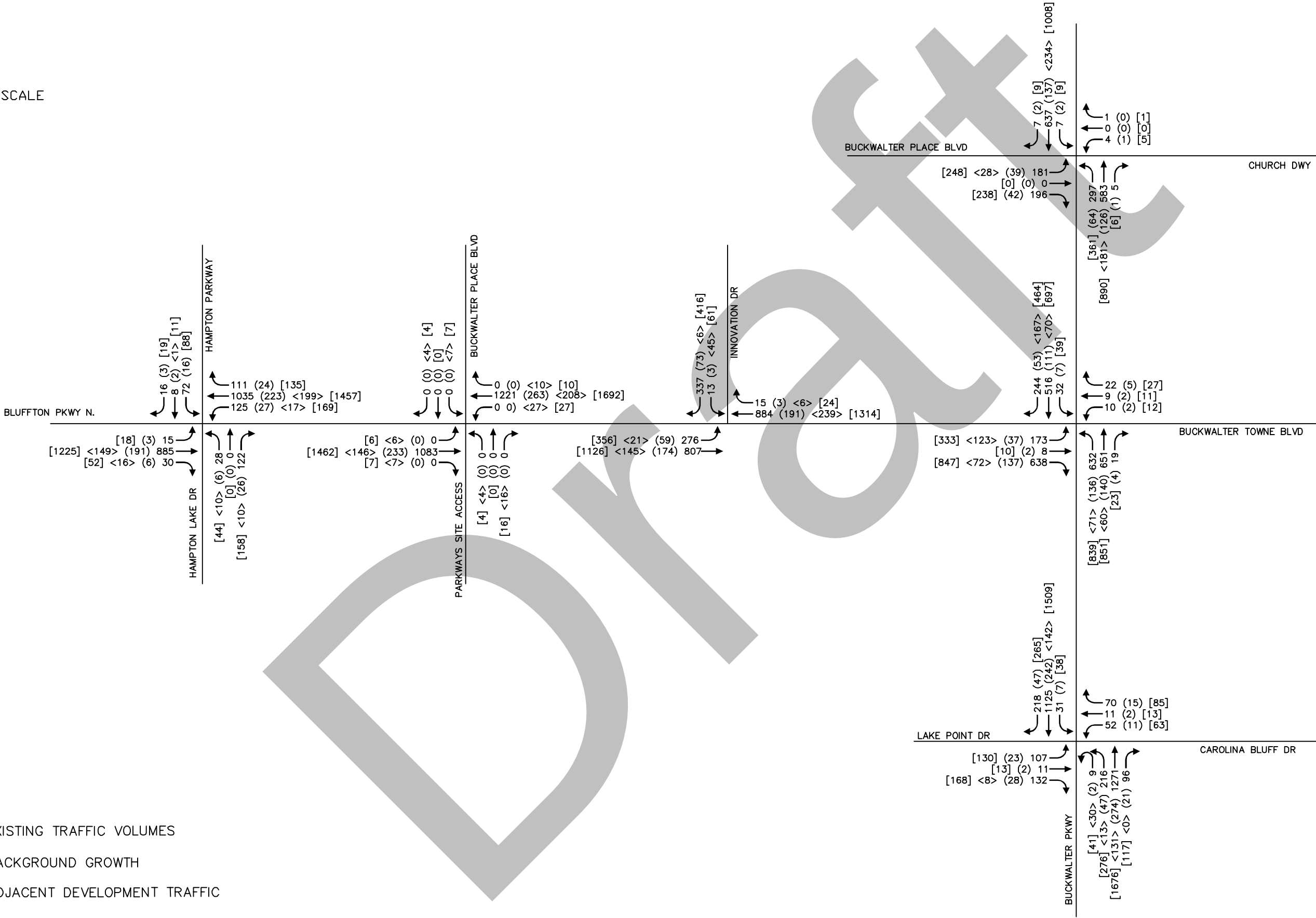
FIGURE
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- LEGEND**
- XX EXISTING TRAFFIC VOLUMES
 - (XX) BACKGROUND GROWTH
 - <XX> ADJACENT DEVELOPMENT TRAFFIC
 - [XX] TOTAL BACKGROUND TRAFFIC



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EXISTING AND PROJECTED (2028)
BACKGROUND PM
PEAK HOUR TRAFFIC VOLUMES

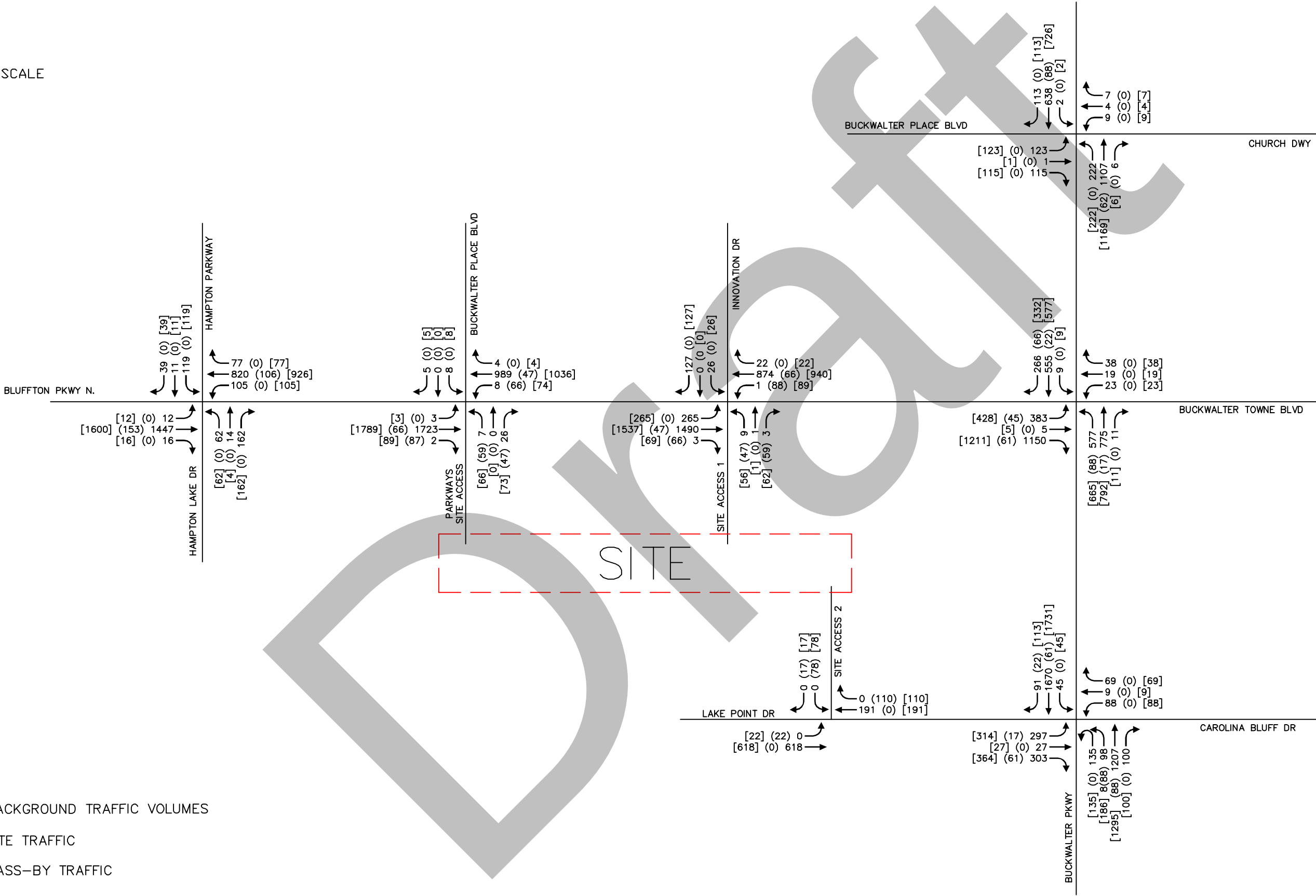
FIGURE
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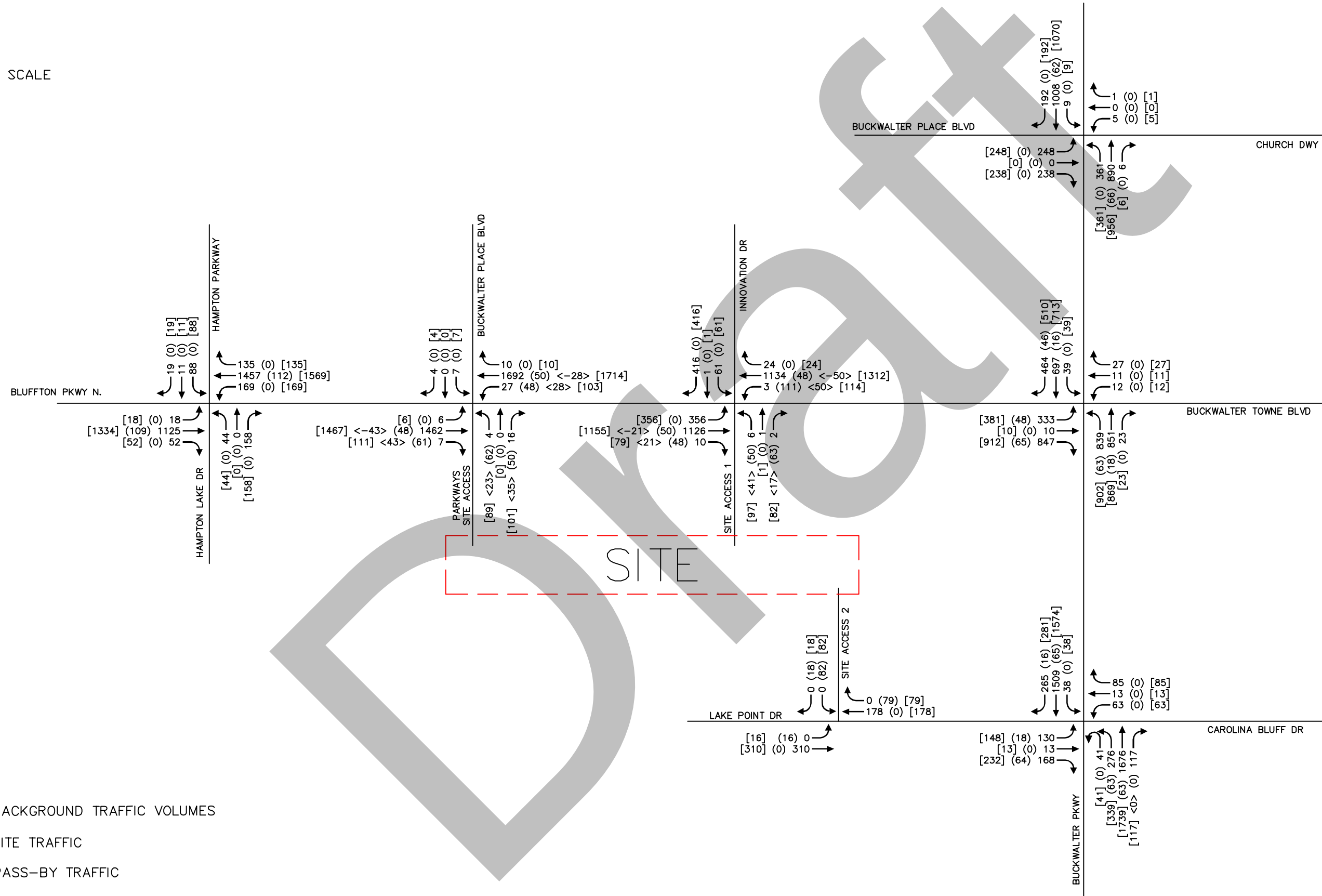
- LEGEND
- XX BACKGROUND TRAFFIC VOLUMES
 - (XX) SITE TRAFFIC
 - <XX> PASS-BY TRAFFIC
 - [XX] TOTAL BUILD TRAFFIC





LEGEND

- | | |
|------|----------------------------|
| XX | BACKGROUND TRAFFIC VOLUMES |
| (XX) | SITE TRAFFIC |
| <XX> | PASS-BY TRAFFIC |
| [XX] | TOTAL BUILD TRAFFIC |



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PROJECTED BUILD (2028)
PM PEAK HOUR
TRAFFIC VOLUMES

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4 Capacity Analysis

Capacity/level-of-Service (LOS) analyses were conducted using the *Highway Capacity Manual (HCM)*, 7th Edition, methodologies of the *Synchro*, Version 12, traffic analysis software. Capacity analyses were conducted for the AM and PM peak hours of the 2024 Existing conditions, 2028 Background conditions, and 2028 Build conditions analysis scenarios.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, gridlocked conditions with high vehicular delays, and are generally considered undesirable. 2 lists the LOS control delay thresholds published in the *HCM* for signalized and unsignalized intersections.

Table 2 – HCM Level of Service Criteria

LOS	Control Delay per Vehicle (sec/veh)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

Existing peak hour factors (PHF) were utilized for all scenarios. Existing heavy vehicle percentages were utilized for all scenarios, with a minimum of 2% considered.

Unsignalized intersections operating at LOS A-LOS C are considered to operate with short delays, unsignalized intersections operating at LOS D-LOS E are considered to operate with moderate delays, and intersections operating at LOS F are considered to operate with long delays.

It should be noted that traffic signal timings are anticipated to be adjusted with the increase in traffic volumes in the study network between 2024 Existing conditions and 2028 Background conditions. Therefore, traffic signal timings were optimized in the Existing, Background, and Build conditions. Signal Plans are included in **Appendix F**.

The following sections outline the results of the capacity analysis for each of the study intersections. The capacity analysis worksheets are included in **Appendix G**.

4.1 Buckwalter Parkway at Buckwalter Place Boulevard

The capacity analysis results for the signalized intersection of Buckwalter Parkway at Buckwalter Place Boulevard are summarized in **Table 3**.

Table 3 – Buckwalter Parkway at Buckwalter Place Boulevard Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2024) Traffic	Overall – A (9.3) EB – B (18.0) WB – B (16.3) NB – A (6.3) SB – B (12.2)	Overall – B (13.0) EB – C (22.9) WB – C (23.1) NB – A (7.2) SB – B (15.2)
Background (2028) Traffic	Overall – A (9.8) EB – C (24.8) WB – C (21.6) NB – A (6.0) SB – B (11.8)	Overall – B (17.7) EB – C (31.5) WB – C (31.6) NB – B (10.4) SB – C (20.2)
Build (2028) Traffic	Overall – A (9.9) EB – C (26.5) WB – C (22.9) NB – A (6.0) SB – B (11.7)	Overall – B (18.5) EB – C (32.8) WB – C (32.5) NB – B (11.3) SB – C (20.8)

Based on the results presented in **Table 3**, the intersection currently operates at LOS A in the AM peak hour and LOS B in the PM peak hour. In the 2028 future year, the intersection is expected to continue to operate at LOS A in the AM peak hour and LOS B in the PM peak hour with or without the inclusion of project traffic. Therefore, no capacity improvements are recommended at this intersection.

4.2 Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard

The capacity analysis results for the signalized intersection of Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard Drive are summarized in **Table 4**.

Table 4 – Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard Drive Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2024) Traffic	Overall – C (20.4) EB – C (27.9) WB – C (21.6) NB – C (20.5) SB – B (15.9)	Overall – C (21.0) EB – C (30.5) WB – C (25.1) NB – C (20.6) SB – B (18.7)
Background (2028) Traffic	Overall – C (28.7) EB – C (28.9) WB – B (18.1) NB – C (26.5) SB – D (35.2)	Overall – D (36.7) EB – D (39.0) WB – C (24.7) NB – D (36.9) SB – D (36.1)
Build (2028) Traffic	Overall – C (34.9) EB – C (31.6) WB – B (18.6) NB – C (30.1) SB – D (51.7)	Overall – D (44.1) EB – D (44.3) WB – C (25.4) NB – D (44.4) SB – D (44.6)

Based on the results presented in **Table 4**, the intersection currently operates at LOS C in the AM and PM peak hours. In the 2028 future year, the intersection is expected to operate at LOS C in the AM peak hour and LOS D in the PM peak hour with or without the inclusion of project traffic. Therefore, no capacity improvements are recommended at this intersection.

4.3 Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive

The capacity analysis results for the signalized intersection of Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive are summarized in **Table 5**.

Table 5 – Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2024) Traffic	Overall – C (25.4) EB – C (31.6) WB – C (30.6) NB – B (11.6) SB – C (33.4)	Overall – B (13.9) EB – C (30.7) WB – C (29.6) NB – A (8.1) SB – B (16.6)
Background (2028) Traffic	Overall – D (48.4) EB – F (98.5) WB – F (187.2) NB – B (13.8) SB – D (45.1)	Overall – C (22.3) EB – D (41.3) WB – D (39.9) NB – B (15.6) SB – C (25.7)
Build (2028) Traffic	Overall – E (74.8) EB – F (215.4) WB – F (246.7) NB – B (19.0) SB – D (52.8)	Overall – C (34.2) EB – E (57.1) WB – D (52.1) NB – C (27.4) SB – D (36.1)
Build Improved (2028) Traffic	Overall – D (47.7) EB – E (57.5) WB – E (57.1) NB – C (21.9) SB – E (66.0)	Overall – C (23.3) EB – D (35.6) WB – D (44.5) NB – B (17.0) SB – C (26.6)

Based on the results presented in **Table 5**, the intersection currently operates at LOS C in the AM peak hour and LOS B in the PM peak hour. In the 2028 Background condition, the intersection is expected to operate at LOS D in the AM peak hour and LOS C in the PM peak hour.

With the addition of project traffic, the overall intersection is expected to operate at LOS E in the AM peak hour and LOS C in the PM peak hour. The following improvements are recommended to accommodate project traffic:

- Construct a second northbound left-turn lane with 200 feet of storage.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.

With the proposed improvements in place, the intersection is expected to operate with LOS D in the AM peak hour and LOS C in the PM peak hour, operating similarly to what it is expected to operate with in the 2028 Background condition. Therefore, no additional capacity improvements are recommended at this intersection.

4.4 Bluffton Parkway at Innovation Drive/Site Access 1

The capacity analysis results for the intersection of Bluffton Parkway at Innovation Drive/Site Access 1 are summarized in **Table 6**.

Table 6 – Bluffton Parkway at Innovation Drive/Site Access 1 Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2024) Traffic	SB – B (12.6) EBL – B (10.2)	SB – D (29.7) EBL – B (13.3)
Background (2028) Traffic	Overall – A (8.3) EB – A (5.5) WB – A (10.0) SB – C (31.0)	Overall – C (23.6) EB – A (9.7) WB – B (17.7) SB – F (82.7)
Build (2028) Traffic	Overall – C (21.0) EB – B (17.8) WB – C (22.9) NB – D (36.1) SB – D (35.5)	Overall – F (86.9) EB – E (55.7) WB – D (50.6) NB – F (145.0) SB – F (277.0)
Build Improved (2028) Traffic	Overall – B (13.0) EB – B (11.5) WB – B (11.0) NB – C (34.3) SB – C (29.4)	Overall – C (25.0) EB – B (19.8) WB – C (26.6) NB – C (33.2) SB – C (34.4)

Based on the results presented in **Table 6**, the minor street approach operates with short delay in the AM peak hour and moderate delay in the PM peak hour. In the 2028 Background condition, this intersection is to be signalized by one of the adjacent developments. As such, the intersection is expected to operate at LOS A in the AM peak hour and LOS C in the PM peak hour.

With the addition of project traffic and the southern leg as Site Access 1, the overall intersection is expected to operate at LOS C in the AM peak hour and LOS F in the PM peak hour. The following improvements are recommended to accommodate project traffic:

- Construct the southern leg with one ingress lane and two egress lanes.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.
- Construct an exclusive southbound left-turn lane with 100 feet of storage.
- Construct an exclusive westbound left-turn lane with 360 feet of storage.

With the proposed improvements in place, the intersection is expected to operate with LOS B in the AM peak hour and LOS C in the PM peak hour. Therefore, no additional capacity improvements are recommended at this intersection.

4.5 Bluffton Parkway at Hampton Parkway

The capacity analysis results for the intersection of Bluffton Parkway at Hampton Parkway are summarized in **Table 7**.

Table 7 – Bluffton Parkway at Hampton Parkway Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Existing (2024) Traffic	Overall – B (16.3) EB – B (16.5) WB – B (11.5) NB – C (32.0) SB – C (31.5)	Overall – B (15.1) EB – B (14.3) WB – B (14.0) NB – C (31.5) SB – C (30.8)
Background (2028) Traffic	Overall – B (17.7) EB – B (17.1) WB – B (10.5) NB – D (49.8) SB – D (47.3)	Overall – B (15.8) EB – B (13.9) WB – B (14.8) NB – D (41.5) SB – D (40.1)
Build (2028) Traffic	Overall – B (18.7) EB – B (19.0) WB – B (10.8) NB – D (52.0) SB – D (49.4)	Overall – B (16.9) EB – B (14.8) WB – B (16.4) NB – D (42.0) SB – D (40.6)

Based on the results presented in **Table 7**, the intersection currently operates at LOS B in both peak hours. Under 2028 Background and 2028 Build conditions, the intersection is expected to continue to operate at LOS B. Therefore, no capacity improvements are recommended at this intersection.

4.6 Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access

The capacity analysis results for the intersection of Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access are summarized in **Table 8**.

**Table 8 – Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access
Capacity Analysis Results**

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Background (2028) Traffic	Overall – A (9.0) EB – B (11.8) WB – A (3.5) NB – C (27.5) SB – C (27.3)	Overall – A (9.1) EB – B (12.0) WB – A (6.4) NB – C (23.0) SB – C (22.7)
Build (2028) Traffic	Overall – B (12.7) EB – B (16.2) WB – A (4.1) NB – C (32.9) SB – C (32.4)	Overall – B (10.8) EB – B (13.7) WB – A (6.5) NB – C (27.5) SB – C (27.1)

Based on the results presented in **Table 8**, the intersection is expected to operate at LOS A in the AM and PM peak hours in the 2028 Background and LOS B in the 2028 Build conditions. Therefore, no capacity improvements are recommended at this intersection.

4.7 Lake Point Drive at Site Access 2

The capacity analysis results for the intersection of Lake Point Drive at Site Access 2 are summarized in **Table 9**.

Table 9 – Lake Point Drive at Site Access 2 Capacity Analysis Results

Condition	AM Peak Hour LOS (Delay)	PM Peak Hour LOS (Delay)
Build (2028) Traffic	SB – C (23.0) EBL – A (8.0)	SB – B (14.2) EBL – A (7.9)
Build Improved (2028) Traffic	SB – C (21.0) EBL – A (8.0)	SB – B (13.6) EBL – A (7.9)

Based on the results presented in **Table 9**, the minor street approach is expected to operate with short delays. Based on SCDOT and NCHRP Turn Lane Guidelines, an eastbound left-turn lane is not warranted while a westbound right-turn lane is. With the turn lane in place, the minor street approach is still expected to operate with short delays. Therefore, it is recommended to construct a westbound right-turn lane with 100 feet of storage and appropriate taper at this intersection as well as dual egress lanes to accommodate emergency vehicles from the hospital. Turn lane warrants are provided in **Appendix H**.

5 Conclusion

Based on the results of the traffic analyses, the following improvements are recommended to mitigate the impact of the proposed development's traffic on the study area intersections:

Buckwalter Parkway at Buckwalter Place Boulevard

- No capacity improvements are recommended at this intersection.

Buckwalter Parkway at Bluffton Parkway/Buckwalter Towne Boulevard

- No capacity improvements are recommended at this intersection.

Buckwalter Parkway at Lake Point Drive/Carolina Bluff Drive

- Construct a second northbound left-turn lane with 200 feet of storage.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.

Bluffton Parkway at Innovation Drive/Site Access 1

- Construct the southern leg with one ingress lane and two egress lanes.
- Construct an exclusive eastbound right-turn lane with 100 feet of storage.
- Construct an exclusive southbound left-turn lane with 100 feet of storage.
- Construct an exclusive westbound left-turn lane with 360 feet of storage.

Bluffton Parkway at Hampton Parkway

- No capacity improvements are recommended at this intersection.

Bluffton Parkway at Buckwalter Place Boulevard/Parkways Site Access

- No capacity improvements are recommended at this intersection.

Lake Point Drive at Site Access 2

- Construct the northern leg with one ingress lane and two egress lanes.
- Construct an exclusive westbound right-turn lane with 100 feet of storage.

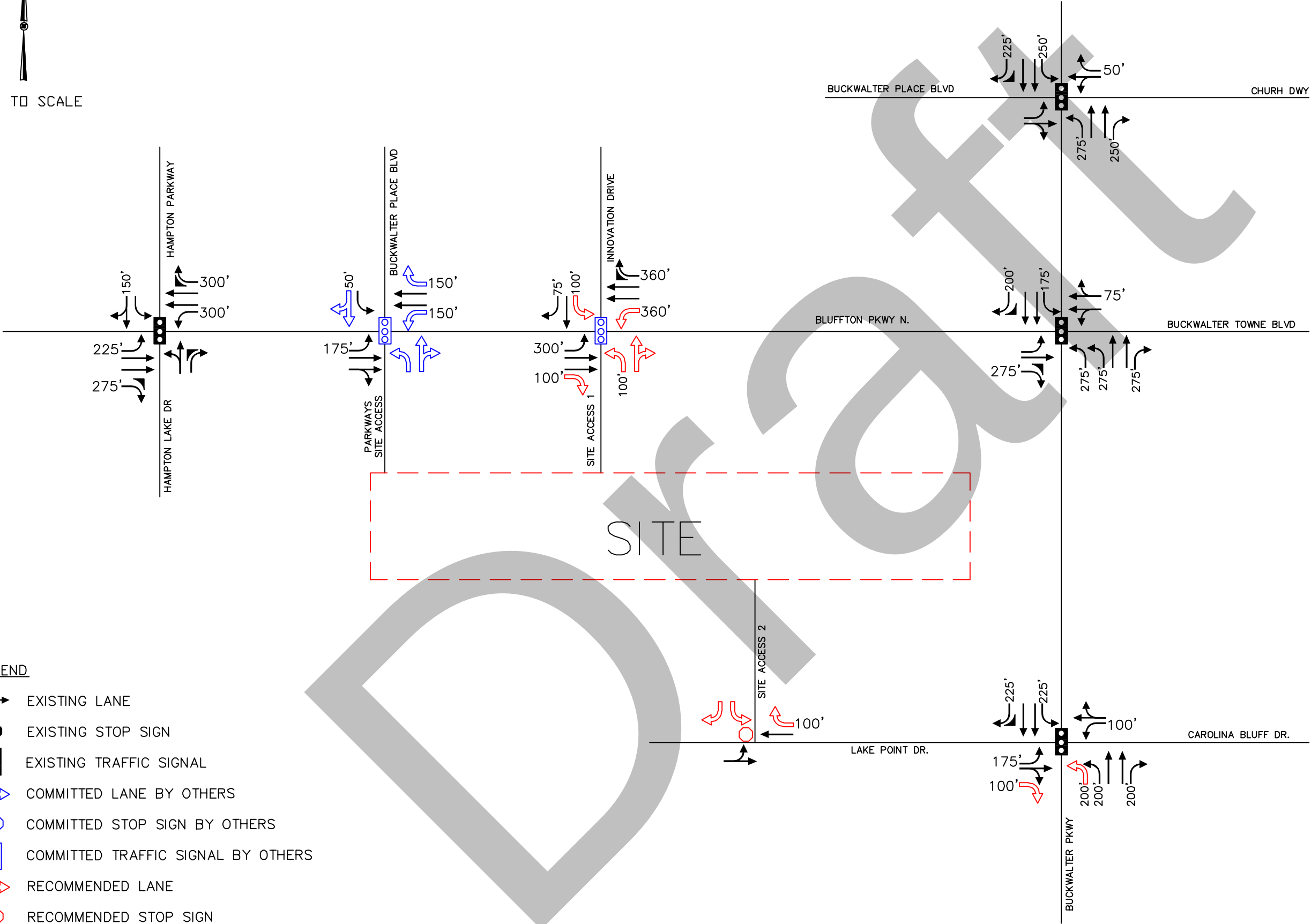
The recommended geometry and traffic control is shown on **Figure 11**.

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LEGEND

- EXISTING LANE
- EXISTING STOP SIGN
- EXISTING TRAFFIC SIGNAL
- COMMITTED LANE BY OTHERS
- COMMITTED STOP SIGN BY OTHERS
- COMMITTED TRAFFIC SIGNAL BY OTHERS
- RECOMMENDED LANE
- RECOMMENDED STOP SIGN
- XX' STORAGE LENGTH

NOT TO SCALE

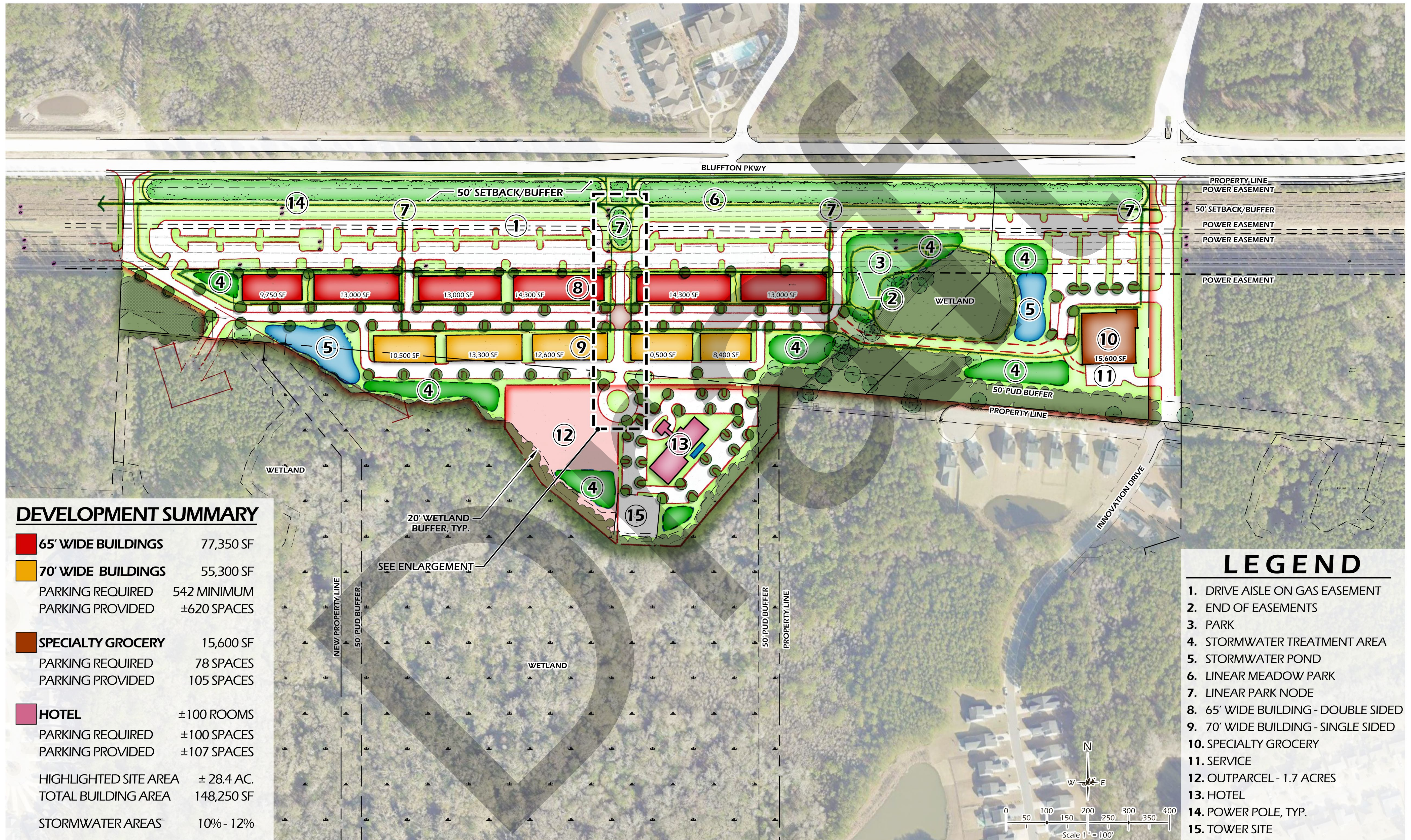


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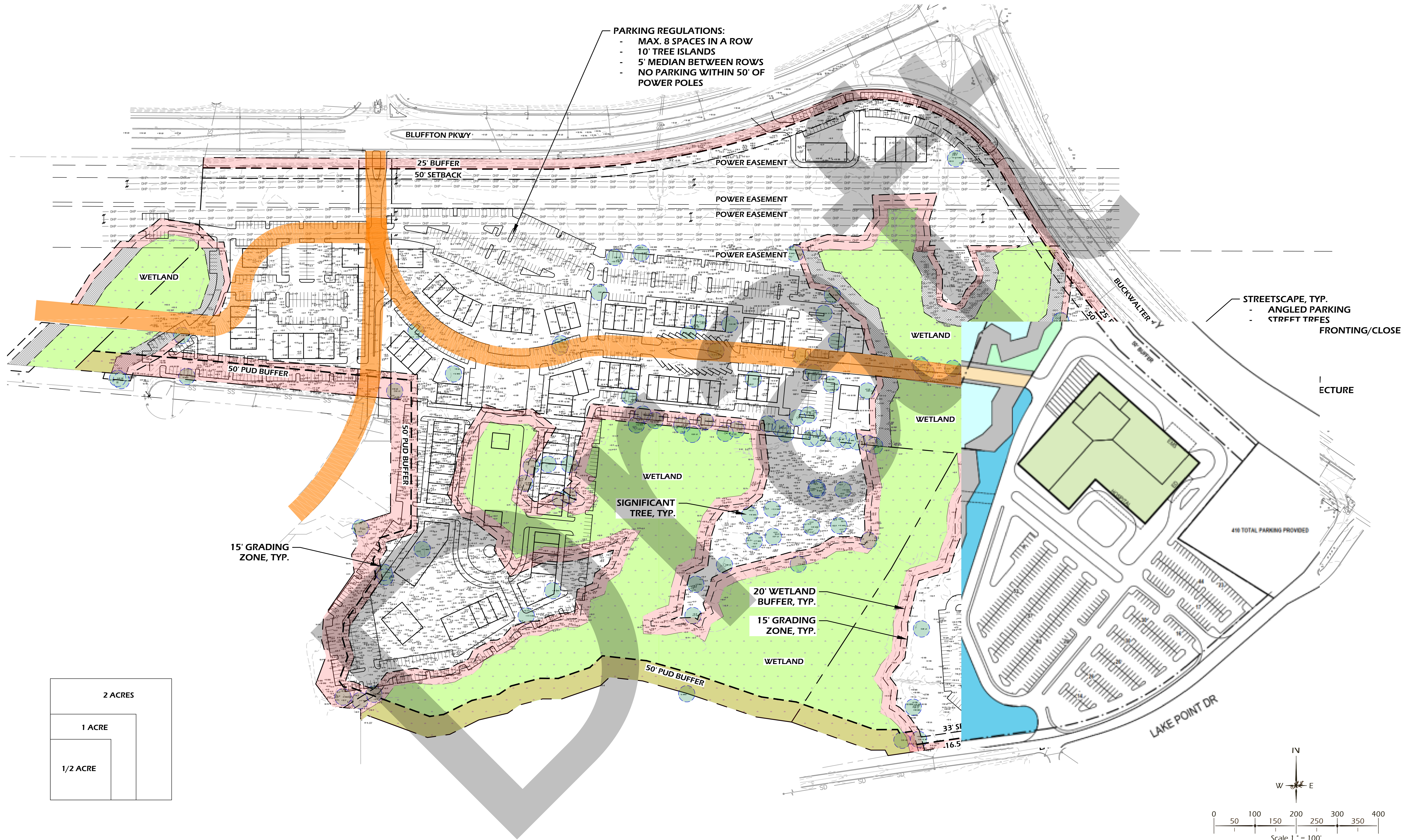
Appendix A – Conceptual Site Plans

Draft

PRELIMINARY SITE PLAN



PRELIMINARY SITE PLAN



FEBRUARY 2023

PROJECT NO.: XXXXX.XX
Witmer Jones Keefer Ltd. / 23 Promenade St., Suite 201, Bluffton, SC. 29910 / ph: (843) 757.7411 / www.wjk ltd.com

PARKWAY CORNERS

LAND PLANNING
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PLAN IS CONCEPTUAL IN NATURE
AND IS SUBJECT TO CHANGE.
THIS SHEET TO SCALE AT: 24"X36"Witmer Jones Keefer
Ltd.
landscape architecture
land planning

Appendix B – Trip Generation Calculations

Draft

Parcel 12C and Parkway Corners

Table 1 - Trip Generation

Land Use		Intensity		Daily			AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out	Total	In	Out
215	Single Family Attached Housing	145	d.u.	1054	527	527	70	18	52	83	49	34
310	Hotel	100	rooms	660	330	330	43	24	19	46	23	23
610	Hospital	100	beds	2232	1116	1116	179	129	50	169	56	113
821	Shopping Plaza (40K-150K) w/o Supermarket	99,488	s.f.	6718	3359	3359	172	107	65	516	253	263
850	Supermarket	15,600	s.f.	1,840	920	920	45	27	18	140	70	70
932	High-Turnover Sit-Down Restaurant	33,163	s.f.	3556	1778	1778	317	174	143	300	183	117
Subtotal				16,060	8,030	8,030	826	479	347	1,254	634	620
<u>Internal Capture</u>												
215	Single Family Attached Housing			410	181	229	12	1	11	53	31	22
310	Hotel			273	125	148	6	1	5	26	13	13
821	Shopping Plaza (40K-150K) w/o Supermarket			1,184	512	672	21	12	9	115	52	63
850	Supermarket			324	140	184	5	3	2	31	14	17
932	High-Turnover Sit-Down Restaurant			1,541	908	633	36	23	13	133	69	64
Internal Capture Total				3,732	1,866	1,866	80	40	40	358	179	179
Total External Trips				12,328	6,164	6,164	746	439	307	896	455	441
<u>Pass-By Capture</u>		<u>AM</u>	<u>PM</u>									
821	Shopping Plaza (40K-150K) w/o Supermarket	0%	40%	2,083	1042	1,041	0	0	0	160	80	80
850	Supermarket	0%	24%	342	171	171	0	0	0	26	13	13
932	High-Turnover Sit-Down Restaurant	0%	43%	853	427	426	0	0	0	72	49	23
Pass-By Capture Total				3,278	1,640	1,638	0	0	0	258	142	116
Total Net New External Trips				9,050	4,524	4,526	746	439	307	638	313	325

Appendix C – Traffic Volume Development Worksheets

Draft

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #1
Buckwalter Place Boulevard/Church Driveway at Buckwalter Parkway

AM PEAK HOUR																
	Buckwalter Parkway Northbound				Buckwalter Parkway Southbound				Buckwalter Place Boulevard Eastbound				Church Driveway Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	1	183	758	5	3	2	415	77	0	88	1	95	0	7	3	6
Count Balancing																
Pedestrians		0				0				0				0		
Conflicting Pedestrians		0	0	0		0	0	0		0	0	0		0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles																
Heavy Vehicles	0	1	4	0	0	0	13	1	0	2	0	4	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	2%	2%
Peak Hour Factor		0.89				0.89				0.89				0.89		
Adjusted 2024 Volumes	1	183	758	5	3	2	415	77	0	88	1	95	0	7	3	6
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	39	163	1	1	0	89	17	0	19	0	20	0	2	1	1
Elle Apartments			4				2									
Bluffton Commons(Washington Square)			93				68									
Parkways Multifamily			21				7									
Buckwalter MOB			47				12									
Bluffton Community Hospital			3				19	19		16						
Cross Schools			18				26									
Grand Oaks																
Total Approved Development Trips	0	0	186	0	0	0	134	19	0	16	0	0	0	0	0	0
2028 No-Build Traffic	1	222	1,107	6	4	2	638	113	0	123	1	115	0	9	4	7
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment							1									
Residential Trips	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment							-1									
Hotel Trips	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment			1													
Retail Trips	0	0	15	0	0	0	24	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Restaurant Trips	0	0	26	0	0	0	30	0	0	0	0	0	0	0	0	0
Trip Distribution IN							20%									
Trip Distribution OUT			(20%)													
Balancing Adjustment																
Other Non-Residential Trips	0	0	10	0	0	0	26	0	0	0	0	0	0	0	0	0
Total Primary Site Trips	0	0	62	0	0	0	88	0	0	0	0	0	0	0	0	0
2028 Build Traffic	1	222	1,169	6	4	2	726	113	0	123	1	115	0	9	4	7
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT

INTERSECTION #1

Buckwalter Place Boulevard/Church Driveway at Buckwalter Parkway

[illegible]

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #2
Bluffton Parkway/Buckwalter Towne Blvd at Buckwalter Parkway

AM PEAK HOUR																
	Buckwalter Parkway Northbound				Buckwalter Parkway Southbound				Bluffton Parkway Eastbound				Buckwalter Towne Blvd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	398	585	9	0	7	413	151	0	212	4	859	0	19	16	31
Count Balancing																
Pedestrians		0				0				0				0		
Conflicting Pedestrians		0		0		0		0		0		0		0		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	8	3	1	0	1	8	2	0	3	1	10	0	3	2	0
Heavy Vehicle %	2%	2%	2%	11%	2%	14%	2%	2%	2%	2%	25%	2%	2%	16%	13%	2%
Peak Hour Factor		0.94				0.94				0.94				0.94		
Adjusted 2024 Volumes	0	398	585	9	0	7	413	151	0	212	4	859	0	19	16	31
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	86	126	2	0	2	89	33	0	46	1	185	0	4	3	7
Elle Apartments		2						2		4		4				
Bluffton Commons(Washington Sqaure)			31				23	45		62						
Parkways Multifamily		6					7			21		21				
Buckwalter MOB			15				4	8		32						
Bluffton Community Hospital		44					19			3		21				
Cross Schools		41	18				26					60				
Grand Oaks							1			3						
Total Approved Development Trips	0	93	64	0	0	0	53	82	0	125	0	106	0	0	0	0
2028 No-Build Traffic	0	577	775	11	0	9	555	266	0	383	5	1,150	0	23	19	38
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Residential Trips	0	3	2	0	0	0	1	3	0	6	0	8	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Hotel Trips	0	5	1	0	0	0	1	3	0	2	0	3	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Retail Trips	0	24	4	0	0	0	6	18	0	11	0	14	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment								-1		-1						
Restaurant Trips	0	30	7	0	0	0	8	22	0	19	0	26	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment								1		-1						
Other Non-Residential Trips	0	26	3	0	0	0	6	20	0	7	0	10	0	0	0	0
Total Primary Site Trips	0	88	17	0	0	0	22	66	0	45	0	61	0	0	0	0
2028 Build Traffic	0	665	792	11	0	9	577	332	0	428	5	1,211	0	23	19	38
2028 Build Heavy Vehicle %	2%	2%	2%	11%	2%	14%	2%	2%	2%	2%	24%	2%	2%	16%	13%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #2
Bluffton Parkway/Buckwalter Towne Blvd at Buckwalter Parkway

PM PEAK HOUR																
	Buckwalter Parkway Northbound				Buckwalter Parkway Southbound				Bluffton Parkway Eastbound				Buckwalter Towne Blvd Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	632	651	19	1	32	516	244	0	173	8	638	0	10	9	22
Count Balancing																
Pedestrians		0				0				0				0		
Conflicting Pedestrians		0	0	0		0	0	0		0	0	0		0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	11	12	0	0	3	12	1	0	5	1	11	0	1	1	2
Heavy Vehicle %	2%	2%	2%	2%	2%	9%	2%	2%	2%	3%	13%	2%	2%	10%	11%	9%
Peak Hour Factor		0.98				0.98				0.98				0.98		
Adjusted 2024 Volumes	0	632	651	19	1	32	516	244	0	173	8	638	0	10	9	22
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	136	140	4	0	7	111	53	0	37	2	137	0	2	2	5
Elle Apartments		5						5		3		4				
Bluffton Commons(Washington Square)			40				43	85			61					
Parkways Multifamily		22					22	13			13					
Buckwalter MOB			9				21	43			18					
Bluffton Community Hospital		21					9			6		39				
Cross Schools		23	11				6					16				
Grand Oaks							3			2						
Total Approved Development Trips	0	71	60	0	0	0	70	167	0	123	0	72	0	0	0	0
2028 No-Build Traffic	0	839	851	23	1	39	697	464	0	333	10	847	0	12	11	27
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment								-1			-1					
Residential Trips	0	4	1	0	0	0	1	2	0	2	0	2	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment								-1			-1					
Hotel Trips	0	2	1	0	0	0	1	1	0	1	0	2	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Retail Trips	0	33	8	0	0	0	8	25	0	24	0	32	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Restaurant Trips	0	13	2	0	0	0	3	10	0	4	0	6	0	0	0	0
Trip Distribution IN		20%					5%	15%								
Trip Distribution OUT			(5%)							(15%)		(20%)				
Balancing Adjustment																
Other Non-Residential Trips	0	11	6	0	0	0	3	8	0	17	0	23	0	0	0	0
Total Primary Site Trips	0	63	18	0	0	0	16	46	0	48	0	65	0	0	0	0
2028 Build Traffic	0	902	869	23	1	39	713	510	0	381	10	912	0	12	11	27
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	9%	2%	2%	2%	2%	12%	2%	2%	10%	11%	9%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #3
Lake Point Drive/Carolina Bluff Drive at Buckwalter Parkway

AM PEAK HOUR																
	Buckwalter Parkway Northbound				Buckwalter Parkway Southbound				Lake Point Drive Eastbound				Carolina Bluff Drive Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	68	73	864	82	0	37	1,243	75	0	244	22	235	0	72	7	57
Count Balancing																
Pedestrians		7				0				2				0		
Conflicting Pedestrians		2		0		0		2		0		7		7		0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	2	10	0	0	2	18	5	0	5	0	2	0	0	0	0
Heavy Vehicle %	2%	3%	2%	2%	2%	5%	2%	7%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.87				0.87				0.87				0.87		
Adjusted 2024 Volumes	68	73	864	82	0	37	1,243	75	0	244	22	235	0	72	7	57
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	15	16	186	18	0	8	268	16	0	53	5	51	0	16	2	12
Elle Apartments			2				4									
Bluffton Commons(Washington Sqaure)			31				23									
Parkways Multifamily			6				21									
Buckwalter MOB			15				4									
Bluffton Community Hospital			44				21									
Cross Schools	52	6	59				86					8				
Grand Oaks		3										9				
Total Approved Development Trips	52	9	157	0	0	0	159	0	0	0	0	17	0	0	0	0
2028 No-Build Traffic	135	98	1,207	100	0	45	1,670	91	0	297	27	303	0	88	9	69
Trip Distribution IN		20%	20%				(20%)	5%		(5%)		(20%)				
Trip Distribution OUT																
Balancing Adjustment																
Residential Trips	0	3	3	0	0	0	8	1	0	2	0	8	0	0	0	0
Trip Distribution IN		20%	20%					5%								
Trip Distribution OUT							(20%)			(5%)		(20%)				
Balancing Adjustment																
Hotel Trips	0	5	5	0	0	0	3	1	0	1	0	3	0	0	0	0
Trip Distribution IN		20%	20%					5%								
Trip Distribution OUT							(20%)			(5%)		(20%)				
Balancing Adjustment																
Retail Trips	0	24	24	0	0	0	14	6	0	4	0	14	0	0	0	0
Trip Distribution IN		20%	20%					5%								
Trip Distribution OUT							(20%)			(5%)		(20%)				
Balancing Adjustment																
Restaurant Trips	0	30	30	0	0	0	26	8	0	7	0	26	0	0	0	0
Trip Distribution IN		20%	20%					5%								
Trip Distribution OUT							(20%)			(5%)		(20%)				
Balancing Adjustment																
Other Non-Residential Trips	0	26	26	0	0	0	10	6	0	3	0	10	0	0	0	0
Total Primary Site Trips	0	88	88	0	0	0	61	22	0	17	0	61	0	0	0	0
2028 Build Traffic	135	186	1,295	100	0	45	1,731	113	0	314	27	364	0	88	9	69
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	5%	2%	5%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #4
Bluffton Parkway at Site Access 1/Innovation Drive

AM PEAK HOUR

AM PEAK HOUR																
	Site Access 1 Northbound				Innovation Drive Southbound				Bluffton Parkway Eastbound				Bluffton Parkway Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	0	0	0	0	2	0	102	1	183	1,058	0	0	0	613	7
Count Balancing	0				0				0				0			
Pedestrians		0		0		0		0		0		0		0		0
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles				0				0				0				0
Conflicting Bicycles				0				0				0				0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	5	16	0	0	0	14	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.90				0.90				0.90				0.90			
Adjusted 2024 Volumes	0	0	0	0	0	2	0	102	1	183	1,058	0	0	0	613	7
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	0	0	0	0	0	0	22	0	39	228	0	0	0	132	2
Elle Apartments											8				4	
Bluffton Commons(Washington Square)											62				45	
Parkways Multifamily											42				13	
Buckwelder MOB											32				8	
Bluffton Community Hospital						24		3		43					18	13
Cross Schools											60				41	
Grand Oaks		9	1	3								3		1		
Total Approved Development Trips	0	9	1	3	0	24	0	3	0	43	204	3	0	1	129	13
2028 No-Build Traffic	0	9	1	3	0	26	0	127	1	265	1,490	3	0	1	874	22
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)					
Balancing Adjustment																
Residential Trips	0	6	0	8	0	0	0	0	0	0	6	3	0	3	3	0
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)					
Balancing Adjustment																
Hotel Trips	0	2	0	3	0	0	0	0	0	0	2	3	0	5	3	0
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)					
Balancing Adjustment																
Retail Trips	0	11	0	14	0	0	0	0	0	0	11	18	0	24	18	0
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)					
Balancing Adjustment				-1										-1		
Restaurant Trips	0	20	0	25	0	0	0	0	0	0	20	23	0	29	23	0
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)					
Balancing Adjustment				-1										1		
Other Non-Residential Trips	0	8	0	9	0	0	0	0	0	0	8	19	0	27	19	0
Total Primary Site Trips	0	47	0	59	0	0	0	0	0	0	47	66	0	88	66	0
2028 Build Traffic	0	56	1	62	0	26	0	127	1	265	1,537	69	0	89	940	22
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #4
Bluffton Parkway at Site Access 1/Innovation Drive

	PM PEAK HOUR															
	Site Access 1 Northbound				Innovation Drive Southbound				Bluffton Parkway Eastbound				Bluffton Parkway Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	0	0	0	0	13	0	337	0	276	807	0	0	0	884	15
Count Balancing																
Pedestrians	0				1				0				0			
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Bicycles	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Conflicting Bicycles	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	3	0	1	17	0	0	0	11	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.94				0.94				0.94				0.94			
Adjusted 2024 Volumes	0	0	0	0	0	13	0	337	0	276	807	0	0	0	884	15
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	0	0	0	0	3	0	73	0	59	174	0	0	0	191	3
Elle Apartments																
Bluffton Commons(Washington Square)																
Parkways Multifamily																
Buckwalter MOB																
Bluffton Community Hospital					45				6				34			
Cross Schools									21				18			
Grand Oaks	6				1				2				10			
Total Approved Development Trips	0	6	1	2	0	45	1	6	0	21	145	10	0	3	239	6
2028 No-Build Traffic	0	6	1	2	0	61	1	416	0	356	1,126	10	0	3	1,314	24
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)			-1	3	0
Balancing Adjustment	0	2	0	2	0	0	0	0	0	0	2	3	0	3	3	0
Residential Trips																
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)			-1		
Balancing Adjustment	0	2	0	1	0	0	0	0	0	0	2	2	0	1	2	0
Hotel Trips																
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)			-1		
Balancing Adjustment	0	24	0	32	0	0	0	0	0	0	24	25	0	33	25	0
Retail Trips																
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)			-1		
Balancing Adjustment	0	5	0	5	0	0	0	0	0	0	5	10	0	13	10	0
Restaurant Trips																
Trip Distribution IN												15%		20%	15%	
Trip Distribution OUT		(15%)		(20%)							(15%)			-1		
Balancing Adjustment	0	17	0	23	0	0	0	0	0	0	17	8	0	11	8	0
Other Non-Residential Trips																
Total Primary Site Trips	0	50	0	63	0	0	0	0	0	0	50	48	0	61	48	0
Pass-By Distribution REDUCTION											-15%			35%	-35%	
Pass-By Distribution IN												15%				
Pass-By Distribution OUT		(35%)		(15%)												
Balancing Adjustment	0	41	0	17	0	0	0	0	0	0	-21	21	0	50	-50	0
Pass-By Trips																
Total Vehicular Project Trips	0	91	0	80	0	0	0	0	0	0	29	69	0	111	-2	0
2028 Build Traffic	0	97	1	82	0	61	1	416	0	356	1,155	79	0	114	1,312	24
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #5
Bluffton Parkway at Hampton Lake Drive/Hampton Parkway

AM PEAK HOUR

[illegible]

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #5
Bluffton Parkway at Hampton Lake Drive/Hampton Parkway

PM PEAK HOUR																
	Hampton Lake Drive Northbound				Hampton Parkway Southbound				Bluffton Parkway Eastbound				Bluffton Parkway Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	28	0	96	0	46	8	16	0	15	675	30	4	125	1,035	111
Count Balancing				26		26					210					
Pedestrians		0				0				1				1		
Conflicting Pedestrians		1		1		1		1		0		0		0		0
Bicycles	0	0	2	0	0	0	3	0	0	0	0	0	0	0	1	0
Conflicting Bicycles				2				3								1
Heavy Vehicles	0	0	0	0	0	0	0	1	0	0	4	0	0	0	4	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.97				0.97				0.97				0.97		
Adjusted 2024 Volumes	0	28	0	122	0	72	8	16	0	15	885	30	4	125	1,035	111
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	6	0	26	0	16	2	3	0	3	191	6	1	27	223	24
Elle Apartments											6				4	
Bluffton Commons(Washington Sqaure)											81				85	
Parkways Multifamily		10		10			1				7	16		17	4	
Buckwalter MOB											18				43	
Bluffton Community Hospital											21				40	
Cross Schools											16				23	
Grand Oaks																
Total Approved Development Trips	0	10	0	10	0	0	1	0	0	0	149	16	0	17	199	0
2028 No-Build Traffic	0	44	0	158	0	88	11	19	0	18	1,225	52	5	169	1,457	135
Trip Distribution IN											35%					
Trip Distribution OUT															(35%)	
Balancing Adjustment											6	0	0	0	4	0
Residential Trips	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0
Trip Distribution IN											35%					
Trip Distribution OUT															(35%)	
Balancing Adjustment											-1				-1	
Hotel Trips	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0
Trip Distribution IN											35%					
Trip Distribution OUT															(35%)	
Balancing Adjustment											57	0	0	0	56	0
Retail Trips	0	0	0	0	0	0	0	0	0	0	57	0	0	0	56	0
Trip Distribution IN											35%					
Trip Distribution OUT															(35%)	
Balancing Adjustment											23	0	0	0	10	0
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	23	0	0	0	10	0
Trip Distribution IN											35%					
Trip Distribution OUT															(35%)	
Balancing Adjustment											20	0	0	0	39	0
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	20	0	0	0	39	0
Total Primary Site Trips	0	0	0	0	0	0	0	0	0	0	109	0	0	0	112	0
2028 Build Traffic	0	44	0	158	0	88	11	19	0	18	1,334	52	5	169	1,569	135
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #6
Bluffton Parkway at Parkways Access/Buckwalter Place Blvd

AM PEAK HOUR

	Parkways Access				Ruckwalter Place Blvd				Bluffton Parkway				Bluffton Parkway			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1,242	0	0	0	715	0
Count Balancing	0				0				0				0			
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0				0				0				0			
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.90				0.90				0.90				0.90			
Adjusted 2024 Volumes	0	0	0	0	0	0	0	0	0	0	1,242	0	0	0	715	0
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	0	0	0	0	0	0	0	0	0	258	0	0	0	154	0
Elle Apartments					8				5							
Bluffton Commons(Washington Sqaure)									3							
Parkways Multifamily	7				26								16			
Buckwalter MOB													32			
Bluffton Community Hospital													43			
Cross Schools													60			
Grand Oaks																
Total Approved Development Trips	0	7	0	26	0	8	0	5	0	3	213	2	0	8	120	4
2028 No-Build Traffic	0	7	0	26	0	8	0	5	0	3	1,723	2	0	8	989	4
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		1														
Residential Trips	0	9	0	6	0	0	0	0	0	0	3	3	0	3	6	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		-1														
Hotel Trips	0	2	0	2	0	0	0	0	0	0	3	5	0	3	2	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment												-1				
Retail Trips	0	14	0	11	0	0	0	0	0	0	18	23	0	18	11	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		-1														
Restaurant Trips	0	25	0	20	0	0	0	0	0	0	23	30	0	23	20	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		-1														
Other Non-Residential Trips	0	9	0	8	0	0	0	0	0	0	19	26	0	19	8	0
Total Primary Site Trips	0	59	0	47	0	0	0	0	0	0	66	87	0	66	47	0
2028 Build Traffic	0	66	0	73	0	8	0	5	0	3	1,789	89	0	74	1,036	4
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #6
Bluffton Parkway at Parkways Access/Buckwalter Place Blvd

Bluffton Parkway at Parkway Access Buckwalter Place Blvd																
	Parkways Access Northbound				Buckwalter Place Blvd Southbound				Bluffton Parkway Eastbound				Bluffton Parkway Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1,083	0	0	0	1,221	0
Count Balancing	0				0				0				0			
Pedestrians																
Conflicting Pedestrians	0				0				0				0			
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.9				0.90				0.90				0.90			
Adjusted 2024 Volumes	0	0	0	0	0	0	0	0	0	0	1,083	0	0	0	1,221	0
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	0	0	0	0	0	0	0	0	0	233	0	0	0	263	0
Elle Apartments					7				4				6			
Bluffton Commons(Washington Square)													81			
Parkways Multifamily													10			
Buckwalter MOB	4				16								7			
Bluffton Community Hospital													27			
Cross Schools													18			
Grand Oaks													21			
Total Approved Development Trips	0	4	0	16	0	7	0	4	0	6	146	7	0	27	208	10
2028 No-Build Traffic	0	4	0	16	0	7	0	4	0	6	1,462	7	0	27	1,692	10
Trip Distribution IN		(20%)		(15%)							15%	20%		15%	(15%)	
Trip Distribution OUT																
Balancing Adjustment												-1				
Residential Trips	0	2	0	2	0	0	0	0	0	0	3	3	0	3	2	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		-1										-1				
Hotel Trips	0	1	0	2	0	0	0	0	0	0	2	1	0	2	2	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment												-1				
Retail Trips	0	32	0	24	0	0	0	0	0	0	25	32	0	25	24	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment		-1										1				
Restaurant Trips	0	5	0	5	0	0	0	0	0	0	10	13	0	10	5	0
Trip Distribution IN											15%	20%		15%		
Trip Distribution OUT		(20%)		(15%)											(15%)	
Balancing Adjustment												-1				
Other Non-Residential Trips	0	22	0	17	0	0	0	0	0	0	8	12	0	8	17	0
Total Primary Site Trips	0	62	0	50	0	0	0	0	0	0	48	61	0	48	50	0
Pass-By Distribution REDUCTION											-30%				-20%	
Pass-By Distribution IN												30%		20%		
Pass-By Distribution OUT		(20%)		(30%)												
Balancing Adjustment												-43	43	0	28	-28
Pass-By Trips	0	23	0	35	0	0	0	0	0	0	-43	43	0	28	-28	0
Total Vehicular Project Trips	0	85	0	85	0	0	0	0	0	0	5	104	0	76	22	0
2028 Build Traffic	0	89	0	101	0	7	0	4	0	6	1,467	111	0	103	1,714	10
2028 Build Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT
INTERSECTION #7
Lake Point Drive at Site Access 2

AM PEAK HOUR

	Northbound				Site Access 2 Southbound				Lake Point Drive Eastbound				Lake Point Drive Westbound			
	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right	U-Turn	Left	Through	Right
Observed 2024 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	501	0	0	0	155	0
Count Balancing	0				0				0				0			
Pedestrians	0				0				0				0			
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Bicycles	0				0				0				0			
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor	0.90				0.90				0.90				0.90			
Adjusted 2024 Volumes	0	0	0	0	0	0	0	0	0	0	501	0	0	0	155	0
Annual Growth Rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Growth Factor	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Background Growth	0	0	0	0	0	0	0	0	0	0	108	1.22	0	0	33	0
Elle Apartments																
Bluffton Commons(Washington Sqaure)																
Parkways Multifamily																
Buckwalter MOB																
Bluffton Community Hospital																
Cross Schools																
Grand Oaks											9				3	
Total Approved Development Trips	0	0	0	0	0	0	0	0	0	0	9	0	0	0	3	0
2028 No-Build Traffic	0	0	0	0	0	0	0	0	0	0	618	0	0	0	191	0
Trip Distribution IN										5%						25%
Trip Distribution OUT						(25%)		(5%)								
Balancing Adjustment																
Residential Trips	0	0	0	0	0	10	0	2	0	1	0	0	0	0	0	4
Trip Distribution IN										5%						25%
Trip Distribution OUT						(25%)		(5%)								
Balancing Adjustment																
Hotel Trips	0	0	0	0	0	4	0	1	0	1	0	0	0	0	0	6
Trip Distribution IN										5%						25%
Trip Distribution OUT						(25%)		(5%)								
Balancing Adjustment																
Retail Trips	0	0	0	0	0	18	0	4	0	6	0	0	0	0	0	30
Trip Distribution IN										5%						25%
Trip Distribution OUT						(25%)		(5%)								
Balancing Adjustment																
Restaurant Trips	0	0	0	0	0	33	0	7	0	8	0	0	0	0	0	38
Trip Distribution IN										5%						25%
Trip Distribution OUT						(25%)		(5%)								
Balancing Adjustment																
Other Non-Residential Trips	0	0	0	0	0	13	0	3	0	6	0	0	0	0	0	32
Total Primary Site Trips	0	0	0	0	0	78	0	17	0	22	0	0	0	0	0	110

Appendix D – Raw Turning Movement Counts

Draft



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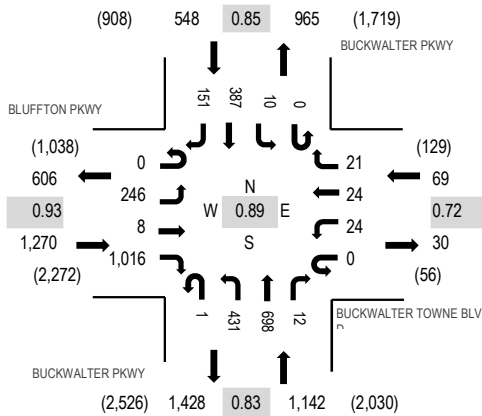
Location: 2 BUCKWALTER PKWY & BUCKWALTER TOWNE BLVD AM

Date: Tuesday, March 19, 2024

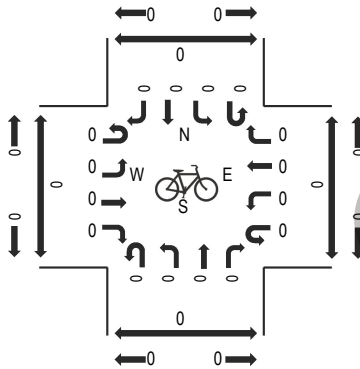
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

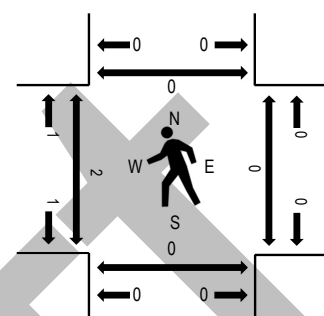
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PKWY Eastbound				BUCKWALTER TOWNE Westbound				BUCKWALTER PKWY Northbound				BUCKWALTER PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	26	1	138	0	6	1	5	0	40	103	2	0	1	47	12	382	2,536	0	1	0	0
7:15 AM	0	37	1	207	0	8	4	9	0	93	136	2	0	0	60	22	579	2,838	0	0	0	0
7:30 AM	0	56	2	277	0	4	5	11	0	66	173	2	0	5	97	26	724	3,029	0	0	0	0
7:45 AM	0	65	0	275	0	9	2	3	0	123	229	1	0	1	118	25	851	3,018	0	0	0	0
8:00 AM	0	59	3	195	0	2	5	4	0	129	169	4	0	3	74	37	684	2,803	2	0	0	0
8:15 AM	0	66	3	269	0	9	12	3	1	113	127	5	0	1	98	63	770		0	0	0	0
8:30 AM	0	53	3	264	0	7	7	5	0	112	148	5	0	1	71	37	713		0	0	0	0
8:45 AM	0	67	2	203	0	3	1	4	0	81	161	5	0	3	84	22	636		0	2	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	245	8	997	0	23	23	20	1	421	695	11	0	8	379	148	2,979
Mediums	0	1	0	17	0	1	1	1	0	10	3	1	0	2	8	3	48
Total	0	246	8	1,016	0	24	24	21	1	431	698	12	0	10	387	151	3,029

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.2%				0.0%				0.0%				0.0%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor		0.93				0.72				0.83				0.85			0.89
Peak Hour Factor	0.00	0.93	0.92	0.92	0.00	0.75	0.54	0.64	0.25	0.92	0.77	0.95	0.00	0.50	0.82	0.64	0.89



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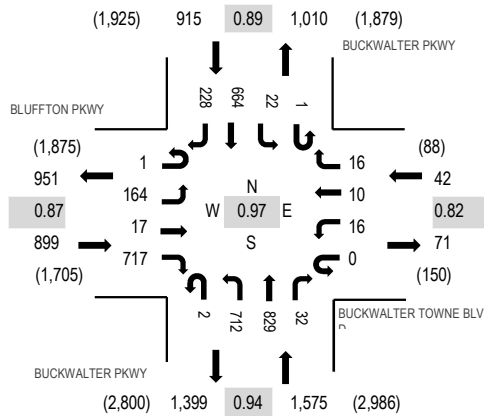
Location: 2 BUCKWALTER PKWY & BUCKWALTER TOWNE BLVD PM

Date: Tuesday, March 19, 2024

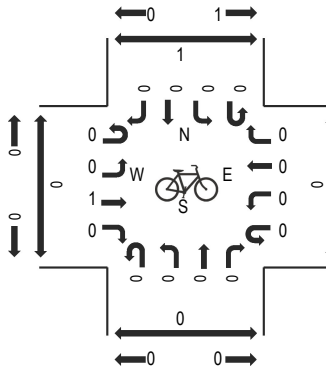
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:00 PM - 04:15 PM

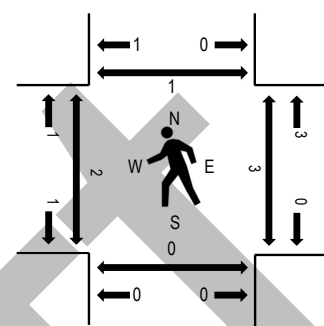
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PKWY Eastbound				BUCKWALTER TOWNE Westbound				BUCKWALTER PKWY Northbound				BUCKWALTER PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	55	2	201	0	6	2	3	1	190	218	10	0	8	126	64	886	3,431	0	0	0	0
4:15 PM	0	37	5	184	0	1	1	6	1	168	217	6	0	5	187	58	876	3,367	1	1	0	1
4:30 PM	0	31	7	179	0	2	3	5	0	194	200	8	1	4	156	58	848	3,378	1	0	0	0
4:45 PM	1	41	3	153	0	7	4	2	0	160	194	8	0	5	195	48	821	3,301	0	2	0	0
5:00 PM	0	35	5	172	0	3	3	8	1	179	168	5	0	4	177	62	822	3,273	4	1	0	0
5:15 PM	0	34	1	199	0	1	4	2	0	169	187	7	1	11	208	63	887		0	1	0	0
5:30 PM	0	41	3	141	0	2	4	5	0	167	175	8	1	6	161	57	771		0	2	0	0
5:45 PM	1	29	4	141	0	6	5	3	1	154	180	10	0	15	188	56	793		0	1	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Lights	1	158	14	693	0	15	9	15	2	703	823	32	1	22	648	228	3,364
Mediums	0	6	3	24	0	1	1	1	0	8	6	0	0	0	16	0	66
Total	1	164	17	717	0	16	10	16	2	712	829	32	1	22	664	228	3,431

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor	0.87				0.82				0.94				0.89				0.97
Peak Hour Factor	0.25	0.75	0.71	0.89	0.00	0.57	0.80	0.66	0.50	0.92	0.95	0.80	0.50	0.60	0.89	0.94	0.97



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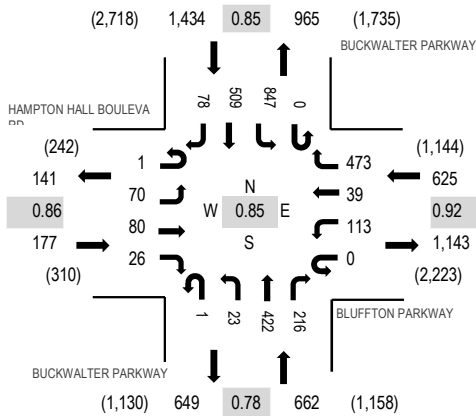
Location: 1 BUCKWALTER PARKWAY & BLUFFTON PARKWAY AM

Date: Wednesday, May 15, 2024

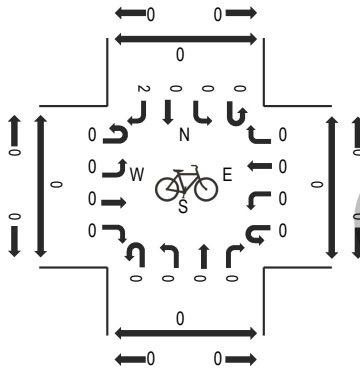
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

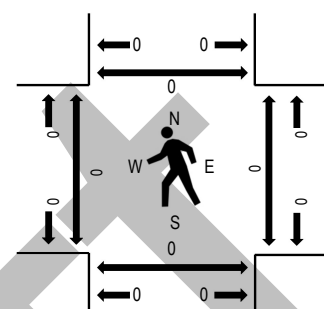
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HAMPTON HALL Eastbound				BLUFFTON PARKWAY Westbound				BUCKWALTER PARKWAY Northbound				BUCKWALTER PARKWAY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	6	12	4	0	9	2	51	0	1	50	38	0	209	86	2	470	2,670	0	0	0	0
7:15 AM	0	13	13	3	0	22	10	89	1	1	94	39	0	241	90	8	624	2,797	0	0	0	0
7:30 AM	0	7	17	5	0	25	6	123	1	5	124	60	0	231	99	17	720	2,898	0	0	0	0
7:45 AM	0	10	35	2	0	26	11	137	0	6	127	79	0	250	142	31	856	2,888	0	0	0	0
8:00 AM	1	24	15	8	0	26	16	114	0	4	60	28	0	172	113	16	597	2,660	0	0	0	0
8:15 AM	0	29	13	11	0	36	6	99	0	8	111	49	0	194	155	14	725		0	0	0	0
8:30 AM	0	15	12	6	0	36	11	129	0	5	104	48	0	192	128	24	710		0	0	0	0
8:45 AM	0	24	22	3	0	25	17	118	0	4	77	34	0	220	68	16	628		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Lights	1	70	80	24	0	110	39	469	1	22	418	215	0	846	505	74	2,874
Mediums	0	0	0	2	0	3	0	3	0	1	4	1	0	1	4	3	22
Total	1	70	80	26	0	113	39	473	1	23	422	216	0	847	509	78	2,898

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.2%				0.0%				0.1%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.1%
Peak Hour Factor		0.86				0.92				0.78				0.85			0.85
Peak Hour Factor	0.25	0.79	0.57	0.64	0.00	0.86	0.74	0.87	0.50	0.72	0.83	0.68	0.00	0.93	0.87	0.69	0.85



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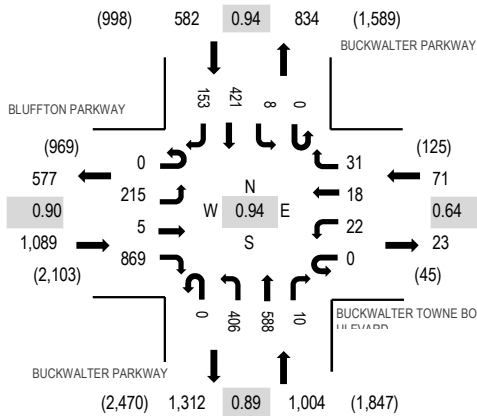
Location: 2 BUCKWALTER PARKWAY & BUCKWALTER TOWNE BOULEVARD AM

Date: Wednesday, May 15, 2024

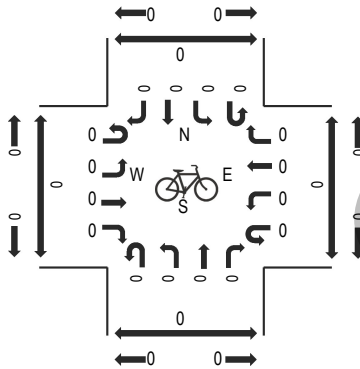
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

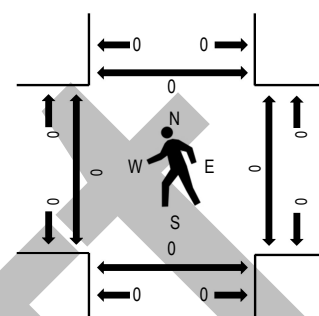
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PARKWAY				BUCKWALTER TOWNE				BUCKWALTER PARKWAY				BUCKWALTER PARKWAY				Rolling Hour	Pedestrian Crossings				
	Eastbound				Westbound				Northbound				Southbound					Total	West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM	0	28	0	167	0	4	2	6	0	31	93	1	0	0	79	11	422	2,392	0	0	0	0
7:15 AM	0	41	1	196	0	4	1	15	0	63	137	1	0	2	68	14	543	2,558	0	0	0	0
7:30 AM	0	56	1	251	0	5	1	6	0	85	160	2	0	5	116	21	709	2,746	0	0	0	0
7:45 AM	0	58	0	210	0	1	2	13	0	106	175	3	0	1	117	32	718	2,740	0	0	0	0
8:00 AM	0	45	2	162	0	6	5	3	0	102	127	1	0	1	94	40	588	2,681	0	0	0	0
8:15 AM	0	56	2	246	0	10	10	9	0	113	126	4	0	1	94	60	731		0	0	0	0
8:30 AM	0	58	1	243	0	2	3	10	0	107	145	2	0	5	88	39	703		0	0	0	0
8:45 AM	0	56	1	222	0	3	0	4	0	99	162	2	0	6	82	22	659		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Lights	0	212	4	859	0	19	16	31	0	398	585	9	0	7	413	151	2,704
Mediums	0	3	1	9	0	3	2	0	0	7	3	1	0	1	8	2	40
Total	0	215	5	869	0	22	18	31	0	406	588	10	0	8	421	153	2,746

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.1%				0.0%				0.1%				0.0%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor		0.90				0.64				0.89				0.94			0.94
Peak Hour Factor	0.00	0.94	0.75	0.89	0.00	0.55	0.50	0.67	0.00	0.95	0.86	0.63	0.00	0.54	0.90	0.71	0.94



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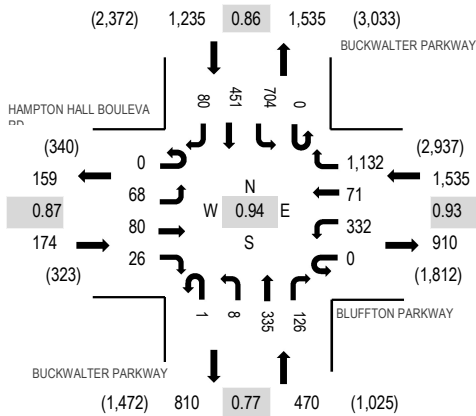
Location: 1 BUCKWALTER PARKWAY & BLUFFTON PARKWAY PM

Date: Wednesday, May 15, 2024

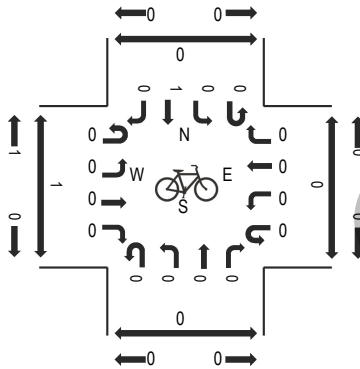
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

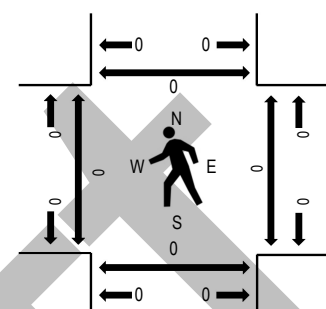
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HAMPTON HALL Eastbound				BLUFFTON PARKWAY Westbound				BUCKWALTER PARKWAY Northbound				BUCKWALTER PARKWAY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	12	17	6	0	70	24	252	0	7	116	53	0	190	100	30	877	3,265	2	0	1	0
4:15 PM	0	16	7	3	0	66	23	280	0	2	110	33	1	162	91	15	809	3,278	0	0	0	0
4:30 PM	0	27	24	3	0	63	15	273	0	7	76	33	0	168	72	23	784	3,381	0	0	0	0
4:45 PM	0	17	20	1	0	67	20	283	0	2	75	25	0	192	74	19	795	3,414	0	0	0	0
5:00 PM	0	24	18	12	0	83	14	314	0	2	94	23	0	158	129	19	890	3,392	0	0	0	0
5:15 PM	0	11	22	8	0	95	20	276	0	2	81	39	0	190	148	20	912		0	0	0	0
5:30 PM	0	16	20	5	0	87	17	259	1	2	85	39	0	164	100	22	817		0	0	0	0
5:45 PM	0	14	14	6	0	81	13	242	0	3	79	36	0	165	101	19	773		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lights	0	66	78	26	0	328	71	1,129	1	8	332	124	0	692	440	79	3,374
Mediums	0	2	2	0	0	4	0	3	0	0	3	2	0	11	11	1	39
Total	0	68	80	26	0	332	71	1,132	1	8	335	126	0	704	451	80	3,414

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Peak Hour Factor	0.87				0.93				0.77				0.86				0.94
Peak Hour Factor	0.00	0.78	0.88	0.65	0.00	0.91	0.85	0.92	0.25	0.64	0.81	0.68	0.25	0.93	0.81	0.73	0.94



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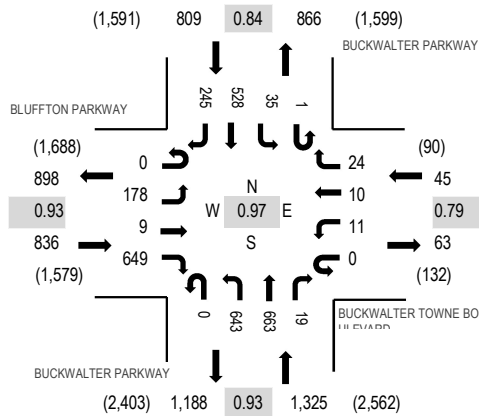
Location: 2 BUCKWALTER PARKWAY & BUCKWALTER TOWNE BOULEVARD PM

Date: Wednesday, May 15, 2024

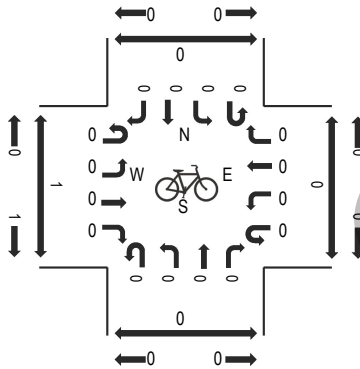
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:00 PM - 04:15 PM

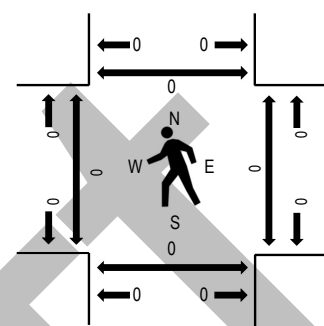
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PARKWAY Eastbound				BUCKWALTER TOWNE Westbound				BUCKWALTER PARKWAY Northbound				BUCKWALTER PARKWAY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	52	2	168	0	0	1	5	0	169	170	1	0	11	156	40	775	3,015	0	0	0	0
4:15 PM	0	53	0	171	0	3	3	8	0	163	186	9	0	9	70	66	741	2,954	0	0	0	0
4:30 PM	0	46	3	150	0	4	6	3	0	153	138	5	0	8	147	74	737	2,975	0	0	0	0
4:45 PM	0	27	4	160	0	4	0	8	0	158	169	4	1	7	155	65	762	2,917	0	0	0	0
5:00 PM	0	23	4	159	0	5	4	9	0	189	169	5	0	11	87	49	714	2,807	0	0	0	0
5:15 PM	0	24	1	159	0	5	1	6	0	177	130	3	0	8	197	51	762		0	0	0	0
5:30 PM	0	33	4	145	0	1	1	2	0	142	145	7	0	11	161	27	679		0	0	0	0
5:45 PM	0	39	3	149	0	3	2	6	0	117	147	6	0	6	144	30	652		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
Lights	0	173	8	638	0	10	9	22	0	632	651	19	1	32	516	244	2,955
Mediums	0	5	1	10	0	1	1	2	0	10	12	0	0	3	12	1	58
Total	0	178	9	649	0	11	10	24	0	643	663	19	1	35	528	245	3,015

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.1%				0.0%				0.1%				0.0%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor		0.93				0.79				0.93				0.84			0.97
Peak Hour Factor	0.00	0.84	0.81	0.95	0.00	0.90	0.54	0.78	0.00	0.90	0.89	0.64	0.25	0.84	0.76	0.86	0.97



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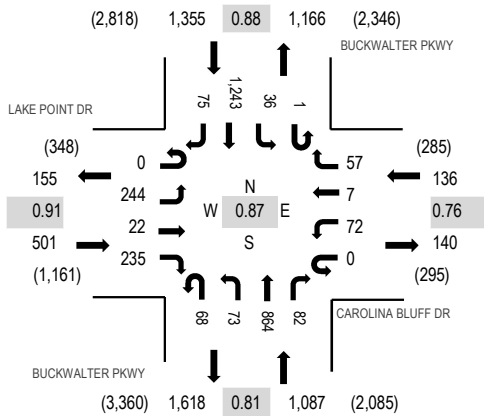
Location: 2 BUCKWALTER PKWY & CAROLINA BLUFF DR AM

Date: Tuesday, May 7, 2024

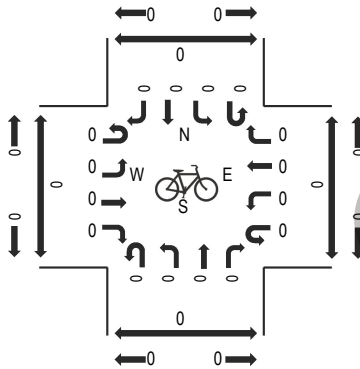
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

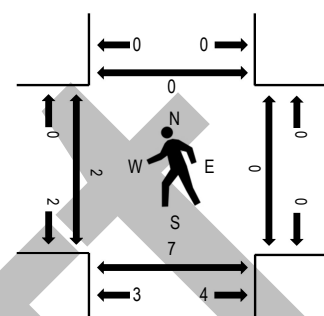
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAKE POINT DR Eastbound				CAROLINA BLUFF DR Westbound				BUCKWALTER PKWY Northbound				BUCKWALTER PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
6:00 AM	0	18	2	6	0	2	0	7	0	4	29	9	0	2	50	1	130	946	0	0	0	0
6:15 AM	0	20	2	38	0	5	0	6	0	4	40	1	0	3	57	4	180	1,272	0	0	0	0
6:30 AM	0	35	3	40	0	5	0	3	0	9	73	3	0	8	95	7	281	1,650	0	0	0	1
6:45 AM	0	40	3	54	0	7	0	7	0	9	76	7	0	11	135	6	355	2,153	0	0	0	0
7:00 AM	0	34	8	68	0	12	2	8	0	5	94	8	0	7	200	10	456	2,678	0	2	1	0
7:15 AM	0	51	4	70	0	13	1	6	0	16	129	8	0	8	238	14	558	2,958	0	0	0	0
7:30 AM	0	45	7	64	0	12	3	11	10	17	206	23	1	4	367	14	784	3,079	0	0	4	0
7:45 AM	0	62	5	56	0	25	3	20	34	13	267	22	0	12	346	15	880	3,014	0	0	2	0
8:00 AM	0	65	7	53	0	21	1	15	22	24	227	15	0	10	251	25	736	2,725	1	0	1	0
8:15 AM	0	72	3	62	0	14	0	11	2	19	164	22	0	10	279	21	679		1	0	0	0
8:30 AM	0	51	2	49	0	19	1	16	4	19	204	20	0	8	296	30	719		1	0	0	0
8:45 AM	0	23	6	33	0	16	0	13	3	17	196	11	1	11	227	34	591		3	0	1	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
Lights	0	239	22	233	0	72	7	57	68	71	854	82	1	34	1,225	70	3,035
Mediums	0	5	0	2	0	0	0	0	0	2	10	0	0	1	16	5	41
Total	0	244	22	235	0	72	7	57	68	73	864	82	1	36	1,243	75	3,079

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%				0.0%				0.0%				0.2%				0.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.2%	0.0%	0.1%
Peak Hour Factor	0.91				0.76				0.81				0.88				0.87
Peak Hour Factor	0.00	0.87	0.75	0.92	0.00	0.79	0.75	0.78	0.50	0.82	0.81	0.89	0.25	0.83	0.85	0.81	0.87



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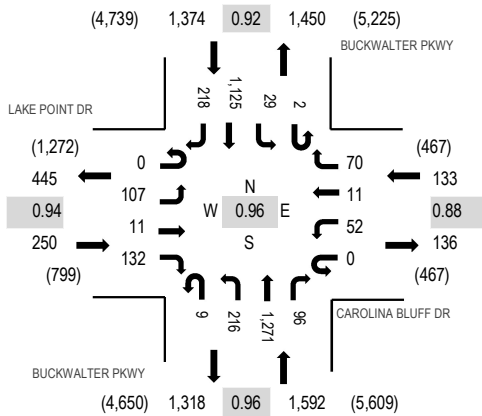
Location: 2 BUCKWALTER PKWY & CAROLINA BLUFF DR PM

Date: Tuesday, May 7, 2024

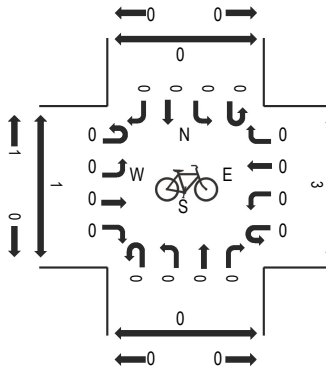
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

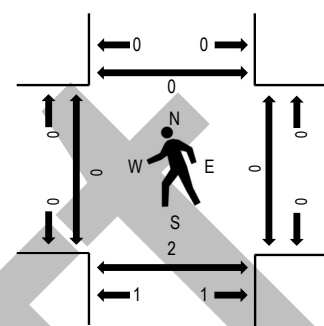
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	LAKE POINT DR Eastbound				CAROLINA BLUFF DR Westbound				BUCKWALTER PKWY Northbound				BUCKWALTER PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
2:00 PM	0	12	0	18	0	11	2	9	1	24	220	9	0	8	177	30	521	2,329	2	0	0	0
2:15 PM	0	15	5	17	0	8	1	8	1	27	206	15	0	4	232	30	569	2,512	0	0	0	0
2:30 PM	0	25	2	26	0	9	3	17	5	17	207	15	1	9	215	28	579	2,643	0	0	0	0
2:45 PM	0	23	4	23	0	12	2	11	6	25	232	14	1	9	279	19	660	2,695	0	0	0	0
3:00 PM	0	21	1	20	0	10	3	15	22	27	303	17	0	6	242	17	704	2,802	0	0	0	0
3:15 PM	0	16	2	20	0	13	1	28	18	20	278	34	0	8	232	30	700	2,934	0	2	1	0
3:30 PM	0	22	4	23	0	12	2	18	11	29	280	21	0	7	185	17	631	3,033	0	2	4	0
3:45 PM	0	20	2	19	0	7	2	16	3	38	334	21	0	4	261	40	767	3,152	0	0	0	0
4:00 PM	0	31	1	18	0	15	3	14	7	49	346	21	0	3	268	60	836	3,190	0	0	1	0
4:15 PM	0	17	0	21	0	10	1	18	2	36	326	20	0	10	286	52	799	3,230	0	0	2	2
4:30 PM	0	26	1	22	0	14	3	14	2	35	306	20	0	6	249	52	750	3,301	0	0	0	0
4:45 PM	0	27	2	22	0	8	3	17	0	44	337	21	1	9	262	52	805	3,349	0	0	0	0
5:00 PM	0	24	4	43	0	21	4	13	4	59	305	25	0	10	306	58	876	3,293	0	0	2	0
5:15 PM	0	24	2	31	0	10	4	21	5	59	319	30	0	4	324	37	870		0	0	0	0
5:30 PM	0	32	3	36	0	13	0	19	0	54	310	20	1	6	233	71	798		0	0	0	0
5:45 PM	0	34	4	34	0	11	2	9	1	53	296	17	0	7	234	47	749		1	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	106	11	128	0	52	11	70	9	214	1,263	96	2	29	1,102	215	3,308
Mediums	0	1	0	4	0	0	0	0	0	2	8	0	0	0	23	3	41
Total	0	107	11	132	0	52	11	70	9	216	1,271	96	2	29	1,125	218	3,349

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%				0.0%				0.0%				0.0%				0.0%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Peak Hour Factor	0.94				0.88				0.96				0.92				0.96
Peak Hour Factor	0.00	0.84	0.81	0.84	0.00	0.65	0.88	0.69	0.65	0.95	0.95	0.71	0.50	0.88	0.88	0.77	0.96



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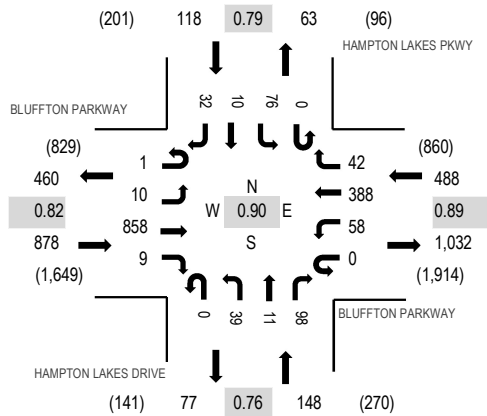
Location: 2 HAMPTON LAKES DRIVE & BLUFFTON PARKWAY AM

Date: Tuesday, November 7, 2023

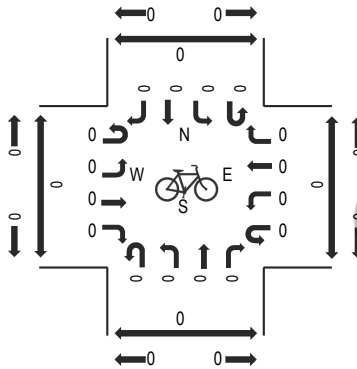
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

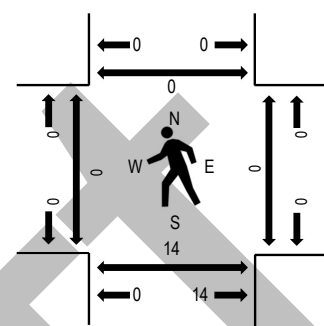
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PARKWAY Eastbound				BLUFFTON PARKWAY Westbound				HAMPTON LAKES DRIVE Northbound				HAMPTON LAKES PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	1	143	2	0	4	51	1	0	10	1	13	0	9	1	6	242	1,489	0	0	0	0
7:15 AM	0	1	230	2	0	8	56	2	0	9	1	16	0	19	1	7	352	1,621	0	0	0	0
7:30 AM	0	3	281	1	0	8	63	9	0	13	3	33	0	28	1	9	452	1,632	0	0	0	0
7:45 AM	1	3	230	2	0	19	118	11	0	6	1	21	0	17	5	9	443	1,531	0	0	0	0
8:00 AM	0	2	178	2	0	11	110	9	0	11	4	23	0	16	2	6	374	1,491	0	0	0	0
8:15 AM	0	2	169	4	0	20	97	13	0	9	3	21	0	15	2	8	363		0	0	14	0
8:30 AM	0	1	174	7	0	14	94	13	0	11	2	17	0	13	0	5	351		0	1	7	0
8:45 AM	0	3	203	4	1	19	103	6	0	9	1	32	0	12	2	8	403		0	0	7	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Lights	1	10	847	9	0	58	382	40	0	38	11	98	0	76	9	32	1,611
Mediums	0	0	10	0	0	0	5	2	0	1	0	0	0	0	1	0	19
Total	1	10	858	9	0	58	388	42	0	39	11	98	0	76	10	32	1,632

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.1%				0.2%				0.0%				0.0%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor		0.82				0.89				0.76				0.79			0.90
Peak Hour Factor	0.25	0.83	0.82	0.61	0.25	0.80	0.89	0.88	0.00	0.91	0.69	0.74	0.00	0.71	0.50	0.89	0.90



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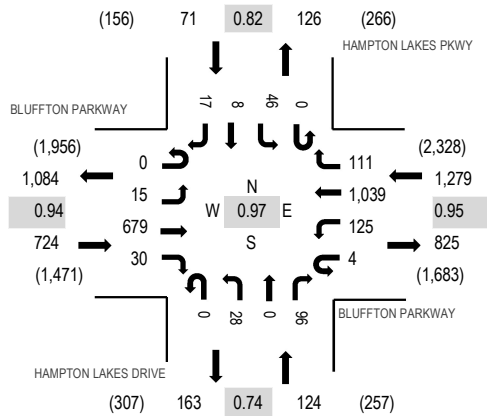
Location: 2 HAMPTON LAKES DRIVE & BLUFFTON PARKWAY PM

Date: Tuesday, November 7, 2023

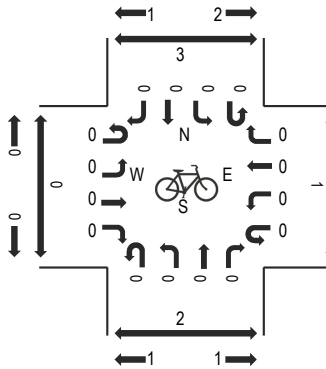
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

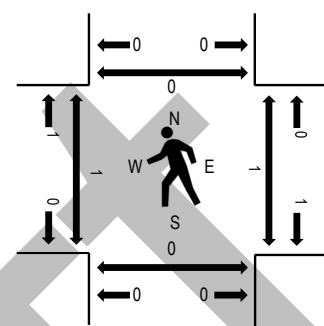
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BLUFFTON PARKWAY Eastbound				BLUFFTON PARKWAY Westbound				HAMPTON LAKES DRIVE Northbound				HAMPTON LAKES PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	4	166	6	0	31	211	28	0	11	3	31	0	17	1	4	513	2,014	0	0	0	0
4:15 PM	0	6	177	4	0	18	227	28	0	6	0	19	0	13	0	8	506	2,067	0	0	0	0
4:30 PM	0	5	174	8	0	25	201	26	0	4	3	28	0	9	4	3	490	2,116	0	0	0	0
4:45 PM	0	6	184	7	0	35	190	29	0	3	2	23	0	17	5	4	505	2,172	0	0	0	0
5:00 PM	0	2	170	6	3	30	276	28	0	9	0	22	0	12	3	5	566	2,198	0	0	0	0
5:15 PM	0	3	184	16	1	18	263	23	0	5	0	26	0	8	2	6	555		0	1	0	0
5:30 PM	0	5	163	5	0	41	251	32	0	4	0	28	0	12	3	2	546		1	0	0	0
5:45 PM	0	5	162	3	0	36	249	28	0	10	0	20	0	14	0	4	531		0	0	0	0

Peak Rolling Hour Flow Rates

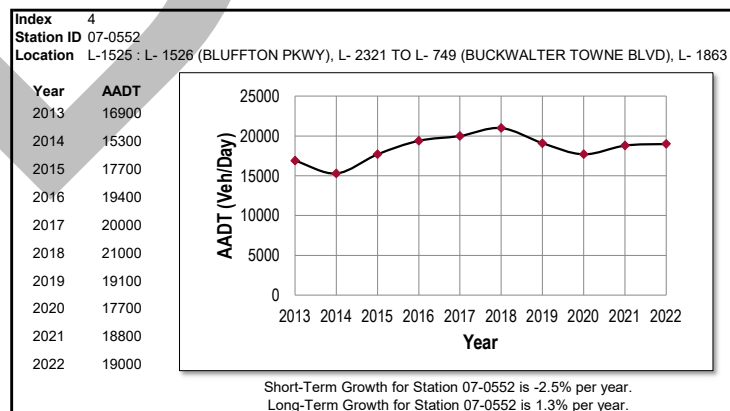
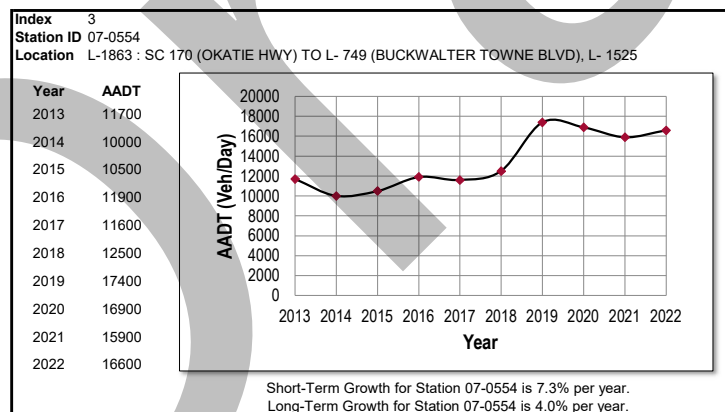
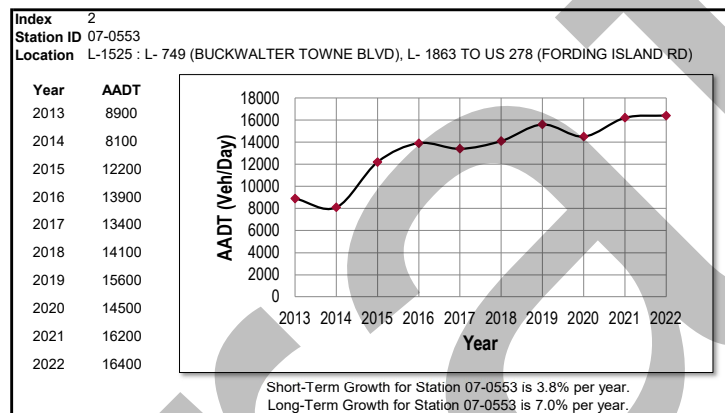
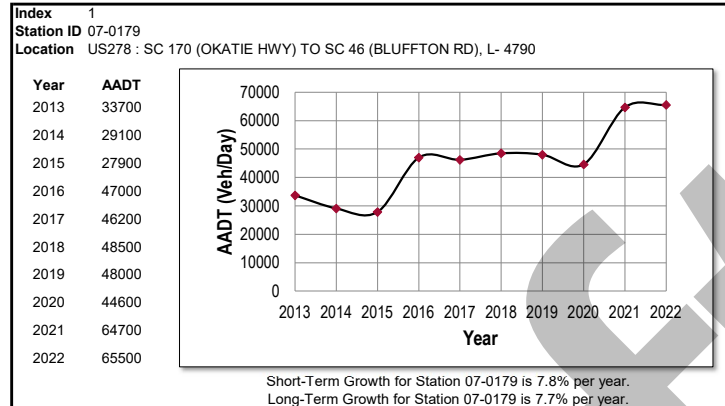
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	15	675	30	4	125	1,035	111	0	28	0	96	0	46	8	16	2,189
Mediums	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	1	7
Total	0	15	679	30	4	125	1,039	111	0	28	0	96	0	46	8	17	2,198

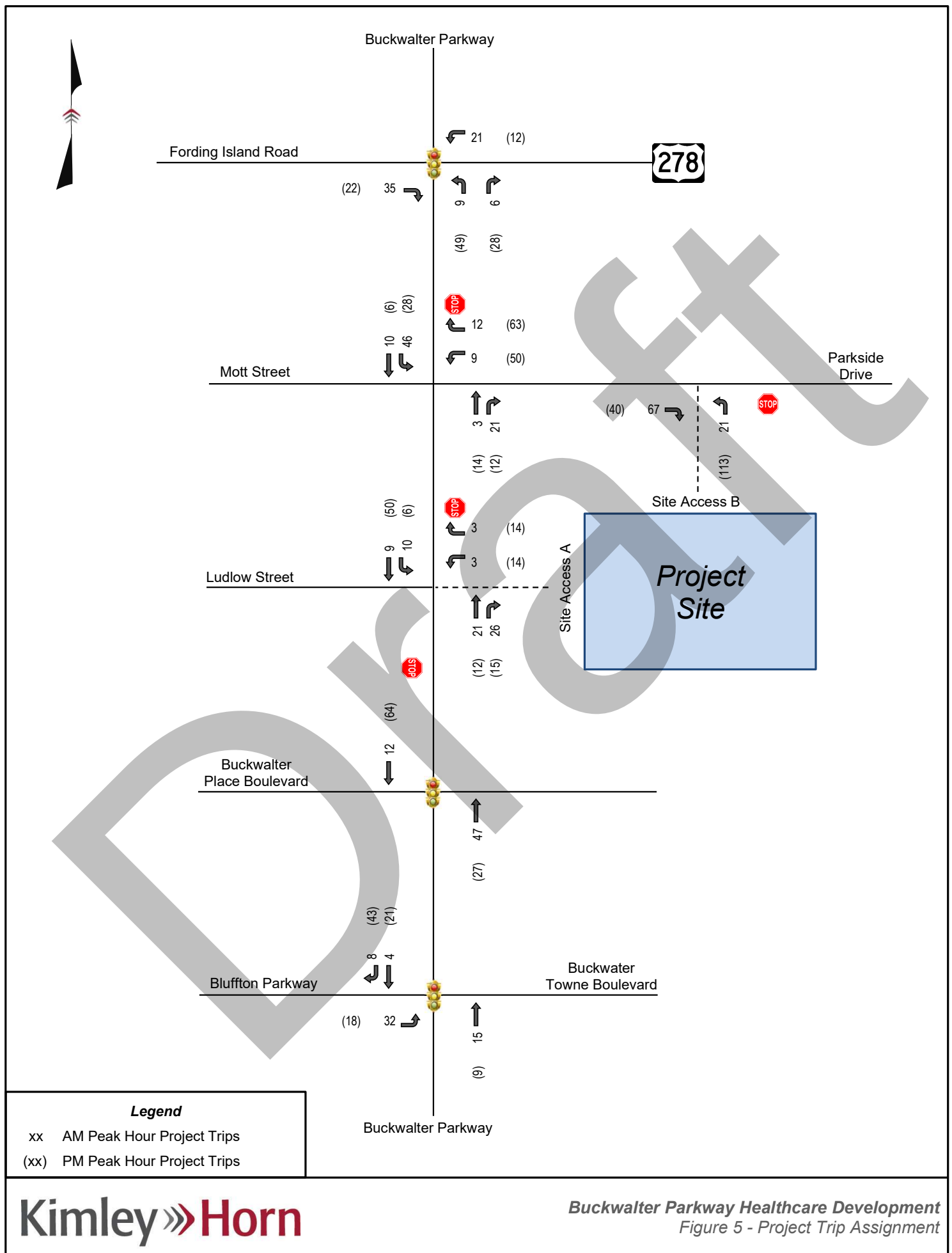
Heavy Vehicle Percentage and Peak Hour Factor

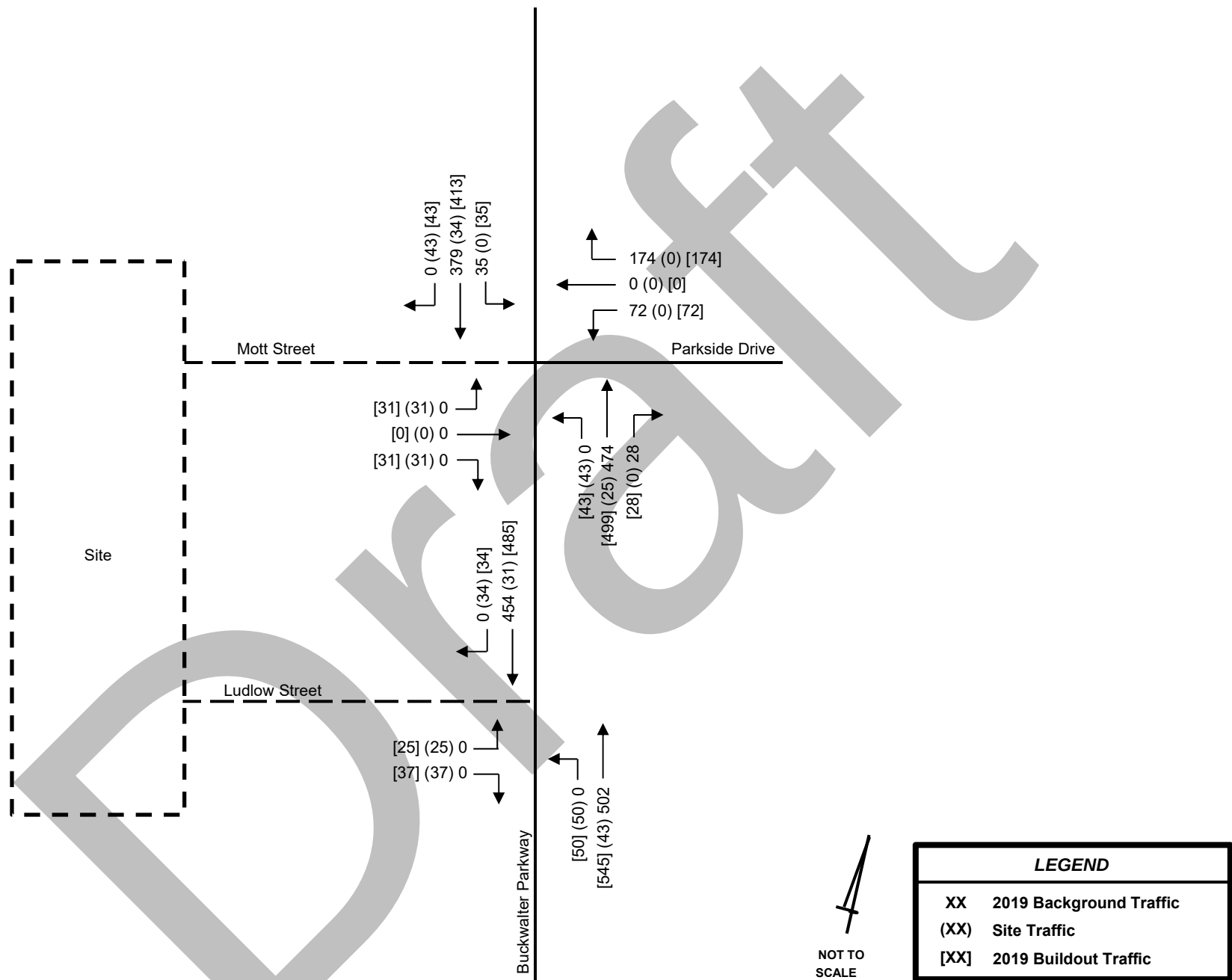
	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.3%				0.0%				0.0%				0.0%			0.1%
Heavy Vehicle %	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Peak Hour Factor		0.94				0.95				0.74				0.82			0.97
Peak Hour Factor	0.00	0.88	0.97	0.58	0.33	0.76	0.94	0.88	0.00	0.70	0.67	0.81	0.00	0.82	0.70	0.63	0.97

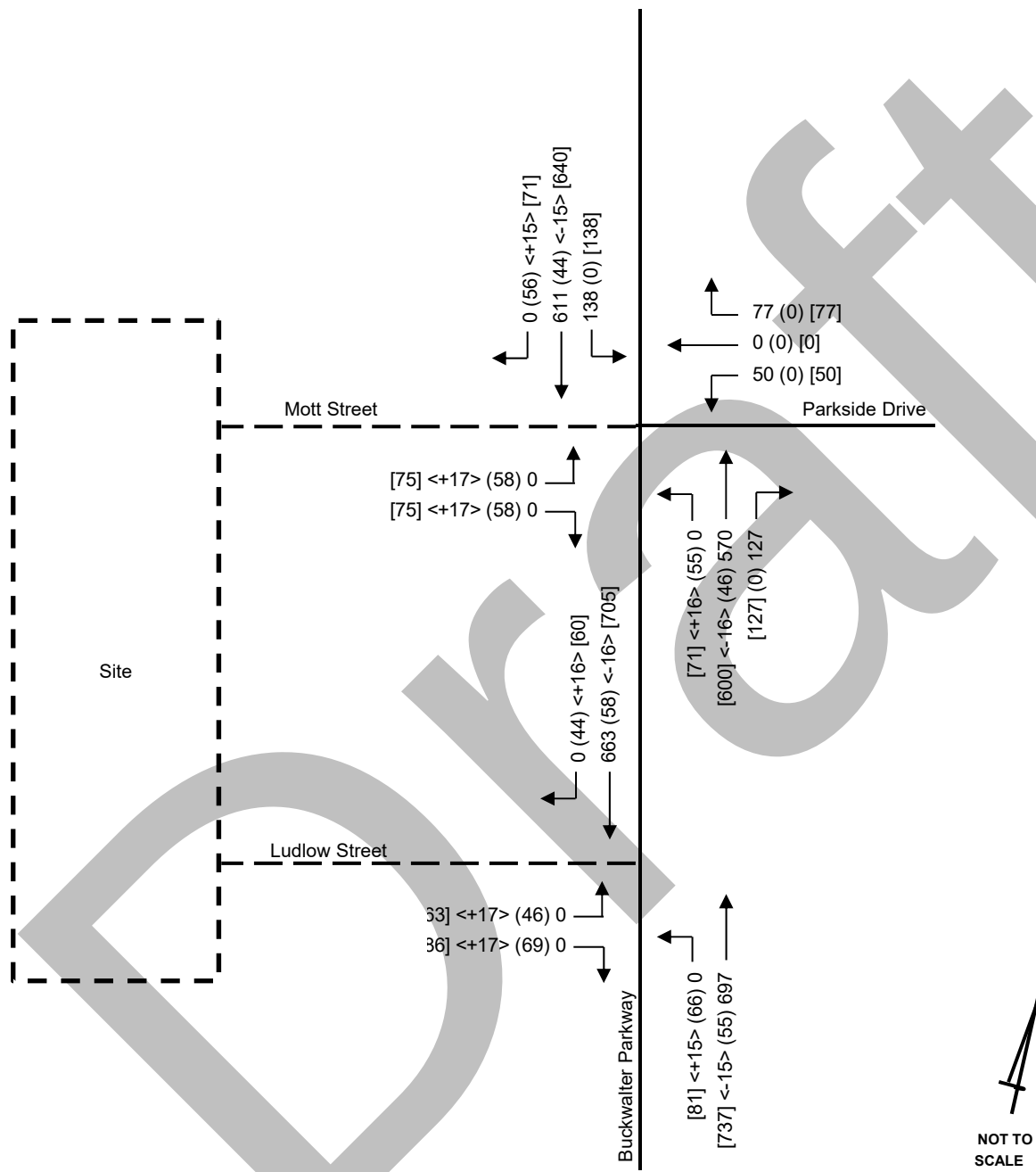
**Appendix E – Historic Growth Rate Calculations and Adjacent
Development Volumes**

Draft









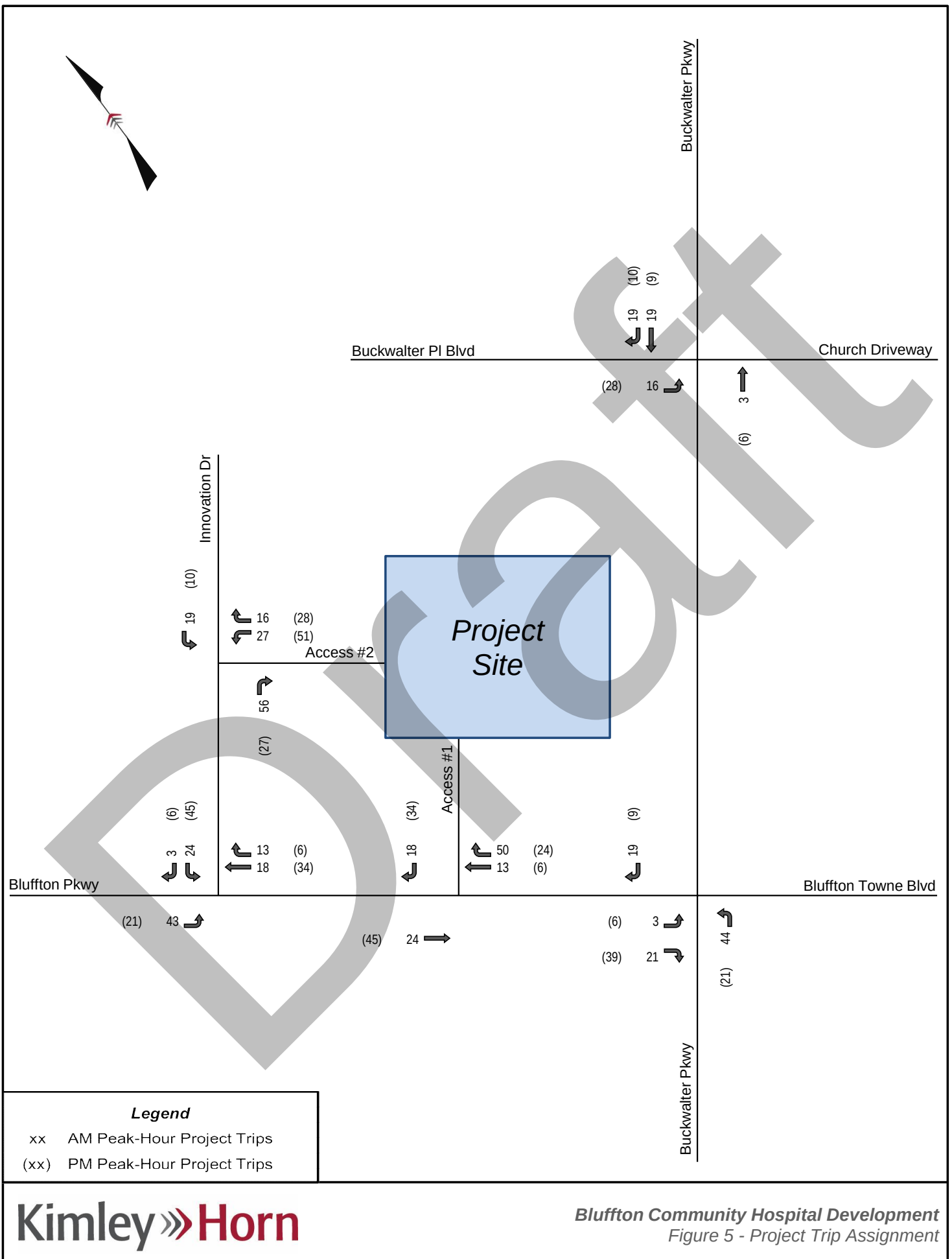
LEGEND	
XX	2019 Background Traffic
((XX))	Site Traffic
<XX>	Pass-by Traffic
[XX]	2019 Buildout Traffic

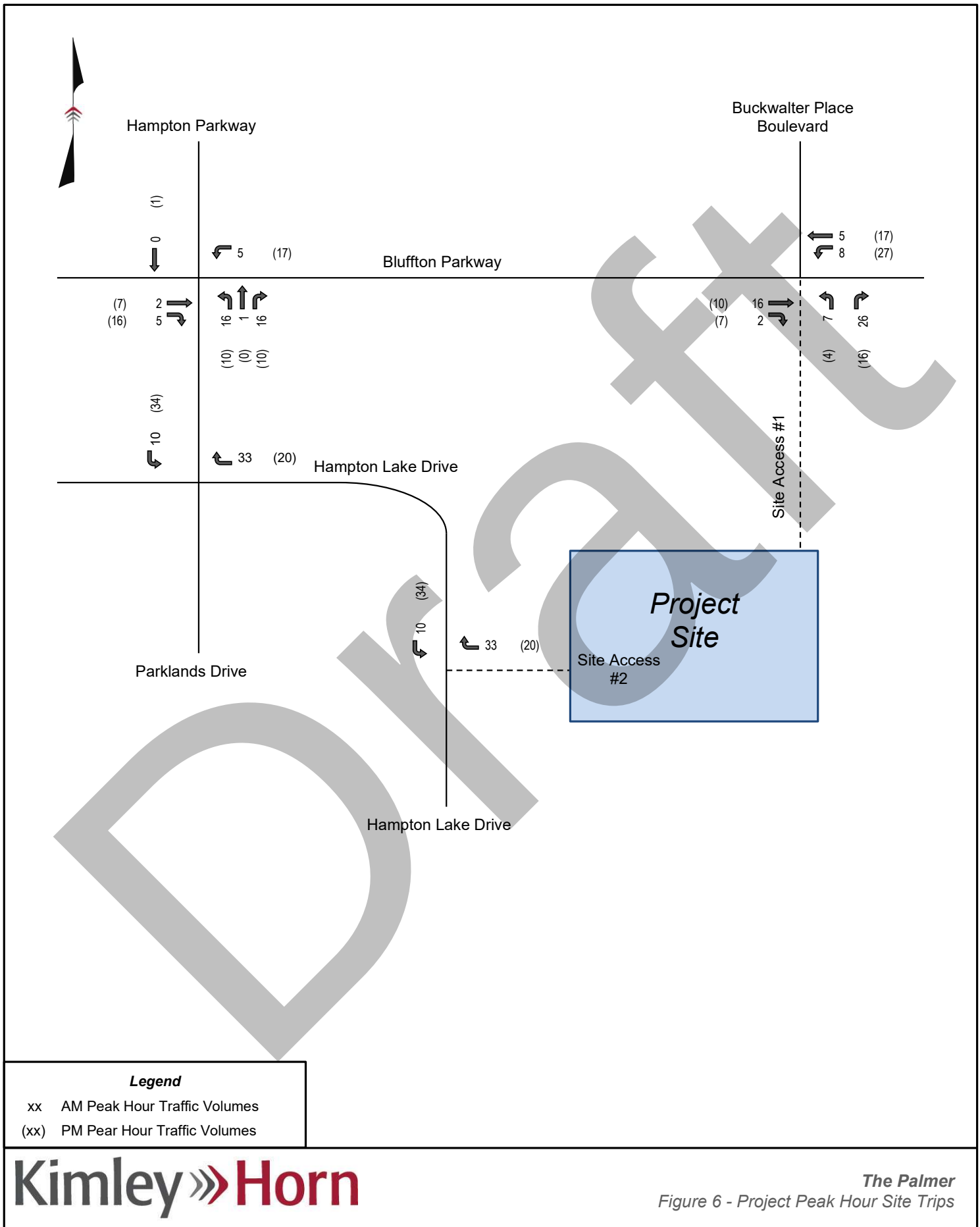


Bluffton Commons
Turn Lane and
Preliminary Signal Warrant Analysis

2019 PM Peak
Traffic Volumes

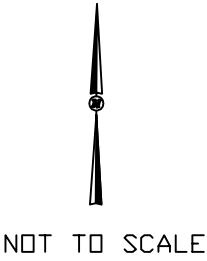
Figure 7



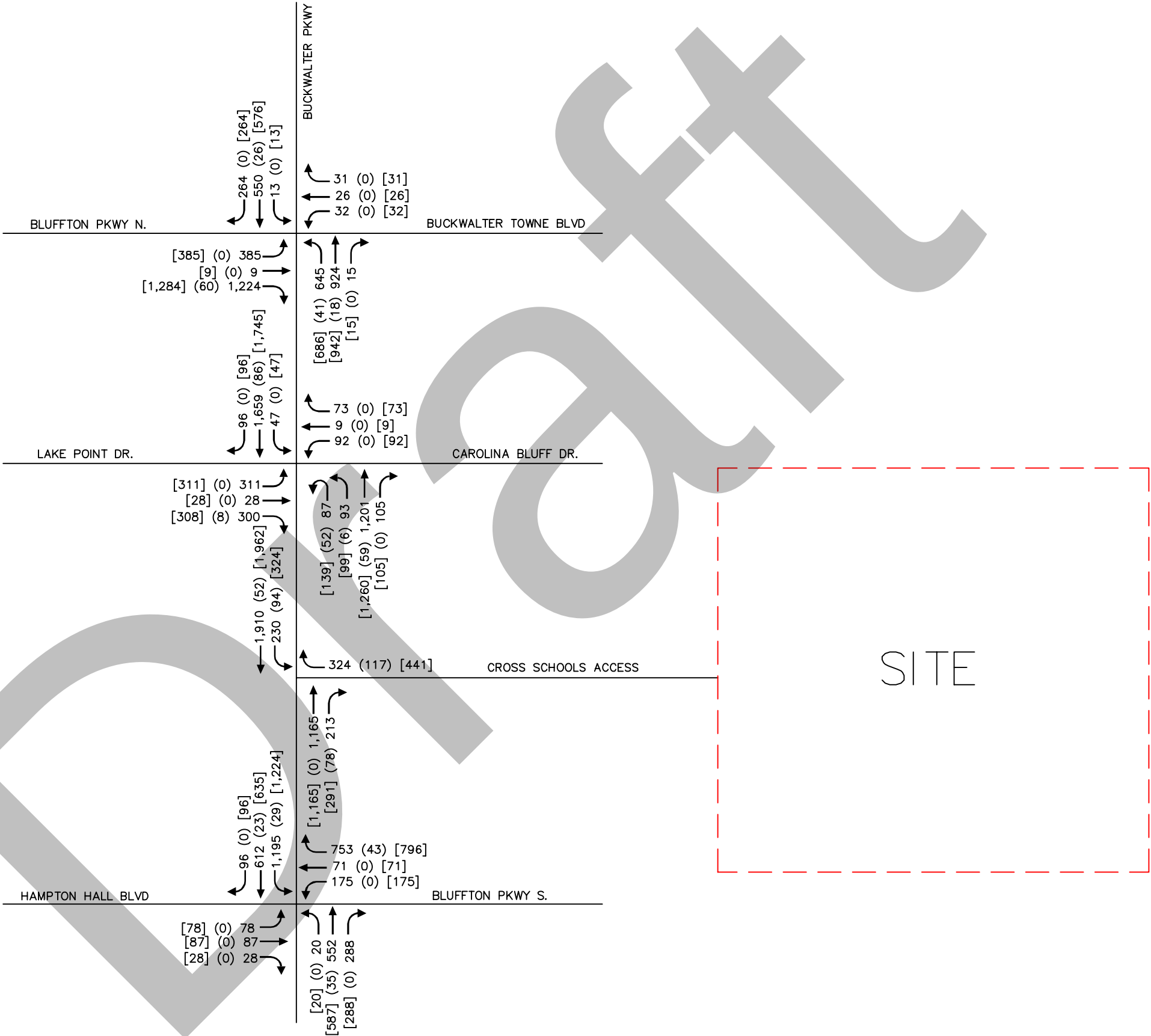


The Elle Apartments Trip Generation									
Land Use	Intensity	Units	Daily	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Residential Land Uses			1,156	99	23	76	99	60	39
221 - Multifamily Housing (Mid-Rise)	252	DU	1,156	99	23	76	99	60	39
Subtotal			1,156	99	23	76	99	60	39
Internal Capture			0	0	0	0	0	0	0
Pass-By			0	0	0	0	0	0	0
Total Net New External Trips			1,156	99	23	76	99	60	39
Note: Trip generation was calculated using the following data:									
<u>Daily Traffic Generation</u>									
Residential Land Uses									
221 - Multifamily Housing (Mid-Rise)			ITE 221	=	T = 4.77 * (X) + (-46.46); (50 % In; 50 % Out)				
<u>AM Peak-Hour Traffic Generation</u>									
Residential Land Uses									
221 - Multifamily Housing (Mid-Rise)			ITE 221	=	T = 0.44 * (X) + (-11.61); (23 % In; 77 % Out)				
<u>PM Peak-Hour Traffic Generation</u>									
Residential Land Uses									
221 - Multifamily Housing (Mid-Rise)			ITE 221	=	T = 0.39 * (X) + (0.34); (61 % In; 39 % Out)				

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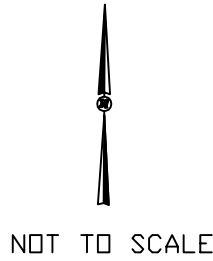


- LEGEND
- XX BACKGROUND TRAFFIC
 - (XX) SITE TRAFFIC
 - [XX] TOTAL BUILD-OUT TRAFFIC

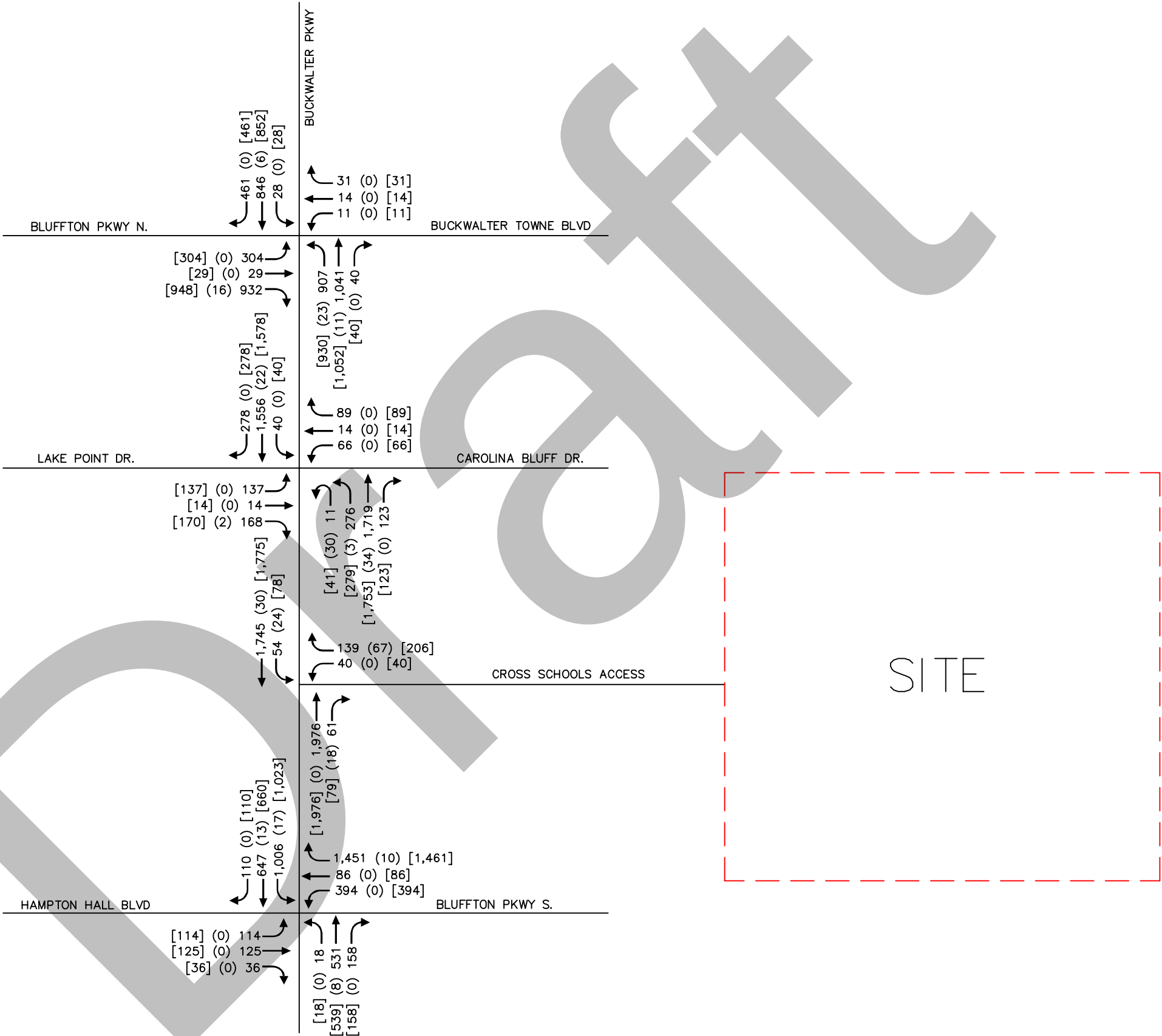


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- LEGEND
- XX BACKGROUND TRAFFIC
 - (XX) SITE TRAFFIC
 - [XX] TOTAL BUILD-OUT TRAFFIC



Appendix F – Signal Plans

Draft

SIGNAL EQUIPMENT

ONE (1) 8PHASE FULLY ACTUATED STANDARD 2070 CONTROLLER WITH FLASHER, SIGNAL MONITOR UNIT, AND BASE - MOUNTED 332A CABINET.

EXT. ☐ PROP. ☐

8 MODEL 222, (2)-CHANNEL VEHICLE DETECTOR UNITS

PEDESTRIAN SIGNALS: EXT. ☐ PROP. ☐ W/ACT. & SIGN

VEHICLE SIGNALS: EXT. ☐ PROP. ☐

HEAD NUMBER	1/8	2	6	4	8	P2	P4	P6	P8
LENS									
PHASE	1,8	2	6	4	8	2P	4P	6P	8P
SIZE	12"	12"	12"	12"	12"	-	-	-	-
QUANTITY	1	2	2	2	2	2	2	2	2

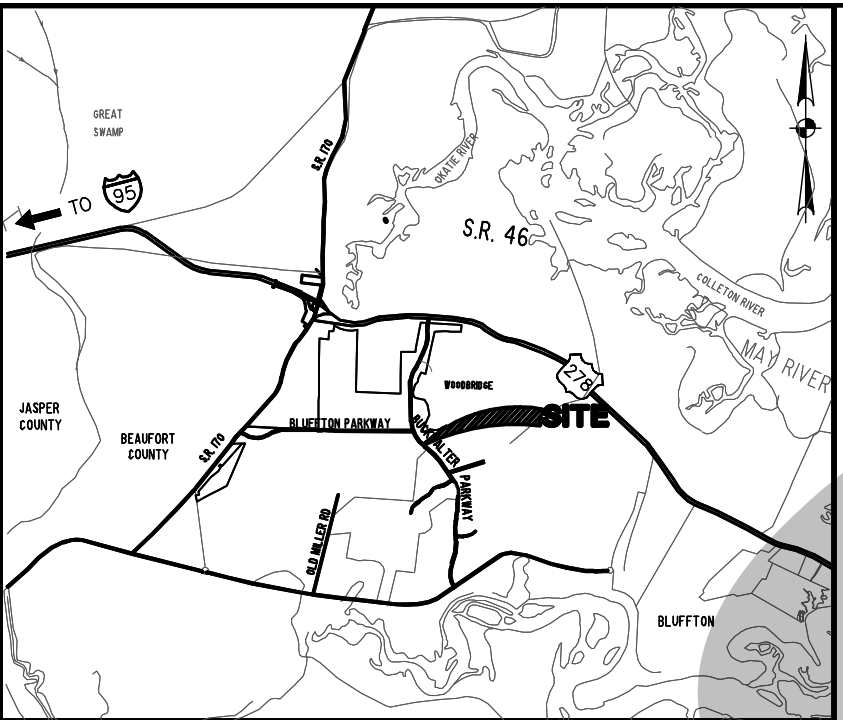
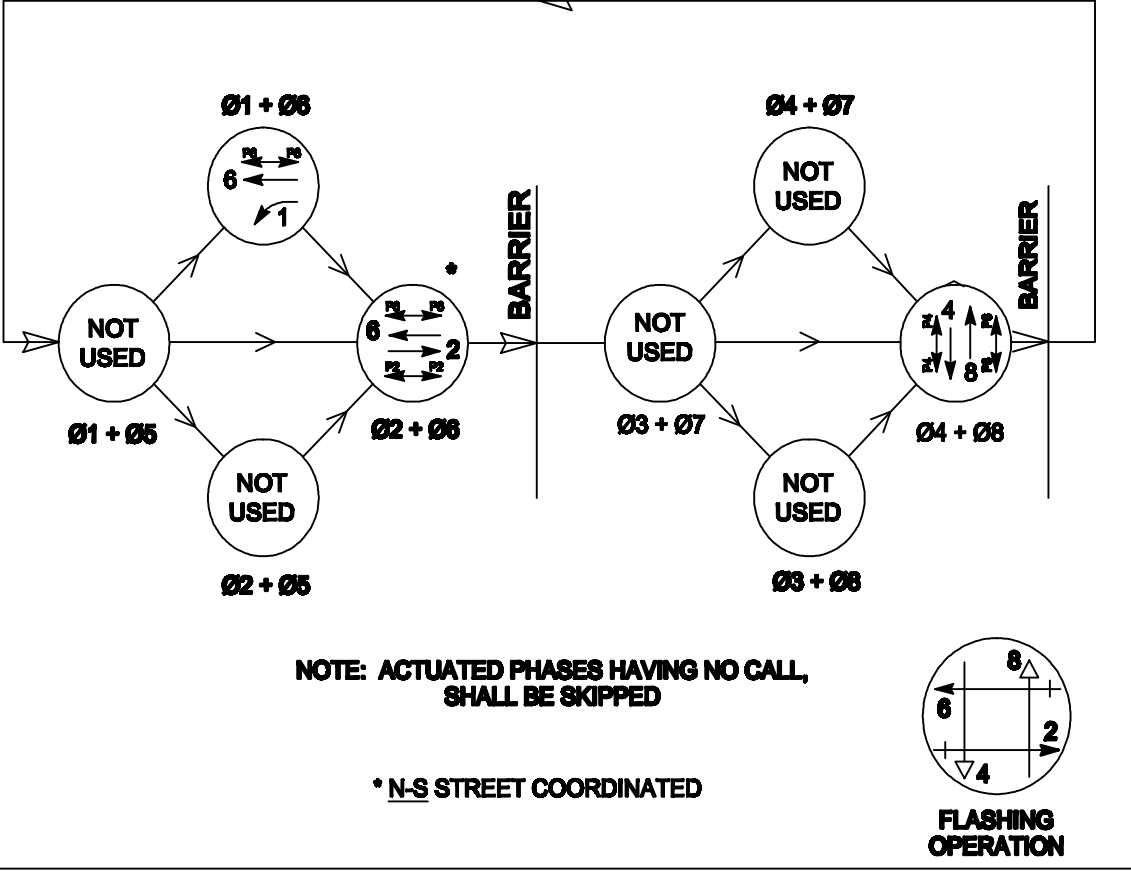
OLA _____ OLC _____

OLB _____ OLD _____

METAL POLES AS NECESSARY: EXT. ☐ PROP. ☐ M

WOOD POLES AS NECESSARY: EXT. ☐ PROP. ☐ W

NEMA PHASING



ROUTE NUMBER	Buckwalter Parkway	Lake Pointe Dr.
APPROACH DIRECTION	NB SB	WB EB
SIGNAL DESIGN SPEED	45 45	30 30
GRADE (%)	0 0	0 0

* ESTIMATED

FED. ROAD DIV. NO.	STATE	COUNTY	FILE NO.	PROJECT NO.	ROUTE NO.	SHEET NO.	TOTAL SHEETS
-	SC	BEAUFORT	-	-	-	-	1

SIGNAL DISPLAY SEQUENCE CHART

PHASE ON (V)	NON-CONFLICTING PHASE (R)	CONFLICTING PHASE (Y)
1 5, 6, 8P	2, 3, 4, 7, 8, 2P, 4P, 6P	3, 4, 7, 8, 2P, 4P, 6P
2 5, 6, 8P, 8P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P
3 1, 2, 3, 4P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P
4 1, 2, 3, 4P, 8P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P
5 1, 2, 3P	3, 4, 7, 8, 2P, 4P, 6P	3, 4, 7, 8, 2P, 4P, 6P
6 1, 2, 3P, 8P	3, 4, 7, 8, 2P, 4P, 6P	3, 4, 7, 8, 2P, 4P, 6P
7 3, 4, 4P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P
8 3, 4, 4P, 8P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P	1, 2, 3, 4, 7, 8, 2P, 4P, 6P

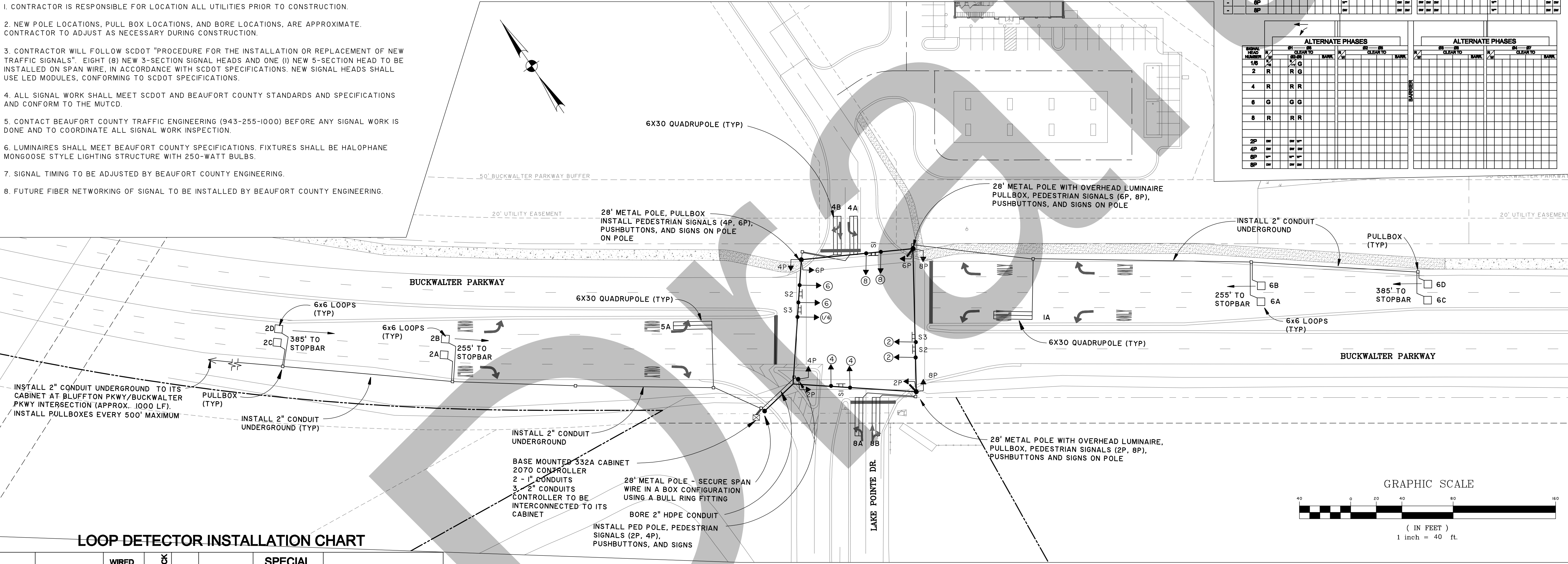
SIGNAL DISPLAY SEQUENCE (PREFERENTIAL PHASING)

SIGNAL HEAD NUMBER	1/8	2	6	4	8	2P	4P	6P	8P
1	Y	Y	Y	Y	Y	Y	Y	Y	Y
2	Y	Y	Y	Y	Y	Y	Y	Y	Y
3	Y	Y	Y	Y	Y	Y	Y	Y	Y
4	Y	Y	Y	Y	Y	Y	Y	Y	Y
5	Y	Y	Y	Y	Y	Y	Y	Y	Y
6	Y	Y	Y	Y	Y	Y	Y	Y	Y
7	Y	Y	Y	Y	Y	Y	Y	Y	Y
8	Y	Y	Y	Y	Y	Y	Y	Y	Y

ALTERNATE PHASES

SIGNAL HEAD NUMBER	1/8	2	6	4	8	2P	4P	6P	8P
1	Y	Y	Y	Y	Y	Y	Y	Y	Y
2	Y	Y	Y	Y	Y	Y	Y	Y	Y
3	Y	Y	Y	Y	Y	Y	Y	Y	Y
4	Y	Y	Y	Y	Y	Y	Y	Y	Y
5	Y	Y	Y	Y	Y	Y	Y	Y	Y
6	Y	Y	Y	Y	Y	Y	Y	Y	Y
7	Y	Y	Y	Y	Y	Y	Y	Y	Y
8	Y	Y	Y	Y	Y	Y	Y	Y	Y

- NOTES:
- CONTRACTOR IS RESPONSIBLE FOR LOCATION ALL UTILITIES PRIOR TO CONSTRUCTION.
 - NEW POLE LOCATIONS, PULL BOX LOCATIONS, AND BORE LOCATIONS, ARE APPROXIMATE. CONTRACTOR TO ADJUST AS NECESSARY DURING CONSTRUCTION.
 - CONTRACTOR WILL FOLLOW SCDOT "PROCEDURE FOR THE INSTALLATION OR REPLACEMENT OF NEW TRAFFIC SIGNALS". EIGHT (8) NEW 3-SECTION SIGNAL HEADS AND ONE (1) NEW 5-SECTION HEAD TO BE INSTALLED ON SPAN WIRE, IN ACCORDANCE WITH SCDOT SPECIFICATIONS. NEW SIGNAL HEADS SHALL USE LED MODULES, CONFORMING TO SCDOT SPECIFICATIONS.
 - ALL SIGNAL WORK SHALL MEET SCDOT AND BEAUFORT COUNTY STANDARDS AND SPECIFICATIONS AND CONFORM TO THE MUTCD.
 - CONTACT BEAUFORT COUNTY TRAFFIC ENGINEERING (943-255-1000) BEFORE ANY SIGNAL WORK IS DONE AND TO COORDINATE ALL SIGNAL WORK INSPECTION.
 - LUMINAIRES SHALL MEET BEAUFORT COUNTY SPECIFICATIONS. FIXTURES SHALL BE HALOPHANE MONGOOSE STYLE LIGHTING STRUCTURE WITH 250-WATT BULBS.
 - SIGNAL TIMING TO BE ADJUSTED BY BEAUFORT COUNTY ENGINEERING.
 - FUTURE FIBER NETWORKING OF SIGNAL TO BE INSTALLED BY BEAUFORT COUNTY ENGINEERING.

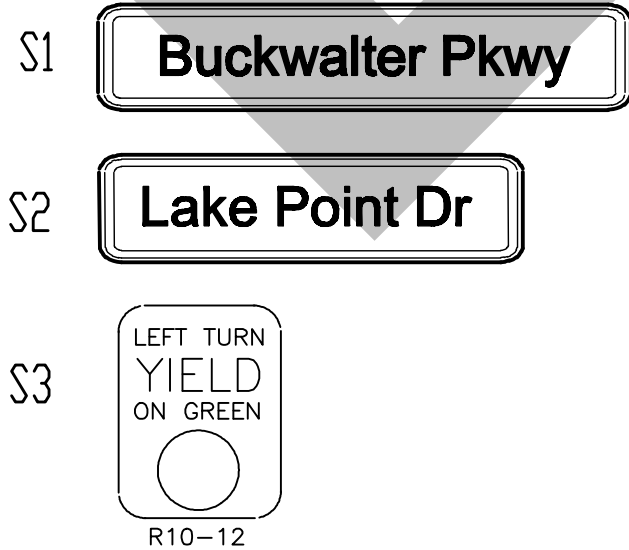


LOOP DETECTOR INSTALLATION CHART

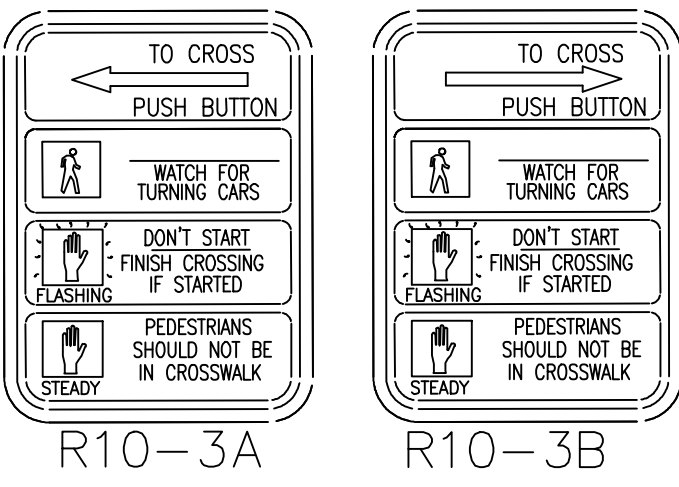
PHASE/	DETECTOR		WIRED	LOOK	NON-LOCK	PULSE	PRES	OPERATION		SPECIAL FEATURES	LOOP DESIGN		
LOOP LTR#	AMP NO.	CHAN NO.	TO PHASE(S)	X	X			DELAY SEC	EXT SEC		TIME OF DAY-TOD, SWITCHING, etc.	SIZE X	NO.OF TURNS
1A			1	X		X				QUAD	6X30	2-4-2	50
2A			2	X		X					6X6	4	255
2B			2	X		X					6X6	4	255
2C			2	X		X					6X6	4	385
2D			2	X		X					6X6	4	385
4A			4		X	X				QUAD	6X30	2-4-2	-2
4B			4		X	X				QUAD	6X30	2-4-2	-2
5A			5		X	X				QUAD	6X30	2-4-2	50
6A			6	X		X					6X30	4	255
6B			6	X		X					6X6	4	255
6C			6	X		X					6X6	4	385
6D			6	X		X					6X6	4	385
8A			8		X	X				QUAD	6X30	2-4-2	-2
8B			8		X	X				QUAD	6X30	2-4-2	-2

STREET NAME SIGNS

* STREET NAME SIGNS SHALL CONFORM TO SCDOT SIGN DETAIL D3-112. SHEETING TYPE SHALL CONFORM WITH ENGINEERING DIRECTIVE MEMORANDUM NO. 4. THE PRIMARY LETTERING SHALL BE SERIES "DT". SERIES "CT" LETTERING MAY BE USED FOR LONGER STREET NAMES.



PEDESTRIAN SIGNS



SIGNAL TIMINGS

	1	2	3	4	5	6	7	8
WALK		4		4		4		4
DONT WALK		19		24		19		24
MIN INITIAL	8	15		8		15		8
MAX INITIAL								
ADD/VEH								
VEH EXT	3	3		3		3		3
TIM BFR REDUC								
TIME TO REDUC								
MIN GAP	3	4.3		3		4.3		3
MAX LIMIT	20	40		30		60		30
MAXIMUM 2								
YELLOW	3.5	4.3		3.5		4.3		3.5
RED CLEAR	2.0	2.0		2.0		2.0		2.0

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www.thomascandhutton.com

GREGORY M PARKER INC.
BEAUFORT COUNTY, SOUTH CAROLINA
PARKER CONVENIENCE STORE

JOB NO:	J-21950.0000
DATE:	10/20/10
DRAWN:	JH
DESIGNED:	BB
REVIEWED:	BB
APPROVED:	BB
SCALE:	1" = 40'

T1

Z:\2023\2023-2024\Engineering\Drawings\Construction Plans\Signal\Bluffton\2023-2024\003 - SC PL 44 - Apr 6, 2023 - 2:00:38 PM

SIGNAL EQUIPMENT

ONE -8 PHASE FULLY ACTUATED STANDARD 2070 CONTROLLER WITH FLASHER, SIGNAL MONITOR UNIT, AND BASE-MOUNTED 332A CABINET.

6 MODEL 222, (2)-CHANNEL VEHICLE DETECTOR UNITS

PEDESTRIAN SIGNALS:

EXT. PROP. W/ACT. & SIGN

VEHICLE SIGNALS:

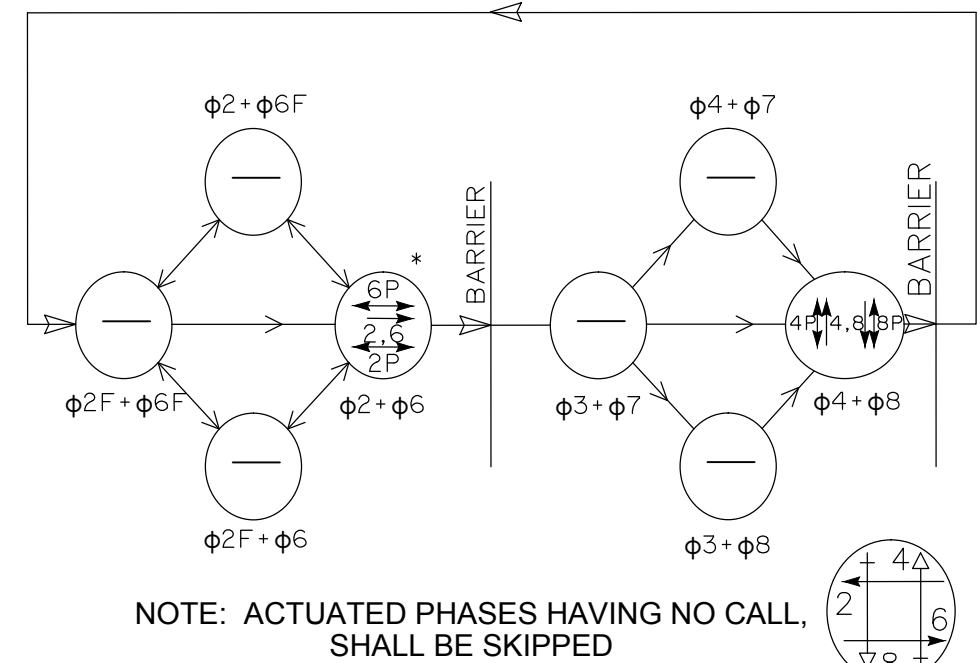
EXT. PROP.

HEAD NUMBER	2F	2	2P	4	4P	6F	6	6P	8	8P
LENS										
PHASE	1,OLA	2	2P	4	4P	5,OLC	6	6P	8	8P
SIZE	12"	12"	16"	12"	16"	12"	12"	16"	12"	16"
QUANTITY	1	2	2	2	2	1	2	2	2	2

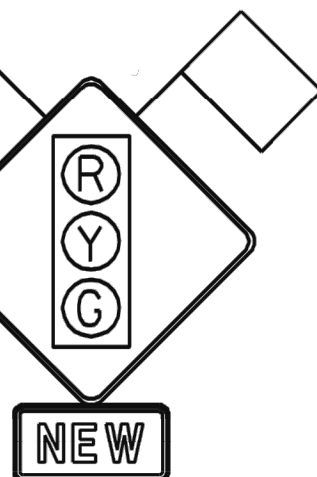
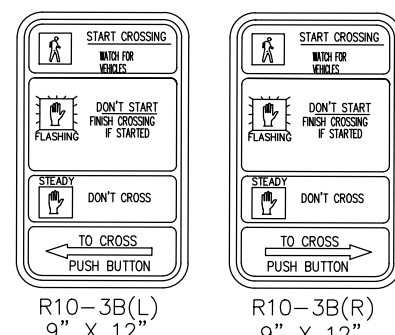
OLA 1+2 (FYA) OLB OLC 5+6 (FYA) OLD

METAL POLES AS NECESSARY: EXT. PROP.
WOOD POLES AS NECESSARY: EXT. PROP.
ALL SIGNAL HEADS AND LENSES SHALL BE LED

NEMA PHASING



PEDESTRIAN SIGNS



SIGNAL TIMINGS

	PHASE				
	2	3	4	6	7
WALK	7		7	7	7
DON'T WALK	15		24	18	22
MIN INITIAL	15		8	15	8
MAX INITIAL					
ADD/VEH					
VEH EXT	3.5		2.5	3.5	2.5
TIM BFR REDUC					
TIME TO REDUC					
MIN GAP	2.5			2.5	
MAX LIMIT	40		25	40	25
MAXIMUM 2					
YELLOW	4.4		3.3	4.4	3.3
RED CLEAR	1.7		2.8	1.7	2.8

NOTES:

- MAST ARM POLES SHALL BE MANUFACTURED TO MEET BEAUFORT COUNTY STANDARDS.
- ALL MATERIALS AND WORKMANSHIP SHALL MEET CURRENT SCDOT & BEAUFORT COUNTY STANDARDS.
- TRAFFIC SIGNAL INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH SCDOT STANDARD DRAWINGS SECTION NO. 675-000 AND SPECIAL PROVISIONS AS PROVIDED.
- CONTRACTOR SHALL COORDINATE WITH EXISTING UTILITIES WITH REGARDS TO POLE AND CONDUIT LOCATIONS.
- PROVIDE A MINIMUM 36" COVERAGE FOR HIGH-DENSITY POLYETHYLENE CONDUIT.
- ALL PULL BOXES SHALL BE 13" X 24" X 18" D UNLESS OTHERWISE SPECIFIED.
- WIRELESS DETECTION TO BE PROVIDED FOR ALL APPROACHES AS SHOWN THAT INTEGRATES WITH BEAUFORT COUNTY'S SNAPS SYSTEM.
- ETHERNET SWITCH TO BE PROVIDED IN CABINET TO CONNECT WITH BEAUFORT COUNTY'S ATM SYSTEM. OPTICOM GPS UNIT TO ALSO BE PROVIDED.
- D-SPEC SIGNS SHALL HAVE WHITE LETTERING ON SCDOT APPROVED GREEN BACKGROUND AND SHALL BE TYPE IX DIAMOND GRADE OR EQUIVALENT.
- ALL SIGNAL HEADS AND OVERHEAD SIGNS SHALL BE MOUNTED WITH PELCO ASTRO BRACKETS OR APPROVED EQUIVALENT. ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES.
- BATTERY BACK UP SYSTEM TO BE PROVIDED IN CABINET: EITHER CLARY SP2000LX-N UPS MODULE, OR TESCO 22-000BBS.
- NEW POWER SERVICE TO BE PROVIDED ON TESCO PAD MOUNT.
- PEDESTRIAN PUSHBUTTONS SHALL BE SOLID STATE, POLARA, WITH TONE AND LIGHT AND SHALL BE MUTCD COMPLIANT.
- ALL AL PEDESTRIAN POLES USED FOR PEDESTRIAN SIGNALS AND VEHICLE DETECTION SHALL BE POWDER COATED BLACK AND BLACK BREAKAWAY BASES.
- MAST ARM POLE SHOULD BE 31.5 FT IN HEIGHT WITH A 4 FT LUMINAIRE ARM MOUNTED 6" FROM THE TOP. AN APPROVED LED COBRA STYLE STREET LIGHT WITH TWIST LOCK PHOTOCCELL SHALL BE FURNISHED AND INSTALLED (ALONG WITH 2 CONDUCTOR, 14 AWC OUTDOOR RATED WIRING) ON EACH MAST ARM POLE. STREET LIGHTS WILL BE RUN ON A SEPARATE CIRCUIT FROM THE TRAFFIC SIGNAL.
- MAST ARM POLE AND FOUNDATION DESIGNS TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- BEAUFORT COUNTY TRAFFIC ENGINEERING TO BE INCLUDED IN ANY PRE-CONSTRUCTION CONFERENCES, SHALL BE RESPONSIBLE FOR INSPECTING CONTRACTOR'S WORK AND SHALL BE NOTIFIED PRIOR TO SIGNAL BEING PLACED IN OPERATION.
- CONTRACTOR RESPONSIBLE FOR HAVING CONCRETE FOR POLE FOUNDATIONS TESTING COMPLETED.
- ALL SIGNAL HEADS SHALL BE INSTALLED WITH RETRO REFLECTIVE BACKPLATES.



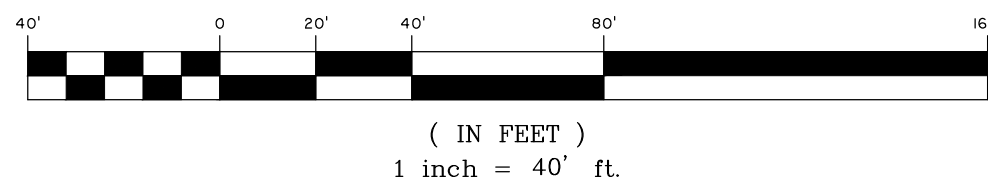
R10-12A-30

REMOVE STOP SIGN
EXISTING CAMERA POLE TO REMAIN
INSTALL MAST ARM POLE WITH 55' ARM, 1-1" CONDUIT, 2-2" CONDUIT, 1-3" CONDUIT, PULL BOX, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON STATION
1-3" AND 2-2" HDPE CONDUITS
1-2" HDPE CONDUIT BETWEEN EXISTING CAMERA CABINET PULLBOX AND SIGNAL CABINET PULLBOX
INSTALL NEW 332 BASE MOUNTED CABINET WITH 2070 CONTROLLER, 2-1" CONDUITS, 3-2" CONDUITS, 1-3" CONDUIT, PULLBOX, ELECTRICAL SERVICE (TESCO PAD MOUNT) AND BATTERY BACKUP SYSTEM (SEE NOTE II)
INSTALL SPP RADIO ON MAST ARM
BORE 3-2" HDPE CONDUITS

INSTALL MAST ARM POLE WITH 50' ARM AND LUMINAIRE ARM, 2-2" CONDUITS, 2-1" CONDUITS, PEDESTRIAN SIGNAL HEAD, PUSH BUTTON STATIONS & SIGN AND PULLBOX.
24" WHITE THERMOPLASTIC STOP BAR
INSTALL 15' PED POLE (BLACK) WITH REPEATER, SHALL BE INSTALLED WITH FLEX ANTENNAS (CATALOG = FLEX ANT-1)
330' TO STOP BAR

INSTALL 15' PED POLE (BLACK) WITH REPEATER, SHALL BE INSTALLED WITH FLEX ANTENNAS (CATALOG = FLEX ANT-1)
INSTALL MAST ARM POLE WITH 50' ARM AND LUMINAIRE, 1-1" CONDUIT, 2-2" CONDUITS, 1-3" CONDUITS, PEDESTRIAN SIGNAL HEAD, PUSH BUTTON STATIONS & SIGN AND PULLBOX.
REMOVE STOP SIGN
RIGHT TURN ARROW SEE SCDOT DETAIL 625-410-00
COMBINATION STRAIGHT AND LEFT TURN ARROW SEE SCDOT DETAIL 625-410-00
24" WHITE THERMOPLASTIC STOP BAR
BORE 3-2" HDPE CONDUITS
INSTALL MAST ARM POLE WITH 40' ARM AND LUMINAIRE ARM, 2-2" CONDUIT, 2-1" CONDUIT, PEDESTRIAN SIGNAL HEAD, PUSH BUTTON STATIONS & SIGN AND PULLBOX.

GRAPHIC SCALE



SIGNAL DISPLAY SEQUENCE CHART

R - RED
Y - RED ARROW
Y - YELLOW
Y - STEADY YELLOW ARROW
Y - FLASHING YELLOW ARROW
G - GREEN
G - GREEN ARROW
W - WALK**
DW - DON'T WALK

PHASE ON (A)	NON-CONFLICTING PHASE (B)	CONFLICTING PHASE *
1	6F, 6, 6P	2, 4, 8, 2P, 4P, 8P
2	6F, 6, 2P, 6P	2F, 4, 8, 4P, 8P
3		
4	8, 4P, 8P	2F, 2, 6F, 6, 2P, 6P
5	2F, 2, 2P	4, 8, 4P, 6P, 8P
6	2F, 2, 2P, 6P	4, 6F, 8, 4P, 8P
7		
8	4, 4P, 8P	2F, 2, 6F, 6, 2P, 6P

NOTES:
A. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE OMITTED.
B. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART).
* CONFLICTING PHASES REQUIRE A CLEARANCE INTERVAL.

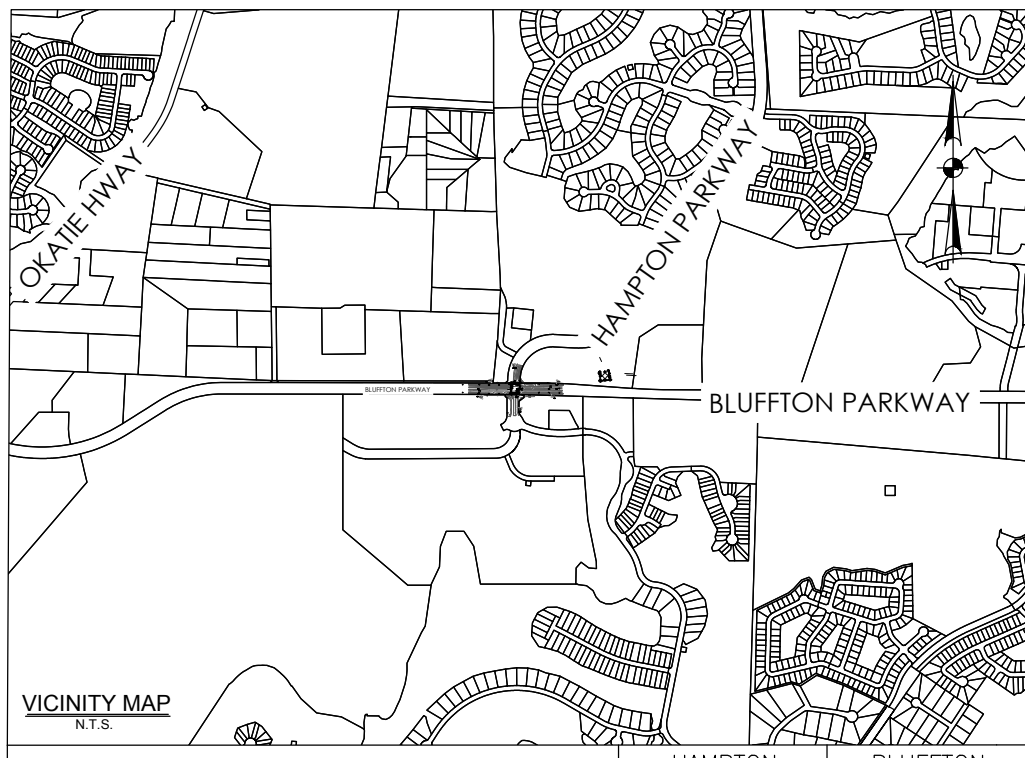
'C' = COORDINATE 02 ; 06

SIGNAL DISPLAY SEQUENCE (PREFERENTIAL PHASING)

SIGNAL HEAD NUMBER	01 - 05	02 - 06	03 - 07	04 - 08
2F				
2				
4				
6F				
6				
8				
2P				
4P				
6P				
8P				

ALTERNATE PHASES

SIGNAL HEAD NUMBER	01 - 06	02 - 05	03 - 08	04 - 07
2F				
2				
4				
6F				
6				
8				
2P				
4P				
6P				
8P				

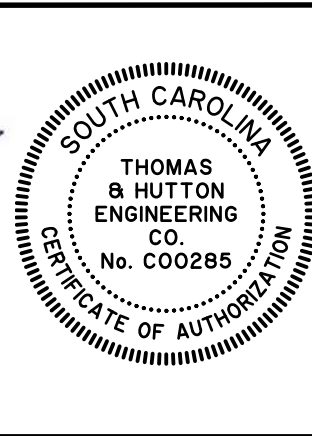


ROUTE NUMBER	HAMPTON PKWY	BLUFFTON PKWY
APPROACH DIRECTION	N S E W	
SIGNAL DESIGN SPEED	30 30 45 45	
GRADE (%)	0 0 0 0	

* ESTIMATED

LOOP DETECTOR INSTALLATION CHART

PHASE / LOOP LTR#	DETECTOR AMP NO.	CHAN NO.	WIRED TO PHASE(S)	LOCK X	LOCK X	PULSE X	PRES X	OPERATION DELAY SEC	EXT SEC	SPECIAL FEATURES	LOOP DESIGN SIZE	NO. OF TURNS	DIST FROM STOP BAR
1ABC			1	X			X			WIRELESS DETECTION	3'-16'-27'		
2ABC			2	X			X			WIRELESS DETECTION	3'-314'-330'		
2DEF			2	X			X			WIRELESS DETECTION	3'-314'-330'		
4ABC			4		X		X			WIRELESS DETECTION	3'-16'-27'		
4DEF			4		X		X			WIRELESS DETECTION	3'-16'-27'		
5ABC			5	X			X			WIRELESS DETECTION	3'-16'-27'		
6ABC			6	X			X			WIRELESS DETECTION	3'-314'-330'		
6DEF			6	X			X			WIRELESS DETECTION	3'-314'-330'		
8ABC			8		X		X			WIRELESS DETECTION	3'-16'-27'		



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DKT.NO.

SHEET NO. 1 OF 2

DATE
05/02/17
06/11/17

REVISIONS
PER BEAUFORT COUNTY COMMENTS
PER BEAUFORT COUNTY COMMENTS



BEAUFORT COUNTY
TRAFFIC ENGINEERING
DEPARTMENT

SUBJECT TITLE
SIGNAL PLAN

SPECIFIC LOCATION
BLUFFTON PARKWAY AND HAMPTON PARKWAY

CITY
BLUFFTON

COUNTY
BEAUFORT

APPROVED BY

APPROVED BY

DESIGNED: JJI

DRAWN: ETW

RECOMMENDED

CONSTRUCTED

COUNTY TRAFFIC ENGINEER

ENGINEER

SCALE

DATE

SHEET NO.

INDEX NO.

1" = 40'

04/11/17

SD.II

Appendix G – Capacity Analysis Worksheets

Draft

2024 Existing Conditions

Draft

Parcel 12C

Existing AM (2024)

09/20/2024

1: Buckwalter Parkway & Buckwalter Place Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	1	95	7	3	6	184	758	5	5	415	77
Future Volume (veh/h)	88	1	95	7	3	6	184	758	5	5	415	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1841	1870	1870	1870	1870	1870	1870	1870	1856	1870
Adj Flow Rate, veh/h	99	1	107	8	3	7	207	852	6	6	466	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	4	2	2	2	2	2	2	2	3	2
Cap, veh/h	409	2	257	239	69	259	576	2028	904	365	1144	
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.12	0.57	0.57	0.32	0.32	0.00
Sat Flow, veh/h	1414	15	1573	640	424	1585	1781	3554	1585	644	3526	1585
Grp Volume(v), veh/h	99	0	108	11	0	7	207	852	6	6	466	0
Grp Sat Flow(s),veh/h/ln	1414	0	1587	1064	0	1585	1781	1777	1585	644	1763	1585
Q Serve(g_s), s	0.0	0.0	2.8	0.0	0.0	0.2	3.4	6.3	0.1	0.3	4.8	0.0
Cycle Q Clear(g_c), s	2.3	0.0	2.8	2.8	0.0	0.2	3.4	6.3	0.1	0.3	4.8	0.0
Prop In Lane	1.00		0.99	0.73		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	0	259	308	0	259	576	2028	904	365	1144	
V/C Ratio(X)	0.24	0.00	0.42	0.04	0.00	0.03	0.36	0.42	0.01	0.02	0.41	
Avail Cap(c_a), veh/h	811	0	711	708	0	710	1139	4381	1954	587	2364	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.1	0.0	17.4	16.3	0.0	16.3	8.4	5.6	4.3	10.6	12.2	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.0	0.1	0.0	0.1	0.9	1.1	0.0	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.4	0.0	18.4	16.4	0.0	16.3	8.7	5.7	4.3	10.7	12.2	0.0
LnGrp LOS	B		B	B		B	A	A	A	B	B	
Approach Vol, veh/h	207					18	1065			472		
Approach Delay, s/veh	18.0					16.3	6.3			12.2		
Approach LOS	B					B	A			B		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	32.4		13.9		11.4	21.0	13.9					
Change Period (Y+Rc), s	6.0		6.3		5.8	6.0	6.3					
Max Green Setting (Gmax), s	57.0		20.7		20.2	31.0	20.7					
Max Q Clear Time (g_c+I1), s	8.3		4.8		5.4	6.8	4.8					
Green Ext Time (p_c), s	14.8		0.6		0.5	5.7	0.0					
Intersection Summary												
HCM 7th Control Delay, s/veh			9.3									
HCM 7th LOS			A									
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Existing AM (2024)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/20/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↱	↰	→	↱	↰	→
Traffic Volume (veh/h)	212	4	859	19	16	31	398	585	9	7	413	151
Future Volume (veh/h)	212	4	859	19	16	31	398	585	9	7	413	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1530	1870	1663	1707	1870	1870	1870	1737	1693	1870	1870
Adj Flow Rate, veh/h	226	4	0	20	17	33	423	622	10	7	439	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	25	2	16	13	2	2	2	11	14	2	2
Cap, veh/h	374	334		233	172	288	523	1831	758	29	1358	
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.15	0.52	0.52	0.02	0.38	0.00
Sat Flow, veh/h	1355	1530	0	697	785	1317	3456	3554	1472	1612	3554	1585
Grp Volume(v), veh/h	226	4	0	37	0	33	423	622	10	7	439	0
Grp Sat Flow(s), veh/h/ln	1355	1530	0	1482	0	1317	1728	1777	1472	1612	1777	1585
Q Serve(g_s), s	11.0	0.1	0.0	0.0	0.0	1.4	8.1	7.1	0.2	0.3	6.0	0.0
Cycle Q Clear(g_c), s	12.4	0.1	0.0	1.2	0.0	1.4	8.1	7.1	0.2	0.3	6.0	0.0
Prop In Lane	1.00		0.00	0.54		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	374	334		405	0	288	523	1831	758	29	1358	
V/C Ratio(X)	0.60	0.01		0.09	0.00	0.11	0.81	0.34	0.01	0.24	0.32	
Avail Cap(c_a), veh/h	775	787		835	0	678	580	1831	758	247	1358	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.4	21.0	0.0	21.4	0.0	21.5	28.1	9.8	8.1	33.2	14.9	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.1	0.0	0.2	7.7	0.5	0.0	4.1	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	0.0	0.5	0.0	0.4	3.6	2.3	0.1	0.1	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.0	21.0	0.0	21.5	0.0	21.6	35.9	10.3	8.1	37.3	15.6	0.0
LnGrp LOS	C	C		C		C	D	B	A	D	B	
Approach Vol, veh/h	230				70		1055				446	
Approach Delay, s/veh	27.9				21.6		20.5				15.9	
Approach LOS	C				C		C				B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.9	32.0		20.7	6.7	41.1		20.7				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	11.5	26.2		35.3	10.5	27.2		35.3				
Max Q Clear Time (g_c+10), s	11.0	8.0		14.4	2.3	9.1		3.4				
Green Ext Time (p_c), s	0.3	4.7		0.7	0.0	6.7		0.2				

Intersection Summary

HCM 7th Control Delay, s/veh 20.4

HCM 7th LOS C

Notes

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

Parcel 12C

Existing AM (2024)

09/20/2024

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↱	↰	↱	↰
Traffic Volume (veh/h)	244	22	235	72	7	57	68	73	864	82	37	1243	75
Future Volume (veh/h)	244	22	235	72	7	57	68	73	864	82	37	1243	75
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99		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		1856	1870	1870	1826	1870	1796
Adj Flow Rate, veh/h	280	25	270	83	8	66		84	993	94	43	1429	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2		3	2	2	5	2	7
Cap, veh/h	411	38	413	214	49	404		247	2059	917	295	1544	
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28		0.08	0.58	0.58	0.43	0.43	0.00
Sat Flow, veh/h	1317	135	1460	1080	173	1428		1767	3554	1582	506	3554	1522
Grp Volume(v), veh/h	280	0	295	83	0	74		84	993	94	43	1429	0
Grp Sat Flow(s), veh/h/ln	1317	0	1595	1080	0	1601		1767	1777	1582	506	1777	1522
Q Serve(g_s), s	17.4	0.0	14.0	6.3	0.0	3.0		2.0	14.0	2.3	4.6	32.6	0.0
Cycle Q Clear(g_c), s	20.4	0.0	14.0	20.2	0.0	3.0		2.0	14.0	2.3	6.2	32.6	0.0
Prop In Lane	1.00		0.92	1.00		0.89		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	0	452	214	0	453		247	2059	917	295	1544	
V/C Ratio(X)	0.68	0.00	0.65	0.39	0.00	0.16		0.34	0.48	0.10	0.15	0.93	
Avail Cap(c_a), veh/h	476	0	530	267	0	532		300	2059	917	295	1544	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.8	0.0	27.0	35.9	0.0	23.1		18.0	10.5	8.1	16.0	22.9	0.0
Incr Delay (d2), s/veh	3.2	0.0	2.3	1.1	0.0	0.2		0.8	0.8	0.2	1.0	10.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	5.4	1.7	0.0	1.1		0.7	4.7	0.7	0.6	14.2	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	34.0	0.0	29.3	37.1	0.0	23.3		18.8	11.4	8.3	17.0	33.9	0.0
LnGrp LOS	C		C	D		C		B	B	A	B	C	
Approach Vol, veh/h	575			157				1171			1472		
Approach Delay, s/veh	31.6			30.6				11.6			33.4		
Approach LOS	C			C				B			C		
Timer - Assigned Phs	1	2		4		6		8					
Phs Duration (G+Y+Rc), s	12.4	43.6		29.8		56.0		29.8					
Change Period (Y+Rc), s	5.5	6.3		5.5		6.3		5.5					
Max Green Setting (Gmax), s	9.5	34.7		28.5		49.7		28.5					
Max Q Clear Time (g_c+14.0), s	14.0	34.6		22.2		16.0		22.4					
Green Ext Time (p_c), s	0.1	0.1		0.3		22.5		1.2					

Intersection Summary

HCM 7th Control Delay, s/veh 25.4

HCM 7th LOS C

Notes

User approved ignoring U-Turning movement.

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

Parcel 12C
4: Bluffton Parkway & Innovation Drive

Existing AM (2024)
09/20/2024

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↰↰	↰↰	↰	↰	↰
Traffic Vol, veh/h	184	1058	613	7	2	102
Future Vol, veh/h	184	1058	613	7	2	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	300	-	-	360	0	75
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	204	1176	681	8	2	113
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	681	0	-	0	1678	341
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	997	-
Critical Hdwy	4.16	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.23	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	901	-	-	-	86	655
Stage 1	-	-	-	-	464	-
Stage 2	-	-	-	-	318	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	901	-	-	-	66	655
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	318	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.51	0		12.59		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	901	-	-	-	66	655
HCM Lane V/C Ratio	0.227	-	-	-	0.033	0.173
HCM Control Delay (s/veh)	10.2	-	-	-	61.1	11.6
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.9	-	-	-	0.1	0.6

Parcel 12C

Existing AM (2024)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/20/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↰	↰	↰	↰↰	↰		↰	↰	↰	↰	↰
Traffic Volume (veh/h)	11	1024	9	82	570	63	38	11	120	98	9	32
Future Volume (veh/h)	11	1024	9	82	570	63	38	11	120	98	9	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1826	1856	1870	1870	1870	1737	1870
Adj Flow Rate, veh/h	12	1125	0	90	626	0	42	12	0	108	10	35
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	5	3	2	2	2	11	2
Cap, veh/h	474	1660		474	1660		185	45		283	40	142
Arrive On Green	0.21	0.47	0.00	0.21	0.47	0.00	0.10	0.12	0.00	0.12	0.12	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1547	836	374	1585	1402	339	1185
Grp Volume(v), veh/h	12	1125	0	90	626	0	54	0	0	108	0	45
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1547	1210	0	1585	1402	0	1524
Q Serve(g_s), s	0.4	18.6	0.0	3.5	8.6	0.0	1.9	0.0	0.0	0.4	0.0	2.0
Cycle Q Clear(g_c), s	0.4	18.6	0.0	3.5	8.6	0.0	4.0	0.0	0.0	4.4	0.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	0.78		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	1660		0	1660		212	0		283	0	182
V/C Ratio(X)	0.00	0.68		0.00	0.38		0.25	0.00		0.38	0.00	0.25
Avail Cap(c_a), veh/h	0	1794		0	1794		270	0		339	0	243
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.6	0.0	0.0	13.0	0.0	31.6	0.0	0.0	31.1	0.0	30.5
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.2	0.0	0.5	0.0	0.0	0.6	0.0	0.5
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	0.0	6.5	0.0	0.0	2.9	0.0	0.9	0.0	0.0	1.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.6	0.0	0.0	13.1	0.0	32.0	0.0	0.0	31.7	0.0	31.0
LnGrp LOS		B			B		C			C		C
Approach Vol, veh/h		1137			716			54			153	
Approach Delay, s/veh		16.5			11.5			32.0			31.5	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.1	40.2		14.0	21.1	40.2		14.0				
Change Period (Y+Rc), s	* 6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	* 37	* 37		10.9	* 37	* 37		10.9				
Max Q Clear Time (g_c+I1), s	5.5	20.6		6.4	2.4	10.6		6.0				
Green Ext Time (p_c), s	0.3	13.5		0.1	0.0	12.0		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			16.3									
HCM 7th LOS			B									
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Existing PM (2024)

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	0	196	4	0	1	301	583	5	13	637	150
Future Volume (veh/h)	181	0	196	4	0	1	301	583	5	13	637	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	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	189	0	204	4	0	1	314	607	5	14	664	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	0	283	200	0	279	550	2114	919	398	1173	
Arrive On Green	0.18	0.00	0.18	0.18	0.00	0.18	0.16	0.59	0.59	0.33	0.33	0.00
Sat Flow, veh/h	1413	0	1577	378	0	1552	1781	3554	1545	807	3554	1585
Grp Volume(v), veh/h	189	0	204	4	0	1	314	607	5	14	664	0
Grp Sat Flow(s),veh/h/ln	1413	0	1577	378	0	1552	1781	1777	1545	807	1777	1585
Q Serve(g_s), s	0.0	0.0	6.6	0.2	0.0	0.0	6.0	4.6	0.1	0.6	8.4	0.0
Cycle Q Clear(g_c), s	5.3	0.0	6.6	6.8	0.0	0.0	6.0	4.6	0.1	0.6	8.4	0.0
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	431	0	283	200	0	279	550	2114	919	398	1173	
V/C Ratio(X)	0.44	0.00	0.72	0.02	0.00	0.00	0.57	0.29	0.01	0.04	0.57	
Avail Cap(c_a), veh/h	765	0	656	478	0	646	894	3582	1557	575	1954	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.5	0.0	21.1	24.3	0.0	18.4	9.8	5.4	4.5	12.5	15.1	0.0
Incr Delay (d2), s/veh	0.7	0.0	3.4	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	2.5	0.0	0.0	0.0	1.7	1.0	0.0	0.1	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	24.5	24.3	0.0	18.4	10.7	5.4	4.5	12.5	15.2	0.0
LnGrp LOS	C		C	C		B	B	A	A	B	B	
Approach Vol, veh/h	393			5			926			678		
Approach Delay, s/veh	22.9			23.1			7.2			15.2		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	38.5			16.1		14.5	24.0		16.1			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	55.0			22.7		19.2	30.0		22.7			
Max Q Clear Time (g_c+I1), s	6.6			8.6		8.0	10.4		8.8			
Green Ext Time (p_c), s	9.5			1.2		0.8	7.6		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				13.0								
HCM 7th LOS				B								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Existing PM (2024)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/20/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	173	8	638	10	9	22	632	651	19	33	516	244
Future Volume (veh/h)	173	8	638	10	9	22	632	651	19	33	516	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1856	1707	1870	1752	1737	1767	1870	1870	1870	1767	1870	1870
Adj Flow Rate, veh/h	177	8	0	10	9	22	645	664	19	34	527	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	13	2	10	11	9	2	2	2	9	2	2
Cap, veh/h	316	292		191	146	229	778	1857	828	116	1301	
Arrive On Green	0.17	0.17	0.00	0.17	0.17	0.17	0.23	0.52	0.52	0.07	0.37	0.00
Sat Flow, veh/h	1367	1707	0	666	852	1340	3456	3554	1585	1682	3554	1585
Grp Volume(v), veh/h	177	8	0	19	0	22	645	664	19	34	527	0
Grp Sat Flow(s), veh/h/ln	1367	1707	0	1518	0	1340	1728	1777	1585	1682	1777	1585
Q Serve(g_s), s	9.0	0.3	0.0	0.0	0.0	1.0	12.7	7.9	0.4	1.4	7.9	0.0
Cycle Q Clear(g_c), s	10.0	0.3	0.0	0.7	0.0	1.0	12.7	7.9	0.4	1.4	7.9	0.0
Prop In Lane	1.00		0.00	0.53		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	292		337	0	229	778	1857	828	116	1301	
V/C Ratio(X)	0.56	0.03		0.06	0.00	0.10	0.83	0.36	0.02	0.29	0.41	
Avail Cap(c_a), veh/h	584	627		627	0	492	990	1857	828	247	1301	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.2	24.7	0.0	24.8	0.0	25.0	26.4	10.0	8.3	31.7	16.9	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.1	0.0	0.2	4.8	0.5	0.1	1.4	0.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.1	0.0	0.3	0.0	0.3	5.2	2.6	0.1	0.6	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.7	24.7	0.0	24.9	0.0	25.2	31.2	10.6	8.3	33.1	17.8	0.0
LnGrp LOS	C	C		C		C	C	B	A	C	B	
Approach Vol, veh/h	185			41			1328			561		
Approach Delay, s/veh	30.5			25.1			20.6			18.7		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.6	32.0		18.0	10.4	43.2		18.0				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	20.5	26.2		26.3	10.5	36.2		26.3				
Max Q Clear Time (g_c+1.4), s	14.5	9.9		12.0	3.4	9.9		3.0				
Green Ext Time (p_c), s	1.4	5.4		0.4	0.0	8.6		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 21.0

HCM 7th LOS C

Notes

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

Parcel 12C

Existing PM (2024)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/20/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱	↰	→	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	107	11	132	52	11	70	225	1271	96	31	1125	218
Future Volume (veh/h)	107	11	132	52	11	70	225	1271	96	31	1125	218
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1856	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	111	11	138	54	11	73	234	1324	100	32	1172	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	20	255	205	36	242	400	2376	1060	274	1734	
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.11	0.67	0.67	0.49	0.49	0.00
Sat Flow, veh/h	1310	118	1480	1236	211	1401	1781	3554	1585	376	3554	1585
Grp Volume(v), veh/h	111	0	149	54	0	84	234	1324	100	32	1172	0
Grp Sat Flow(s), veh/h/ln	1310	0	1598	1236	0	1612	1781	1777	1585	376	1777	1585
Q Serve(g_s), s	6.0	0.0	6.3	3.1	0.0	3.4	4.3	14.6	1.7	3.6	18.7	0.0
Cycle Q Clear(g_c), s	9.4	0.0	6.3	9.4	0.0	3.4	4.3	14.6	1.7	4.8	18.7	0.0
Prop In Lane	1.00		0.93	1.00		0.87	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	263	0	276	205	0	278	400	2376	1060	274	1734	
V/C Ratio(X)	0.42	0.00	0.54	0.26	0.00	0.30	0.59	0.56	0.09	0.12	0.68	
Avail Cap(c_a), veh/h	540	0	613	466	0	618	461	2376	1060	274	1734	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.9	0.0	28.1	32.4	0.0	26.8	11.7	6.5	4.4	11.3	14.5	0.0
Incr Delay (d2), s/veh	1.1	0.0	1.6	0.7	0.0	0.6	1.4	0.9	0.2	0.9	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.5	1.0	0.0	1.3	1.3	3.8	0.4	0.3	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.0	0.0	29.7	33.0	0.0	27.4	13.2	7.5	4.5	12.2	16.7	0.0
LnGrp LOS	C		C	C		C	B	A	A	B	B	
Approach Vol, veh/h		260			138			1658			1204	
Approach Delay, s/veh		30.7			29.6			8.1			16.6	
Approach LOS		C			C			A			B	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	13.4	42.6		18.3		56.0		18.3				
Change Period (Y+Rc), s	5.5	6.3		5.5		6.3		5.5				
Max Green Setting (Gmax), s	10.5	33.7		28.5		49.7		28.5				
Max Q Clear Time (g_c+10), s	10.3	20.7		11.4		16.6		11.4				
Green Ext Time (p_c), s	0.4	11.5		0.4		27.8		0.8				

Intersection Summary

HCM 7th Control Delay, s/veh 13.9

HCM 7th LOS B

Notes

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

Parcel 12C
4: Bluffton Parkway & Innovation Drive

Existing PM (2024)

09/20/2024

Intersection						
Int Delay, s/veh	6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↗↗	↗↗	↰	↰	↰
Traffic Vol, veh/h	276	807	884	15	13	337
Future Vol, veh/h	276	807	884	15	13	337
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	300	-	-	360	0	75
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	294	859	940	16	14	359
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	941	0	-	0	1958	471
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1016	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	724	-	-	-	56	539
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	310	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	723	-	-	-	33	539
Mov Cap-2 Maneuver	-	-	-	-	33	-
Stage 1	-	-	-	-	202	-
Stage 2	-	-	-	-	310	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	3.4	0		29.69		
HCM LOS	D					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	723	-	-	-	33	539
HCM Lane V/C Ratio	0.406	-	-	-	0.419	0.666
HCM Control Delay (s/veh)	13.3	-	-	-	177.5	24
HCM Lane LOS	B	-	-	-	F	C
HCM 95th %tile Q(veh)	2	-	-	-	1.4	4.9

Parcel 12C

Existing PM (2024)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/20/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	885	30	129	1035	111	28	0	122	72	8	16
Future Volume (veh/h)	15	885	30	129	1035	111	28	0	122	72	8	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
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	1811
Adj Flow Rate, veh/h	15	912	0	133	1067	0	29	0	0	74	8	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	6
Cap, veh/h	479	1666		479	1666		234	0		270	63	125
Arrive On Green	0.21	0.47	0.00	0.21	0.47	0.00	0.10	0.00	0.00	0.11	0.11	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1199	0	1585	1414	548	1097
Grp Volume(v), veh/h	15	912	0	133	1067	0	29	0	0	74	0	24
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1199	0	1585	1414	0	1645
Q Serve(g_s), s	0.6	13.7	0.0	5.3	17.0	0.0	1.5	0.0	0.0	0.5	0.0	1.0
Cycle Q Clear(g_c), s	0.6	13.7	0.0	5.3	17.0	0.0	2.4	0.0	0.0	3.0	0.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	0	1666		0	1666		216	0		270	0	188
V/C Ratio(X)	0.00	0.55		0.00	0.64		0.13	0.00		0.27	0.00	0.13
Avail Cap(c_a), veh/h	0	1858		0	1858		262	0		317	0	243
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.2	0.0	0.0	15.0	0.0	31.3	0.0	0.0	30.5	0.0	30.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.7	0.0	0.2	0.0	0.0	0.4	0.0	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	0.0	4.6	0.0	0.0	5.9	0.0	0.5	0.0	0.0	1.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	14.5	0.0	0.0	15.8	0.0	31.5	0.0	0.0	30.9	0.0	30.2
LnGrp LOS	B			B			C			C		
Approach Vol, veh/h	927			1200			29			98		
Approach Delay, s/veh	14.3			14.0			31.5			30.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.1	40.0		13.5	21.1	40.0		13.5				
Change Period (Y+Rc), s	* 6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	* 38	* 38		9.9	* 38	* 38		9.9				
Max Q Clear Time (g_c+I1), s	7.3	15.7		5.0	2.6	19.0		4.4				
Green Ext Time (p_c), s	0.5	15.1		0.1	0.0	14.9		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	15.1											
HCM 7th LOS	B											
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

2028 Background Conditions

Draft

Parcel 12C

Background AM (2028)

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1	115	9	4	7	223	1107	6	6	638	113
Future Volume (veh/h)	123	1	115	9	4	7	223	1107	6	6	638	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1841	1870	1870	1870	1870	1870	1870	1870	1856	1870
Adj Flow Rate, veh/h	138	1	129	10	4	8	251	1244	7	7	717	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	4	2	2	2	2	2	2	2	3	2
Cap, veh/h	343	2	218	169	50	219	542	2299	1025	316	1510	
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.12	0.65	0.65	0.43	0.43	0.00
Sat Flow, veh/h	1412	12	1575	441	364	1585	1781	3554	1585	444	3526	1585
Grp Volume(v), veh/h	138	0	130	14	0	8	251	1244	7	7	717	0
Grp Sat Flow(s),veh/h/ln	1412	0	1587	805	0	1585	1781	1777	1585	444	1763	1585
Q Serve(g_s), s	0.0	0.0	4.4	0.0	0.0	0.3	4.3	10.9	0.1	0.5	8.4	0.0
Cycle Q Clear(g_c), s	4.4	0.0	4.4	4.4	0.0	0.3	4.3	10.9	0.1	0.5	8.4	0.0
Prop In Lane	1.00		0.99	0.71		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	343	0	219	219	0	219	542	2299	1025	316	1510	
V/C Ratio(X)	0.40	0.00	0.59	0.06	0.00	0.04	0.46	0.54	0.01	0.02	0.47	
Avail Cap(c_a), veh/h	634	0	546	505	0	545	899	3599	1605	389	2093	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.1	0.0	23.2	21.5	0.0	21.4	7.8	5.5	3.6	9.5	11.8	0.0
Incr Delay (d2), s/veh	0.8	0.0	2.5	0.1	0.0	0.1	0.6	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	1.7	0.2	0.0	0.1	1.2	2.0	0.0	0.0	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.9	0.0	25.7	21.7	0.0	21.4	8.4	5.6	3.6	9.5	11.8	0.0
LnGrp LOS	C		C	C		C	A	A	A	A	B	
Approach Vol, veh/h	268			22			1502			724		
Approach Delay, s/veh	24.8			21.6			6.0			11.8		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	43.0			14.2		12.5	30.5	14.2				
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0	6.3				
Max Green Setting (Gmax), s	58.0			19.7		18.2	34.0	19.7				
Max Q Clear Time (g_c+H1), s	12.9			6.4		6.3	10.4	6.4				
Green Ext Time (p_c), s	24.2			0.7		0.6	9.2	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				9.8								
HCM 7th LOS				A								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Background AM (2028)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↱	↰	→	↱	↰	→
Traffic Volume (veh/h)	383	5	1150	23	19	38	577	775	11	9	555	266
Future Volume (veh/h)	383	5	1150	23	19	38	577	775	11	9	555	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1530	1870	1663	1707	1870	1870	1870	1737	1693	1870	1870
Adj Flow Rate, veh/h	407	5	0	24	20	40	614	824	12	10	590	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	25	2	16	13	2	2	2	11	14	2	2
Cap, veh/h	532	539		330	253	464	738	1489	617	40	818	
Arrive On Green	0.35	0.35	0.00	0.35	0.35	0.35	0.21	0.42	0.42	0.02	0.23	0.00
Sat Flow, veh/h	1343	1530	0	746	719	1317	3456	3554	1472	1612	3554	1585
Grp Volume(v), veh/h	407	5	0	44	0	40	614	824	12	10	590	0
Grp Sat Flow(s), veh/h/ln	1343	1530	0	1465	0	1317	1728	1777	1472	1612	1777	1585
Q Serve(g_s), s	24.2	0.2	0.0	0.0	0.0	1.7	14.2	14.6	0.4	0.5	12.8	0.0
Cycle Q Clear(g_c), s	25.9	0.2	0.0	1.4	0.0	1.7	14.2	14.6	0.4	0.5	12.8	0.0
Prop In Lane	1.00		0.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	532	539		583	0	464	738	1489	617	40	818	
V/C Ratio(X)	0.76	0.01		0.08	0.00	0.09	0.83	0.55	0.02	0.25	0.72	
Avail Cap(c_a), veh/h	1497	1638		1624	0	1410	1015	1489	617	203	818	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.7	17.5	0.0	18.0	0.0	18.0	31.4	18.3	14.2	39.9	29.6	0.0
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.1	0.0	0.1	4.3	1.5	0.1	3.2	5.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.1	0.0	0.6	0.0	0.5	5.9	5.6	0.1	0.2	5.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	17.6	0.0	18.0	0.0	18.1	35.7	19.8	14.3	43.1	35.1	0.0
LnGrp LOS	C	B		B		B	D	B	B	D	D	
Approach Vol, veh/h		412			84			1450			600	
Approach Delay, s/veh		28.9			18.1			26.5			35.2	
Approach LOS		C			B			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.3	25.0		35.1	7.6	40.7		35.1				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	24.5	19.2		89.3	10.5	33.2		89.3				
Max Q Clear Time (g_c+1.0), s	14.8	14.8		27.9	2.5	16.6		3.7				
Green Ext Time (p_c), s	1.6	2.2		1.5	0.0	8.5		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh 28.7

HCM 7th LOS C

Notes

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

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

Parcel 12C

Background AM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱			↰	↱	↱	↰	↱	↰
Traffic Volume (veh/h)	297	27	303	88	9	69	135	98	1207	100	45	1670	91
Future Volume (veh/h)	297	27	303	88	9	69	135	98	1207	100	45	1670	91
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99		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		1856	1870	1870	1826	1870	1796
Adj Flow Rate, veh/h	341	31	348	101	10	79		113	1387	115	52	1920	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2		3	2	2	5	2	7
Cap, veh/h	322	32	359	70	44	349		177	2331	1038	208	1936	
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25		0.07	0.66	0.66	0.54	0.54	0.00
Sat Flow, veh/h	1299	130	1462	1004	180	1420		1767	3554	1583	341	3554	1522
Grp Volume(v), veh/h	341	0	379	101	0	89		113	1387	115	52	1920	0
Grp Sat Flow(s), veh/h/ln	1299	0	1592	1004	0	1600		1767	1777	1583	341	1777	1522
Q Serve(g_s), s	24.2	0.0	28.3	1.2	0.0	5.3		3.1	26.4	3.2	12.2	64.2	0.0
Cycle Q Clear(g_c), s	29.5	0.0	28.3	29.5	0.0	5.3		3.1	26.4	3.2	25.3	64.2	0.0
Prop In Lane	1.00		0.92	1.00		0.89		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	0	391	70	0	393		177	2331	1038	208	1936	
V/C Ratio(X)	1.06	0.00	0.97	1.44	0.00	0.23		0.64	0.60	0.11	0.25	0.99	
Avail Cap(c_a), veh/h	322	0	391	70	0	393		232	2331	1038	208	1936	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.2	0.0	44.8	59.9	0.0	36.1		28.3	11.7	7.7	22.6	27.0	0.0
Incr Delay (d2), s/veh	66.9	0.0	37.1	260.2	0.0	0.3		3.8	1.1	0.2	2.8	18.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	0.0	15.1	7.2	0.0	2.1		1.9	9.4	1.0	1.1	29.3	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	117.1	0.0	81.8	320.1	0.0	36.4		32.1	12.8	7.9	25.4	45.6	0.0
LnGrp LOS	F		F	F		D		C	B	A	C	D	
Approach Vol, veh/h	720			190				1615			1972		
Approach Delay, s/veh	98.5			187.2				13.8			45.1		
Approach LOS	F			F				B			D		
Timer - Assigned Phs	1	2		4		6		8					
Phs Duration (G+Y+Rc), s	33.3	71.7		35.0		85.0		35.0					
Change Period (Y+Rc), s	5.5	6.3		5.5		6.3		5.5					
Max Green Setting (Gmax), s	11.5	61.7		29.5		78.7		29.5					
Max Q Clear Time (g_c+1.5), s	11.5	66.2		31.5		28.4		31.5					
Green Ext Time (p_c), s	0.2	0.0		0.0		40.8		0.0					

Intersection Summary

HCM 7th Control Delay, s/veh 48.4

HCM 7th LOS D

Notes

User approved ignoring U-Turning movement.

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

Parcel 12C

Background AM (2028)

09/25/2024

4: Bluffton Parkway & Innovation Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗↗	↗↗	↗	↘	↗
Traffic Volume (veh/h)	266	1490	874	22	26	127
Future Volume (veh/h)	266	1490	874	22	26	127
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
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	1856	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	296	1656	971	0	29	141
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	2	2	2	2	2
Cap, veh/h	505	2681	2078		179	314
Arrive On Green	0.10	0.75	0.58	0.00	0.10	0.10
Sat Flow, veh/h	1767	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	296	1656	971	0	29	141
Grp Sat Flow(s), veh/h/ln	1767	1777	1777	1585	1781	1585
Q Serve(g_s), s	5.3	17.8	12.9	0.0	1.2	6.5
Cycle Q Clear(g_c), s	5.3	17.8	12.9	0.0	1.2	6.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	505	2681	2078		179	314
V/C Ratio(X)	0.59	0.62	0.47		0.16	0.45
Avail Cap(c_a), veh/h	781	2959	2078		193	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	7.1	4.7	9.8	0.0	34.1	29.3
Incr Delay (d2), s/veh	1.1	0.3	0.2	0.0	0.4	1.0
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	3.4	4.1	0.0	0.6	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.2	5.0	10.0	0.0	34.5	30.3
LnGrp LOS	A	A	A		C	C
Approach Vol, veh/h		1952	971		170	
Approach Delay, s/veh		5.5	10.0		31.0	
Approach LOS		A	A		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	4.1	54.5			68.5	14.3
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	21.0	42.0			69.0	9.0
Max Q Clear Time (g_c+I), s	17.3	14.9			19.8	8.5
Green Ext Time (p_c), s	0.8	16.3			42.8	0.0

Intersection Summary

HCM 7th Control Delay, s/veh	8.3
HCM 7th LOS	A

Notes

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

Parcel 12C

Background AM (2028)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷		↶	↷	↰	↷	
Traffic Volume (veh/h)	13	1447	16	105	820	77	62	14	162	119	11	39
Future Volume (veh/h)	13	1447	16	105	820	77	62	14	162	119	11	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1826	1856	1870	1870	1870	1737	1870
Adj Flow Rate, veh/h	14	1590	0	115	901	0	68	15	0	131	12	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	5	3	2	2	2	11	2
Cap, veh/h	330	2126		330	2126		151	28		239	38	136
Arrive On Green	0.15	0.60	0.00	0.15	0.60	0.00	0.10	0.11	0.00	0.11	0.11	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1547	790	248	1585	1398	332	1190
Grp Volume(v), veh/h	14	1590	0	115	901	0	83	0	0	131	0	55
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1547	1037	0	1585	1398	0	1523
Q Serve(g_s), s	0.8	35.2	0.0	6.6	14.8	0.0	5.6	0.0	0.0	0.0	0.0	3.6
Cycle Q Clear(g_c), s	0.8	35.2	0.0	6.6	14.8	0.0	9.2	0.0	0.0	8.8	0.0	3.6
Prop In Lane	1.00		1.00	1.00		1.00	0.82		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	2126		0	2126		168	0		239	0	174
V/C Ratio(X)	0.00	0.75		0.00	0.42		0.49	0.00		0.55	0.00	0.32
Avail Cap(c_a), veh/h	0	2202		0	2202		177	0		248	0	183
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.8	0.0	0.0	11.7	0.0	48.2	0.0	0.0	46.3	0.0	44.4
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.2	0.0	1.7	0.0	0.0	1.9	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.7	0.0	0.0	5.2	0.0	2.3	0.0	0.0	3.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	17.2	0.0	0.0	11.8	0.0	49.8	0.0	0.0	48.2	0.0	45.2
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1604			1016			83			186		
Approach Delay, s/veh	17.1			10.5			49.8			47.3		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.1	69.7		17.3	21.1	69.7		17.3				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	66	* 66		11.9	* 66	* 66		11.9				
Max Q Clear Time (g_c+1.0), s	37.2	37.2		10.8	2.8	16.8		11.2				
Green Ext Time (p_c), s	0.5	26.4		0.0	0.0	25.2		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 17.7

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Background AM (2028)

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱	↰	↑	↱	↰	↑	↱
Traffic Volume (veh/h)	3	1723	2	8	989	4	7	0	26	8	0	5
Future Volume (veh/h)	3	1723	2	8	989	4	7	0	26	8	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	3	1914	2	9	1099	4	8	0	29	9	0	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	425	2303	1027	232	2652	1183	295	0	223	273	0	223
Arrive On Green	0.65	0.65	0.65	0.04	0.75	0.75	0.14	0.00	0.11	0.14	0.00	0.11
Sat Flow, veh/h	511	3554	1585	1781	3554	1585	1410	0	1585	1381	0	1585
Grp Volume(v), veh/h	3	1914	2	9	1099	4	8	0	29	9	0	6
Grp Sat Flow(s),veh/h/ln	511	1777	1585	1781	1777	1585	1410	0	1585	1381	0	1585
Q Serve(g_s), s	0.2	29.2	0.0	0.1	8.1	0.0	0.3	0.0	1.2	0.4	0.0	0.2
Cycle Q Clear(g_c), s	1.2	29.2	0.0	0.1	8.1	0.0	0.6	0.0	1.2	1.6	0.0	0.2
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	425	2303	1027	232	2652	1183	295	0	223	273	0	223
V/C Ratio(X)	0.01	0.83	0.00	0.04	0.41	0.00	0.03	0.00	0.13	0.03	0.00	0.03
Avail Cap(c_a), veh/h	461	2555	1139	358	3156	1408	673	0	648	643	0	648
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.8	9.5	4.4	9.7	3.3	2.3	26.5	0.0	27.6	27.4	0.0	27.1
Incr Delay (d2), s/veh	0.0	2.3	0.0	0.1	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	0.0	0.0	1.2	0.0	0.1	0.0	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.8	11.8	4.4	9.7	3.4	2.3	26.6	0.0	27.8	27.4	0.0	27.2
LnGrp LOS	A	B	A	A	A	A	C		C	C		C
Approach Vol, veh/h	1919			1112			37			15		
Approach Delay, s/veh	11.8			3.5			27.5			27.3		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	7.0	50.0		14.0		56.9		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	49.0		27.0		61.0		27.0				
Max Q Clear Time (g_c+12, s)	12.5	31.2		3.6		10.1		3.2				
Green Ext Time (p_c), s	0.0	12.8		0.0		9.3		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	9.0											
HCM 7th LOS	A											

Parcel 12C

Background PM (2028)

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	238	5	0	1	366	890	6	16	1008	192
Future Volume (veh/h)	248	0	238	5	0	1	366	890	6	16	1008	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	258	0	248	5	0	1	381	927	6	17	1050	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	0	307	150	0	307	461	2256	1002	336	1401	
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.16	0.63	0.63	0.39	0.39	0.00
Sat Flow, veh/h	1414	0	1578	258	0	1578	1781	3554	1578	599	3554	1585
Grp Volume(v), veh/h	258	0	248	5	0	1	381	927	6	17	1050	0
Grp Sat Flow(s),veh/h/ln	1414	0	1578	258	0	1578	1781	1777	1578	599	1777	1585
Q Serve(g_s), s	0.0	0.0	10.8	0.3	0.0	0.0	8.7	9.3	0.1	1.3	18.3	0.0
Cycle Q Clear(g_c), s	9.9	0.0	10.8	11.1	0.0	0.0	8.7	9.3	0.1	1.3	18.3	0.0
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	431	0	307	150	0	307	461	2256	1002	336	1401	
V/C Ratio(X)	0.60	0.00	0.81	0.03	0.00	0.00	0.83	0.41	0.01	0.05	0.75	
Avail Cap(c_a), veh/h	561	0	453	254	0	453	649	2807	1246	365	1576	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.4	0.0	27.8	33.1	0.0	23.4	13.7	6.5	4.8	13.6	18.8	0.0
Incr Delay (d2), s/veh	1.3	0.0	6.7	0.1	0.0	0.0	6.1	0.0	0.0	0.0	1.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	4.5	0.1	0.0	0.0	3.4	2.4	0.0	0.2	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	0.0	34.4	33.2	0.0	23.4	19.8	6.6	4.8	13.7	20.3	0.0
LnGrp LOS	C		C	C		C	B	A	A	B	C	
Approach Vol, veh/h	506			6			1314			1067		
Approach Delay, s/veh	31.5			31.6			10.4			20.2		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	51.8			20.3		17.4	34.4		20.3			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	57.0			20.7		19.2	32.0		20.7			
Max Q Clear Time (g_c+I1), s	11.3			12.8		10.7	20.3		13.1			
Green Ext Time (p_c), s	16.3			1.2		0.8	8.1		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				17.7								
HCM 7th LOS				B								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Background PM (2028)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↰	→	↱	↰	→	↱
Traffic Volume (veh/h)	333	10	847	12	11	27	839	851	23	40	697	464
Future Volume (veh/h)	333	10	847	12	11	27	839	851	23	40	697	464
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1856	1707	1870	1752	1737	1767	1870	1870	1870	1767	1870	1870
Adj Flow Rate, veh/h	340	10	0	12	11	28	856	868	23	41	711	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	13	2	10	11	9	2	2	2	9	2	2
Cap, veh/h	444	489		264	223	383	893	1652	737	117	982	
Arrive On Green	0.29	0.29	0.00	0.29	0.29	0.29	0.26	0.46	0.46	0.07	0.28	0.00
Sat Flow, veh/h	1358	1707	0	720	778	1340	3456	3554	1585	1682	3554	1585
Grp Volume(v), veh/h	340	10	0	23	0	28	856	868	23	41	711	0
Grp Sat Flow(s), veh/h/ln	1358	1707	0	1498	0	1340	1728	1777	1585	1682	1777	1585
Q Serve(g_s), s	23.1	0.4	0.0	0.0	0.0	1.4	23.2	16.4	0.7	2.2	17.2	0.0
Cycle Q Clear(g_c), s	24.5	0.4	0.0	0.9	0.0	1.4	23.2	16.4	0.7	2.2	17.2	0.0
Prop In Lane	1.00		0.00	0.52		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	489		487	0	383	893	1652	737	117	982	
V/C Ratio(X)	0.77	0.02		0.05	0.00	0.07	0.96	0.53	0.03	0.35	0.72	
Avail Cap(c_a), veh/h	518	581		567	0	456	893	1652	737	186	982	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.6	24.3	0.0	24.5	0.0	24.7	34.7	18.0	13.8	42.1	31.1	0.0
Incr Delay (d2), s/veh	5.8	0.0	0.0	0.0	0.0	0.1	20.8	1.2	0.1	1.8	4.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.2	0.0	0.4	0.0	0.5	11.7	6.3	0.3	0.9	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.4	24.3	0.0	24.5	0.0	24.8	55.4	19.2	13.9	43.8	35.7	0.0
LnGrp LOS	D	C		C		C	E	B	B	D	D	
Approach Vol, veh/h	350			51			1747			752		
Approach Delay, s/veh	39.0			24.7			36.9			36.1		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.0	32.0		32.8	12.1	49.9		32.8				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	24.5	26.2		32.3	10.5	40.2		32.3				
Max Q Clear Time (g_c+2.2), s	19.2	19.2		26.5	4.2	18.4		3.4				
Green Ext Time (p_c), s	0.0	3.9		0.6	0.0	10.5		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 36.7

HCM 7th LOS D

Notes

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

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

Parcel 12C

Background PM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	130	13	168	63	13	85	41	276	1676	117	38	1509	265
Future Volume (veh/h)	130	13	168	63	13	85	41	276	1676	117	38	1509	265
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
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	1856	1870	1870	1870		1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	135	14	175	66	14	89		288	1746	122	40	1572	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	3	2	2	2		2	2	2	2	2	2
Cap, veh/h	247	23	283	170	42	266		324	2459	1097	168	1854	
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19		0.12	0.69	0.69	0.52	0.52	0.00
Sat Flow, veh/h	1288	118	1480	1192	219	1395		1781	3554	1585	245	3554	1585
Grp Volume(v), veh/h	135	0	189	66	0	103		288	1746	122	40	1572	0
Grp Sat Flow(s),veh/h/ln	1288	0	1598	1192	0	1614		1781	1777	1585	245	1777	1585
Q Serve(g_s), s	10.2	0.0	10.9	5.4	0.0	5.6		9.2	30.0	2.6	11.9	38.2	0.0
Cycle Q Clear(g_c), s	15.7	0.0	10.9	16.3	0.0	5.6		9.2	30.0	2.6	24.8	38.2	0.0
Prop In Lane	1.00		0.93	1.00		0.86		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	305	170	0	308		324	2459	1097	168	1854	
V/C Ratio(X)	0.55	0.00	0.62	0.39	0.00	0.33		0.89	0.71	0.11	0.24	0.85	
Avail Cap(c_a), veh/h	365	0	452	279	0	457		374	2459	1097	168	1854	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.0	0.0	37.4	44.9	0.0	35.2		26.3	9.4	5.2	22.1	20.7	0.0
Incr Delay (d2), s/veh	1.9	0.0	2.0	1.4	0.0	0.6		20.3	1.8	0.2	3.3	5.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	4.4	1.7	0.0	2.3		8.5	9.3	0.7	0.8	15.1	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	43.9	0.0	39.4	46.3	0.0	35.8		46.6	11.2	5.4	25.4	25.7	0.0
LnGrp LOS	D		D	D		D		D	B	A	C	C	
Approach Vol, veh/h	324			169				2156			1612		
Approach Delay, s/veh	41.3			39.9				15.6			25.7		
Approach LOS	D			D				B			C		
Timer - Assigned Phs	1	2	4		6		8						
Phs Duration (G+Y+Rc), s	7.1	58.9	24.7		76.0		24.7						
Change Period (Y+Rc), s	5.5	6.3	5.5		6.3		5.5						
Max Green Setting (Gmax), s	14.5	49.7	28.5		69.7		28.5						
Max Q Clear Time (g_c+1), s	11.2	40.2	18.3		32.0		17.7						
Green Ext Time (p_c), s	0.4	9.2	0.4		35.6		0.9						

Intersection Summary

HCM 7th Control Delay, s/veh 22.3

HCM 7th LOS C

Notes

User approved ignoring U-Turning movement.

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

Parcel 12C

Background PM (2028)

09/25/2024

4: Bluffton Parkway & Innovation Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	356	1126	1314	24	61	416
Future Volume (veh/h)	356	1126	1314	24	61	416
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
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	379	1198	1398	0	65	443
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	431	2608	1807		203	418
Arrive On Green	0.15	0.73	0.51	0.00	0.11	0.11
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	379	1198	1398	0	65	443
Grp Sat Flow(s), veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	8.9	10.7	25.2	0.0	2.6	9.0
Cycle Q Clear(g_c), s	8.9	10.7	25.2	0.0	2.6	9.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	431	2608	1807		203	418
V/C Ratio(X)	0.88	0.46	0.77		0.32	1.06
Avail Cap(c_a), veh/h	638	3107	1891		203	418
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	4.2	15.7	0.0	32.1	29.1
Incr Delay (d2), s/veh	9.5	0.1	2.0	0.0	0.9	61.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.1	8.8	0.0	1.2	14.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.7	4.3	17.7	0.0	33.0	90.0
LnGrp LOS	C	A	B		C	F
Approach Vol, veh/h		1577	1398		508	
Approach Delay, s/veh		9.7	17.7		82.7	
Approach LOS		A	B		F	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.8	46.1			63.9	15.0
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	21.0	42.0			69.0	9.0
Max Q Clear Time (g_c+1.0), s	11.0	27.2			12.7	11.0
Green Ext Time (p_c), s	0.9	13.0			35.3	0.0
Intersection Summary						
HCM 7th Control Delay, s/veh			23.6			
HCM 7th LOS			C			
Notes						
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.						

Parcel 12C

Background PM (2028)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷		↶	↷	↰	↷	
Traffic Volume (veh/h)	18	1225	52	174	1457	135	44	0	158	88	11	19
Future Volume (veh/h)	18	1225	52	174	1457	135	44	0	158	88	11	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1811
Adj Flow Rate, veh/h	19	1263	0	179	1502	0	45	0	0	91	11	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	6
Cap, veh/h	387	2011		387	2011		185	0		233	58	105
Arrive On Green	0.17	0.57	0.00	0.17	0.57	0.00	0.09	0.00	0.00	0.10	0.10	0.09
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1098	0	1585	1414	593	1079
Grp Volume(v), veh/h	19	1263	0	179	1502	0	45	0	0	91	0	31
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1098	0	1585	1414	0	1672
Q Serve(g_s), s	0.9	22.1	0.0	8.9	29.3	0.0	2.9	0.0	0.0	0.0	0.0	1.6
Cycle Q Clear(g_c), s	0.9	22.1	0.0	8.9	29.3	0.0	4.5	0.0	0.0	4.5	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	0	2011		0	2011		172	0		233	0	163
V/C Ratio(X)	0.00	0.63		0.00	0.75		0.26	0.00		0.39	0.00	0.19
Avail Cap(c_a), veh/h	0	2079		0	2079		202	0		264	0	199
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.5	0.0	0.0	15.1	0.0	40.9	0.0	0.0	39.6	0.0	38.7
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	1.5	0.0	0.6	0.0	0.0	0.8	0.0	0.4
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	0.0	7.6	0.0	0.0	10.3	0.0	1.0	0.0	0.0	2.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	14.1	0.0	0.0	16.6	0.0	41.5	0.0	0.0	40.4	0.0	39.1
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1282				1681		45				122	
Approach Delay, s/veh	13.9				14.8		41.5				40.1	
Approach LOS	B				B		D				D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.1	57.2		14.0	21.1	57.2		14.0				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	53	* 53		9.9	* 53	* 53		9.9				
Max Q Clear Time (g_c+10), s	24.1			6.5	2.9	31.3		6.5				
Green Ext Time (p_c), s	0.7	23.6		0.1	0.0	19.8		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 15.8

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Background PM (2028)

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷	↰	↶	↷	↰	↶	↷
Traffic Volume (veh/h)	6	1462	7	27	1692	10	4	0	16	7	0	4
Future Volume (veh/h)	6	1462	7	27	1692	10	4	0	16	7	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	7	1624	8	30	1880	11	4	0	18	8	0	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	2046	913	310	2527	1127	339	0	254	326	0	254
Arrive On Green	0.58	0.58	0.58	0.07	0.71	0.71	0.16	0.00	0.13	0.16	0.00	0.13
Sat Flow, veh/h	240	3554	1585	1781	3554	1585	1412	0	1585	1395	0	1585
Grp Volume(v), veh/h	7	1624	8	30	1880	11	4	0	18	8	0	4
Grp Sat Flow(s),veh/h/ln	240	1777	1585	1781	1777	1585	1412	0	1585	1395	0	1585
Q Serve(g_s), s	1.2	22.2	0.1	0.4	20.2	0.1	0.1	0.0	0.6	0.3	0.0	0.1
Cycle Q Clear(g_c), s	12.9	22.2	0.1	0.4	20.2	0.1	0.3	0.0	0.6	0.9	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	2046	913	310	2527	1127	339	0	254	326	0	254
V/C Ratio(X)	0.03	0.79	0.01	0.10	0.74	0.01	0.01	0.00	0.07	0.02	0.00	0.02
Avail Cap(c_a), veh/h	228	2339	1043	412	3023	1348	770	0	738	751	0	738
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.1	10.3	5.6	8.4	5.5	2.6	22.1	0.0	23.1	22.6	0.0	22.9
Incr Delay (d2), s/veh	0.1	1.7	0.0	0.1	0.8	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.2	0.0	0.1	3.2	0.0	0.0	0.0	0.2	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.1	12.1	5.6	8.5	6.4	2.6	22.1	0.0	23.2	22.6	0.0	22.9
LnGrp LOS	B	B	A	A	A	A	C		C	C		C
Approach Vol, veh/h	1639			1921			22			12		
Approach Delay, s/veh	12.0			6.4			23.0			22.7		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	39.9			14.0		48.3		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	39.0			27.0		51.0		27.0				
Max Q Clear Time (g_c+12.5), s	24.2			2.9		22.2		2.6				
Green Ext Time (p_c), s	0.0	9.6		0.0		17.5		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	9.1											
HCM 7th LOS	A											

2028 Build Conditions

Draft

Parcel 12C

Build AM (2028)

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1	115	9	4	7	223	1169	6	6	726	113
Future Volume (veh/h)	123	1	115	9	4	7	223	1169	6	6	726	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	1	129	10	4	8	251	1313	7	7	816	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	2	208	157	47	210	515	2355	1050	309	1614	
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.66	0.66	0.45	0.45	0.00
Sat Flow, veh/h	1412	12	1575	412	352	1585	1781	3554	1585	416	3554	1585
Grp Volume(v), veh/h	138	0	130	14	0	8	251	1313	7	7	816	0
Grp Sat Flow(s),veh/h/ln	1412	0	1587	763	0	1585	1781	1777	1585	416	1777	1585
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	0.3	4.3	11.9	0.1	0.6	9.8	0.0
Cycle Q Clear(g_c), s	4.7	0.0	4.6	4.7	0.0	0.3	4.3	11.9	0.1	0.6	9.8	0.0
Prop In Lane	1.00		0.99	0.71		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	210	204	0	210	515	2355	1050	309	1614	
V/C Ratio(X)	0.42	0.00	0.62	0.07	0.00	0.04	0.49	0.56	0.01	0.02	0.51	
Avail Cap(c_a), veh/h	580	0	495	453	0	494	826	3494	1559	369	2132	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.6	0.0	24.6	22.9	0.0	22.7	7.8	5.4	3.4	9.1	11.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	3.0	0.1	0.0	0.1	0.7	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.8	0.2	0.0	0.1	1.2	2.2	0.0	0.0	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	0.0	27.6	23.0	0.0	22.8	8.6	5.5	3.4	9.1	11.7	0.0
LnGrp LOS	C		C	C		C	A	A	A	A	B	
Approach Vol, veh/h	268			22			1571			823		
Approach Delay, s/veh	26.5			22.9			6.0			11.7		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	45.8			14.2		12.5	33.2		14.2			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	59.0			18.7		17.2	36.0		18.7			
Max Q Clear Time (g_c+I1), s	13.9			6.7		6.3	11.8		6.7			
Green Ext Time (p_c), s	25.9			0.7		0.6	10.7		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				9.9								
HCM 7th LOS				A								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Build AM (2028)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↱	↰	→	↱	↰	→
Traffic Volume (veh/h)	428	5	1211	23	19	38	665	792	11	9	577	332
Future Volume (veh/h)	428	5	1211	23	19	38	665	792	11	9	577	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1544	1870	1663	1707	1870	1870	1870	1737	1693	1870	1870
Adj Flow Rate, veh/h	455	5	0	24	20	40	707	843	12	10	614	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	24	2	16	13	2	2	2	11	14	2	2
Cap, veh/h	565	593		348	271	505	832	1467	608	39	698	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.38	0.24	0.41	0.41	0.02	0.20	0.00
Sat Flow, veh/h	1343	1544	0	755	707	1317	3456	3554	1472	1612	3554	1585
Grp Volume(v), veh/h	455	5	0	44	0	40	707	843	12	10	614	0
Grp Sat Flow(s), veh/h/ln	1343	1544	0	1462	0	1317	1728	1777	1472	1612	1777	1585
Q Serve(g_s), s	30.9	0.2	0.0	0.0	0.0	1.8	18.5	17.3	0.5	0.6	15.9	0.0
Cycle Q Clear(g_c), s	32.8	0.2	0.0	1.5	0.0	1.8	18.5	17.3	0.5	0.6	15.9	0.0
Prop In Lane	1.00		0.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	565	593		619	0	505	832	1467	608	39	698	
V/C Ratio(X)	0.81	0.01		0.07	0.00	0.08	0.85	0.57	0.02	0.25	0.88	
Avail Cap(c_a), veh/h	1086	1192		1182	0	1016	1183	1467	608	178	698	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.0	18.1	0.0	18.5	0.0	18.6	34.4	21.5	16.5	45.5	37.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.0	0.1	4.3	1.6	0.1	3.3	14.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.0	0.6	0.0	0.6	7.8	6.9	0.2	0.3	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	18.1	0.0	18.6	0.0	18.7	38.7	23.1	16.6	48.8	51.8	0.0
LnGrp LOS	C	B		B		B	D	C	B	D	D	
Approach Vol, veh/h		460			84			1562			624	
Approach Delay, s/veh		31.6			18.6			30.1			51.7	
Approach LOS		C			B			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	38.4	24.5		42.1	7.8	45.0		42.1				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	32.5	17.2		73.3	10.5	39.2		73.3				
Max Q Clear Time (g_c+20), s	20.5	17.9		34.8	2.6	19.3		3.8				
Green Ext Time (p_c), s	2.3	0.0		1.7	0.0	9.7		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C

Notes

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

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

Parcel 12C

Build AM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱	↰	→	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	314	27	364	88	9	69	135	186	1295	100	45	1731	113
Future Volume (veh/h)	314	27	364	88	9	69	135	186	1295	100	45	1731	113
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99		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	1826	1870	1826
Adj Flow Rate, veh/h	361	31	418	101	10	79		214	1489	115	52	1990	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2		2	2	2	5	2	5
Cap, veh/h	276	23	314	60	38	301		231	2449	1091	204	1946	
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21		0.10	0.69	0.69	0.55	0.55	0.00
Sat Flow, veh/h	1298	110	1477	941	180	1419		1781	3554	1583	309	3554	1547
Grp Volume(v), veh/h	361	0	449	101	0	89		214	1489	115	52	1990	0
Grp Sat Flow(s), veh/h/ln	1298	0	1587	941	0	1598		1781	1777	1583	309	1777	1547
Q Serve(g_s), s	19.9	0.0	25.5	0.0	0.0	5.6		10.2	26.9	2.9	13.0	65.7	0.0
Cycle Q Clear(g_c), s	25.5	0.0	25.5	25.5	0.0	5.6		10.2	26.9	2.9	22.9	65.7	0.0
Prop In Lane	1.00		0.93	1.00		0.89		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	337	60	0	340		231	2449	1091	204	1946	
V/C Ratio(X)	1.31	0.00	1.33	1.68	0.00	0.26		0.93	0.61	0.11	0.26	1.02	
Avail Cap(c_a), veh/h	276	0	337	60	0	340		231	2449	1091	204	1946	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.2	0.0	47.3	60.0	0.0	39.4		40.8	10.0	6.3	20.6	27.1	0.0
Incr Delay (d2), s/veh	163.3	0.0	168.1	369.1	0.0	0.4		39.9	1.1	0.2	3.0	26.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.9	0.0	25.7	8.0	0.0	2.3		8.7	9.1	0.9	1.1	32.0	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	215.5	0.0	215.4	429.1	0.0	39.8		80.7	11.1	6.4	23.7	53.5	0.0
LnGrp LOS	F		F	F		D		F	B	A	C	F	
Approach Vol, veh/h	810			190				1818			2042		
Approach Delay, s/veh	215.4			246.7				19.0			52.8		
Approach LOS	F			F				B			D		
Timer - Assigned Phs	1	2		4		6		8					
Phs Duration (G+Y+Rc), s	7.0	72.0		31.0		89.0		31.0					
Change Period (Y+Rc), s	5.5	6.3		5.5		6.3		5.5					
Max Green Setting (Gmax), s	11.5	65.7		25.5		82.7		25.5					
Max Q Clear Time (g_c+1.2), s	11.2	67.7		27.5		28.9		27.5					
Green Ext Time (p_c), s	0.0	0.0		0.0		45.5		0.0					

Intersection Summary

HCM 7th Control Delay, s/veh 74.8

HCM 7th LOS E

Notes

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

User approved ignoring U-Turning movement.

Parcel 12C

Build AM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024

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

DRAFT

Parcel 12C

Build AM (2028)

4: Site Access 1/Innovation Drive & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑	↱		↰	↑	↱	↰	↑	↱		
Traffic Volume (veh/h)	266	1537	69	89	940	22	56	1	62	26	0	127
Future Volume (veh/h)	266	1537	69	89	940	22	56	1	62	26	0	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	296	1708	77	99	1044	0	62	1	69	29	0	141
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	2441	109	133	1247		175	4	244	239	0	247
Arrive On Green	0.07	0.70	0.70	0.57	0.57	0.00	0.16	0.16	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1781	3464	155	141	2207	1585	1248	23	1566	1331	0	1585
Grp Volume(v), veh/h	296	872	913	368	775	0	62	0	70	29	0	141
Grp Sat Flow(s), veh/h/ln	1781	1777	1842	731	1617	1585	1248	0	1589	1331	0	1585
Q Serve(g_s), s	6.0	24.4	24.9	24.2	34.4	0.0	4.2	0.0	3.3	1.7	0.0	7.1
Cycle Q Clear(g_c), s	6.0	24.4	24.9	37.2	34.4	0.0	11.2	0.0	3.3	5.0	0.0	7.1
Prop In Lane	1.00		0.08	0.27		1.00	1.00		0.99	1.00		1.00
Lane Grp Cap(c), veh/h	297	1252	1298	466	914		175	0	247	239	0	247
V/C Ratio(X)	1.00	0.70	0.70	0.79	0.85		0.35	0.00	0.28	0.12	0.00	0.57
Avail Cap(c_a), veh/h	297	1282	1330	478	941		213	0	296	280	0	295
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	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	7.4	7.4	14.6	15.6	0.0	38.8	0.0	32.0	34.3	0.0	33.6
Incr Delay (d2), s/veh	51.3	1.6	1.7	8.4	7.2	0.0	1.2	0.0	0.6	0.2	0.0	2.1
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	7.3	6.5	6.9	6.0	12.0	0.0	1.3	0.0	1.3	0.6	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	70.4	9.0	9.1	23.1	22.8	0.0	40.0	0.0	32.7	34.5	0.0	35.7
LnGrp LOS	E	A	A	C	C		D		C	C		D
Approach Vol, veh/h	2081			1143			132			170		
Approach Delay, s/veh	17.8			22.9			36.1			35.5		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2		4			6		8			
Phs Duration (G+Y+Rc), s	2.0	54.5		19.4			66.5		19.4			
Change Period (Y+Rc), s	6.0	6.0		6.0			6.0		6.0			
Max Green Setting (Gmax), s	6.0	50.0		16.0			62.0		16.0			
Max Q Clear Time (g_c+1.0), s	6.0	39.2		13.2			26.9		9.1			
Green Ext Time (p_c), s	0.0	9.4		0.1			32.8		0.5			

Intersection Summary

HCM 7th Control Delay, s/veh 21.0

HCM 7th LOS C

Notes

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

Parcel 12C

Build AM (2028)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷		↶	↷	↰	↶	↷
Traffic Volume (veh/h)	13	1600	16	105	926	77	62	14	162	119	11	39
Future Volume (veh/h)	13	1600	16	105	926	77	62	14	162	119	11	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1856	1870	1870	1870	1870	1737	1870
Adj Flow Rate, veh/h	14	1758	0	115	1018	0	68	15	0	131	12	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	3	2	2	2	2	11	2
Cap, veh/h	324	2163		324	2163		143	27		231	36	130
Arrive On Green	0.15	0.61	0.00	0.15	0.61	0.00	0.10	0.11	0.00	0.11	0.11	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1572	769	245	1585	1398	332	1190
Grp Volume(v), veh/h	14	1758	0	115	1018	0	83	0	0	131	0	55
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1572	1014	0	1585	1398	0	1523
Q Serve(g_s), s	0.8	42.2	0.0	6.6	17.3	0.0	5.8	0.0	0.0	0.0	0.0	3.7
Cycle Q Clear(g_c), s	0.8	42.2	0.0	6.6	17.3	0.0	9.5	0.0	0.0	9.1	0.0	3.7
Prop In Lane	1.00		1.00	1.00		1.00	0.82		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	2163		0	2163		160	0		231	0	166
V/C Ratio(X)	0.00	0.81		0.00	0.47		0.52	0.00		0.57	0.00	0.33
Avail Cap(c_a), veh/h	0	2194		0	2194		160	0		231	0	166
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	0.0	0.0	11.8	0.0	49.6	0.0	0.0	47.8	0.0	45.8
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.0	0.2	0.0	2.3	0.0	0.0	2.8	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.4	0.0	0.0	6.1	0.0	2.4	0.0	0.0	3.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	19.2	0.0	0.0	12.0	0.0	52.0	0.0	0.0	50.5	0.0	46.6
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1772			1133			83			186		
Approach Delay, s/veh	19.0			10.8			52.0			49.4		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	72.1		17.0	21.1	72.1		17.0				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	67	* 67		10.9	* 67	* 67		10.9				
Max Q Clear Time (g_c+1.0), s	11.1	44.2		11.1	2.8	19.3		11.5				
Green Ext Time (p_c), s	0.5	21.8		0.0	0.0	28.5		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 18.7

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Build AM (2028)

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱	↰	↱		↰	↱	
Traffic Volume (veh/h)	3	1789	89	74	1036	4	66	0	73	8	0	5
Future Volume (veh/h)	3	1789	89	74	1036	4	66	0	73	8	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	3	1988	99	82	1151	4	73	0	81	9	0	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	398	2237	998	283	2736	1220	267	0	203	197	0	203
Arrive On Green	0.63	0.63	0.63	0.09	0.77	0.77	0.13	0.00	0.10	0.13	0.00	0.10
Sat Flow, veh/h	487	3554	1585	1781	3554	1585	1410	0	1585	1317	0	1585
Grp Volume(v), veh/h	3	1988	99	82	1151	4	73	0	81	9	0	6
Grp Sat Flow(s),veh/h/ln	487	1777	1585	1781	1777	1585	1410	0	1585	1317	0	1585
Q Serve(g_s), s	0.2	36.8	1.9	1.1	8.6	0.0	3.7	0.0	3.7	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.2	36.8	1.9	1.1	8.6	0.0	4.0	0.0	3.7	4.2	0.0	0.3
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	398	2237	998	283	2736	1220	267	0	203	197	0	203
V/C Ratio(X)	0.01	0.89	0.10	0.29	0.42	0.00	0.27	0.00	0.40	0.05	0.00	0.03
Avail Cap(c_a), veh/h	409	2317	1033	306	2862	1277	610	0	588	517	0	588
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.4	12.2	5.7	16.4	3.1	2.1	31.6	0.0	32.3	33.3	0.0	30.7
Incr Delay (d2), s/veh	0.0	4.6	0.0	0.6	0.1	0.0	0.5	0.0	1.3	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.5	0.5	0.9	1.2	0.0	1.3	0.0	1.5	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.4	16.8	5.8	16.9	3.2	2.1	32.2	0.0	33.6	33.4	0.0	30.8
LnGrp LOS	A	B	A	B	A	A	C		C	C		C
Approach Vol, veh/h	2090			1237			154			15		
Approach Delay, s/veh	16.2			4.1			32.9			32.4		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	1.0	53.2		14.0		64.2		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	49.0		27.0		61.0		27.0				
Max Q Clear Time (g_c+I1), s	13.1	38.8		6.2		10.6		6.0				
Green Ext Time (p_c), s	0.0	8.4		0.0		10.0		0.6				
Intersection Summary												
HCM 7th Control Delay, s/veh				12.7								
HCM 7th LOS				B								

Parcel 12C
7: Lake Point Dr & Site Access 2

Build AM (2028)
09/25/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	4		4	4
Traffic Vol, veh/h	22	618	191	110	78	17
Future Vol, veh/h	22	618	191	110	78	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	687	212	122	87	19
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	334	0	-	0	1009	273
Stage 1	-	-	-	-	273	-
Stage 2	-	-	-	-	736	-
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	1225	-	-	-	266	765
Stage 1	-	-	-	-	773	-
Stage 2	-	-	-	-	474	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1225	-	-	-	258	765
Mov Cap-2 Maneuver	-	-	-	-	258	-
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	474	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.27	0		23.02		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	62	-	-	-	258	765
HCM Lane V/C Ratio	0.02	-	-	-	0.336	0.025
HCM Control Delay (s/veh)	8	0	-	-	25.9	9.8
HCM Lane LOS	A	A	-	-	D	A
HCM 95th %tile Q(veh)	0.1	-	-	-	1.4	0.1

Parcel 12C

Build PM (2028)

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	238	5	0	1	366	956	6	16	1070	192
Future Volume (veh/h)	248	0	238	5	0	1	366	956	6	16	1070	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	258	0	248	5	0	1	381	996	6	17	1115	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	0	305	146	0	305	444	2277	1011	325	1444	
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.16	0.64	0.64	0.41	0.41	0.00
Sat Flow, veh/h	1414	0	1578	250	0	1578	1781	3554	1578	561	3554	1585
Grp Volume(v), veh/h	258	0	248	5	0	1	381	996	6	17	1115	0
Grp Sat Flow(s),veh/h/ln	1414	0	1578	250	0	1578	1781	1777	1578	561	1777	1585
Q Serve(g_s), s	0.0	0.0	11.2	0.3	0.0	0.0	8.8	10.4	0.1	1.4	20.1	0.0
Cycle Q Clear(g_c), s	10.2	0.0	11.2	11.5	0.0	0.0	8.8	10.4	0.1	1.4	20.1	0.0
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	426	0	305	146	0	305	444	2277	1011	325	1444	
V/C Ratio(X)	0.60	0.00	0.81	0.03	0.00	0.00	0.86	0.44	0.01	0.05	0.77	
Avail Cap(c_a), veh/h	548	0	441	243	0	441	602	2732	1213	347	1582	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	0.0	28.6	34.1	0.0	24.1	14.2	6.6	4.8	13.5	19.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	7.4	0.1	0.0	0.0	9.1	0.0	0.0	0.0	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	4.7	0.1	0.0	0.0	3.8	2.7	0.0	0.2	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	0.0	36.1	34.2	0.0	24.1	23.4	6.7	4.8	13.5	20.9	0.0
LnGrp LOS	C		D	C		C	C	A	A	B	C	
Approach Vol, veh/h	506			6			1383			1132		
Approach Delay, s/veh	32.8			32.5			11.3			20.8		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	53.5			20.6		17.4	36.1		20.6			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	57.0			20.7		18.2	33.0		20.7			
Max Q Clear Time (g_c+I1), s	12.4			13.2		10.8	22.1		13.5			
Green Ext Time (p_c), s	17.8			1.2		0.8	8.0		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				18.5								
HCM 7th LOS				B								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Build PM (2028)

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↰	→	↱	↰	→	↱
Traffic Volume (veh/h)	381	10	912	12	11	27	902	869	23	40	713	510
Future Volume (veh/h)	381	10	912	12	11	27	902	869	23	40	713	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1722	1870	1752	1737	1767	1870	1870	1870	1767	1870	1870
Adj Flow Rate, veh/h	389	10	0	12	11	28	920	887	23	41	728	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	12	2	10	11	9	2	2	2	9	2	2
Cap, veh/h	480	544		282	242	423	926	1627	726	111	909	
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.27	0.46	0.46	0.07	0.26	0.00
Sat Flow, veh/h	1368	1722	0	731	764	1340	3456	3554	1585	1682	3554	1585
Grp Volume(v), veh/h	389	10	0	23	0	28	920	887	23	41	728	0
Grp Sat Flow(s), veh/h/ln	1368	1722	0	1495	0	1340	1728	1777	1585	1682	1777	1585
Q Serve(g_s), s	29.5	0.4	0.0	0.0	0.0	1.6	28.2	19.2	0.8	2.5	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.4	0.0	1.0	0.0	1.6	28.2	19.2	0.8	2.5	20.4	0.0
Prop In Lane	1.00		0.00	0.52		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	480	544		524	0	423	926	1627	726	111	909	
V/C Ratio(X)	0.81	0.02		0.04	0.00	0.07	0.99	0.55	0.03	0.37	0.80	
Avail Cap(c_a), veh/h	528	604		576	0	470	926	1627	726	166	909	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	25.0	0.0	25.2	0.0	25.4	38.8	20.8	15.9	47.5	37.0	0.0
Incr Delay (d2), s/veh	8.5	0.0	0.0	0.0	0.0	0.1	27.8	1.3	0.1	2.0	7.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.2	0.0	0.4	0.0	0.5	14.9	7.7	0.3	1.1	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.8	25.0	0.0	25.2	0.0	25.5	66.6	22.1	15.9	49.6	44.4	0.0
LnGrp LOS	D	C		C		C	E	C	B	D	D	
Approach Vol, veh/h	399			51			1830			769		
Approach Delay, s/veh	44.3			25.4			44.4			44.6		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.0	33.0		39.3	12.5	54.5		39.3				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	28.5	27.2		37.3	10.5	45.2		37.3				
Max Q Clear Time (g_c+10), s	10.2	22.4		33.0	4.5	21.2		3.6				
Green Ext Time (p_c), s	0.0	2.9		0.6	0.0	11.4		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 44.1

HCM 7th LOS D

Notes

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

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

Parcel 12C

Build PM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	148	13	232	63	13	85	41	339	1739	117	38	1574	281
Future Volume (veh/h)	148	13	232	63	13	85	41	339	1739	117	38	1574	281
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
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	154	14	242	66	14	89		353	1811	122	40	1640	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2		2	2	2	2	2	2
Cap, veh/h	259	18	319	123	46	295		338	2479	1106	144	1823	
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21		0.14	0.70	0.70	0.51	0.51	0.00
Sat Flow, veh/h	1289	87	1507	1122	219	1395		1781	3554	1585	230	3554	1585
Grp Volume(v), veh/h	154	0	256	66	0	103		353	1811	122	40	1640	0
Grp Sat Flow(s),veh/h/ln	1289	0	1594	1122	0	1615		1781	1777	1585	230	1777	1585
Q Serve(g_s), s	14.9	0.0	19.6	7.6	0.0	7.0		18.5	40.8	3.3	16.9	54.2	0.0
Cycle Q Clear(g_c), s	21.8	0.0	19.6	27.2	0.0	7.0		18.5	40.8	3.3	33.7	54.2	0.0
Prop In Lane	1.00		0.95	1.00		0.86		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	0	337	123	0	342		338	2479	1106	144	1823	
V/C Ratio(X)	0.60	0.00	0.76	0.53	0.00	0.30		1.04	0.73	0.11	0.28	0.90	
Avail Cap(c_a), veh/h	259	0	337	123	0	342		338	2479	1106	144	1823	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.4	0.0	48.1	60.9	0.0	43.2		42.2	12.1	6.4	29.9	28.6	0.0
Incr Delay (d2), s/veh	3.7	0.0	9.6	4.4	0.0	0.5		60.8	1.9	0.2	4.8	7.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	8.7	2.3	0.0	2.9		16.4	14.3	1.0	1.1	23.3	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	56.0	0.0	57.8	65.4	0.0	43.7		103.0	14.0	6.6	34.7	36.2	0.0
LnGrp LOS	E		E	E		D		F	B	A	C	D	
Approach Vol, veh/h	410				169				2286		1680		
Approach Delay, s/veh	57.1				52.1				27.4		36.1		
Approach LOS	E				D				C		D		
Timer - Assigned Phs	1	2	4		6		8						
Phs Duration (G+Y+Rc), s	34.0	73.0	33.0		97.0		33.0						
Change Period (Y+Rc), s	5.5	6.3	5.5		6.3		5.5						
Max Green Setting (Gmax), s	10.5	66.7	27.5		90.7		27.5						
Max Q Clear Time (g_c+20), s	10.5	56.2	29.2		42.8		23.8						
Green Ext Time (p_c), s	0.0	10.2	0.0		45.2		0.6						

Intersection Summary

HCM 7th Control Delay, s/veh	34.2
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
 User approved ignoring U-Turning movement.

Parcel 12C

Build PM (2028)

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024

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

DRAFT

Parcel 12C

Build PM (2028)

09/25/2024

4: Site Access 1/Innovation Drive & Bluffton Parkway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰	↱	↰	↱		↰	↱	
Traffic Volume (veh/h)	356	1155	79	114	1312	24	97	1	82	61	1	416
Future Volume (veh/h)	356	1155	79	114	1312	24	97	1	82	61	1	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	379	1229	84	121	1396	0	103	1	87	65	1	443
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	2325	159	142	1398		80	3	279	250	1	281
Arrive On Green	0.10	0.69	0.69	0.52	0.52	0.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	3375	230	182	2676	1585	946	18	1570	1309	4	1582
Grp Volume(v), veh/h	379	646	667	703	814	0	103	0	88	65	0	444
Grp Sat Flow(s), veh/h/ln	1781	1777	1829	1241	1617	1585	946	0	1588	1309	0	1586
Q Serve(g_s), s	9.0	16.0	16.1	42.3	43.6	0.0	0.0	0.0	4.3	4.1	0.0	16.0
Cycle Q Clear(g_c), s	9.0	16.0	16.1	47.0	43.6	0.0	16.0	0.0	4.3	8.4	0.0	16.0
Prop In Lane	1.00		0.13	0.17		1.00	1.00		0.99	1.00		1.00
Lane Grp Cap(c), veh/h	273	1224	1260	695	844		80	0	282	250	0	282
V/C Ratio(X)	1.39	0.53	0.53	1.01	0.96		1.29	0.00	0.31	0.26	0.00	1.58
Avail Cap(c_a), veh/h	273	1224	1260	695	844		80	0	282	250	0	282
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	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	6.8	6.9	22.0	20.7	0.0	45.0	0.0	32.2	35.9	0.0	37.0
Incr Delay (d2), s/veh	196.5	0.4	0.4	37.0	22.6	0.0	195.9	0.0	0.6	0.5	0.0	275.2
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	17.5	4.4	4.6	20.1	19.0	0.0	6.1	0.0	1.7	1.3	0.0	27.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	223.5	7.3	7.3	59.0	43.3	0.0	240.9	0.0	32.8	36.4	0.0	312.2
LnGrp LOS	F	A	A	F	D		F		C	D		F
Approach Vol, veh/h	1692			1517			191			509		
Approach Delay, s/veh	55.7			50.6			145.0			277.0		
Approach LOS	E			D			F			F		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	15.0	53.0		22.0		68.0		22.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	47.0			16.0		62.0		16.0				
Max Q Clear Time (g_c+1), s	49.0			18.0		18.1		18.0				
Green Ext Time (p_c), s	0.0	0.0		0.0		32.4		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 86.9

HCM 7th LOS F

Notes

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

Parcel 12C

Build PM (2028)

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷		↶	↷	↰	↷	
Traffic Volume (veh/h)	18	1334	52	174	1569	135	44	0	158	88	11	19
Future Volume (veh/h)	18	1334	52	174	1569	135	44	0	158	88	11	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1811
Adj Flow Rate, veh/h	19	1375	0	179	1618	0	45	0	0	91	11	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	6
Cap, veh/h	383	2025		383	2025		183	0		231	57	104
Arrive On Green	0.17	0.57	0.00	0.17	0.57	0.00	0.08	0.00	0.00	0.10	0.10	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1095	0	1585	1414	593	1079
Grp Volume(v), veh/h	19	1375	0	179	1618	0	45	0	0	91	0	31
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1095	0	1585	1414	0	1672
Q Serve(g_s), s	0.9	25.3	0.0	8.9	33.5	0.0	2.9	0.0	0.0	0.0	0.0	1.6
Cycle Q Clear(g_c), s	0.9	25.3	0.0	8.9	33.5	0.0	4.5	0.0	0.0	4.5	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	0	2025		0	2025		170	0		231	0	161
V/C Ratio(X)	0.00	0.68		0.00	0.80		0.26	0.00		0.39	0.00	0.19
Avail Cap(c_a), veh/h	0	2059		0	2059		200	0		262	0	197
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.1	0.0	0.0	15.8	0.0	41.4	0.0	0.0	40.1	0.0	39.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.4	0.0	0.6	0.0	0.0	0.8	0.0	0.4
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	0.0	8.7	0.0	0.0	11.9	0.0	1.0	0.0	0.0	2.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	15.0	0.0	0.0	18.2	0.0	42.0	0.0	0.0	40.9	0.0	39.5
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1394			1797			45			122		
Approach Delay, s/veh	14.8			16.4			42.0			40.5		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.1	58.1		14.0	21.1	58.1		14.0				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	53	* 53		9.9	* 53	* 53		9.9				
Max Q Clear Time (g_c+10), s	27.3			6.5	2.9	35.5		6.5				
Green Ext Time (p_c), s	0.7	22.3		0.1	0.0	16.5		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 16.9

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Build PM (2028)

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱	↰	↑	↱	↰	↑	↱
Traffic Volume (veh/h)	6	1467	111	103	1714	10	89	0	101	7	0	4
Future Volume (veh/h)	6	1467	111	103	1714	10	89	0	101	7	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	7	1630	123	114	1904	11	99	0	112	8	0	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	1993	889	354	2594	1157	317	0	238	216	0	238
Arrive On Green	0.56	0.56	0.56	0.11	0.73	0.73	0.15	0.00	0.12	0.15	0.00	0.12
Sat Flow, veh/h	234	3554	1585	1781	3554	1585	1412	0	1585	1281	0	1585
Grp Volume(v), veh/h	7	1630	123	114	1904	11	99	0	112	8	0	4
Grp Sat Flow(s),veh/h/ln	234	1777	1585	1781	1777	1585	1412	0	1585	1281	0	1585
Q Serve(g_s), s	1.2	24.8	2.5	1.5	20.8	0.1	4.3	0.0	4.4	0.4	0.0	0.1
Cycle Q Clear(g_c), s	10.7	24.8	2.5	1.5	20.8	0.1	4.4	0.0	4.4	4.8	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	1993	889	354	2594	1157	317	0	238	216	0	238
V/C Ratio(X)	0.03	0.82	0.14	0.32	0.73	0.01	0.31	0.00	0.47	0.04	0.00	0.02
Avail Cap(c_a), veh/h	219	2186	975	373	2825	1260	719	0	690	581	0	690
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	11.9	7.0	11.5	5.2	2.4	26.0	0.0	26.9	28.1	0.0	25.0
Incr Delay (d2), s/veh	0.1	2.4	0.1	0.5	0.9	0.0	0.6	0.0	1.4	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.5	0.6	0.7	3.3	0.0	1.4	0.0	1.7	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.7	14.2	7.0	12.0	6.2	2.5	26.6	0.0	28.3	28.2	0.0	25.0
LnGrp LOS	B	B	A	B	A	A	C		C	C		C
Approach Vol, veh/h	1760			2029			211			12		
Approach Delay, s/veh	13.7			6.5			27.5			27.1		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.3	41.4		14.0		52.7		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	39.0	39.0		27.0		51.0		27.0				
Max Q Clear Time (g_c+13.5), s	13.5	26.8		6.8		22.8		6.4				
Green Ext Time (p_c), s	0.1	8.6		0.0		17.6		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	10.8											
HCM 7th LOS	B											

Parcel 12C
7: Lake Point Dr & Site Access 2

Build PM (2028)
09/25/2024

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		4	1		1	1
Traffic Vol, veh/h	16	310	178	79	82	18
Future Vol, veh/h	16	310	178	79	82	18
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	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	344	198	88	91	20
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	286	0	-	0	622	242
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	380	-
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	1277	-	-	-	451	797
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1277	-	-	-	443	797
Mov Cap-2 Maneuver	-	-	-	-	443	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	691	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.39	0		14.22		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	88	-	-	-	443	797
HCM Lane V/C Ratio	0.014	-	-	-	0.206	0.025
HCM Control Delay (s/veh)	7.9	0	-	-	15.2	9.6
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0	-	-	-	0.8	0.1

2028 Build Improved Conditions

Draft

Parcel 12C

Build AM (2028) - Improved

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	1	115	9	4	7	223	1169	6	6	726	113
Future Volume (veh/h)	123	1	115	9	4	7	223	1169	6	6	726	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1841	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	138	1	129	10	4	8	251	1313	7	7	816	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	4	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	2	208	157	47	210	515	2355	1050	309	1614	
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.66	0.66	0.45	0.45	0.00
Sat Flow, veh/h	1412	12	1575	412	352	1585	1781	3554	1585	416	3554	1585
Grp Volume(v), veh/h	138	0	130	14	0	8	251	1313	7	7	816	0
Grp Sat Flow(s),veh/h/ln	1412	0	1587	763	0	1585	1781	1777	1585	416	1777	1585
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	0.3	4.3	11.9	0.1	0.6	9.8	0.0
Cycle Q Clear(g_c), s	4.7	0.0	4.6	4.7	0.0	0.3	4.3	11.9	0.1	0.6	9.8	0.0
Prop In Lane	1.00		0.99	0.71		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	210	204	0	210	515	2355	1050	309	1614	
V/C Ratio(X)	0.42	0.00	0.62	0.07	0.00	0.04	0.49	0.56	0.01	0.02	0.51	
Avail Cap(c_a), veh/h	580	0	495	453	0	494	826	3494	1559	369	2132	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.6	0.0	24.6	22.9	0.0	22.7	7.8	5.4	3.4	9.1	11.6	0.0
Incr Delay (d2), s/veh	0.9	0.0	3.0	0.1	0.0	0.1	0.7	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.8	0.2	0.0	0.1	1.2	2.2	0.0	0.0	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	0.0	27.6	23.0	0.0	22.8	8.6	5.5	3.4	9.1	11.7	0.0
LnGrp LOS	C		C	C		C	A	A	A	A	B	
Approach Vol, veh/h	268			22			1571			823		
Approach Delay, s/veh	26.5			22.9			6.0			11.7		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	45.8			14.2		12.5	33.2		14.2			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	59.0			18.7		17.2	36.0		18.7			
Max Q Clear Time (g_c+I1), s	13.9			6.7		6.3	11.8		6.7			
Green Ext Time (p_c), s	25.9			0.7		0.6	10.7		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				9.9								
HCM 7th LOS				A								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Build AM (2028) - Improved

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↱	↰	→	↱	↰	→
Traffic Volume (veh/h)	428	5	1211	23	19	38	665	792	11	9	577	332
Future Volume (veh/h)	428	5	1211	23	19	38	665	792	11	9	577	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1544	1870	1663	1707	1870	1870	1870	1737	1693	1870	1870
Adj Flow Rate, veh/h	455	5	0	24	20	40	707	843	12	10	614	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	24	2	16	13	2	2	2	11	14	2	2
Cap, veh/h	565	593		348	271	505	832	1467	608	39	698	
Arrive On Green	0.38	0.38	0.00	0.38	0.38	0.38	0.24	0.41	0.41	0.02	0.20	0.00
Sat Flow, veh/h	1343	1544	0	755	707	1317	3456	3554	1472	1612	3554	1585
Grp Volume(v), veh/h	455	5	0	44	0	40	707	843	12	10	614	0
Grp Sat Flow(s), veh/h/ln	1343	1544	0	1462	0	1317	1728	1777	1472	1612	1777	1585
Q Serve(g_s), s	30.9	0.2	0.0	0.0	0.0	1.8	18.5	17.3	0.5	0.6	15.9	0.0
Cycle Q Clear(g_c), s	32.8	0.2	0.0	1.5	0.0	1.8	18.5	17.3	0.5	0.6	15.9	0.0
Prop In Lane	1.00		0.00	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	565	593		619	0	505	832	1467	608	39	698	
V/C Ratio(X)	0.81	0.01		0.07	0.00	0.08	0.85	0.57	0.02	0.25	0.88	
Avail Cap(c_a), veh/h	1086	1192		1182	0	1016	1183	1467	608	178	698	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.0	18.1	0.0	18.5	0.0	18.6	34.4	21.5	16.5	45.5	37.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.0	0.1	4.3	1.6	0.1	3.3	14.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.0	0.6	0.0	0.6	7.8	6.9	0.2	0.3	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	18.1	0.0	18.6	0.0	18.7	38.7	23.1	16.6	48.8	51.8	0.0
LnGrp LOS	C	B		B		B	D	C	B	D	D	
Approach Vol, veh/h	460			84			1562			624		
Approach Delay, s/veh	31.6			18.6			30.1			51.7		
Approach LOS	C			B			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	38.4	24.5		42.1	7.8	45.0		42.1				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	32.5	17.2		73.3	10.5	39.2		73.3				
Max Q Clear Time (g_c+20), s	20.5	17.9		34.8	2.6	19.3		3.8				
Green Ext Time (p_c), s	2.3	0.0		1.7	0.0	9.7		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh 34.9

HCM 7th LOS C

Notes

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

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

Parcel 12C

Build AM (2028) - Improved

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱	↱		↰	↱	↰	↰	↱	↰
Traffic Volume (veh/h)	314	27	364	88	9	69	135	186	1295	100	45	1731	113
Future Volume (veh/h)	314	27	364	88	9	69	135	186	1295	100	45	1731	113
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.98		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	1826	1870	1826
Adj Flow Rate, veh/h	361	0	439	101	10	79		214	1489	115	52	1990	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2		2	2	2	5	2	5
Cap, veh/h	392	0	924	196	27	217		310	2309	1028	174	1902	
Arrive On Green	0.12	0.00	0.30	0.15	0.15	0.14		0.09	0.65	0.65	0.54	0.54	0.00
Sat Flow, veh/h	1781	0	3132	943	179	1412		3456	3554	1583	309	3554	1547
Grp Volume(v), veh/h	361	0	439	101	0	89		214	1489	115	52	1990	0
Grp Sat Flow(s), veh/h/ln	1781	0	1566	943	0	1591		1728	1777	1583	309	1777	1547
Q Serve(g_s), s	16.5	0.0	16.2	14.3	0.0	7.2		8.5	35.7	3.9	17.2	75.5	0.0
Cycle Q Clear(g_c), s	16.5	0.0	16.2	14.3	0.0	7.2		8.5	35.7	3.9	36.7	75.5	0.0
Prop In Lane	1.00		1.00	1.00		0.89		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	0	924	196	0	244		310	2309	1028	174	1902	
V/C Ratio(X)	0.92	0.00	0.47	0.52	0.00	0.36		0.69	0.64	0.11	0.30	1.05	
Avail Cap(c_a), veh/h	392	0	1121	255	0	344		355	2309	1028	174	1902	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.7	0.0	40.8	56.7	0.0	54.4		62.3	14.9	9.3	30.8	32.8	0.0
Incr Delay (d2), s/veh	26.7	0.0	0.4	2.1	0.0	0.9		4.7	1.4	0.2	4.4	34.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	6.4	3.6	0.0	3.0		3.9	13.5	1.3	1.5	39.0	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	77.3	0.0	41.2	58.8	0.0	55.3		67.0	16.3	9.6	35.2	66.8	0.0
LnGrp LOS	E		D	E		E		E	B	A	D	F	
Approach Vol, veh/h	800			190				1818			2042		
Approach Delay, s/veh	57.5			57.1				21.9			66.0		
Approach LOS	E			E				C			E		
Timer - Assigned Phs	1	2	3	4		6		8					
Phs Duration (G+Y+Rc), s	16.2	79.8	20.0	25.1		96.0		45.1					
Change Period (Y+Rc), s	5.5	6.3	5.5	5.5		6.3		5.5					
Max Green Setting (Gmax), s	12.5	71.7	14.5	28.5		89.7		48.5					
Max Q Clear Time (g_c+10), s	10.5	77.5	18.5	16.3		37.7		18.2					
Green Ext Time (p_c), s	0.2	0.0	0.0	0.6		44.2		1.9					

Intersection Summary

HCM 7th Control Delay, s/veh 47.7

HCM 7th LOS D

Notes

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

User approved volume balancing among the lanes for turning movement.

Parcel 12C

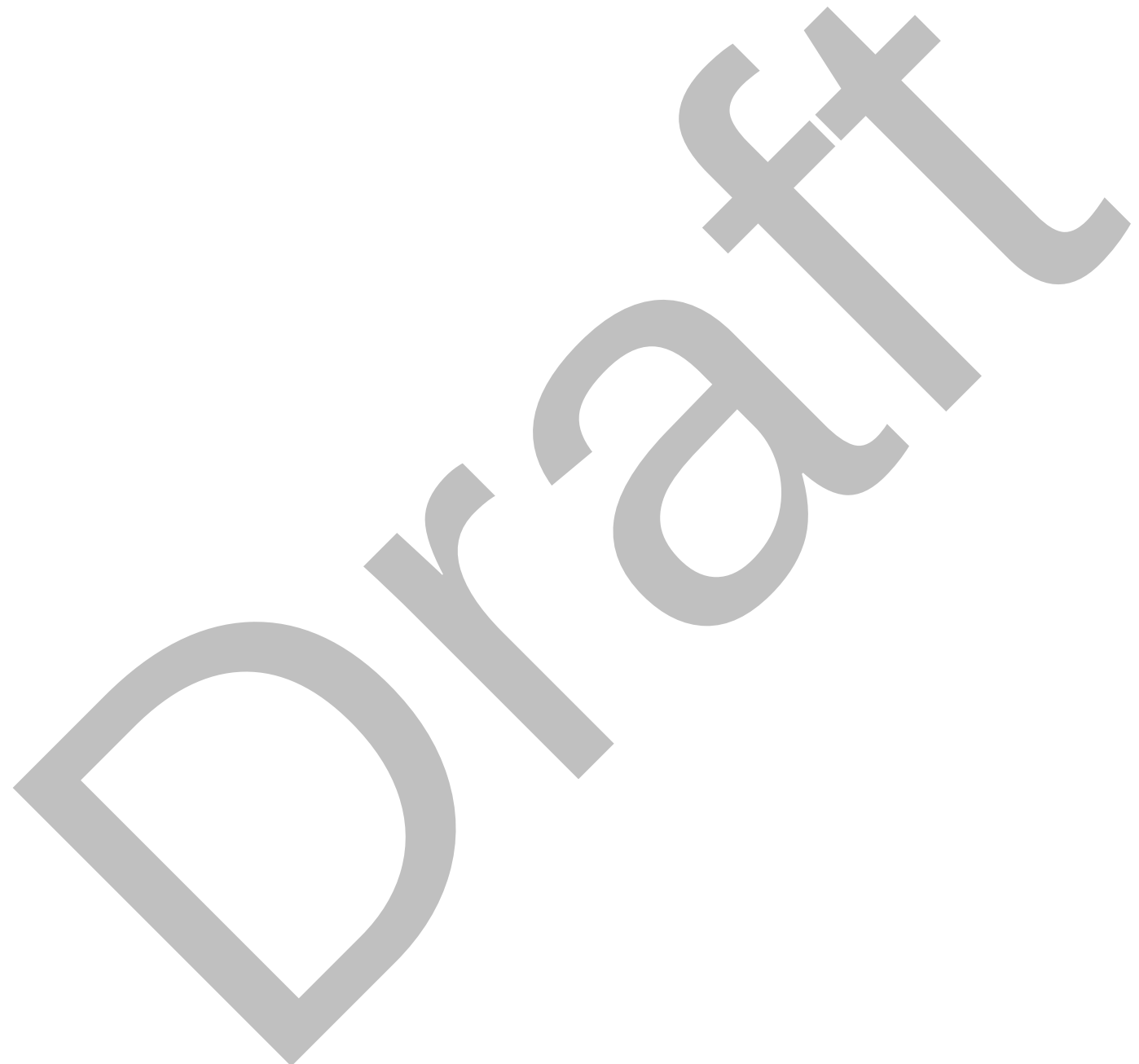
Build AM (2028) - Improved

3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

09/25/2024

User approved ignoring U-Turning movement.

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



Parcel 12C

Build AM (2028) - Improved

4: Site Access 1/Innovation Drive & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶	↷	↰	↶	↷	↰	↶	↷	↰	↶	↷
Traffic Volume (veh/h)	266	1537	69	89	940	22	56	1	62	26	0	127
Future Volume (veh/h)	266	1537	69	89	940	22	56	1	62	26	0	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	296	1708	77	99	1044	0	62	1	69	29	0	141
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	478	2234	996	266	2007		224	2	167	178	200	329
Arrive On Green	0.10	0.63	0.63	0.06	0.56	0.00	0.11	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1248	23	1566	1331	1870	1585
Grp Volume(v), veh/h	296	1708	77	99	1044	0	62	0	70	29	0	141
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1248	0	1589	1331	1870	1585
Q Serve(g_s), s	5.3	27.2	1.5	1.5	14.3	0.0	3.7	0.0	3.3	1.6	0.0	6.1
Cycle Q Clear(g_c), s	5.3	27.2	1.5	1.5	14.3	0.0	3.7	0.0	3.3	4.9	0.0	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Lane Grp Cap(c), veh/h	478	2234	996	266	2007		224	0	170	178	200	329
V/C Ratio(X)	0.62	0.76	0.08	0.37	0.52		0.28	0.00	0.41	0.16	0.00	0.43
Avail Cap(c_a), veh/h	726	2291	1022	313	2007		343	0	321	305	378	480
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	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	10.5	5.7	11.6	10.6	0.0	33.2	0.0	33.0	35.3	0.0	27.3
Incr Delay (d2), s/veh	1.3	1.6	0.0	0.9	0.2	0.0	0.7	0.0	1.6	0.4	0.0	0.9
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	1.5	8.0	0.4	0.7	4.5	0.0	1.1	0.0	1.3	0.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.5	12.1	5.8	12.5	10.8	0.0	33.9	0.0	34.6	35.7	0.0	28.1
LnGrp LOS	A	B	A	B	B		C		C	D		C
Approach Vol, veh/h	2081			1143			132			170		
Approach Delay, s/veh	11.5			11.0			34.3			29.4		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.0	50.7		14.4	8.9	55.7		14.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	4.5	6.0		6.0				
Max Green Setting (Gmax), s	19.0	37.0		16.0	6.5	51.0		16.0				
Max Q Clear Time (g_c+I), s	17.3	16.3		5.7	3.5	29.2		8.1				
Green Ext Time (p_c), s	0.7	14.3		0.4	0.1	20.5		0.3				

Intersection Summary

HCM 7th Control Delay, s/veh 13.0

HCM 7th LOS B

Notes

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

Parcel 12C

Build AM (2028) - Improved

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱		↰	↱	↰	↱	
Traffic Volume (veh/h)	13	1600	16	105	926	77	62	14	162	119	11	39
Future Volume (veh/h)	13	1600	16	105	926	77	62	14	162	119	11	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1856	1870	1870	1870	1870	1737	1870
Adj Flow Rate, veh/h	14	1758	0	115	1018	0	68	15	0	131	12	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	3	2	2	2	2	11	2
Cap, veh/h	324	2163		324	2163		143	27		231	36	130
Arrive On Green	0.15	0.61	0.00	0.15	0.61	0.00	0.10	0.11	0.00	0.11	0.11	0.10
Sat Flow, veh/h	1781	3554	1585	1781	3554	1572	769	245	1585	1398	332	1190
Grp Volume(v), veh/h	14	1758	0	115	1018	0	83	0	0	131	0	55
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1572	1014	0	1585	1398	0	1523
Q Serve(g_s), s	0.8	42.2	0.0	6.6	17.3	0.0	5.8	0.0	0.0	0.0	0.0	3.7
Cycle Q Clear(g_c), s	0.8	42.2	0.0	6.6	17.3	0.0	9.5	0.0	0.0	9.1	0.0	3.7
Prop In Lane	1.00		1.00	1.00		1.00	0.82		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	2163		0	2163		160	0		231	0	166
V/C Ratio(X)	0.00	0.81		0.00	0.47		0.52	0.00		0.57	0.00	0.33
Avail Cap(c_a), veh/h	0	2194		0	2194		160	0		231	0	166
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	0.0	0.0	11.8	0.0	49.6	0.0	0.0	47.8	0.0	45.8
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.0	0.2	0.0	2.3	0.0	0.0	2.8	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.4	0.0	0.0	6.1	0.0	2.4	0.0	0.0	3.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	19.2	0.0	0.0	12.0	0.0	52.0	0.0	0.0	50.5	0.0	46.6
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1772			1133			83			186		
Approach Delay, s/veh	19.0			10.8			52.0			49.4		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	72.1		17.0	21.1	72.1		17.0				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	67	* 67		10.9	* 67	* 67		10.9				
Max Q Clear Time (g_c+1.0), s	11.1	44.2		11.1	2.8	19.3		11.5				
Green Ext Time (p_c), s	0.5	21.8		0.0	0.0	28.5		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 18.7

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Build AM (2028) - Improved

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱	↰	↱		↰	↱	
Traffic Volume (veh/h)	3	1789	89	74	1036	4	66	0	73	8	0	5
Future Volume (veh/h)	3	1789	89	74	1036	4	66	0	73	8	0	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	3	1988	99	82	1151	4	73	0	81	9	0	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	398	2237	998	283	2736	1220	267	0	203	197	0	203
Arrive On Green	0.63	0.63	0.63	0.09	0.77	0.77	0.13	0.00	0.10	0.13	0.00	0.10
Sat Flow, veh/h	487	3554	1585	1781	3554	1585	1410	0	1585	1317	0	1585
Grp Volume(v), veh/h	3	1988	99	82	1151	4	73	0	81	9	0	6
Grp Sat Flow(s), veh/h/ln	487	1777	1585	1781	1777	1585	1410	0	1585	1317	0	1585
Q Serve(g_s), s	0.2	36.8	1.9	1.1	8.6	0.0	3.7	0.0	3.7	0.5	0.0	0.3
Cycle Q Clear(g_c), s	0.2	36.8	1.9	1.1	8.6	0.0	4.0	0.0	3.7	4.2	0.0	0.3
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	398	2237	998	283	2736	1220	267	0	203	197	0	203
V/C Ratio(X)	0.01	0.89	0.10	0.29	0.42	0.00	0.27	0.00	0.40	0.05	0.00	0.03
Avail Cap(c_a), veh/h	409	2317	1033	306	2862	1277	610	0	588	517	0	588
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.4	12.2	5.7	16.4	3.1	2.1	31.6	0.0	32.3	33.3	0.0	30.7
Incr Delay (d2), s/veh	0.0	4.6	0.0	0.6	0.1	0.0	0.5	0.0	1.3	0.1	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.5	0.5	0.9	1.2	0.0	1.3	0.0	1.5	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.4	16.8	5.8	16.9	3.2	2.1	32.2	0.0	33.6	33.4	0.0	30.8
LnGrp LOS	A	B	A	B	A	A	C		C	C		C
Approach Vol, veh/h	2090			1237			154			15		
Approach Delay, s/veh	16.2			4.1			32.9			32.4		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	1.0	53.2		14.0		64.2		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	49.0		27.0		61.0		27.0				
Max Q Clear Time (g_c+I), s	1.0	38.8		6.2		10.6		6.0				
Green Ext Time (p_c), s	0.0	8.4		0.0		10.0		0.6				
Intersection Summary												
HCM 7th Control Delay, s/veh				12.7								
HCM 7th LOS				B								

Parcel 12C
7: Lake Point Dr & Site Access 2

Build AM (2028) - Improved
09/25/2024

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↱	↰	↰	↰
Traffic Vol, veh/h	22	618	191	110	78	17
Future Vol, veh/h	22	618	191	110	78	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	687	212	122	87	19

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	334	0	0 948 212
Stage 1	-	-	- 212 -
Stage 2	-	-	- 736 -
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	1225	-	- 290 828
Stage 1	-	-	- 823 -
Stage 2	-	-	- 474 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1225	-	- 280 828
Mov Cap-2 Maneuver	-	-	- 280 -
Stage 1	-	-	- 797 -
Stage 2	-	-	- 474 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	20.99
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	62	-	-	-	280	828
HCM Lane V/C Ratio	0.02	-	-	-	0.309	0.023
HCM Control Delay (s/veh)	8	0	-	-	23.5	9.5
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3	0.1

Parcel 12C

Build PM (2028) - Improved

1: Buckwalter Parkway & Buckwalter Place Boulevard

09/25/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	0	238	5	0	1	366	956	6	16	1070	192
Future Volume (veh/h)	248	0	238	5	0	1	366	956	6	16	1070	192
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	258	0	248	5	0	1	381	996	6	17	1115	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	0	305	146	0	305	444	2277	1011	325	1444	
Arrive On Green	0.19	0.00	0.19	0.19	0.00	0.19	0.16	0.64	0.64	0.41	0.41	0.00
Sat Flow, veh/h	1414	0	1578	250	0	1578	1781	3554	1578	561	3554	1585
Grp Volume(v), veh/h	258	0	248	5	0	1	381	996	6	17	1115	0
Grp Sat Flow(s),veh/h/ln	1414	0	1578	250	0	1578	1781	1777	1578	561	1777	1585
Q Serve(g_s), s	0.0	0.0	11.2	0.3	0.0	0.0	8.8	10.4	0.1	1.4	20.1	0.0
Cycle Q Clear(g_c), s	10.2	0.0	11.2	11.5	0.0	0.0	8.8	10.4	0.1	1.4	20.1	0.0
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	426	0	305	146	0	305	444	2277	1011	325	1444	
V/C Ratio(X)	0.60	0.00	0.81	0.03	0.00	0.00	0.86	0.44	0.01	0.05	0.77	
Avail Cap(c_a), veh/h	548	0	441	243	0	441	602	2732	1213	347	1582	
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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	0.0	28.6	34.1	0.0	24.1	14.2	6.6	4.8	13.5	19.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	7.4	0.1	0.0	0.0	9.1	0.0	0.0	0.0	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	4.7	0.1	0.0	0.0	3.8	2.7	0.0	0.2	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	0.0	36.1	34.2	0.0	24.1	23.4	6.7	4.8	13.5	20.9	0.0
LnGrp LOS	C		D	C		C	C	A	A	B	C	
Approach Vol, veh/h	506			6			1383			1132		
Approach Delay, s/veh	32.8			32.5			11.3			20.8		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	53.5			20.6		17.4	36.1		20.6			
Change Period (Y+Rc), s	6.0			6.3		5.8	6.0		6.3			
Max Green Setting (Gmax), s	57.0			20.7		18.2	33.0		20.7			
Max Q Clear Time (g_c+I1), s	12.4			13.2		10.8	22.1		13.5			
Green Ext Time (p_c), s	17.8			1.2		0.8	8.0		0.0			
Intersection Summary												
HCM 7th Control Delay, s/veh				18.5								
HCM 7th LOS				B								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

Parcel 12C

Build PM (2028) - Improved

2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱		↰	→	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	381	10	912	12	11	27	902	869	23	40	713	510
Future Volume (veh/h)	381	10	912	12	11	27	902	869	23	40	713	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1722	1870	1752	1737	1767	1870	1870	1870	1767	1870	1870
Adj Flow Rate, veh/h	389	10	0	12	11	28	920	887	23	41	728	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	12	2	10	11	9	2	2	2	9	2	2
Cap, veh/h	480	544		282	242	423	926	1627	726	111	909	
Arrive On Green	0.32	0.32	0.00	0.32	0.32	0.32	0.27	0.46	0.46	0.07	0.26	0.00
Sat Flow, veh/h	1368	1722	0	731	764	1340	3456	3554	1585	1682	3554	1585
Grp Volume(v), veh/h	389	10	0	23	0	28	920	887	23	41	728	0
Grp Sat Flow(s), veh/h/ln	1368	1722	0	1495	0	1340	1728	1777	1585	1682	1777	1585
Q Serve(g_s), s	29.5	0.4	0.0	0.0	0.0	1.6	28.2	19.2	0.8	2.5	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.4	0.0	1.0	0.0	1.6	28.2	19.2	0.8	2.5	20.4	0.0
Prop In Lane	1.00		0.00	0.52		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	480	544		524	0	423	926	1627	726	111	909	
V/C Ratio(X)	0.81	0.02		0.04	0.00	0.07	0.99	0.55	0.03	0.37	0.80	
Avail Cap(c_a), veh/h	528	604		576	0	470	926	1627	726	166	909	
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	25.0	0.0	25.2	0.0	25.4	38.8	20.8	15.9	47.5	37.0	0.0
Incr Delay (d2), s/veh	8.5	0.0	0.0	0.0	0.0	0.1	27.8	1.3	0.1	2.0	7.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.2	0.0	0.4	0.0	0.5	14.9	7.7	0.3	1.1	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.8	25.0	0.0	25.2	0.0	25.5	66.6	22.1	15.9	49.6	44.4	0.0
LnGrp LOS	D	C		C		C	E	C	B	D	D	
Approach Vol, veh/h	399			51			1830			769		
Approach Delay, s/veh	44.3			25.4			44.4			44.6		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.0	33.0		39.3	12.5	54.5		39.3				
Change Period (Y+Rc), s	5.5	5.8		5.7	5.5	5.8		5.7				
Max Green Setting (Gmax), s	28.5	27.2		37.3	10.5	45.2		37.3				
Max Q Clear Time (g_c+10), s	10.2	22.4		33.0	4.5	21.2		3.6				
Green Ext Time (p_c), s	0.0	2.9		0.6	0.0	11.4		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 44.1

HCM 7th LOS D

Notes

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

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

Parcel 12C
3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Build PM (2028) - Improved

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱	↱		↰	↱	↰	↰	↱	↰
Traffic Volume (veh/h)	148	13	232	63	13	85	41	339	1739	117	38	1574	281
Future Volume (veh/h)	148	13	232	63	13	85	41	339	1739	117	38	1574	281
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99		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	154	0	251	66	14	89		353	1811	122	40	1640	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2		2	2	2	2	2	2
Cap, veh/h	275	0	711	202	26	162		460	2480	1106	159	1884	
Arrive On Green	0.07	0.00	0.23	0.12	0.12	0.10		0.13	0.70	0.70	0.53	0.53	0.00
Sat Flow, veh/h	1781	0	3156	1125	219	1391		3456	3554	1585	230	3554	1585
Grp Volume(v), veh/h	154	0	251	66	0	103		353	1811	122	40	1640	0
Grp Sat Flow(s), veh/h/ln	1781	0	1578	1125	0	1610		1728	1777	1585	230	1777	1585
Q Serve(g_s), s	7.5	0.0	6.8	5.6	0.0	6.2		10.0	31.8	2.6	13.2	40.8	0.0
Cycle Q Clear(g_c), s	7.5	0.0	6.8	5.6	0.0	6.2		10.0	31.8	2.6	28.0	40.8	0.0
Prop In Lane	1.00		1.00	1.00		0.86		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	711	202	0	188		460	2480	1106	159	1884	
V/C Ratio(X)	0.56	0.00	0.35	0.33	0.00	0.55		0.77	0.73	0.11	0.25	0.87	
Avail Cap(c_a), veh/h	275	0	1293	410	0	485		460	2480	1106	159	1884	
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	0.00	1.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.7	0.0	33.0	42.0	0.0	43.1		42.4	9.4	5.0	23.3	20.8	0.0
Incr Delay (d2), s/veh	2.6	0.0	0.3	0.9	0.0	2.5		7.6	1.9	0.2	3.7	5.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	2.6	1.6	0.0	2.6		4.6	9.8	0.7	0.8	16.3	0.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	39.3	0.0	33.3	42.9	0.0	45.6		50.0	11.4	5.2	27.0	26.6	0.0
LnGrp LOS	D		C	D		D		D	B	A	C	C	
Approach Vol, veh/h	405			169				2286			1680		
Approach Delay, s/veh	35.6			44.5				17.0			26.6		
Approach LOS	D			D				B			C		
Timer - Assigned Phs	1	2	3	4		6		8					
Phs Duration (G+Y+Rc), s	7.0	58.0	11.0	15.3		75.0		26.3					
Change Period (Y+Rc), s	5.5	6.3	5.5	5.5		6.3		5.5					
Max Green Setting (Gmax), s	11.5	51.7	5.5	28.5		68.7		39.5					
Max Q Clear Time (g_c+1.0), s	12.0	42.8	9.5	8.2		33.8		8.8					
Green Ext Time (p_c), s	0.0	8.7	0.0	0.6		33.4		1.0					

Intersection Summary

HCM 7th Control Delay, s/veh 23.3
HCM 7th LOS C

Notes

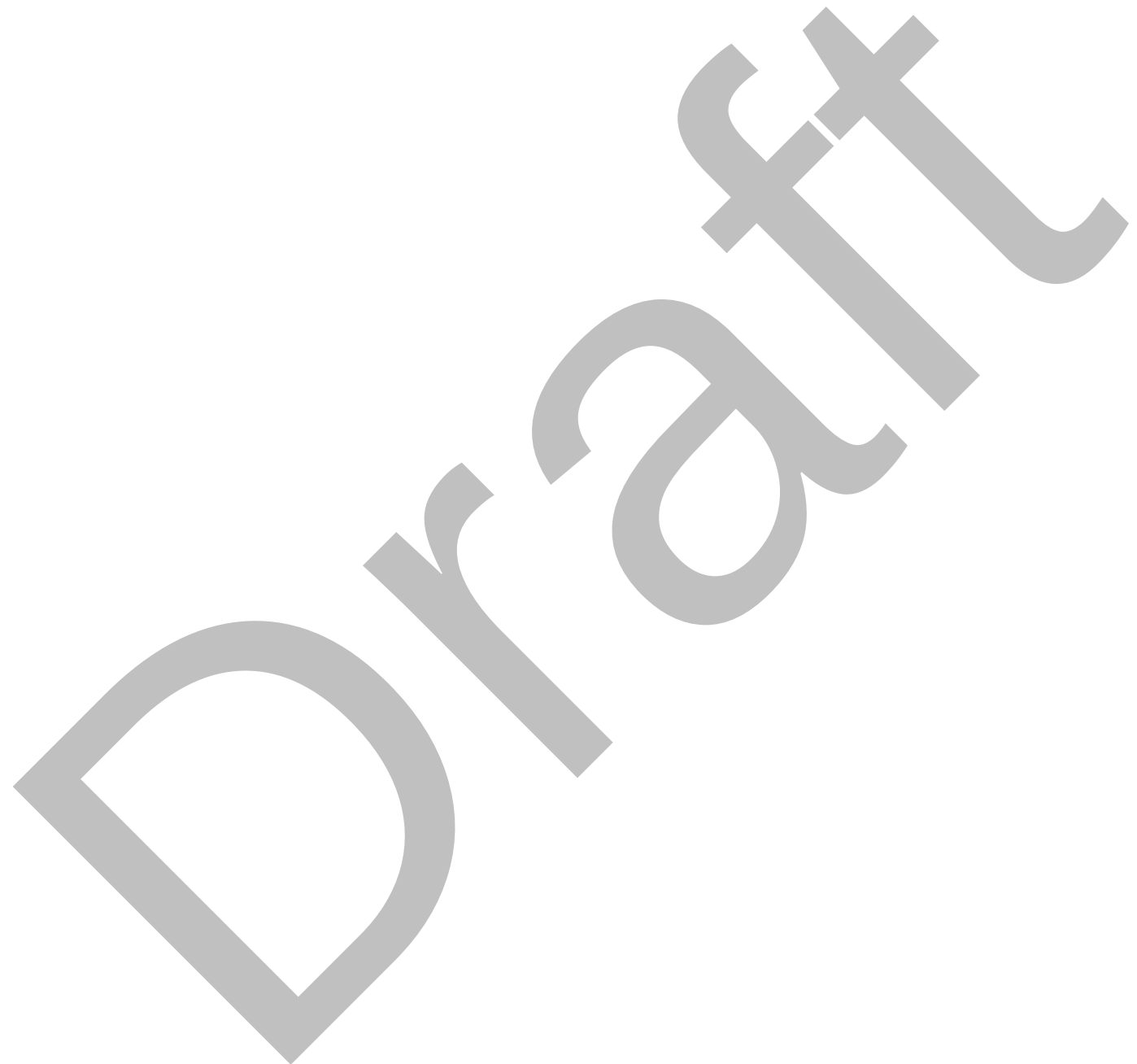
User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Parcel 12C
3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Build PM (2028) - Improved
09/25/2024

User approved ignoring U-Turning movement.

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



Parcel 12C

Build PM (2028) - Improved

4: Site Access 1/Innovation Drive & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↶↷	↷	↰	↶↷	↷	↰	↶↷	↷	↰	↶↷	↷
Traffic Volume (veh/h)	356	1155	79	114	1312	24	97	1	82	61	1	416
Future Volume (veh/h)	356	1155	79	114	1312	24	97	1	82	61	1	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	379	1229	84	121	1396	0	103	1	87	65	1	443
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	2053	915	326	1590		253	3	285	256	339	552
Arrive On Green	0.17	0.58	0.58	0.05	0.45	0.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	3554	1584	1781	3554	1585	946	18	1570	1309	1870	1585
Grp Volume(v), veh/h	379	1229	84	121	1396	0	103	0	88	65	1	443
Grp Sat Flow(s), veh/h/ln	1781	1777	1584	1781	1777	1585	946	0	1588	1309	1870	1585
Q Serve(g_s), s	12.5	19.7	2.1	2.4	31.5	0.0	8.8	0.0	4.2	4.0	0.0	16.0
Cycle Q Clear(g_c), s	12.5	19.7	2.1	2.4	31.5	0.0	8.9	0.0	4.2	8.2	0.0	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Lane Grp Cap(c), veh/h	414	2053	915	326	1590		253	0	288	256	339	552
V/C Ratio(X)	0.92	0.60	0.09	0.37	0.88		0.41	0.00	0.31	0.25	0.00	0.80
Avail Cap(c_a), veh/h	439	2053	915	402	1611		253	0	288	256	339	552
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	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	12.0	8.3	9.5	22.2	0.0	33.2	0.0	31.3	34.9	29.6	26.0
Incr Delay (d2), s/veh	23.0	0.5	0.0	0.7	5.8	0.0	1.1	0.0	0.6	0.5	0.0	8.3
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	7.1	6.5	0.6	0.8	12.7	0.0	2.1	0.0	1.6	1.3	0.0	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	12.5	8.3	10.2	28.0	0.0	34.3	0.0	31.9	35.4	29.6	34.3
LnGrp LOS	D	B	A	B	C		C		C	D	C	C
Approach Vol, veh/h	1692			1517			191			509		
Approach Delay, s/veh	19.8			26.6			33.2			34.4		
Approach LOS	B			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	30.7	45.5		22.0	9.2	57.0		22.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	4.5	6.0		6.0				
Max Green Setting (Gmax), s	16.0	40.0		16.0	8.5	49.0		16.0				
Max Q Clear Time (g_c+1.5), s	14.5	33.5		10.9	4.4	21.7		18.0				
Green Ext Time (p_c), s	0.2	5.9		0.4	0.1	21.4		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh	25.0
HCM 7th LOS	C

Notes

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

Parcel 12C

Build PM (2028) - Improved

5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱		↰	↱	↰	↱	
Traffic Volume (veh/h)	18	1334	52	174	1569	135	44	0	158	88	11	19
Future Volume (veh/h)	18	1334	52	174	1569	135	44	0	158	88	11	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	1811
Adj Flow Rate, veh/h	19	1375	0	179	1618	0	45	0	0	91	11	20
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	6
Cap, veh/h	383	2025		383	2025		183	0		231	57	104
Arrive On Green	0.17	0.57	0.00	0.17	0.57	0.00	0.08	0.00	0.00	0.10	0.10	0.08
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1095	0	1585	1414	593	1079
Grp Volume(v), veh/h	19	1375	0	179	1618	0	45	0	0	91	0	31
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1095	0	1585	1414	0	1672
Q Serve(g_s), s	0.9	25.3	0.0	8.9	33.5	0.0	2.9	0.0	0.0	0.0	0.0	1.6
Cycle Q Clear(g_c), s	0.9	25.3	0.0	8.9	33.5	0.0	4.5	0.0	0.0	4.5	0.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	0	2025		0	2025		170	0		231	0	161
V/C Ratio(X)	0.00	0.68		0.00	0.80		0.26	0.00		0.39	0.00	0.19
Avail Cap(c_a), veh/h	0	2059		0	2059		200	0		262	0	197
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.1	0.0	0.0	15.8	0.0	41.4	0.0	0.0	40.1	0.0	39.1
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	2.4	0.0	0.6	0.0	0.0	0.8	0.0	0.4
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	0.0	8.7	0.0	0.0	11.9	0.0	1.0	0.0	0.0	2.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	15.0	0.0	0.0	18.2	0.0	42.0	0.0	0.0	40.9	0.0	39.5
LnGrp LOS		B			B		D			D		D
Approach Vol, veh/h	1394			1797			45			122		
Approach Delay, s/veh	14.8			16.4			42.0			40.5		
Approach LOS	B			B			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.1	58.1		14.0	21.1	58.1		14.0				
Change Period (Y+Rc), s	6.1	* 6.1		6.1	* 6.1	* 6.1		6.1				
Max Green Setting (Gmax), s	53	* 53		9.9	* 53	* 53		9.9				
Max Q Clear Time (g_c+10), s	27.3			6.5	2.9	35.5		6.5				
Green Ext Time (p_c), s	0.7	22.3		0.1	0.0	16.5		0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 16.9

HCM 7th LOS B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Parcel 12C

Build PM (2028) - Improved

6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

09/25/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑	↱	↰	↑↑	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	6	1467	111	103	1714	10	89	0	101	7	0	4
Future Volume (veh/h)	6	1467	111	103	1714	10	89	0	101	7	0	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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	7	1630	123	114	1904	11	99	0	112	8	0	4
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	1993	889	354	2594	1157	317	0	238	216	0	238
Arrive On Green	0.56	0.56	0.56	0.11	0.73	0.73	0.15	0.00	0.12	0.15	0.00	0.12
Sat Flow, veh/h	234	3554	1585	1781	3554	1585	1412	0	1585	1281	0	1585
Grp Volume(v), veh/h	7	1630	123	114	1904	11	99	0	112	8	0	4
Grp Sat Flow(s),veh/h/ln	234	1777	1585	1781	1777	1585	1412	0	1585	1281	0	1585
Q Serve(g_s), s	1.2	24.8	2.5	1.5	20.8	0.1	4.3	0.0	4.4	0.4	0.0	0.1
Cycle Q Clear(g_c), s	10.7	24.8	2.5	1.5	20.8	0.1	4.4	0.0	4.4	4.8	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	1993	889	354	2594	1157	317	0	238	216	0	238
V/C Ratio(X)	0.03	0.82	0.14	0.32	0.73	0.01	0.31	0.00	0.47	0.04	0.00	0.02
Avail Cap(c_a), veh/h	219	2186	975	373	2825	1260	719	0	690	581	0	690
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	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	11.9	7.0	11.5	5.2	2.4	26.0	0.0	26.9	28.1	0.0	25.0
Incr Delay (d2), s/veh	0.1	2.4	0.1	0.5	0.9	0.0	0.6	0.0	1.4	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.5	0.6	0.7	3.3	0.0	1.4	0.0	1.7	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.7	14.2	7.0	12.0	6.2	2.5	26.6	0.0	28.3	28.2	0.0	25.0
LnGrp LOS	B	B	A	B	A	A	C		C	C		C
Approach Vol, veh/h	1760			2029			211			12		
Approach Delay, s/veh	13.7			6.5			27.5			27.1		
Approach LOS	B			A			C			C		
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.3	41.4		14.0		52.7		14.0				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	6.0	39.0		27.0		51.0		27.0				
Max Q Clear Time (g_c+13.5), s	11.5	26.8		6.8		22.8		6.4				
Green Ext Time (p_c), s	0.1	8.6		0.0		17.6		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				10.8								
HCM 7th LOS				B								

Parcel 12C
7: Lake Point Dr & Site Access 2

Build PM (2028) - Improved
09/25/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰	↰	↰	↰
Traffic Vol, veh/h	16	310	178	79	82	18
Future Vol, veh/h	16	310	178	79	82	18
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	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	344	198	88	91	20
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	286	0	-	0	578	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	380	-
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	1277	-	-	-	478	843
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1277	-	-	-	470	843
Mov Cap-2 Maneuver	-	-	-	-	470	-
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	691	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.39	0		13.58		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	88	-	-	-	470	843
HCM Lane V/C Ratio	0.014	-	-	-	0.194	0.024
HCM Control Delay (s/veh)	7.9	0	-	-	14.5	9.4
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0.1

SimTraffic Results

Draft

Parcel 12C
Queuing and Blocking Report

Existing AM (2024)
09/26/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	103	81	27	20	119	116	123	24	23	122	109
Average Queue (ft)	47	36	6	3	52	44	61	1	3	53	40
95th Queue (ft)	86	64	23	14	96	90	107	10	14	100	86
Link Distance (ft)	747	747	470			998	998			1187	1187
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)				50	275			250	250		
Storage Blk Time (%)			0								
Queuing Penalty (veh)			0								

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	204	45	80	44	190	203	147	130	21	36	130	137
Average Queue (ft)	106	4	21	12	90	104	51	56	2	5	64	65
95th Queue (ft)	173	24	57	33	149	164	108	109	12	24	110	115
Link Distance (ft)	1416	1416	658				628	628			998	998
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				75	275	275			275	175		
Storage Blk Time (%)			1	0		0	0				0	
Queuing Penalty (veh)			0	0		0	0				0	

Parcel 12C
Queuing and Blocking Report

Existing AM (2024)
09/26/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	198	256	85	82	141	230	178	52	88	326	322	65
Average Queue (ft)	128	118	39	30	71	125	70	18	29	166	171	5
95th Queue (ft)	196	215	79	63	118	205	149	44	67	278	282	74
Link Distance (ft)		1297		326		1012	1012			814	814	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		100		200			200	225			225
Storage Blk Time (%)	2	2	0	0	0	1	0			2	3	
Queuing Penalty (veh)	6	4	0	0	1	1	0			1	2	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11	B11
Directions Served	T	T
Maximum Queue (ft)	56	151
Average Queue (ft)	2	7
95th Queue (ft)	45	87
Link Distance (ft)	628	628
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Bluffton Parkway & Innovation Drive

Movement	EB	EB	SB	SB
Directions Served	L	T	L	R
Maximum Queue (ft)	85	8	28	82
Average Queue (ft)	40	0	2	38
95th Queue (ft)	73	8	13	63
Link Distance (ft)		5012	741	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	300			75
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Parcel 12C
Queuing and Blocking Report

Existing AM (2024)
09/26/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	R	L	TR
Maximum Queue (ft)	31	141	125	109	90	105	68	11	113	61
Average Queue (ft)	6	78	51	44	30	47	29	0	52	23
95th Queue (ft)	24	123	100	83	71	89	63	11	93	52
Link Distance (ft)		1332	1332		5012	5012	213	213	905	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225			300						150
Storage Blk Time (%)									0	
Queuing Penalty (veh)									0	

Network Summary

Network wide Queuing Penalty: 15

Parcel 12C
Queuing and Blocking Report

Existing PM (2024)
09/26/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	161	113	20	15	188	125	134	28	40	186	200	29
Average Queue (ft)	85	56	1	1	92	46	63	3	8	96	103	1
95th Queue (ft)	139	94	10	8	155	98	111	16	27	162	174	18
Link Distance (ft)	747	747	470			998	998			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275		250	250				225
Storage Blk Time (%)											0	
Queuing Penalty (veh)											0	

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	184	49	49	50	212	222	162	148	28	74	159	177
Average Queue (ft)	102	6	12	11	138	143	71	68	5	25	79	92
95th Queue (ft)	169	30	36	34	197	205	139	131	21	59	133	154
Link Distance (ft)	1416	1416	658				628	628			998	998
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				75	275	275			275	175		
Storage Blk Time (%)			0	0		0					0	0
Queuing Penalty (veh)			0	0		0					0	0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB
Directions Served	R
Maximum Queue (ft)	34
Average Queue (ft)	1
95th Queue (ft)	24
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Parcel 12C
Queuing and Blocking Report

Existing PM (2024)
09/26/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	B11
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	T
Maximum Queue (ft)	127	135	95	82	197	333	284	65	83	270	266	12
Average Queue (ft)	61	57	36	35	88	157	90	19	25	125	129	0
95th Queue (ft)	108	102	75	69	155	277	214	48	64	222	227	12
Link Distance (ft)		1297		326		1012	1012			814	814	628
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175		100		200			200	225			
Storage Blk Time (%)		0	0	0	0	3	0			1	1	
Queuing Penalty (veh)		0	0	0	2	6	0			0	2	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11
Directions Served	T
Maximum Queue (ft)	92
Average Queue (ft)	4
95th Queue (ft)	54
Link Distance (ft)	628
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Bluffton Parkway & Innovation Drive

Movement	EB	WB	SB	SB
Directions Served	L	T	L	R
Maximum Queue (ft)	152	3	188	168
Average Queue (ft)	71	0	29	99
95th Queue (ft)	124	3	117	161
Link Distance (ft)		1416	741	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	300			75
Storage Blk Time (%)			1	20
Queuing Penalty (veh)			2	3

Parcel 12C
Queuing and Blocking Report

Existing PM (2024)
09/26/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	L	TR
Maximum Queue (ft)	41	124	96	123	116	138	61	92	63
Average Queue (ft)	9	64	39	54	51	70	19	42	17
95th Queue (ft)	31	109	81	102	102	119	50	77	48
Link Distance (ft)		1332	1332		5012	5012	213	905	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	225			300					150
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 16

Parcel 12C
Queuing and Blocking Report

Background AM (2028)
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	109	96	37	24	129	171	189	20	23	167	169	18
Average Queue (ft)	60	43	8	3	62	72	91	1	3	81	82	1
95th Queue (ft)	102	75	27	15	106	137	152	9	16	139	144	11
Link Distance (ft)	747	747	470			998	998			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275			250	250			225
Storage Blk Time (%)			0	0		0	0				0	
Queuing Penalty (veh)			0	0		0	0				0	

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	400	654	85	48	261	263	233	241	38	43	252	245
Average Queue (ft)	197	81	26	15	144	150	104	112	5	9	131	134
95th Queue (ft)	332	416	65	37	231	237	193	199	23	31	213	212
Link Distance (ft)	1416	1416	658				628	628			998	998
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				75	275	275			275	175		
Storage Blk Time (%)			1	0	0	0	0	0			3	2
Queuing Penalty (veh)			0	0	0	1	0	0			0	5

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB
Directions Served	R
Maximum Queue (ft)	59
Average Queue (ft)	2
95th Queue (ft)	37
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	
Queuing Penalty (veh)	

Parcel 12C
Queuing and Blocking Report

Background AM (2028)
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	200	1073	119	108	324	461	387	83	324	663	680	325
Average Queue (ft)	194	642	57	37	183	245	165	20	73	415	421	89
95th Queue (ft)	228	1185	108	79	305	392	310	61	234	637	649	327
Link Distance (ft)		1297		326		1012	1012			814	814	
Upstream Blk Time (%)		2								0	0	
Queuing Penalty (veh)		0								3	3	
Storage Bay Dist (ft)	175		100		200			200	225			225
Storage Blk Time (%)	35	35	4	0	14	9	2			28	29	
Queuing Penalty (veh)	115	104	3	0	82	21	2			13	27	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11	B11	B11
Directions Served	T	T	
Maximum Queue (ft)	379	462	414
Average Queue (ft)	26	68	20
95th Queue (ft)	185	307	193
Link Distance (ft)	628	628	628
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Bluffton Parkway & Innovation Drive

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	L	R
Maximum Queue (ft)	149	120	176	204	221	60	89
Average Queue (ft)	72	25	48	89	97	21	42
95th Queue (ft)	128	85	140	167	178	51	76
Link Distance (ft)		2488	2488	1416	1416	741	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300						75
Storage Blk Time (%)						0	1
Queuing Penalty (veh)						0	0

Parcel 12C
Queuing and Blocking Report

Background AM (2028)
09/25/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	R	L	TR
Maximum Queue (ft)	35	190	166	170	136	154	125	38	166	100
Average Queue (ft)	6	103	77	72	44	63	55	2	84	30
95th Queue (ft)	26	169	145	141	108	131	102	30	146	70
Link Distance (ft)		1332	1332		2474	2474	213	213	906	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225			300						150
Storage Blk Time (%)									1	
Queuing Penalty (veh)									1	

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	22	201	205	5	33	129	153	17	32	43	31	18
Average Queue (ft)	1	95	105	0	5	49	68	1	5	12	6	2
95th Queue (ft)	11	159	167	4	23	108	127	7	21	35	24	11
Link Distance (ft)		2474	2474			2488	2488			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		0	0				0				0	
Queuing Penalty (veh)		0	0				0				0	

Network Summary

Network wide Queuing Penalty: 382

Parcel 12C
Queuing and Blocking Report

Background PM (2028)
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	228	168	27	12	264	240	210	25	78	420	517	325
Average Queue (ft)	120	73	3	1	138	90	101	2	11	250	305	113
95th Queue (ft)	197	127	16	6	237	192	174	13	52	382	459	367
Link Distance (ft)	747	747	470			998	998			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275			250	250			225
Storage Blk Time (%)			0		1	0	0			8	28	0
Queuing Penalty (veh)			0		5	0	0			1	55	0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	B11	B11	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	T	T	L
Maximum Queue (ft)	339	156	51	54	322	364	520	330	34	104	20	149
Average Queue (ft)	193	14	11	14	244	255	184	130	8	9	1	40
95th Queue (ft)	305	93	37	41	344	378	456	247	29	84	15	99
Link Distance (ft)	1416	1416	658				628	628		814	814	
Upstream Blk Time (%)							1					
Queuing Penalty (veh)							13					
Storage Bay Dist (ft)				75	275	275			275			175
Storage Blk Time (%)			0	0	6	9	1	0				0
Queuing Penalty (veh)			0	0	24	39	5	0				0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	263	279	286
Average Queue (ft)	152	159	61
95th Queue (ft)	233	242	221
Link Distance (ft)	998	998	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)	5	3	2
Queuing Penalty (veh)	2	16	6

Parcel 12C
Queuing and Blocking Report

Background PM (2028)
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	164	182	103	124	350	657	582	263	298	538	543	325
Average Queue (ft)	84	90	42	51	210	299	227	39	58	299	301	97
95th Queue (ft)	142	155	86	103	357	557	476	167	182	496	502	341
Link Distance (ft)		1297		326		1012	1012			814	814	
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)	175		100		200			200	225			225
Storage Blk Time (%)	0	0	0	1	11	15	8			17	17	
Queuing Penalty (veh)	0	1	0	1	93	47	9			6	46	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11	B11	B11
Directions Served	T	T	
Maximum Queue (ft)	341	429	201
Average Queue (ft)	19	43	7
95th Queue (ft)	162	237	102
Link Distance (ft)	628	628	628
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Bluffton Parkway & Innovation Drive

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	R	L	R
Maximum Queue (ft)	261	130	166	430	436	45	319	175
Average Queue (ft)	129	36	59	240	248	1	103	122
95th Queue (ft)	218	98	140	414	425	44	255	196
Link Distance (ft)		2488	2488	1416	1416		741	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	300					360		75
Storage Blk Time (%)	0				2		4	24
Queuing Penalty (veh)	1				1		18	15

Parcel 12C
Queuing and Blocking Report

Background PM (2028)
09/25/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	LT	L	TR
Maximum Queue (ft)	43	156	136	2	230	194	191	91	128	67
Average Queue (ft)	13	85	63	0	104	70	88	34	56	21
95th Queue (ft)	38	138	117	2	198	151	166	74	107	53
Link Distance (ft)		1332	1332			2474	2474	213	906	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225			275	300					150
Storage Blk Time (%)					0	0			0	
Queuing Penalty (veh)					3	0			0	

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	31	200	198	18	56	186	196	27	24	27	31	21
Average Queue (ft)	5	90	94	1	17	82	102	2	3	7	4	3
95th Queue (ft)	22	164	168	10	45	157	172	13	17	24	20	14
Link Distance (ft)		2474	2474			2488	2488			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		0	0			0	1				0	0
Queuing Penalty (veh)		0	0			0	0				0	0

Network Summary

Network wide Queuing Penalty: 405

Parcel 12C
Queuing and Blocking Report

Build AM (2028)
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T
Maximum Queue (ft)	131	92	36	20	139	171	190	27	23	177	205
Average Queue (ft)	59	41	7	4	66	74	91	2	3	83	98
95th Queue (ft)	104	74	26	16	115	143	157	13	15	142	171
Link Distance (ft)	747	747	470			998	998			1187	1187
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)				50	275			250	250		
Storage Blk Time (%)			0			0	0				0
Queuing Penalty (veh)			0			0	0				0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	774	862	79	62	292	315	302	259	30	57	328	341
Average Queue (ft)	280	219	21	16	155	155	113	117	4	9	167	169
95th Queue (ft)	606	770	61	42	258	267	233	219	21	36	275	291
Link Distance (ft)	1413	1413	658				628	628			998	998
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				75	275	275			275	175		
Storage Blk Time (%)			1	0	0	1	0	0		0	11	7
Queuing Penalty (veh)			0	0	2	3	2	0		0	1	23

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB
Directions Served	R
Maximum Queue (ft)	208
Average Queue (ft)	21
95th Queue (ft)	138
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Parcel 12C
Queuing and Blocking Report

Build AM (2028)
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	200	623	117	138	350	1058	1042	233	324	691	689	325
Average Queue (ft)	197	606	57	42	342	876	811	31	67	424	427	111
95th Queue (ft)	220	678	109	96	393	1299	1302	142	218	657	665	365
Link Distance (ft)		609		326		1012	1012			814	814	
Upstream Blk Time (%)		45				50	11			0	0	
Queuing Penalty (veh)		313				0	0			3	4	
Storage Bay Dist (ft)	175		100		200			200	225			225
Storage Blk Time (%)	38	49	4	0	86	9	4			29	29	
Queuing Penalty (veh)	149	153	3	0	559	29	4			13	33	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11	B11	B11
Directions Served	T	T	
Maximum Queue (ft)	453	488	454
Average Queue (ft)	37	87	37
95th Queue (ft)	226	358	272
Link Distance (ft)	628	628	628
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Site Access 1/Innovation Drive & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	LT	T	R	L	TR	L	TR
Maximum Queue (ft)	220	221	280	456	448	45	80	97	69	115
Average Queue (ft)	109	86	138	238	230	2	34	36	21	51
95th Queue (ft)	189	188	245	399	392	44	70	74	55	92
Link Distance (ft)		2485	2485	1413	1413			325	741	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	300					360	100			75
Storage Blk Time (%)					1		0	0	0	3
Queuing Penalty (veh)					0		0	0	1	1

Parcel 12C
Queuing and Blocking Report

Build AM (2028)
09/25/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	R	L	TR
Maximum Queue (ft)	36	187	180	163	136	141	123	104	169	77
Average Queue (ft)	7	102	86	78	44	61	55	6	88	29
95th Queue (ft)	27	161	152	149	106	120	106	55	148	61
Link Distance (ft)		1332	1332		2474	2474	213	213	906	
Upstream Blk Time (%)								0		
Queuing Penalty (veh)								0		
Storage Bay Dist (ft)	225			300						150
Storage Blk Time (%)		0							1	
Queuing Penalty (veh)		0							1	

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	21	331	326	140	102	139	144	20	92	89	32	19
Average Queue (ft)	1	162	165	22	43	58	76	1	39	32	5	3
95th Queue (ft)	12	285	284	83	82	118	129	8	80	70	22	13
Link Distance (ft)		2474	2474			2485	2485			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		3	2				0		0	0	0	
Queuing Penalty (veh)		0	1				0		0	0	0	

Intersection: 7: Lake Point Dr & Site Access 2

Movement	EB	WB	SB	SB
Directions Served	LT	TR	L	R
Maximum Queue (ft)	784	15	379	335
Average Queue (ft)	629	1	295	183
95th Queue (ft)	1001	8	479	470
Link Distance (ft)	735	609	355	355
Upstream Blk Time (%)	55		59	48
Queuing Penalty (veh)	0		0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1301

Parcel 12C
Queuing and Blocking Report

Build PM (2028)
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	219	169	25	13	271	193	208	22	72	499	613	325
Average Queue (ft)	125	74	2	1	137	82	97	2	12	268	342	139
95th Queue (ft)	199	133	14	6	231	161	173	12	45	434	539	402
Link Distance (ft)	747	747	470			998	998			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275			250	250			225
Storage Blk Time (%)			0		0	0	0			10	34	0
Queuing Penalty (veh)			0		2	0	0			2	65	0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	B11	B11	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	T	T	L
Maximum Queue (ft)	362	111	55	56	325	375	675	514	34	495	368	120
Average Queue (ft)	216	12	12	14	278	307	368	158	8	88	43	39
95th Queue (ft)	330	66	37	38	375	441	791	358	29	431	295	91
Link Distance (ft)	1413	1413	658				628	628		814	814	
Upstream Blk Time (%)							10	0		0	0	
Queuing Penalty (veh)							98	0		4	0	
Storage Bay Dist (ft)				75	275	275			275			175
Storage Blk Time (%)			0	0	22	27	0	0				0
Queuing Penalty (veh)			0	0	94	116	3	0				0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	387	433	297
Average Queue (ft)	177	195	102
95th Queue (ft)	298	351	293
Link Distance (ft)	998	998	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)	10	7	7
Queuing Penalty (veh)	4	36	23

Parcel 12C
Queuing and Blocking Report

Build PM (2028)
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	199	316	116	149	350	1056	1037	350	324	632	650	325
Average Queue (ft)	118	149	49	59	315	708	632	96	71	384	391	165
95th Queue (ft)	202	263	98	116	409	1257	1223	330	213	592	613	428
Link Distance (ft)		609		326		1012	1012			814	814	
Upstream Blk Time (%)						24	6			0	0	
Queuing Penalty (veh)						0	0			0	0	
Storage Bay Dist (ft)	175		100		200			200	225			225
Storage Blk Time (%)	2	5	1	2	49	25	19			26	26	
Queuing Penalty (veh)	6	7	1	2	425	97	23			10	72	

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	B11	B11	B11
Directions Served	T	T	
Maximum Queue (ft)	393	476	523
Average Queue (ft)	35	81	29
95th Queue (ft)	229	349	236
Link Distance (ft)	628	628	628
Upstream Blk Time (%)			0
Queuing Penalty (veh)			1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Site Access 1/Innovation Drive & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	LT	T	R	L	TR	L	TR
Maximum Queue (ft)	400	1687	1672	1324	1390	460	120	129	571	175
Average Queue (ft)	373	971	924	864	884	130	59	44	246	160
95th Queue (ft)	487	1862	1818	1465	1542	471	103	93	539	204
Link Distance (ft)		2485	2485	1413	1413			325	741	
Upstream Blk Time (%)				1	9				0	
Queuing Penalty (veh)				4	67				0	
Storage Bay Dist (ft)	300					360	100			75
Storage Blk Time (%)	83	0			58		2	1	6	60
Queuing Penalty (veh)	480	0			14		2	1	26	36

Parcel 12C
Queuing and Blocking Report

Build PM (2028)
09/25/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	R	L	TR
Maximum Queue (ft)	46	169	160	268	210	201	78	59	127	74
Average Queue (ft)	13	90	71	119	73	88	30	2	57	23
95th Queue (ft)	37	148	131	233	157	164	66	32	103	58
Link Distance (ft)		1332	1332		2474	2474	213	213	906	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225			300						150
Storage Blk Time (%)		0		1	0				0	
Queuing Penalty (veh)		0		6	0				0	

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	72	302	298	87	120	186	204	27	113	101	31	22
Average Queue (ft)	7	147	149	26	50	87	105	3	49	39	4	3
95th Queue (ft)	43	257	259	67	95	156	171	16	92	79	20	14
Link Distance (ft)		2474	2474			2485	2485			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		2	1			0	1		1	0	0	0
Queuing Penalty (veh)		0	1			0	0		1	0	0	0

Intersection: 7: Lake Point Dr & Site Access 2

Movement	EB	WB	SB	SB
Directions Served	LT	TR	L	R
Maximum Queue (ft)	56	6	68	33
Average Queue (ft)	6	0	34	13
95th Queue (ft)	32	4	58	37
Link Distance (ft)	735	609	355	355
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1727

Parcel 12C
Queuing and Blocking Report

Build AM (2028) - Improved
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	119	98	29	20	126	164	184	22	28	169	191	26
Average Queue (ft)	57	43	7	3	61	71	88	1	4	84	99	1
95th Queue (ft)	99	78	25	15	105	137	154	10	18	148	169	16
Link Distance (ft)	747	747	470			993	993			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275		250	250				225
Storage Blk Time (%)			0								0	
Queuing Penalty (veh)			0								0	

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	L	T	T
Maximum Queue (ft)	743	958	76	56	289	330	307	286	34	68	316	333
Average Queue (ft)	411	382	22	18	144	149	103	108	3	10	163	162
95th Queue (ft)	1079	1206	60	45	249	270	220	221	17	45	265	267
Link Distance (ft)	1413	1413	658				623	623			993	993
Upstream Blk Time (%)	2	2										
Queuing Penalty (veh)	13	15										
Storage Bay Dist (ft)				75	275	275			275	175		
Storage Blk Time (%)			1	0	1	1	0	0			10	6
Queuing Penalty (veh)			0	0	2	4	2	0			1	20

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB
Directions Served	R
Maximum Queue (ft)	221
Average Queue (ft)	14
95th Queue (ft)	111
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Parcel 12C
Queuing and Blocking Report

Build AM (2028) - Improved
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	R	L	TR	UL	L	T	T	R	L	T
Maximum Queue (ft)	200	600	200	124	283	275	350	1055	1032	288	324	887
Average Queue (ft)	182	321	108	85	81	266	338	970	869	32	85	692
95th Queue (ft)	226	611	187	139	219	303	408	1231	1276	162	262	997
Link Distance (ft)		603			320			1002	1002			808
Upstream Blk Time (%)		3			1			67	11			14
Queuing Penalty (veh)		18			0			0	0			131
Storage Bay Dist (ft)	175		100	100		200	200			200	225	
Storage Blk Time (%)	29	21	13	22	1	90	58	14	11			43
Queuing Penalty (veh)	114	104	70	17	1	585	376	45	11			19

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	SB	SB	B11	B11	B11
Directions Served	T	R	T	T	
Maximum Queue (ft)	888	325	455	481	619
Average Queue (ft)	700	138	123	162	138
95th Queue (ft)	996	402	417	480	620
Link Distance (ft)	808		623	623	623
Upstream Blk Time (%)	16				4
Queuing Penalty (veh)	149				24
Storage Bay Dist (ft)		225			
Storage Blk Time (%)	45				
Queuing Penalty (veh)	51				

Intersection: 4: Site Access 1/Innovation Drive & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	R	L	T	T	L	TR	L	T	R
Maximum Queue (ft)	198	561	630	200	106	257	281	76	74	67	9	99
Average Queue (ft)	105	201	250	43	40	113	120	34	29	20	0	40
95th Queue (ft)	266	688	735	164	81	218	230	68	61	53	9	73
Link Distance (ft)		2475	2475			1413	1413		316		741	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			100	360			100		100		75
Storage Blk Time (%)	0	5	19				0	0	0	0	0	1
Queuing Penalty (veh)	0	15	13				0	0	0	0	0	0

Parcel 12C
Queuing and Blocking Report

Build AM (2028) - Improved
09/25/2024

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	LT	R	L	TR
Maximum Queue (ft)	33	194	184	202	123	138	124	38	180	86
Average Queue (ft)	6	104	85	79	41	56	52	2	85	29
95th Queue (ft)	25	166	150	163	97	114	101	29	149	66
Link Distance (ft)		1332	1332		2474	2474	213	213	906	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	225			300						150
Storage Blk Time (%)		0		0					1	
Queuing Penalty (veh)		0		0					1	

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	22	301	304	87	99	168	182	2	89	98	27	20
Average Queue (ft)	2	150	162	20	39	58	78	0	40	34	4	2
95th Queue (ft)	12	263	272	61	77	135	148	3	76	72	19	12
Link Distance (ft)		2474	2474			2475	2475			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		2	1				0		0	0	0	
Queuing Penalty (veh)		0	1				0		0	0	0	

Intersection: 7: Lake Point Dr & Site Access 2

Movement	EB	WB	WB	SB	SB
Directions Served	LT	T	R	L	R
Maximum Queue (ft)	223	44	23	123	29
Average Queue (ft)	31	1	1	40	9
95th Queue (ft)	144	21	12	91	29
Link Distance (ft)	735	603	603	346	346
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1803

Parcel 12C
Queuing and Blocking Report

Build PM (2028) - Improved
09/25/2024

Intersection: 1: Buckwalter Parkway & Buckwalter Place Boulevard

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	TR	LT	R	L	T	T	R	L	T	T	R
Maximum Queue (ft)	242	158	28	13	291	228	204	23	78	475	558	325
Average Queue (ft)	128	78	4	1	147	91	102	2	13	263	327	107
95th Queue (ft)	206	132	18	8	246	177	174	14	55	407	495	357
Link Distance (ft)	747	747	470			993	993			1187	1187	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)				50	275		250	250				225
Storage Blk Time (%)			0		1		0			9	32	
Queuing Penalty (veh)			0		4		0			1	61	

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	EB	EB	WB	WB	NB	NB	NB	NB	NB	B11	B11	SB
Directions Served	L	TR	LT	TR	L	L	T	T	R	T	T	L
Maximum Queue (ft)	416	227	61	53	325	375	709	546	32	399	284	140
Average Queue (ft)	236	19	15	15	290	319	372	155	8	85	27	36
95th Queue (ft)	379	139	45	42	371	434	797	332	29	390	220	96
Link Distance (ft)	1413	1413	658				623	623		808	808	
Upstream Blk Time (%)							9	0		0		
Queuing Penalty (veh)							91	0		0		
Storage Bay Dist (ft)				75	275	275			275			175
Storage Blk Time (%)			0	0	17	27	1	0				0
Queuing Penalty (veh)			0	0	76	118	10	0				0

Intersection: 2: Buckwalter Pkwy & Bluffton Pkwy N./Buckwalter Towne Blvd.

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	338	367	296
Average Queue (ft)	192	201	110
95th Queue (ft)	302	320	301
Link Distance (ft)	993	993	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			200
Storage Blk Time (%)	14	11	4
Queuing Penalty (veh)	6	54	15

Parcel 12C
Queuing and Blocking Report

Build PM (2028) - Improved
09/25/2024

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB
Directions Served	L	TR	R	L	TR	UL	L	T	T	R	L	T
Maximum Queue (ft)	170	160	133	111	129	262	350	1041	1022	350	324	622
Average Queue (ft)	89	76	52	47	54	164	289	714	640	140	65	361
95th Queue (ft)	156	132	106	90	104	261	433	1248	1203	407	201	618
Link Distance (ft)		603			320			1002	1002			808
Upstream Blk Time (%)								23	5			0
Queuing Penalty (veh)								0	0			4
Storage Bay Dist (ft)	175		100	100		200	200			200	225	
Storage Blk Time (%)	1	3	1	1	1	10	11	35	32			22
Queuing Penalty (veh)	3	9	3	1	1	91	94	134	37			8

Intersection: 3: Buckwalter Pkwy & Lake Point Dr/Carolina Bluff Dr

Movement	SB	SB	B11	B11	B11
Directions Served	T	R	T	T	
Maximum Queue (ft)	635	325	474	510	581
Average Queue (ft)	367	162	48	94	32
95th Queue (ft)	625	428	266	375	263
Link Distance (ft)	808		623	623	623
Upstream Blk Time (%)	0				0
Queuing Penalty (veh)	4				1
Storage Bay Dist (ft)		225			
Storage Blk Time (%)	23				
Queuing Penalty (veh)	66				

Parcel 12C
Queuing and Blocking Report

Build PM (2028) - Improved
09/25/2024

Intersection: 4: Site Access 1/Innovation Drive & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	T
Maximum Queue (ft)	260	265	314	198	320	476	487	91	133	118	169	326
Average Queue (ft)	144	113	146	33	61	286	294	5	55	35	50	73
95th Queue (ft)	235	225	272	128	177	452	460	79	105	79	119	257
Link Distance (ft)		2475	2475			1413	1413			316		741
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			100	360			360	100		100	
Storage Blk Time (%)	0	0	13			4	5		2	0	1	0
Queuing Penalty (veh)	0	0	10			4	1		1	0	3	1

Intersection: 4: Site Access 1/Innovation Drive & Bluffton Parkway

Movement	SB
Directions Served	R
Maximum Queue (ft)	175
Average Queue (ft)	130
95th Queue (ft)	197
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	75
Storage Blk Time (%)	27
Queuing Penalty (veh)	17

Intersection: 5: Hampton Lake Drive/Hampton Parkway & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	LT	R	L	TR
Maximum Queue (ft)	44	171	143	6	231	182	190	92	90	124	50
Average Queue (ft)	12	89	68	0	111	73	91	31	4	55	18
95th Queue (ft)	38	150	123	5	201	151	169	71	45	102	45
Link Distance (ft)		1332	1332			2474	2474	213	213	906	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	225			275	300						150
Storage Blk Time (%)										0	
Queuing Penalty (veh)										0	

Parcel 12C
Queuing and Blocking Report

Build PM (2028) - Improved
09/25/2024

Intersection: 6: Parkways Site Access/Buckwalter Place Boulevard & Bluffton Parkway

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	37	308	319	128	108	257	269	52	113	109	31	19
Average Queue (ft)	5	146	149	25	50	106	126	3	48	40	6	3
95th Queue (ft)	26	261	264	79	92	200	221	29	90	80	23	13
Link Distance (ft)		2474	2474			2475	2475			361	472	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			250	225			150	100			50
Storage Blk Time (%)		2	1			0	3		1	0	0	0
Queuing Penalty (veh)		0	1			0	0		1	0	0	0

Intersection: 7: Lake Point Dr & Site Access 2

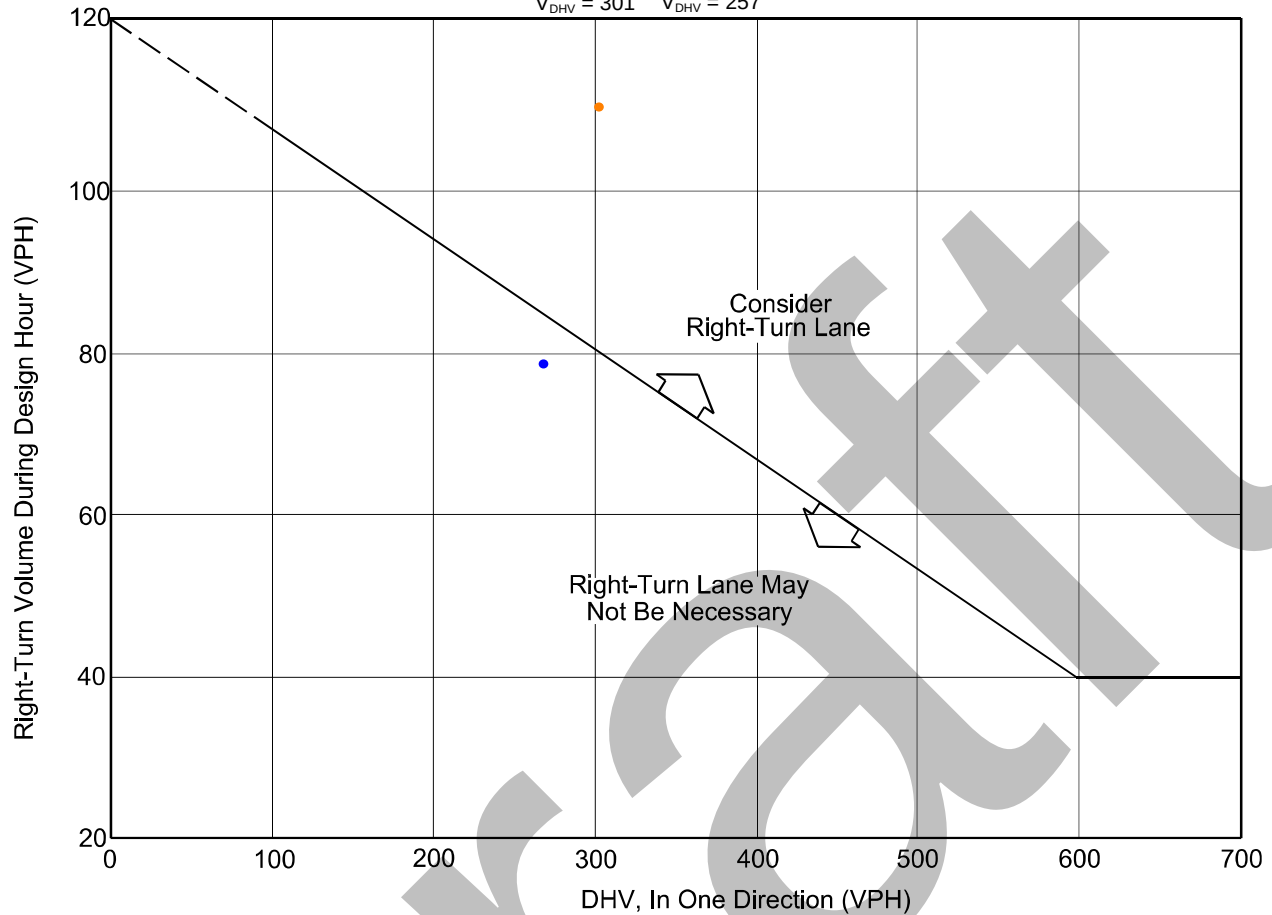
Movement	EB	WB	WB	SB	SB
Directions Served	LT	T	R	L	R
Maximum Queue (ft)	64	13	10	83	27
Average Queue (ft)	7	0	0	33	11
95th Queue (ft)	36	9	7	60	30
Link Distance (ft)	735	603	603	346	346
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 931

Appendix H – Turn Lane Warrants

Draft

Site Driveway**AM****PM**
 $V_{WBR} = 110$ $V_{WBR} = 79$
 $V_{DHV} = 301$ $V_{DHV} = 257$


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:

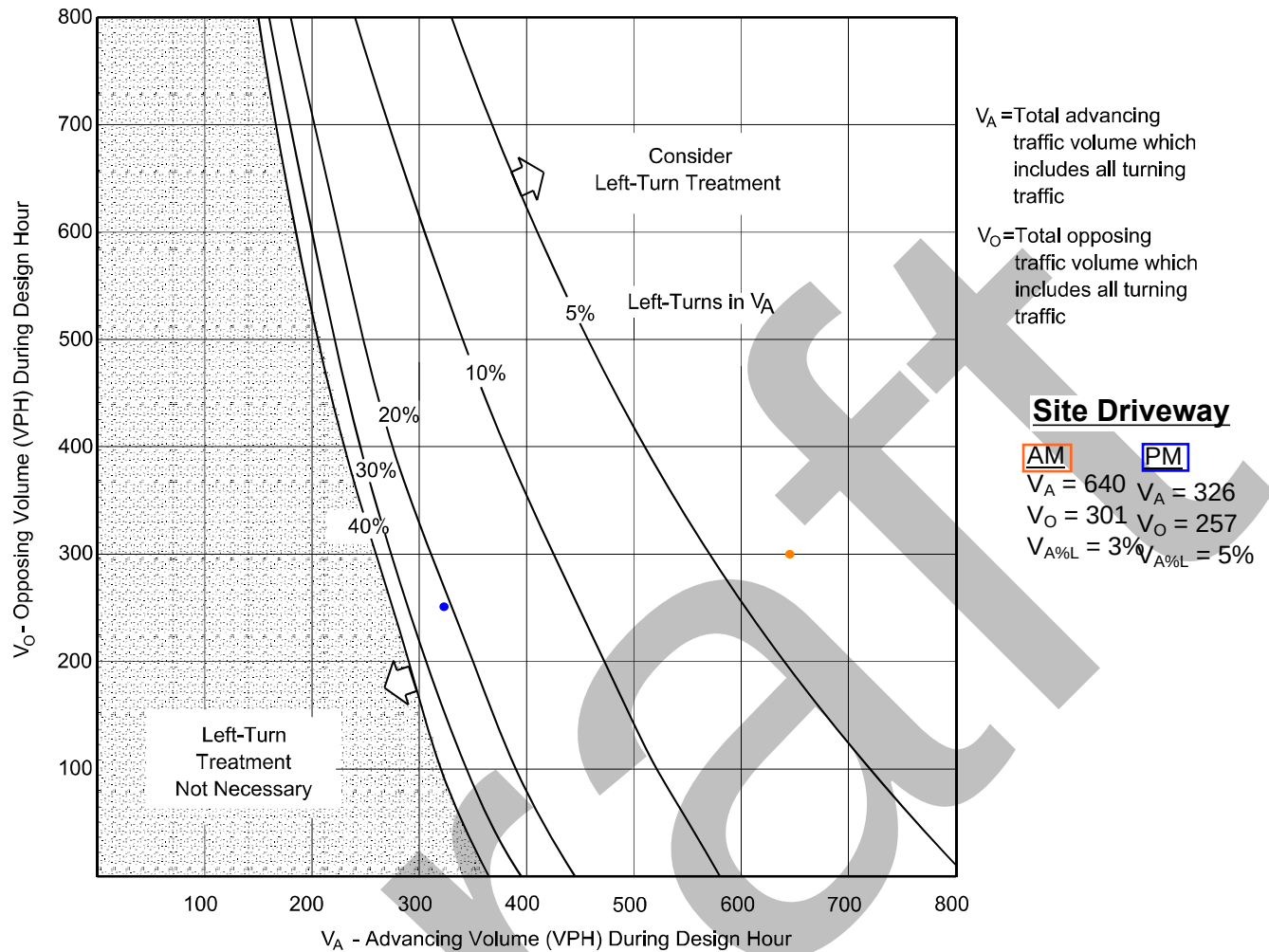
Design Speed	=	35 miles per hour
DHV	=	250 vehicles per hour
Right Turns	=	100 vehicles per hour

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.

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS
ON TWO-LANE HIGHWAYS**

Figure 9.5-A

**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

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

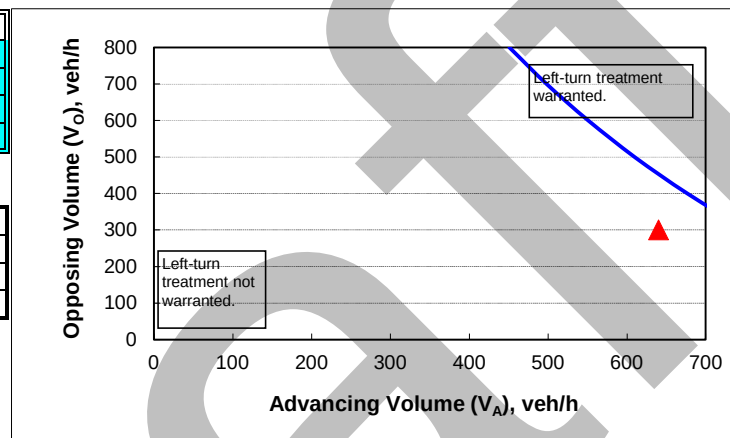
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	640
Opposing volume (V_O), veh/h:	301

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	753
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

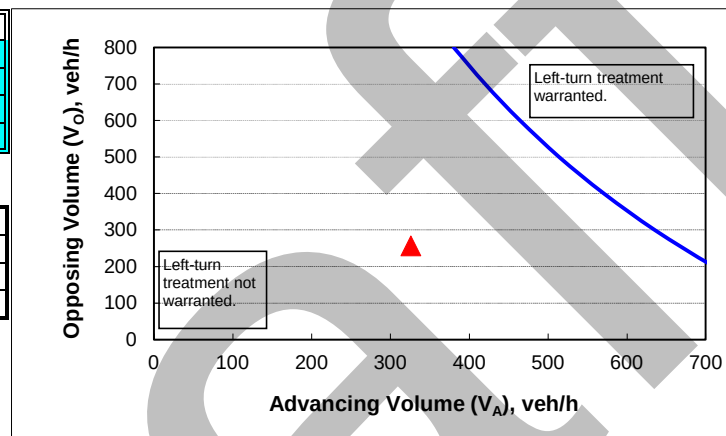
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	30
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	326
Opposing volume (V_O), veh/h:	257

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	667
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	301
Right-turn volume, veh/h:	110

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	6363
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

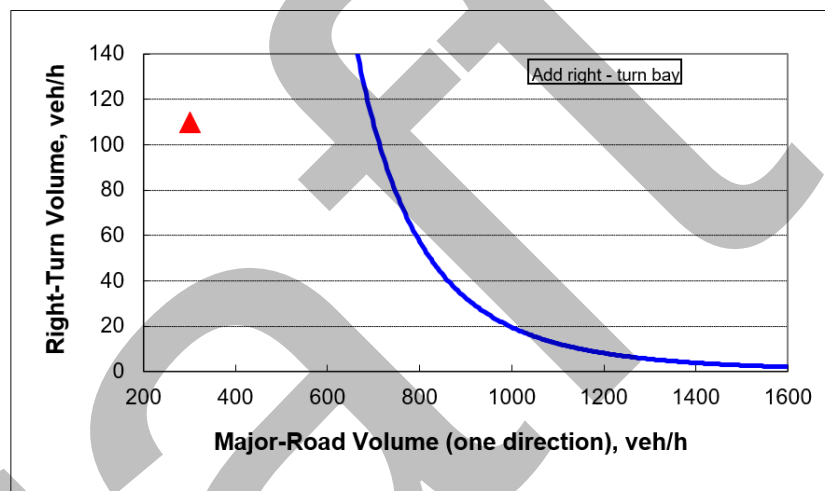


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	30
Major-road volume (one direction), veh/h:	257
Right-turn volume, veh/h:	79

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	13628
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

