

**BEAUFORT–PORT ROYAL
METROPOLITAN PLANNING COMMISSION
REVISED AGENDA**

1911 Boundary Street, Beaufort, SC 29902
Phone: 843-525-7011 ~ Fax: 843-986-5606

Monday, August 17, 2020, 5:00 P.M.

~~City Hall, Planning Conference Room—1911 Boundary Street, Beaufort, SC~~

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/83496346253?pwd=eGlEVVdhNVNGamVjWkl6ZnlhNU9EUT09>

Password: 151147

Meeting ID: 834 9634 6253

Call in Phone #: 1 + 929 205 6099

STATEMENT OF MEDIA NOTIFICATION: "In accordance with South Carolina Code of Laws, 1976, Section 30-4-80(d), as amended, all local media were duly notified of the time, date, place and agenda of this meeting."

I. Call to Order

II. Pledge of Allegiance

III. Review Commission Meeting Minutes:

A. July 20, 2020 Regular Meeting Minutes

IV. Questions Relating to Military Operations

V. Review of Projects for the City of Beaufort:

A. Whitehall Sketch Plan. The applicant, Whitehall Point Holdings, LLC, has requested a major subdivision of approximately 10.1 acres located at 4 Harborview Circle (Whitehall). The property is further identified as District R123, Map 14, Parcel 149. The subdivision will result in 2 lots (8.4 ac and 1.6 ac) and new streets.

B. Update of Council Actions

C. Update of pending applications/status of approved projects.

VI. Review of Projects for the Town of Port Royal:

A. None

VII. Review of Projects for Beaufort County:

A. None

VIII. Adjournment

Note: If you have special needs due to a physical challenge, please call Julie Bachety at (843) 525-7011.



Metropolitan Planning Commission

Meeting Minutes – July 20, 2020

1. CALL TO ORDER

3:06

A meeting of the Metropolitan Planning Commission was held via Zoom on July 20, 2020.

2. ATTENDEES

Members in attendance: Michael Tomy (Chairman), James Crower (Vice-Chair), Judy Alling, Bill Bardenwerper, Caroline Fermin, and Jason Hinch.

Staff in attendance: David Prichard (City of Beaufort Director of Community and Economic Development); Heather Spade (City of Beaufort Planning Tech); and Linda Bridges (Town of Port Royal Director of Planning)

3. REVIEW OF MINUTES

3:57

Mr. Crower made a motion to approve the May 18, 2020 minutes as submitted; seconded by Mr. Hinch. The motion passed unanimously.

Mr. Crower made a motion to approve the June 15, 2020 minutes as submitted; seconded by Mr. Hinch. The motion passed unanimously.

4. FLIGHT OPERATIONS PRESENTATION

5:41

Kim Fleming, Director , Government & External Relations gave a presentation regarding the status of the MCAS flight operations.

5. NEW BUSINESS

23:18

City of Beaufort Agenda Items: public

- A. **Salem Farms Sketch Plan.** The applicant, Pulte Homes Company, LLC, has requested a major subdivision of approximately 94.94 acres located at Salem Road (Salem Farms Subdivision). The property is further identified as District R120, Map 29, Parcels 105, 105A, 105B, and 105C.

The chairman, Mike Tomy, invited public comment.

Motion: Mr. Bardenwerper made a motion to recommend for approval with the condition that there be no fewer number of street trees than in total number than required by the

regulations and if The Beaufort Code isn't flexible enough to allow some deviations and distance separation that staff would have that authority to act as long as the total number of street trees isn't reduced beyond the required number.

Mr. Tomy asked Mr. Bardenwerper to add the following conditions to his motion:

1. Internal and external traffic study be completed and approved by SCDOT and that staff approves of the study.
2. Retention areas be reviewed by staff with the conditions relative to making them into an acceptable amenity for each.
3. Applicant work with staff to determine both what is required for sidewalks and that the construction be phased in complete pods with sidewalks. Staff will work with applicant for other flexibility of sidewalks based on preservation of trees.
4. Staff review the HOA requirements of maintenance for all the properties including the percent complete/date that the maintenance is turned over from the applicant to the HOA for maintenance.

Mr. Bardenwerper accepted all of Mr. Tomy's conditions to be added to his motion.

The motion was seconded by Mr. Crower. The motion passed unanimously.

- B. **Annexation and rezoning** of approximately 19 acres at 14 FC Carter Drive. **1:46:58**
The property is further identified as District R100, Map 29, Parcel 45. The current zoning is Regional Center Mixed-Use. The requested zoning is T4-N. Applicant: Robert Sample for Broad River Place, LLC.

The chairman, Mike Tomy, invited the public to comment.

Motion: Mr. Crower made a motion to recommend approval of the annexation; seconded by Ms. Alling. The motion passed unanimously.

Motion: Ms. Alling made a motion to recommend the zoning request to T4-N; seconded by Ms. Fermin. The motion passed unanimously.

- C. **Text Amendment.** The applicant, Robert Sample for Broad River Place, LLC **2:00:30**
has requested an amendment to The Beaufort Code to revise Section 2.6.2.C.1 to reduce the minimum elevation requirement from 2 feet to 12 inches (1 ft.) to make housing products more affordable for the market.

The chairman, Mike Tomy, invited the public to comment.

Motion: Ms. Alling made a motion to not recommend the code change in the T4-N to a 12" elevation; seconded by Ms. Fermin. The motion passed unanimously.

- D. **Whitehall Sketch Plan.** The applicant, Whitehall Point Holdings, LLC, has **2:25:21**
requested a major subdivision of approximately 10.1 acres located at 4 Harborview Circle (Whitehall). The property is further identified as District R123, Map 14, Parcel 149. The subdivision will result in 2 lots (8.4 ac and 1.6 ac) and new streets.

The chairman, Mike Tomy, invited the public to comment.

Motion: Mr. Crower made a motion to deny the request; seconded by Ms. Alling.

Mr. Bardenwerper asked Mr. Crower to amend his motion to state that, “specifically related to the fact of what we received was the traffic impact study that was obsolete and prepared for a different project and whereas the updates were helpful in the end, but were essentially for a different project.

Mr. Crower accepted the amendment from Mr. Bardenwerper.

Mr. Tomy called the question to the motion. The vote on the motion was tied 3/3. And failed.

Applicant requested postponement and stated he would move forward with new traffic impact analysis.

Motion: Mr. Bardenwerper made a motion to postpone a decision to a future date so we can have a traffic study that addresses all of the issues that we asked for tonight; seconded by Mr. Hincer. The motion passed unanimously.

E. Update of Council Actions

F. Update of pending applications/status of approved projects.

Town of Port Royal Agenda Items:

4:18:22

- A. **Town of Port Royal - Rezoning Request.** Rezone 2.96 acres at 4 Sundown Bend. The property is further identified as District 112, Map 30, Parcel 4. The current zoning is T4 Neighborhood Center. The requested zoning is T4 Neighborhood Center - Open. The chairman, Mike Tomy, invited the public to comment.

Motion: Ms. Alling made a motion to accept the zoning change; seconded by Ms. Fermin. The motion passed unanimously.

B. Update of Council Actions.

6. **ADJOURN**

4:30:30

Mr. Tomy made a motion to adjourn the meeting; seconded by Ms. Fermin. The motion passed unanimously.

Disclaimer: All Metropolitan Planning Commission Meeting minutes are recorded, and can be found on the City’s website at <http://www.cityofbeaufort.org/AgendaCenter>. Audio recordings are available upon request by contacting the City Clerk, Ivette Burgess at 843-525-7018 or by email at iburgess@cityofbeaufort.org.



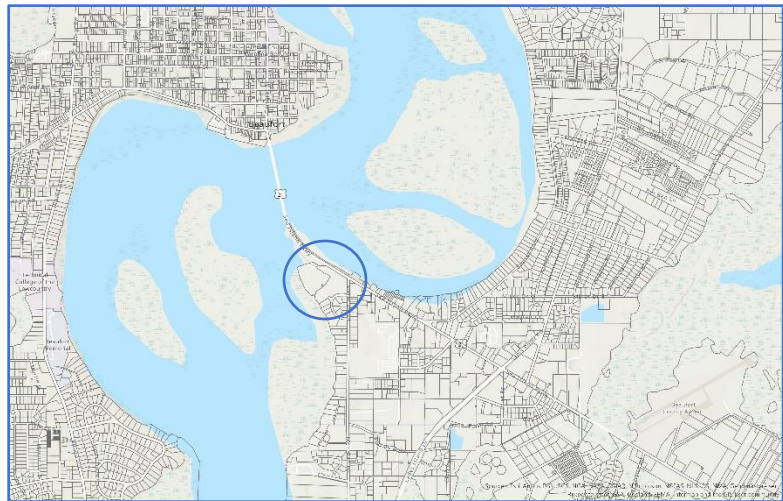
Staff Report – Addendum for MPC

From the Director of Community and Economic Development

August 17, 2020

SUBJECT: Whitehall Major Subdivision

Request: The applicant, Sam Levin, has requested a major subdivision of approximately 10.1 acres located at 4 Harborview Circle (Whitehall) (R123 014 000 0149 0000). The subdivision will result in 2 lots (8.4 ac and 1.6 ac) and new streets.



This addendum addresses questions raised by the MPC at previous meetings regarding subdivision sketch approval and the authorized role of the planning commission. Staff still stands by its assessment and recommendation set forth in the Whitehall Major Subdivision Staff Report dated July 20, 2020. - attached

Traffic Impact Study

“A traffic impact study (TIS) is a specialized engineering study that evaluates the effects of a proposed development on traffic conditions in an area. These studies help developers and government agencies identify the potential traffic impacts of a development and means to mitigate these impacts both on- and off-site.” [SCDOT Access & Roadside Management Standards

https://www.scdot.org/business/pdf/accessMgt/trafficEngineering/ARMS_2008.pdf?v=3]

Responsibility for determining the completeness of a TIS is the city’s Technical Review Committee (TRC). The TRC is also responsible for its review and approval. [BDC 7.3.2.I, 7.3.2.G, and 7.3.2.J]. The TRC has reviewed the updated TIS of the Whitehall Mixed-use Development (August 2020) and is satisfied with its rationales and proposed mitigations; therefore, the City

of Beaufort's Technical Review Committee approves the study conditioned on subsequent approval by SCDOT.

The city requires a TIS to provide that any traffic impacts which may be caused by new development will have mitigation measures. Approval of the preliminary plat by the TRC is contingent on the design of these measures. Approval of the final plat is contingent on the construction or bonding of these measures.

MPC Task at Hand

Evaluation of the subdivision sketch plan. The approval is based on whether the minimum lot, block, and street dimensions are met; on whether the general street layout satisfactorily connects with the existing street network; and whether the allocation of open space meets the standards of the code.

MPC Concerns with Density, Building Heights, and Uses.

The density, dimensional standards, and allowable uses (established by ordinance) for a particular property is dependent on the property's zoning designation (established by ordinance). The allowable density, dimensional standards, and uses have already been set forth by council, and the MPC does not have the authority to dismiss these development rights.

Therefore, the MPC should not condition approval of the subdivision sketch plan on concessions from the owner of development rights which are allowed by ordinance. Any approval conditions must be related to the subdivision of land.

If the MPC had concerns with allowable density, heights, uses, etc., the MPC could have, by vote, decided to recommend an alternative zoning designation to the city council [BDC 9.16.3]. This should have been done prior to an owner's application.

Powers and Duties of the MPC

SC Code of Laws SECTION 6-29-340. Functions, powers, and duties of local planning commissions.

(A) It is the function and duty of the local planning commission . . . to undertake a continuing planning program for the physical, social, and economic growth, development, and redevelopment of the area within its jurisdiction. [. . .]

(B) In the discharge of its responsibilities, the local planning commission has the power and duty to:

(1) prepare and revise periodically plans and programs for the development and redevelopment of its area as provided in this chapter; and

(2) prepare and recommend for adoption to the appropriate governing authority or authorities as a means for implementing the plans and programs in its area:

(a) zoning ordinances to include zoning district maps and appropriate revisions thereof, as provided in this chapter;

(b) regulations for the subdivision or development of land and appropriate revisions thereof, and to oversee the administration of the regulations that may be adopted as provided in this chapter;

(c) an official map and appropriate revision on it showing the exact location of existing or proposed public street, highway, and utility rights-of-way, and public building sites, together with regulations to control the erection of buildings or other structures or changes in land use within the rights-of-way, building sites, or open spaces within its political jurisdiction or a specified portion of it, as set forth in this chapter;

(d) a landscaping ordinance setting forth required planting, tree preservation, and other aesthetic considerations for land and structures;

(e) a capital improvements program setting forth projects required to implement plans which have been prepared and adopted, including an annual listing of priority projects for consideration by the governmental bodies responsible for implementation prior to preparation of their capital budget; and

(f) policies or procedures to facilitate implementation of planning elements.

City of Beaufort [BDC 10.2.1.C] :

In order to better coordinate growth within the growth area, the MPC shall:

1. promote comprehensive planning in the growth area.
2. review all zoning and land development regulation amendments for conformity with the respective Comprehensive Plan. Conflicts with the Comprehensive Plan shall be noted in any report to the respective governmental entity making the regulation amendment.
3. review and make recommendations concerning all annexations with specific attention to those of regional impact within the growth area.
4. review and make recommendations concerning all requests for zoning within the growth area.
5. review and make recommendations concerning major transportation projects affecting the growth area.
6. review and make recommendations on other matters delegated by any of the governmental entities or such other matters as may appropriately come before the Commission.

- a. In matters affecting the entire growth area, the MPC shall report its recommendations to the councils for the municipalities, and to the county planning commission.
- b. In matters affecting only one governmental entity, the MPC shall report its recommendations to that governmental entity.

City of Beaufort [BDC 10.2.1.D] :

Pertaining to lands within the City of Beaufort limits, the Beaufort City Council designates to the MPC the following additional duties:

1. Review and make recommendations to the City Council in regard to planting, tree preservation, and other aesthetic consideration for land and land structures.
2. Review and make recommendations on public projects.
3. Review and approve, approve with conditions, or deny all Major Subdivision Sketch Plans.
4. Delegate Site Plan (syn. Preliminary Plat) and Final Subdivision Plat review and approval to city staff.
5. Review and make recommendations to the City Council about amendments to the text of this Development Code.
6. Review and make recommendations to the City Council about amendments to the Official Zoning Map.

TRAFFIC IMPACT STUDY

FOR THE

WHITEHALL MIXED-USE DEVELOPMENT

LOCATED
IN
BEAUFORT, SOUTH CAROLINA

Prepared For:
Witmer-Jones-Keefer, Ltd.

Prepared By:
Ramey Kemp & Associates, Inc.



March 2018; **Updated August 2020**
RKA Project #18056

TRAFFIC IMPACT STUDY

FOR THE

WHITEHALL MIXED-USE DEVELOPMENT

LOCATED
IN
BEAUFORT, SOUTH CAROLINA

Prepared For:
Witmer-Jones-Keefer, Ltd.
23 Promenade Street, Suite 201
Bluffton, South Carolina 29910

Prepared By:
Ramey Kemp & Associates, Inc.
7301 Rivers Avenue, Suite 242
North Charleston, South Carolina 29406



March 2018; **Updated August 2020**
RKA Project #18056

Andrew Kyle Ritter



08/06/2020

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- D) Synchro Analysis Worksheets (2020 Existing Conditions)
- E) Synchro Analysis Worksheets (2023 No-Build Conditions)
- F) Synchro Analysis Worksheets (2023 Build Conditions)
- G) Turn-Lane Analysis Worksheet
- H) Signal Warrant Analysis

EXECUTIVE SUMMARY

This traffic impact study was updated in August 2020 to address the Beaufort County, South Carolina Planning Commission comments. The previous study was submitted in March 2018. New traffic counts were not taken due to the effects of COVID-19, counts from the previous study were grown to the future years using the approved growth rate. Results were similar to the 2018 study with minor increases in delay associated with the growth in background traffic. The recommendations associated with the March 2018 traffic study remain.

A traffic impact study was conducted for the proposed Whitehall mixed-use development in accordance with City of Beaufort and SCDOT guidelines. The proposed development is located in the southwest quadrant of the US 21 Business/Sea Island Parkway & Meridian Road intersection in the City of Beaufort, South Carolina and consists of 202 multi-family units and a 10-acre public park.

Access to the development is proposed to be provided through one right-in/right-out driveway along US 21 Business/Sea Island Parkway (North Project Driveway), one full-access driveway along Meridian Road (East Project Driveway), and one connection to the existing Harborview Drive (South Project Driveway). A review of the driveway spacing for the project driveway indicates that no modifications to the project access plan are recommended at this time.

The results of the analysis indicate that the project driveway intersections are projected to experience acceptable LOS conditions during the study peak hours. The results of the intersection analyses indicate that the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection currently experiences and is projected to continue experiencing undesirable delay on the side-street approaches during both the weekday AM and PM peak hours. This is due to the high volume of traffic along US 21 Business/Sea Island Parkway that operates in a nearly free-flow condition at the study intersection.

Therefore, a traffic signal warrant analyses was completed using the 2023 Build conditions traffic projections to determine if traffic signalization of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway would be warranted with buildout of the development. The results show that Warrant 1, Condition B and Warrant 2 are projected to be satisfied with buildout of the development; therefore, it is recommended that this intersection be signalized to address the undesirable existing and projected delay. The signalized configuration of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection will result in acceptable operating conditions in the weekday AM and PM peak hours.

Based on the *Highway Design Manual* considerations, exclusive left-turn lanes at the project driveways along Meridian Road and Harborview Circle are not recommended.

Based on the Highway Design Manual considerations, exclusive right-turn lanes at the project driveways along US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle are not recommended.

1. INTRODUCTION

The purpose of this report is to document a traffic impact study for the proposed Whitehall mixed-use development in accordance with City of Beaufort and SCDOT guidelines. This report summarizes the procedures and findings of the traffic impact study.

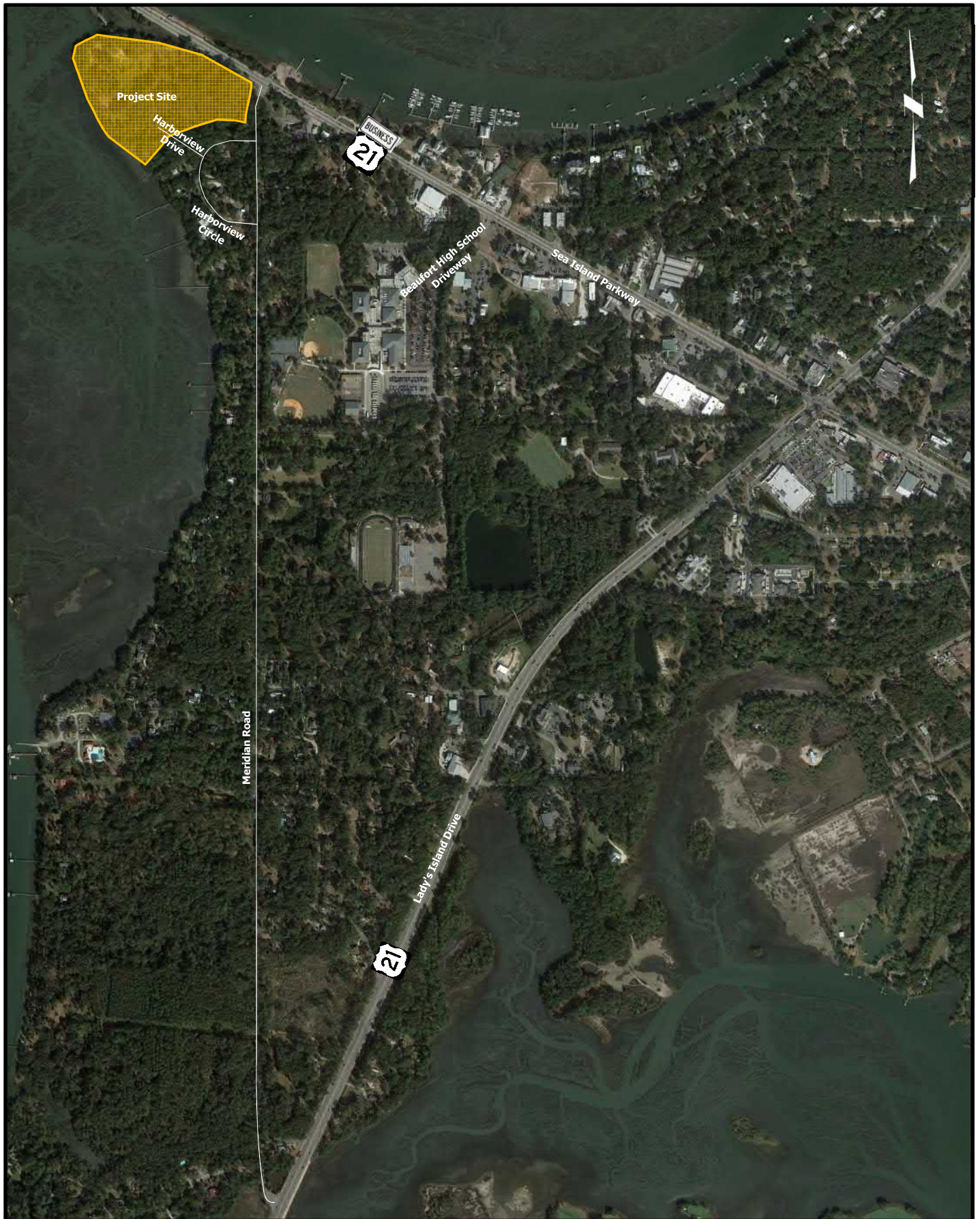
1.1. Project Background

The proposed development is located in the southwest quadrant of the US 21 Business/Sea Island Parkway & Meridian Road intersection in the City of Beaufort, South Carolina and consists of 202 multi-family units and a 10-acre public park. Access to the development is proposed to be provided through one right-in/right-out driveway along US 21 Business/Sea Island Parkway (North Project Driveway), one full-access driveway along Meridian Road (East Project Driveway), and one connection to the existing Harborview Drive (South Project Driveway).

The traffic impact study considers the weekday AM peak period (between 7:00 AM and 9:00 AM) and the weekday PM peak period (between 4:00 PM and 6:00 PM) as the study time frames. Based upon direction from Beaufort County staff, the extent of the existing roadway network to be studied consists the following six (6) intersections:

- 1) US 21 Business/Carteret Street & Bay Street;
- 2) US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway;
- 3) US 21 Business/Sea Island Parkway & Beaufort High School Driveway;
- 4) Meridian Road & Harborview Circle (north)/CNC Bank Driveway;
- 5) Meridian Road & Harborview Circle (south); and
- 6) US 21/Lady's Island Drive & Meridian Road.

The completion date for the proposed development is anticipated prior to 2023; therefore, future-year 2023 conditions were analyzed as the Build scenario. Figure 1 illustrates the location of the project site, including the adjacent public roadway network, and Figure 2 illustrates a conceptual site plan of the proposed development.



WHITEHALL

SKETCH PLAN
FOR ILLUSTRATIVE PURPOSES



Whitehall Jones Kasper
LLC
ARCHITECTURE
PLANNING
www.wjkllc.com

DRAFT
Not for construction
without approval



DATE: 22 JUNE 2020
LOCATION: BEAUFORT, SC

1.2. Existing Roadway Conditions

Existing lane configurations, including number of traffic lanes on each intersection approach and other intersection and roadway information, was collected through field reconnaissance.

US 21 Business/Sea Island Parkway/Carteret Street is a two-lane to five-lane undivided minor arterial that serves as a connection between the City of Beaufort and the sea islands of Lady's Island, St. Helena Island, Hunting Island, and Fripp Island. The posted speed limit is 40 mph and the 2016 AADT was 18,800 vehicles per day (vpd). Based upon existing turning movement counts, the percentage of heavy vehicles along US 21 Business/Sea Island Parkway is less than 1.0%.

US 21/Lady's Island Drive is a four-lane divided to five-lane undivided minor arterial that primarily serves as a connection between the Town of Port Royal and Lady's Island. The posted speed limit is 55 mph and the 2016 AADT was 21,600 vpd. Based upon existing turning movement counts, the percentage of heavy vehicles along US 21/Lady's Island Drive is approximately 1.9%.

Meridian Road is a two-lane, undivided major collector that primarily serves residential land uses. The posted speed limit is 35 mph and the 2016 AADT was 1,750 vpd. Based upon existing turning movement counts, the percentage of heavy vehicles along Meridian Road is less than 1.0%.

Harborview Circle is a two-lane, undivided local roadway that primarily serves residential land uses. The posted speed limit is 25 mph. Based upon existing turning movement counts, the percentage of heavy vehicles along Harborview Circle is approximately 5.5%.

Harborview Drive is a two-lane, undivided local roadway that primarily serves residential land uses.

Bay Street is a two-lane, undivided minor arterial that serves as the main roadway through the historic district of the City of Beaufort. The posted speed limit is 30 mph and the 2016 AADT was 7,400 vpd. Based upon existing turning movement counts, the percentage of heavy vehicles along Bay Street is less than 1.0%.

1.3. Future Roadway Conditions

A corridor study was conducted for US 21 Business/Sea Island Parkway and US 21/Lady's Island Drive in 2017 by the City of Beaufort. The study identified various access management recommendations to be implemented along the corridors, including reconfiguration of the US 21 Business/Sea Island Parkway & Beaufort High School Driveway intersection. However, there is currently no funding for these projects, so the recommendations were not considered to be in place for future-year analyses.

2. DRIVEWAY SPACING REVIEW

Access to the development is proposed to be provided through one right-in/right-out driveway along US 21 Business/Sea Island Parkway (North Project Driveway), one full-access driveway along Meridian Road (East Project Driveway), and one connection to the existing Harborview Drive (South Project Driveway). A review of the driveway spacing for the East Project Driveway was undertaken based upon information contained in SCDOT's *Access & Roadside Management Standards (ARMS)* manual.

Based upon the 40-mph posted speed limit, the 2016 AADT, and the driveway spacing criteria of *ARMS*, a minimum driveway spacing of 150 feet is required for a right-in/right-out driveways along US 21 Business/Sea Island Parkway. The proposed North Project Driveway is located approximately 380 feet west of the intersection with Meridian Road, which meets the SCDOT spacing criteria; therefore, no access modifications are recommended at this driveway.

Based upon the 35-mph posted speed limit, the 2016 AADT, and the driveway spacing criteria of *ARMS*, a minimum driveway spacing of 125 feet is required for driveways along Meridian Road. The proposed East Project Driveway is located approximately 160 feet south of the intersection with US 21 Business/Sea Island Parkway, approximately 190 feet north of the intersection with Harborview Circle (North), and approximately 20 feet north of the nearby CNC Bank Driveway. No modifications to the project access plan are recommended at this time.

Harborview Drive is an existing roadway along Harborview Circle therefore no modifications are recommended.

3. PROJECT TRAFFIC

Project traffic is defined as the vehicle trips expected to be generated by the Whitehall mixed-use development. The trips were distributed and assigned throughout the study roadway network.

3.1. Proposed Land Uses

The proposed development is anticipated to consist of multi-family units and a 10-acre public park. This study provided assumes 202 multi-family units. The project site is currently vacant.

3.2. Trip Generation Estimates

The trip generation potential for the Whitehall mixed-use development was estimated using information contained in ITE's *Trip Generation Manual*, 10th Edition (2017) for land use codes (LUC) 220 – Apartment and (LUC) 411 – Public Park. The weekday daily, the weekday AM peak hour of the adjacent street, and the weekday PM peak hour of the adjacent street time periods were considered in this review.

Pass-by capture and Internal capture were not considered for this development.

The trip generation estimates for the development are shown in Table 1 and documented in Appendix A.

Table 1 – Trip Generation Estimates

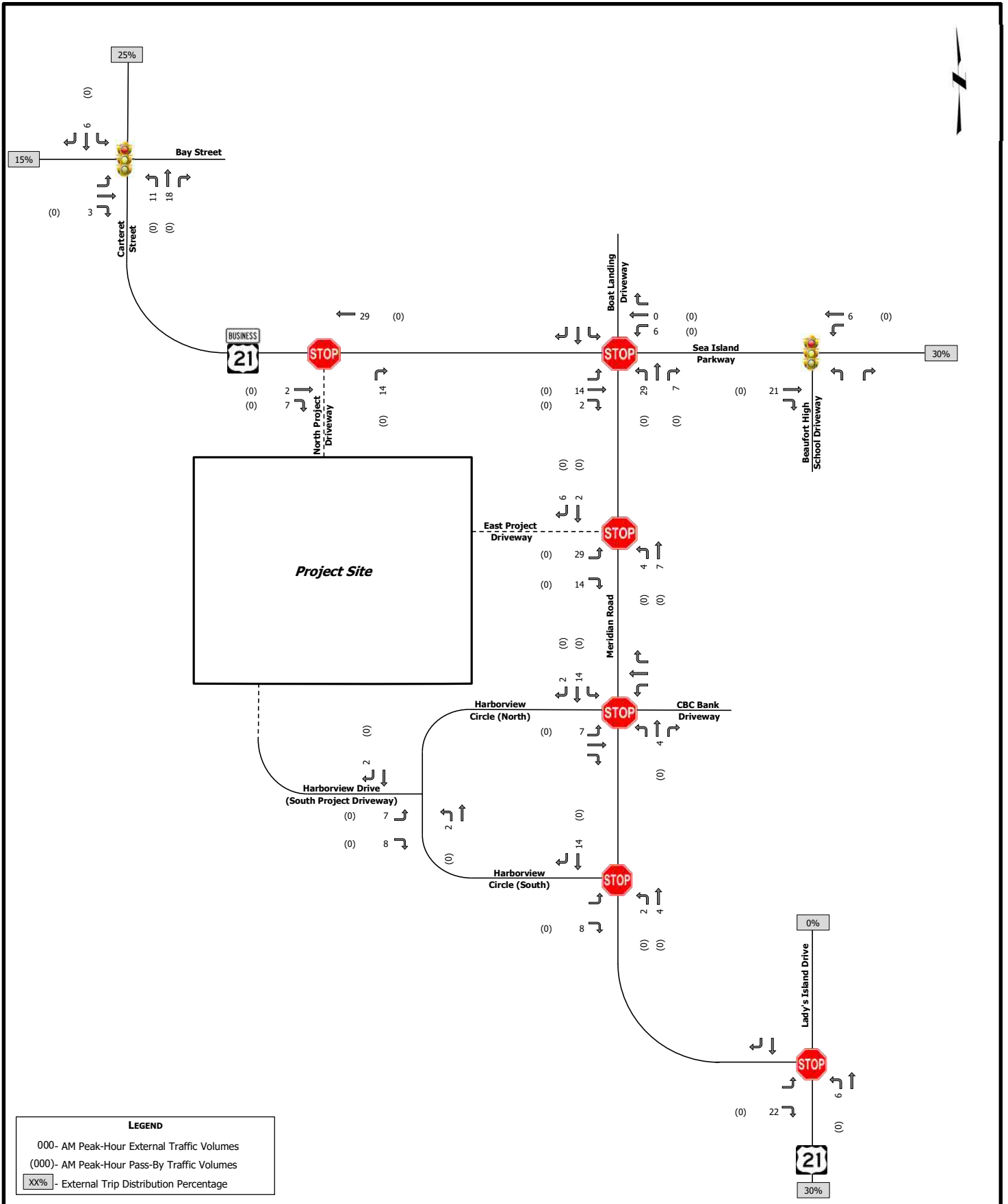
Land Use	ITE LUC	Scale	Weekday Daily Trips	Weekday AM Peak Hour Trips		Weekday PM Peak Hour Trips	
				In	Out	In	Out
Multifamily Housing (Low-Rise)	220	202 dwelling units	1,486	21	72	69	41
Public Park	411	10 Acres	95	0	0	13	10
New External Trips:			1,581	21	72	82	51

3.3 Trip Distribution & Assignment

New external traffic expected to be generated by the Whitehall mixed-use development was distributed and assigned to the roadway network based upon existing travel patterns in the area and the location of nearby land uses. After closer examination, the trip distribution is not anticipated to change with just (LUC) 220 – Apartment and (LUC) 411 – Public Park. The general distribution of new external project trips was assumed to be:

- 25% to/from the north via US 21 Business/Carteret Street,
- 15% from the west via Bay Street.
- 30% to the east via US 21 Business/Sea Island Parkway; and
- 30% to/from the south via US 21/Lady’s Island Drive.

The distribution and assignment of project traffic, in terms of new external trips, is illustrated in Figure 3 for the AM peak hour and Figure 4 for the PM peak hour.



Whitehall Mixed-Use Development - Traffic Impact Study
Figure 3 - AM Peak-Hour Project Traffic Volumes
Page 8

4. TRAFFIC VOLUME DEVELOPMENT

Existing 2020 traffic volumes were utilized in the analysis and future-year traffic volumes were developed for projected 2023 traffic conditions. The future-year volumes consisted of existing traffic volumes adjusted by an annual growth rate and the projected traffic volumes of the Whitehall mixed-use development.

4.1. Existing Traffic Volumes

Vehicle turning movement counts were conducted during the weekday AM peak period (7:00 AM to 9:00 AM) and the weekday PM peak period (4:00 PM to 6:00 PM) at the six intersections of:

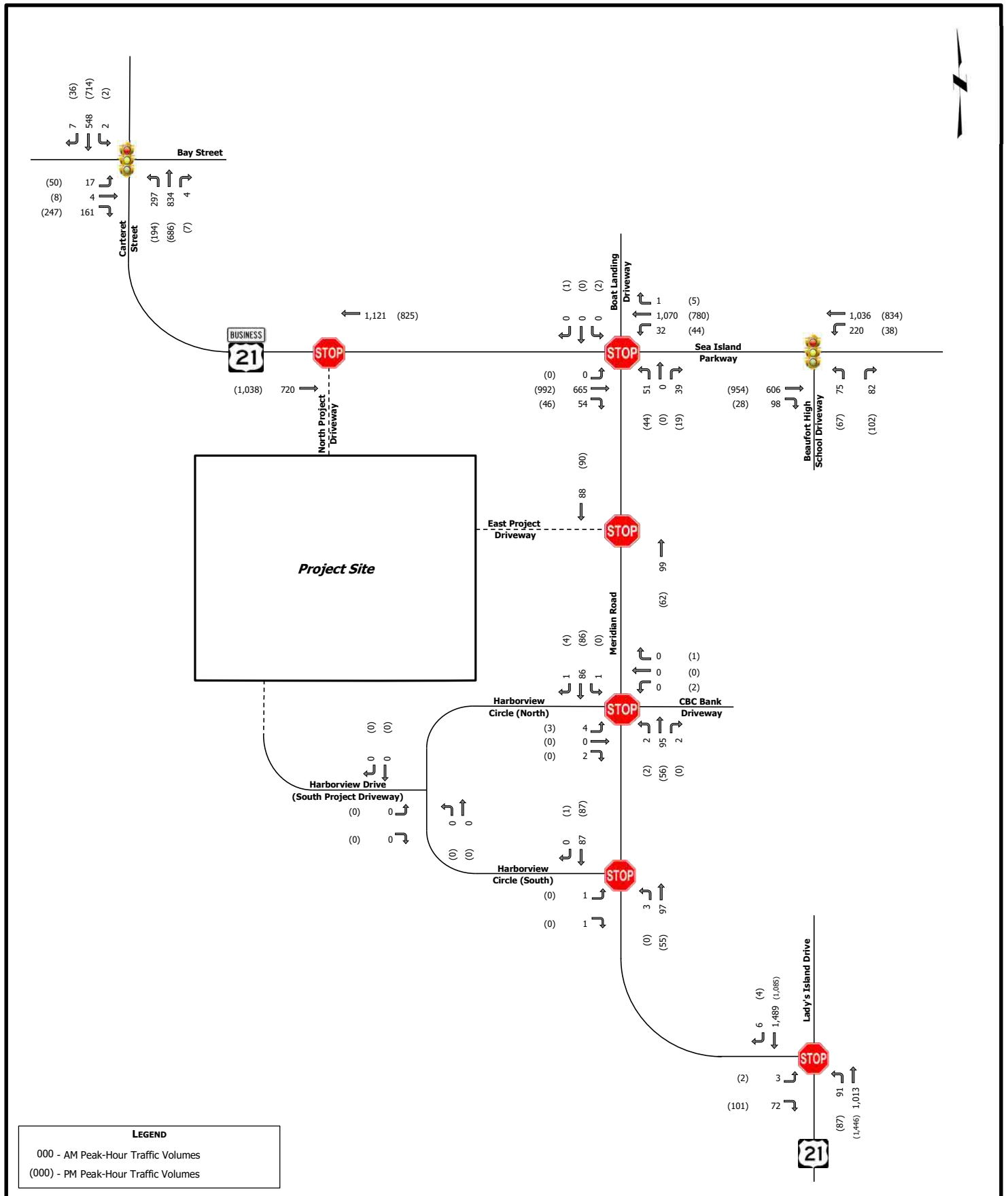
- 1) US 21 Business/Carteret Street & Bay Street;
- 2) US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway;
- 3) US 21 Business/Sea Island Parkway & Beaufort High School Driveway;
- 4) Meridian Road & Harborview Circle (north)/CNC Bank Driveway;
- 5) Meridian Road & Harborview Circle (south); and
- 6) US 21/Lady's Island Drive & Meridian Road.

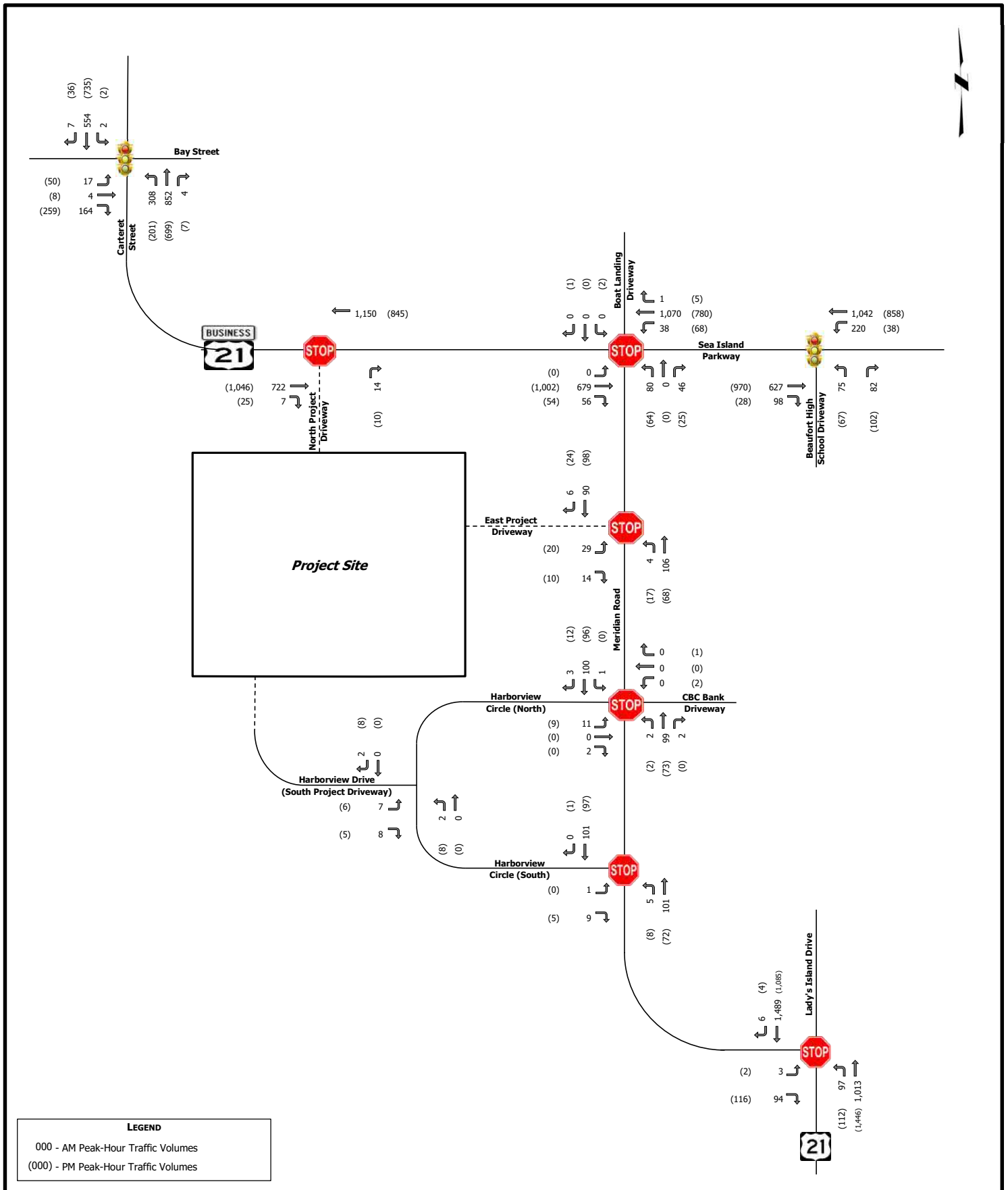
The counts were conducted in August 2017 while the local school district was in session. Traffic counts were grown to the year 2020 at the approved growth rate due to the effects of COVID-19. The raw traffic counts are provided in Appendix B and the 2020 existing traffic volumes are illustrated in Figure 5.

4.2 Future Traffic Volume Projections

To develop an annual background growth rate for use in the analysis, historical count data along US 21 Business/Sea Island Parkway (SCDOT count station #137), US 21/Lady's Island Drive (SCDOT count station #221), Bay Street (SCDOT count station #395), and Meridian Road (SCDOT count station #451) was reviewed over the past 10 years. It was determined that the roadways have collectively experienced negative annual growth over the past 10 years. However, over the past eight years, linear regression shows that US 21 Business/Sea Island Parkway (SCDOT count station #137) has experienced approximately 1.5% annual growth. Therefore, to provide a conservative analysis, a 1.5% annual growth rate was utilized on all study roadways to develop the 2023 No-Build traffic volumes, which are illustrated in Figure 6 and documented in Appendix C. Worksheets documenting the growth analysis is included in Appendix B.

The Whitehall mixed-use development project traffic volumes were added to the 2023 No-Build traffic volumes to develop 2023 Build traffic volumes, which are illustrated in Figure 7 and documented in Appendix C.





5. TRAFFIC IMPACT ANALYSIS

Using the existing and proposed traffic volumes previously discussed, intersection analyses and turn-lane warrant analyses were conducted.

5.1. Turn Lane Analysis

An analysis was conducted to determine the potential need for exclusive turn lanes along US 21 Business/Sea Island Parkway at the North Project Driveway, along Meridian Road at the East Project Driveway and along Harborview Circle at the South Project Driveway intersections. This analysis was conducted utilizing the criteria documented in SCDOT's *ARMS* manual and *Highway Design Manual* (2017).

The need for exclusive left-turn lanes is based upon the criteria documented in Section 9.5.1.2 of the *Highway Design Manual*, which consists of nine considerations. These considerations and applications at the intersections of Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are summarized below. The intersection of US 21 Business/Sea Island Parkway & North Project Driveway is proposed to be a right-in/right-out driveway therefore a left-turn lane is not recommended at this driveway.

- 1) *at any unsignalized intersection on principal, high-speed rural highways with other arterials or collectors;*

The project driveways are not located on high-speed rural highways; therefore, this consideration is not met.

- 2) *at any unsignalized intersection on a two-lane urban or rural highway which satisfies the criteria in Figures 9.5-C, 9.5-D, 9.5-E, 9.5-F, or 9.5-G;*

The posted speed limit along Meridian Road near the East Project Driveway is 35 mph; therefore, this criteria is not met.

The posted speed limit along Harborview Circle at the South Project Driveway is 25 mph; therefore, this criteria is not met.

- 3) *at any intersection where a capacity analysis determines a left-turn lane is necessary to meet the level-of-service criteria;*

The intersections of Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are projected to operate at an acceptable LOS without exclusive northbound left-turn lanes into the project site; therefore, this consideration is not met.

- 4) *at any signalized intersection where the left-turn volume is 300 vehicles per hour or more, conduct a traffic review to determine if dual left-turn lanes are required;*

The intersections of Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are projected to have mainline left-turn volumes of less than 300 vehicles in the peak hours and are not proposed to be signalized; therefore, this consideration is not met.

- 5) *as a general rule, at any intersection where the left-turning volume is 100 vehicles per hour (for a single turn lane) or 300 vehicles per hour (for a dual turn lane);*

The intersections of Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are projected to have northbound left-turn volumes less than 100 vehicles in the peak hours; therefore, this consideration is not met.

- 6) *at all entrances to major residential, commercial and industrial developments;*

The development is not a major residential, commercial, or industrial development; therefore, this consideration is not met.

- 7) *at all median crossovers;*

There is not a median crossover along Meridian Road or Harborview Circle at the project driveway intersections therefore, this consideration is not met.

- 8) *for uniformity of intersection design along the highway if other intersections have left-turn lanes (i.e., to satisfy driver expectancy); or*

There are no exclusive left-turn lanes at other unsignalized intersections along Meridian Road or Harborview Circle, therefore, this consideration is not met.

- 9) *at any intersection where crash experience, traffic operations, sight distance restrictions (e.g., intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to left-turning vehicles.*

There are no known issues with crashes, traffic operations, or sight distance along Meridian Road or Harborview Circle in this area; therefore, this consideration is not applicable.

Based on the *Highway Design Manual* considerations, exclusive northbound left-turn lanes along Meridian Road at the East Project Driveway intersection and along Harborview Circle the South Project Driveway intersection are not recommended. A worksheet documenting the left-turn lane warrant analysis is provided in Appendix G.

The need for exclusive right-turn lanes is based upon the criteria documented in Section 9.5.1.1 of the *Highway Design Manual*, which consists of nine considerations. These considerations and applications at the intersections of US 21 Business/Sea Island Parkway & North Project Driveway, Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are summarized on the following page.

- 1) *at a free-flowing leg of any intersection on a two-lane urban or rural highway which satisfies the criteria in Figure 9.5-A;*

The projected 2023 Build conditions traffic volumes at the US 21 Business/Sea Island Parkway & North Project Driveway intersection do not satisfy the criteria for *FIGURE 9.5-A – GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS*.

The projected 2023 Build conditions traffic volumes at the Meridian Road & East Project Driveway intersection do not satisfy the criteria for *FIGURE 9.5-A – GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS*.

The projected 2023 Build conditions traffic volumes at the Harborview Circle & South Project Driveway intersection do not satisfy the criteria for *FIGURE 9.5-A – GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS*.

- 2) *at the free-flowing leg of any unsignalized intersection on a high-speed (50 miles per hour or greater), four-lane urban or rural highway that satisfies the criteria in Figure 9.5-B;*

The speed limits along US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle are 40 mph, 35 mph, and 25 mph; respectively, in the study area; therefore, this consideration is not met.

- 3) *at the free-flowing leg of any unsignalized intersection on a six-lane urban or rural highway;*

US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle are not six-lane roadways; therefore, this consideration is not met.

- 4) *at any intersection where a capacity analysis determines a right-turn lane is necessary to meet the overall level-of-service criteria;*

The US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle approaches to the project driveway intersections are projected to operate at an acceptable LOS without exclusive right-turn lanes along into the project site; therefore, this consideration is not met.

- 5) *at any signalized intersection where the projected right-turning volume is greater than 300 vehicles per hour and where there is greater than 300 vehicles per hour per lane on the mainline;*

The intersections of US 21 Business/Sea Island Parkway & North Project Driveway, Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway are projected to have mainline right-turn volumes of less than 300 vehicles in the peak hours; therefore, this consideration is not met.

- 6) *for uniformity of intersection design along the highway if other intersections have right-turn lanes;*

There are no exclusive mainline right-turn lanes at other unsignalized intersections along US 21 Business/Sea Island Parkway, Meridian Road, or Harborview Circle; therefore, this consideration is not met.

- 7) *at any intersection where the mainline is curved to the left and where the mainline curve requires superelevation;*

The project driveway intersections are not located in curves to the left which require superelevation; therefore, the consideration is not met.

- 8) *at railroad crossings where the railroad is paralleled to the facility and is located close to the intersection and where a right-turn lane would be desirable to store queued vehicles avoiding interference with the movement of through traffic; or*

The project driveway intersections are not located near railroad crossings; therefore, this consideration is not applicable.

- 9) *at any intersection where the crash experience, existing traffic operations, sight distance restrictions (e.g. intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to right-turning vehicles.*

There are no known issues with crashes, traffic operations, or sight distance along of US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle; therefore, this consideration is not applicable.

Based on the *Highway Design Manual* considerations, exclusive right-turn lanes are not recommended for the US 21 Business/Sea Island Parkway & North Project Driveway, Meridian Road & East Project Driveway and Harborview Circle & South Project Driveway intersections. A worksheet documenting the right-turn lane analyses is provided in Appendix G.

5.2. Intersection LOS Analysis

Using the existing and proposed traffic volumes, intersection analyses were conducted for the study and project driveway intersections considering 2020 Existing conditions, 2023 No-Build conditions, and 2023 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 2010 (HCM 2010)* methodologies of the *Synchro*, Version 9 software.

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, forced-flow (bumper-to-bumper) conditions with high vehicular delays, and are generally considered undesirable. Table 2 on the following page summarizes the *HCM 2010* control delay thresholds associated with each LOS grade for unsignalized and signalized intersections.

Table 2 – HCM 2010 LOS Criteria for Unsignalized & Signalized Intersections

Unsignalized Intersections		Signalized Intersections	
LOS	Control Delay per Vehicle (seconds)	LOS	Control Delay per Vehicle (seconds)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 15	B	> 10 and ≤ 20
C	> 15 and ≤ 25	C	> 20 and ≤ 35
D	> 25 and ≤ 35	D	> 35 and ≤ 55
E	> 35 and ≤ 50	E	> 55 and ≤ 80
F	> 50	F	> 85

As part of the intersection analysis, SCDOT's default *Synchro* parameters were utilized. Existing peak-hour factors (PHF) were utilized in the analysis of existing conditions and a minimum PHF of 0.90 and a maximum PHF of 0.95 was utilized in the analysis of future conditions. Existing heavy vehicle percentages were utilized in the analysis, with a minimum percentage of 2% considered. Existing lane geometry was utilized for the analysis of the existing and future-year scenarios. Existing traffic signal timing and phasing plans were obtained from Beaufort County and utilized for all scenarios.

Using the *Synchro* software, intersection analyses were conducted for 2020 Existing conditions, 2023 No-Build conditions, and 2023 Build conditions for the weekday AM peak-hour and weekday PM peak-hour time periods. It should be noted that the signalized intersection of US 21 Business/Sea Island Parkway & Beaufort High School Driveway has an unsignalized southbound approach that provides access to a shopping center. Due to limitations of the *Synchro* software, this approach was removed from the analysis, but would likely have little to no effect on the overall results due to the low volume of traffic on the approach. The results of the intersection analyses are summarized in Table 3 for the unsignalized intersections and Table 4 for the signalized intersections.

Table 3 – Unsignalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)					
		2020 Existing Conditions		2023 No-Build Conditions		2023 Build Conditions	
		AM	PM	AM	PM	AM	PM
US 21 Business/Sea Island Parkway & North Project Driveway	EB	--	--	--	--	A/0.0	A/0.0
	WB	--	--	--	--	A/0.0	A/0.0
	NB	--	--	--	--	B/14.8	C/21.2
US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway	EB	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0
	WB	A/0.3	A/0.6	A/0.3	A/0.6	A/0.3	A/0.9
	NB	F/158.7	F/188.8	F/258.5	F/280.9	F/575.4	F/608.2
	SB	A/0.0	F/61.3	A/0.0	F/73.1	A/0.0	F/87.0
Meridian Road & East Project Driveway	EB	--	--	--	--	A/9.7	A/9.7
	NB	--	--	--	--	A/0.3	A/1.5
	SB	--	--	--	--	A/0.0	A/0.0
Meridian Road & Harborview Circle (North)/CBC Bank Driveway	EB	A/9.5	A/9.6	A/9.6	A/9.6	A/9.9	A/9.9
	WB	A/0.0	A/9.3	A/0.0	A/9.2	A/0.0	A/9.4
	NB	A/0.2	A/0.3	A/0.1	A/0.3	A/0.1	A/0.2
	SB	A/0.1	A/0.0	A/0.1	A/0.0	A/0.1	A/0.0
Harborview Circle & Harborview Drive (South Project Driveway)	EB	--	--	--	--	A/8.5	A/8.6
	NB	--	--	--	--	A/7.3	A/7.3
	SB	--	--	--	--	A/0.0	A/0.0
Meridian Road & Harborview Circle (South)	EB	A/9.3	A/0.0	A/9.3	A/0.0	A/9.0	A/8.9
	NB	A/0.2	A/0.0	A/0.2	A/0.0	A/0.4	A/0.7
	SB	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0
US 21/Lady's Island Drive & Meridian Road	EB	D/27.8	C/16.4	D/31.8	C/18.2	D/33.4	C/19.9
	NB	A/1.3	A/0.6	A/1.4	A/0.7	A/1.5	A/0.9
	SB	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0	A/0.0

Table 4 – Signalized Intersection Analysis Results

Intersection	LOS/Delay (seconds)							
	2020 Existing Conditions		2023 No-Build Conditions		2023 Build Conditions		2023 Build + Improvement Conditions	
	AM	PM	AM	PM	AM	PM	AM	PM
US 21 Business/Carteret Street & Bay Street	Overall-B/12.5 EB-D/46.2 NB-A/7.2 SB-B/12.4	Overall-C/20.5 EB-E/58.3 NB-B/10.3 SB-B/17.1	Overall-B/13.2 EB-D/46.0 NB-A/8.0 SB-B/13.3	Overall-C/21.5 EB-E/58.3 NB-B/11.4 SB-B/18.6	Overall-B/13.6 EB-D/45.9 NB-A/8.4 SB-B/13.7	Overall-C/22.8 EB-E/58.7 NB-B/12.4 SB-C/20.2	Overall-B/13.6* EB-D/45.9 NB-A/8.4 SB-B/13.7	Overall-C/22.8* EB-E/58.7 NB-B/12.4 SB-C/20.2
US 21 Business/Sea Island Parkway & Beaufort High	Overall-B/10.9 EB-A/6.4 WB-A/5.7 NB-E/72.3	Overall-B/13.9 EB-B/12.2 WB-A/5.8 NB-E/65.3	Overall-11.5 EB-A/6.9 WB-A/6.4 NB-E/72.2	Overall-B/14.4 EB-B/13.0 WB-A/6.1 NB-E/65.2	Overall-B/11.5 EB-A/7.1 WB-A/6.6 NB-E/72.2	Overall-B/14.6 EB-B/13.6 WB-A/6.3 NB-E/65.2	Overall-B/11.5* EB-A/7.1 WB-A/6.6 NB-E/72.2	Overall-B/14.6* EB-B/13.6 WB-A/6.3 NB-E/65.2
US 21 Business/Sea Island Parkway Meridian Road/Boat Landing Driveway	--	--	--	--	--	--	Overall-B/10.7* EB-A/8.9 WB-A/7.9 NB-D/45.8 SB-A/0.0	Overall-B/15.0* EB-B/19.6 WB-A/6.0 NB-D/47.2 SB-D/42.1

*LOS considering signalization of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection.

The results of the analysis indicate that the project driveway intersections are projected to experience acceptable LOS conditions during the study peak hours.

The results of the intersection analyses indicate that the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection currently experiences and is projected to continue experiencing undesirable delay on the side-street approaches during both the weekday AM and PM peak hours. This is due to the high volume of traffic along US 21 Business/Sea Island Parkway that operates in a nearly free-flow condition at the study intersection. Therefore, it is recommended that this intersection be signalized with the development of the proposed Whitehall mixed-use development to address the undesirable existing and projected delay; the signalized configuration of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection will result in acceptable operating conditions in the weekday AM and PM peak hours.

With the signal, the northbound approach of the intersection is still expected to operate at LOS F in the AM Peak hour but queues and delays will improve. Installation of signal at the intersection is not expected to have significant impact on the existing signal at Beaufort High School. With US 21 being a minor arterial, SCDOT prefers 1320 feet of spacing between traffic signals. The spacing

between the new signal and US 21 Business/Sea Island Parkway and Beaufort High School is approximately 1850 feet.

Worksheets documenting the intersection analyses are provided in Appendix D for 2020 Existing conditions, Appendix E for 2023 No-Build conditions, and Appendix F for 2023 Build conditions and 2023 Build + Improvement conditions.

6. SIGNAL WARRANT ANALYSIS

A traffic signal warrant analysis was conducted for the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection. The methods used for the signal warrant analysis were based upon the criteria set forth in the 2009 Edition of the Federal Highway Administration's *Manual on Uniform Traffic Control Devices (MUTCD)*.

The analysis considered the projected 2023 No-Build hourly traffic volumes plus the projected hourly traffic volumes from the Whitehall mixed-use development, which are documented in Appendix H. Traffic volumes for the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection approaches were developed for each hour between 6:00 AM to 7:00 PM using the daily trip generation estimates from the ITE's *Trip Generation Manual*, 10th Edition (2017) as previously discussed. Hourly distribution percentages considered the ITE's *Trip Generation Manual*, 10th Edition (2017) percentages for LUC 220 - Apartments and LUC 411–Public Park. A worksheet documenting the hourly traffic volumes is provided in Appendix H.

The *MUTCD* contains eight warrants used to evaluate intersections for potential traffic signalization. In performing this analysis, only the traffic volume warrants, Warrant 1 and Warrant 2, were considered applicable in evaluating the projected intersection characteristics. SCDOT prefers for warrants a new signal to meet 1A or 1B but in some cases Warrant 2 will suffice. Worksheets documenting the traffic signal analysis are provided in Appendix H.

For the purposes of the analysis, it is expected that the minor-street Meridian Road right-turn movements will impact the need for a traffic signal; therefore, 50% of the minor-street right-turn traffic volumes were included in the signal warrant analysis.

6.1. Warrant 1A – Eight-Hour Vehicular Volume

The Eight-Hour Vehicular Volume Warrant is separated into two conditions based upon intersection volumes. Condition A is intended for applications where a large volume of intersecting traffic is the principal reason to consider the installation of a traffic signal. The minimum hourly volumes need to satisfy the criteria of Warrant 1, Condition A are 500 vehicles on the major-street approaches and 150 vehicles on the highest minor-street approach for a one-lane approach for each of any eight hours of an average day.

For build 2023 traffic volumes, considering the major street as US 21 Business/Sea Island Parkway and the minor street as Meridian Road, the criteria are met for one hour; therefore, Warrant 1, Condition A is **not satisfied** for build 2023 conditions.

6.2. Warrant 1B – Eight-Hour Vehicular Volume

The Eight-Hour Vehicular Volume Warrant is separated into two conditions based upon intersection volumes. Condition B is intended where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. The minimum hourly volumes need to satisfy the criteria of Warrant 1, Condition B are 750 vehicles on the major-street approaches and 75 vehicles on the highest minor-street approach for a one-lane approach for each of any eight hours of an average day.

For build 2023 traffic volumes, considering the major street as US 21 Business/Sea Island Parkway and the minor street as Meridian Road, the criteria are met for 11 hours; therefore, Warrant 1, Condition B is **satisfied** for build 2023 conditions.

6.3. Warrant 1 Combination – Eight-Hour Vehicular Volume

In addition to the two Conditions of Warrant 1, a combination of Conditions A and B is provided if the intersection volumes do not meet the criteria of either Condition A or Condition B. The minimum hourly volumes need to satisfy the criteria are 80% of both the respective Condition A and Condition B criteria for the major-street and minor-street approaches for each of any eight hours of an average day.

For build 2023 traffic volumes, considering the major street as US 21 Business/Sea Island Parkway and the minor street as Meridian Road, Warrant 1, Combination is **not applicable** due to the fact that the traffic volumes meet Warrant 1, Condition B for build 2023 conditions.

6.4. Warrant 2 – Four-Hour Vehicular Volume

The Four-Hour Vehicular Volume Warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider the installation of a traffic signal. The criteria of Warrant 2 are satisfied if the major-street and minor-street plotted hourly volumes fall above the applicable curve in Figure 4C-1 of the *MUTCD* for each of any four hours of an average day.

For build 2023 traffic volumes, considering the major street as US 21 Business/Sea Island Parkway and the minor street as Meridian Road, the criteria are met for eleven hours; therefore, Warrant 2 is **satisfied** for build 2023 conditions.

6.5. Traffic Signal Warrant Analysis Summary

Table 5 summarizes the results of the signal warrant analysis for the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection. Worksheets documenting the signal warrant analysis are provided in Appendix H.

Table 5 – Signal Warrant Analysis Summary

<i>MUTCD</i> Warrant		Signal Warrant Results Build 2023 Conditions
Warrant 1 (Eight-Hour Vehicular Volume)	Condition A	Not Satisfied
	Condition B	Satisfied
	Combination	Not Applicable
Warrant 2 (Four-Hour Vehicular Volume)		Satisfied

Based upon build 2023 traffic volumes, considering the major street as US 21 Business/Sea Island Parkway and the minor street as Meridian Road, the traffic signal warrant criteria are met for 11 (of eight) hours of Warrant 1, Condition B and for eleven (of four) hours of Warrant 2. Based upon the results of the traffic signal warrant analysis, traffic signalization is recommended for consideration at the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection once the future traffic volumes meet the warrant criteria with the development of the Whitehall mixed-use development. The analyses considered 50% of the right-turning vehicles.

7. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This traffic impact study was updated in August 2020 to address the Beaufort County, South Carolina Planning Commission comments. The previous study was submitted in March 2018. New traffic counts were not taken due to the effects of COVID-19, counts from the previous study were grown to the future years using the approved growth rate. Results were similar to the 2018 study with minor increases in delay associated with the growth in background traffic. The recommendations associated with the March 2018 traffic study remain.

A traffic impact study was conducted for the proposed Whitehall mixed-use development in accordance with City of Beaufort and SCDOT guidelines. The proposed development is located in the southwest quadrant of the US 21 Business/Sea Island Parkway & Meridian Road intersection in the City of Beaufort, South Carolina and consists of 202 multi-family units and a 10-acre public park.

Access to the development is proposed to be provided through one right-in/right-out driveway along US 21 Business/Sea Island Parkway (North Project Driveway), one full-access driveway along Meridian Road (East Project Driveway), and one connection to the existing Harborview Drive (South Project Driveway). A review of the driveway spacing for the project driveway indicates that no modifications to the project access plan are recommended at this time.

The results of the analysis indicate that the project driveway intersections are projected to experience acceptable LOS conditions during the study peak hours. The results of the intersection analyses indicate that the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection currently experiences and is projected to continue experiencing undesirable delay on the side-street approaches during both the weekday AM and PM peak hours. This is due to the high volume of traffic along US 21 Business/Sea Island Parkway that operates in a nearly free-flow condition at the study intersection.

Therefore, a traffic signal warrant analyses was completed using the 2023 Build conditions traffic projections to determine if traffic signalization of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway would be warranted with buildout of the development. The results show that Warrant 1, Condition B and Warrant 2 are projected to be satisfied with buildout of the development; therefore, it is recommended that this intersection be signalized to address the undesirable existing and projected delay. The signalized configuration of the US 21 Business/Sea Island Parkway & Meridian Road/Boat Landing Driveway intersection will result in acceptable operating conditions in the weekday AM and PM peak hours.

Based on the *Highway Design Manual* considerations, exclusive left-turn lanes at the project driveways along Meridian Road and Harborview Circle are not recommended.

Based on the Highway Design Manual considerations, exclusive right-turn lanes at the project driveways along US 21 Business/Sea Island Parkway, Meridian Road, and Harborview Circle are not recommended.

APPENDIX A

Trip Generation Worksheet

WHITEHALL PLANTATION
TRIP GENERATION ESTIMATES

Daily Trips																			
Land Use	ITE LUC Code	Size	Unit	Location	Label	Equation Type	Equation					Directional Distribution		Gross Trips			External Trips		
												In	Out	In	Out	Total	In	Out	Total
Multifamily Housing (Low Rise)	220	202	DU	GU/SU	48	Linear	T=	7.56	(X)	-	40.86	50%	50%	743	743	1,486	743	743	1,486
Public Park	411	10	Acres		116	Linear	T=	0.64	(X)	+	88.46	50%	50%	47	48	95	47	48	95
Total:														790	791	1,581	790	791	1,581

AM Peak Hour Trips																			
Land Use	ITE LUC Code	Size	Unit	Location	Label	Equation Type	Equation					Directional Distribution		Gross Trips			External Trips		
												In	Out	In	Out	Total	In	Out	Total
Multifamily Housing (Low Rise)	220	202	DU	GU/SU	48	Log	Ln(T)=	0.95	Ln(X)	-	0.51	23%	77%	21	72	93	21	72	93
Public Park	411	10	Acres		116	Linear	T=	0.02	(X)	+	0	59%	41%	0	0	0	0	0	0
Total:														21	72	93	21	72	93

PM Peak Hour Trips																			
Land Use	ITE LUC Code	Size	Unit	Location	Label	Equation Type	Equation					Directional Distribution		Gross Trips			External Trips		
												In	Out	In	Out	Total	In	Out	Total
Multifamily Housing (Low Rise)	220	202	DU	GU/SU	48	Log	$\ln(T)=$	0.89	$\ln(X)$	-	0.02	63%	37%	69	41	110	69	41	110
Public Park	411	10	Acres		116	Linear	$T=$	0.06	(X)	+	22.6	55%	45%	13	10	23	13	10	23
Total:														82	51	133	82	51	133

APPENDIX B

Traffic Count Data

SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : Meridian Rd @ Sea Island Pkwy

Site Code : 00110717

Start Date : 11/7/2017

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Meridian Rd Eastbound				Sea Island Pkwy Westbound				Meridian Rd Northbound				Boat Ramp Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
06:00	0	19	0	1	0	78	0	1	2	0	1	0	0	0	0	0	102
06:15	0	23	1	2	2	87	0	0	2	0	1	0	1	0	0	0	119
06:30	0	53	6	1	1	150	0	0	5	0	2	0	0	0	0	0	218
06:45	0	66	6	3	0	183	0	0	6	0	4	0	0	0	0	0	268
Total	0	161	13	7	3	498	0	1	15	0	8	0	1	0	0	0	707
07:00	0	89	1	1	1	198	4	0	4	0	5	0	1	0	0	0	304
07:15	0	141	7	0	6	203	0	0	6	0	7	0	0	0	0	0	370
07:30	0	144	9	1	9	247	2	0	12	0	9	0	1	0	0	0	434
07:45	0	136	10	0	3	272	0	0	9	0	15	0	0	0	0	0	445
Total	0	510	27	2	19	920	6	0	31	0	36	0	2	0	0	0	1553
08:00	0	133	14	0	10	234	2	1	8	0	11	0	0	0	0	0	413
08:15	0	150	15	0	14	211	1	0	19	0	13	0	1	0	0	0	424
08:30	0	159	12	1	4	159	2	0	8	0	16	0	2	0	0	0	363
08:45	0	123	6	0	9	172	1	0	7	0	12	0	1	0	0	0	331
Total	0	565	47	1	37	776	6	1	42	0	52	0	4	0	0	0	1531
09:00	0	93	10	3	17	128	0	1	12	0	7	0	0	0	0	0	271
09:15	0	121	7	2	11	157	0	0	7	0	7	0	2	0	0	0	314
09:30	0	102	8	0	13	138	2	1	5	0	11	0	0	0	1	0	281
09:45	1	135	14	0	7	159	0	0	7	0	10	0	0	0	0	0	333
Total	1	451	39	5	48	582	2	2	31	0	35	0	2	0	1	0	1199
10:00	0	126	12	0	4	144	0	1	6	0	9	0	1	0	1	0	304
10:15	0	133	8	0	14	154	0	1	13	0	11	0	2	0	1	0	337
10:30	0	106	7	0	9	156	2	1	8	0	4	0	2	0	0	0	295
10:45	0	128	14	0	8	162	0	0	10	0	6	0	3	0	0	0	331
Total	0	493	41	0	35	616	2	3	37	0	30	0	8	0	2	0	1267
11:00	0	127	5	0	1	138	0	0	4	1	7	0	0	0	0	0	283
11:15	0	146	4	3	3	113	0	0	11	0	6	0	1	1	0	0	288
11:30	0	107	10	0	14	145	1	0	6	0	5	0	1	0	0	0	289
11:45	0	180	6	5	6	157	3	0	11	0	12	0	1	0	0	0	381
Total	0	560	25	8	24	553	4	0	32	1	30	0	3	1	0	0	1241
12:00	0	111	5	0	16	130	1	0	4	0	10	0	0	0	1	0	278
12:15	2	192	9	1	6	140	1	0	9	0	10	0	0	0	1	0	371
12:30	1	103	13	1	19	149	1	1	5	0	7	0	0	0	3	0	303
12:45	0	189	18	1	11	175	2	1	9	0	14	0	1	0	2	0	423
Total	3	595	45	3	52	594	5	2	27	0	41	0	1	0	7	0	1375
13:00	0	193	13	0	10	148	1	0	4	0	4	0	0	0	1	0	374
13:15	0	167	9	0	8	182	2	0	6	0	9	0	1	0	1	0	385
13:30	0	151	9	0	6	156	1	0	2	1	7	0	2	0	0	0	335
13:45	0	139	13	0	8	149	2	0	4	1	6	0	3	1	0	0	326
Total	0	650	44	0	32	635	6	0	16	2	26	0	6	1	2	0	1420
14:00	0	136	14	0	9	160	0	0	5	0	5	0	0	0	0	0	329
14:15	0	146	13	3	12	152	1	0	10	0	8	0	1	0	0	0	346
14:30	0	127	7	0	19	139	0	0	4	0	12	0	1	0	0	0	309
14:45	1	201	7	0	10	153	3	0	9	0	17	0	2	0	1	0	404
Total	1	610	41	3	50	604	4	0	28	0	42	0	4	0	1	0	1388
15:00	0	172	12	0	9	170	0	0	11	0	10	0	0	0	0	0	384
15:15	0	196	14	0	16	184	0	0	10	0	11	0	0	0	0	0	431
15:30	1	188	15	0	9	182	0	0	11	0	10	0	0	0	0	0	416
15:45	0	214	9	0	18	165	1	2	20	0	16	0	5	0	0	0	450
Total	1	770	50	0	52	701	1	2	52	0	47	0	5	0	0	0	1681

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735 Maryland St
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We can't say we're the Best, but you Can!

File Name : Meridian Rd @ Sea Island Pkwy

Site Code : 00110717

Start Date : 11/7/2017

Page No : 2

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Meridian Rd Eastbound				Sea Island Pkwy Westbound				Meridian Rd Northbound				Boat Ramp Southbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
16:00	0	187	14	1	18	234	0	0	24	0	16	0	0	0	0	0	494
16:15	0	222	9	1	11	171	0	0	10	0	3	0	0	0	0	0	427
16:30	0	202	19	0	10	187	0	0	6	0	8	0	0	0	0	0	432
16:45	1	213	11	1	5	157	1	0	12	0	5	0	1	0	0	0	407
Total	1	824	53	3	44	749	1	0	52	0	32	0	1	0	0	0	1760
17:00	0	238	17	4	10	182	2	2	15	0	13	0	0	0	0	0	483
17:15	0	264	13	4	9	173	0	0	17	0	11	0	0	0	0	0	491
17:30	0	229	14	0	11	155	0	0	13	0	8	0	0	0	0	0	430
17:45	0	232	6	0	9	161	0	0	13	0	14	0	2	0	0	0	437
Total	0	963	50	8	39	671	2	2	58	0	46	0	2	0	0	0	1841
18:00	0	159	9	1	6	126	0	0	1	0	6	0	0	0	1	0	309
18:15	0	173	4	0	6	142	0	0	9	0	3	0	0	0	0	0	337
18:30	0	183	7	1	9	120	1	0	6	0	5	0	0	0	0	0	332
18:45	0	146	5	0	8	108	0	0	11	0	5	0	0	0	0	0	283
Total	0	661	25	2	29	496	1	0	27	0	19	0	0	0	1	0	1261
Grand Total	7	7813	500	42	464	8395	40	13	448	3	444	0	39	2	14	0	18224
Apprch %	0.1	93.4	6	0.5	5.2	94.2	0.4	0.1	50.1	0.3	49.6	0	70.9	3.6	25.5	0	
Total %	0	42.9	2.7	0.2	2.5	46.1	0.2	0.1	2.5	0	2.4	0	0.2	0	0.1	0	
Passenger Vehicles	7	7749	497	25	453	8317	38	6	447	3	440	0	37	2	14	0	18035
% Passenger Vehicles	100	99.2	99.4	59.5	97.6	99.1	95	46.2	99.8	100	99.1	0	94.9	100	100	0	99
Heavy Vehicles	0	44	0	0	10	50	2	0	0	0	2	0	2	0	0	0	110
% Heavy Vehicles	0	0.6	0	0	2.2	0.6	5	0	0	0	0.5	0	5.1	0	0	0	0.6
Buses	0	20	3	17	1	28	0	7	1	0	2	0	0	0	0	0	79
% Buses	0	0.3	0.6	40.5	0.2	0.3	0	53.8	0.2	0	0.5	0	0	0	0	0	0.4

[illegible]

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File Name : Hwy 21 Bus @ Bay St
Site Code :
Start Date : 8/24/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Hwy 21 Bus (Carteret St) Southbound				Bay St Westbound				Hwy 21 Bus (Carteret St) Northbound				Bay St Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	78	3	1	0	0	0	0	28	150	0	2	1	0	10	0	273
07:15	0	111	1	0	0	0	0	0	51	163	0	0	1	0	35	2	364
07:30	0	122	1	1	0	0	0	0	65	191	0	1	2	0	28	0	411
07:45	0	136	3	0	0	0	0	0	81	214	1	2	4	1	40	0	482
Total	0	447	8	2	0	0	0	0	225	718	1	5	8	1	113	2	1530
08:00	0	124	1	1	0	0	0	0	68	170	1	4	4	1	38	1	413
08:15	2	119	2	0	0	0	0	1	58	189	2	6	5	2	41	2	429
08:30	0	117	8	1	0	0	0	0	43	159	2	4	4	1	41	2	382
08:45	2	115	7	0	0	0	0	0	38	135	5	5	6	3	31	0	347
Total	4	475	18	2	0	0	0	1	207	653	10	19	19	7	151	5	1571
16:00	0	165	9	4	0	0	0	1	63	173	0	2	8	0	69	3	497
16:15	1	169	9	6	0	0	0	0	41	169	5	1	12	3	60	3	479
16:30	1	153	4	3	0	0	0	0	33	135	1	2	13	1	51	9	406
16:45	0	167	11	6	0	0	1	1	41	151	1	1	13	4	46	4	447
Total	2	654	33	19	0	0	1	2	178	628	7	6	46	8	226	19	1829
17:00	0	157	6	0	0	0	0	0	36	132	1	7	11	1	85	5	441
17:15	3	194	7	5	0	0	0	1	30	176	2	3	6	1	56	6	490
17:30	0	188	12	1	0	0	0	0	37	139	3	1	9	0	49	0	439
17:45	1	168	8	6	0	0	0	1	36	161	2	2	13	4	52	2	456
Total	4	707	33	12	0	0	0	2	139	608	8	13	39	6	242	13	1826
Grand Total	10	2283	92	35	0	0	1	5	749	2607	26	43	112	22	732	39	6756
Apprch %	0.4	94.3	3.8	1.4	0	0	16.7	83.3	21.9	76.1	0.8	1.3	12.4	2.4	80.9	4.3	
Total %	0.1	33.8	1.4	0.5	0	0	0	0.1	11.1	38.6	0.4	0.6	1.7	0.3	10.8	0.6	
Passenger Vehicles	10	2262	91	35	0	0	1	5	745	2587	26	43	110	22	725	39	6701
% Passenger Vehicles	100	99.1	98.9	100	0	0	100	100	99.5	99.2	100	100	98.2	100	99	100	99.2
Heavy Vehicles	0	14	1	0	0	0	0	0	4	17	0	0	2	0	4	0	42
% Heavy Vehicles	0	0.6	1.1	0	0	0	0	0	0.5	0.7	0	0	1.8	0	0.5	0	0.6
Buses	0	7	0	0	0	0	0	0	0	3	0	0	0	0	3	0	13
% Buses	0	0.3	0	0	0	0	0	0	0	0.1	0	0	0	0	0.4	0	0.2

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File Name : Hwy 21 Bus @ Bay St
Site Code :
Start Date : 8/24/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Hwy 21 Bus (Carteret St) Southbound				Bay St Westbound				Hwy 21 Bus (Carteret St) Northbound				Bay St Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	78	3	1	0	0	0	0	28	150	0	2	1	0	10	0	273
07:15	0	111	1	0	0	0	0	0	51	163	0	0	1	0	35	2	364
07:30	0	122	1	1	0	0	0	0	65	191	0	1	2	0	28	0	411
07:45	0	136	3	0	0	0	0	0	81	214	1	2	4	1	40	0	482
Total	0	447	8	2	0	0	0	0	225	718	1	5	8	1	113	2	1530
08:00	0	124	1	1	0	0	0	0	68	170	1	4	4	1	38	1	413
08:15	2	119	2	0	0	0	0	1	58	189	2	6	5	2	41	2	429
08:30	0	117	8	1	0	0	0	0	43	159	2	4	4	1	41	2	382
08:45	2	115	7	0	0	0	0	0	38	135	5	5	6	3	31	0	347
Total	4	475	18	2	0	0	0	1	207	653	10	19	19	7	151	5	1571
16:00	0	165	9	4	0	0	0	1	63	173	0	2	8	0	69	3	497
16:15	1	169	9	6	0	0	0	0	41	169	5	1	12	3	60	3	479
16:30	1	153	4	3	0	0	0	0	33	135	1	2	13	1	51	9	406
16:45	0	167	11	6	0	0	1	1	41	151	1	1	13	4	46	4	447
Total	2	654	33	19	0	0	1	2	178	628	7	6	46	8	226	19	1829
17:00	0	157	6	0	0	0	0	0	36	132	1	7	11	1	85	5	441
17:15	3	194	7	5	0	0	0	1	30	176	2	3	6	1	56	6	490
17:30	0	188	12	1	0	0	0	0	37	139	3	1	9	0	49	0	439
17:45	1	168	8	6	0	0	0	1	36	161	2	2	13	4	52	2	456
Total	4	707	33	12	0	0	0	2	139	608	8	13	39	6	242	13	1826
Grand Total	10	2283	92	35	0	0	1	5	749	2607	26	43	112	22	732	39	6756
Apprch %	0.4	94.3	3.8	1.4	0	0	16.7	83.3	21.9	76.1	0.8	1.3	12.4	2.4	80.9	4.3	
Total %	0.1	33.8	1.4	0.5	0	0	0	0.1	11.1	38.6	0.4	0.6	1.7	0.3	10.8	0.6	
Passenger Vehicles	10	2262	91	35	0	0	1	5	745	2587	26	43	110	22	725	39	6701
% Passenger Vehicles	100	99.1	98.9	100	0	0	100	100	99.5	99.2	100	100	98.2	100	99	100	99.2
Heavy Vehicles	0	14	1	0	0	0	0	0	4	17	0	0	2	0	4	0	42
% Heavy Vehicles	0	0.6	1.1	0	0	0	0	0	0.5	0.7	0	0	1.8	0	0.5	0	0.6
Buses	0	7	0	0	0	0	0	0	0	3	0	0	0	0	3	0	13
% Buses	0	0.3	0	0	0	0	0	0	0	0.1	0	0	0	0	0.4	0	0.2

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735 Maryland St
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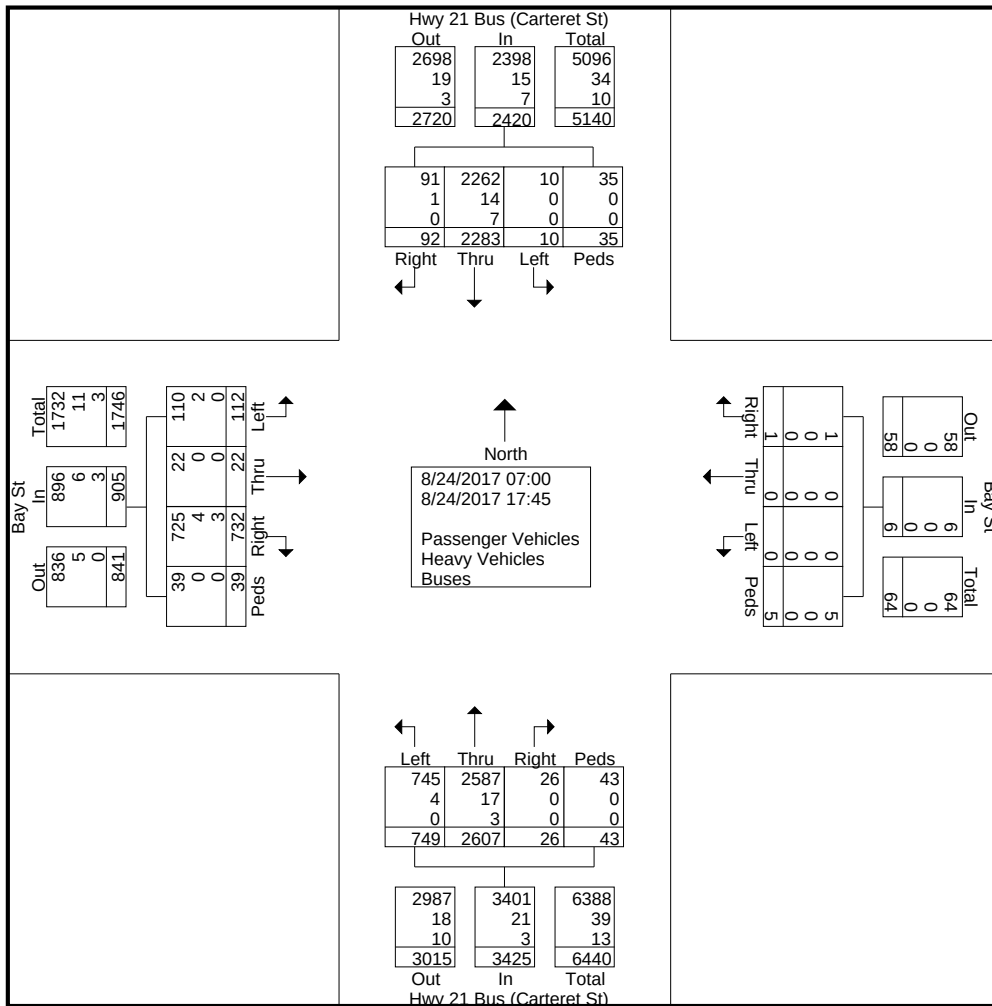
We can't say we're the Best, but you Can!

File Name : Hwy 21 Bus @ Bay St

Site Code :

Start Date : 8/24/2017

Page No : 2



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735 Maryland St
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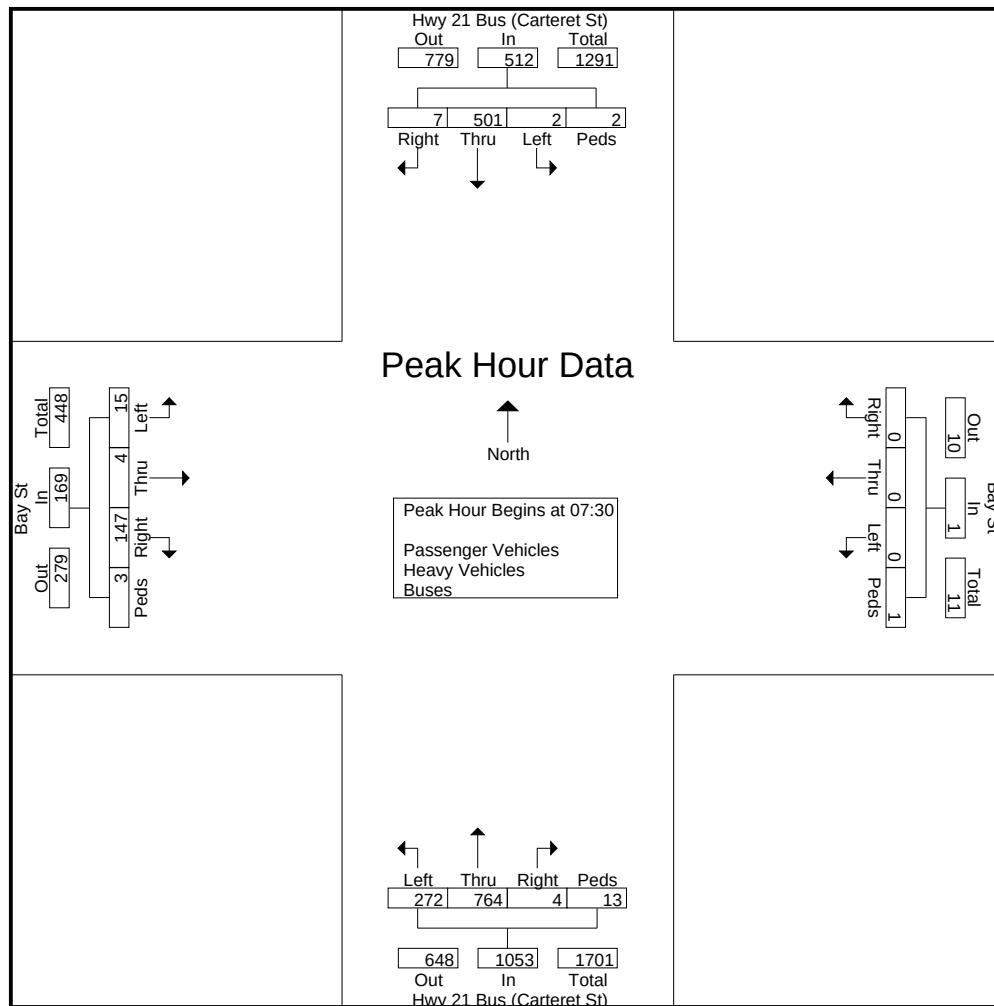
File Name : Hwy 21 Bus @ Bay St

Site Code :

Start Date : 8/24/2017

Page No : 3

	Hwy 21 Bus (Carteret St) Southbound					Bay St Westbound					Hwy 21 Bus (Carteret St) Northbound					Bay St Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	122	1	1	124	0	0	0	0	0	65	191	0	1	257	2	0	28	0	30	411
07:45	0	136	3	0	139	0	0	0	0	0	81	214	1	2	298	4	1	40	0	45	482
08:00	0	124	1	1	126	0	0	0	0	0	68	170	1	4	243	4	1	38	1	44	413
08:15	2	119	2	0	123	0	0	0	1	1	58	189	2	6	255	5	2	41	2	50	429
Total Volume	2	501	7	2	512	0	0	0	1	1	272	764	4	13	1053	15	4	147	3	169	1735
% App. Total	0.4	97.9	1.4	0.4		0	0	0	100		25.8	72.6	0.4	1.2		8.9	2.4	87	1.8		
PHF	.250	.921	.583	.500	.921	.000	.000	.000	.250	.250	.840	.893	.500	.542	.883	.750	.500	.896	.375	.845	.900



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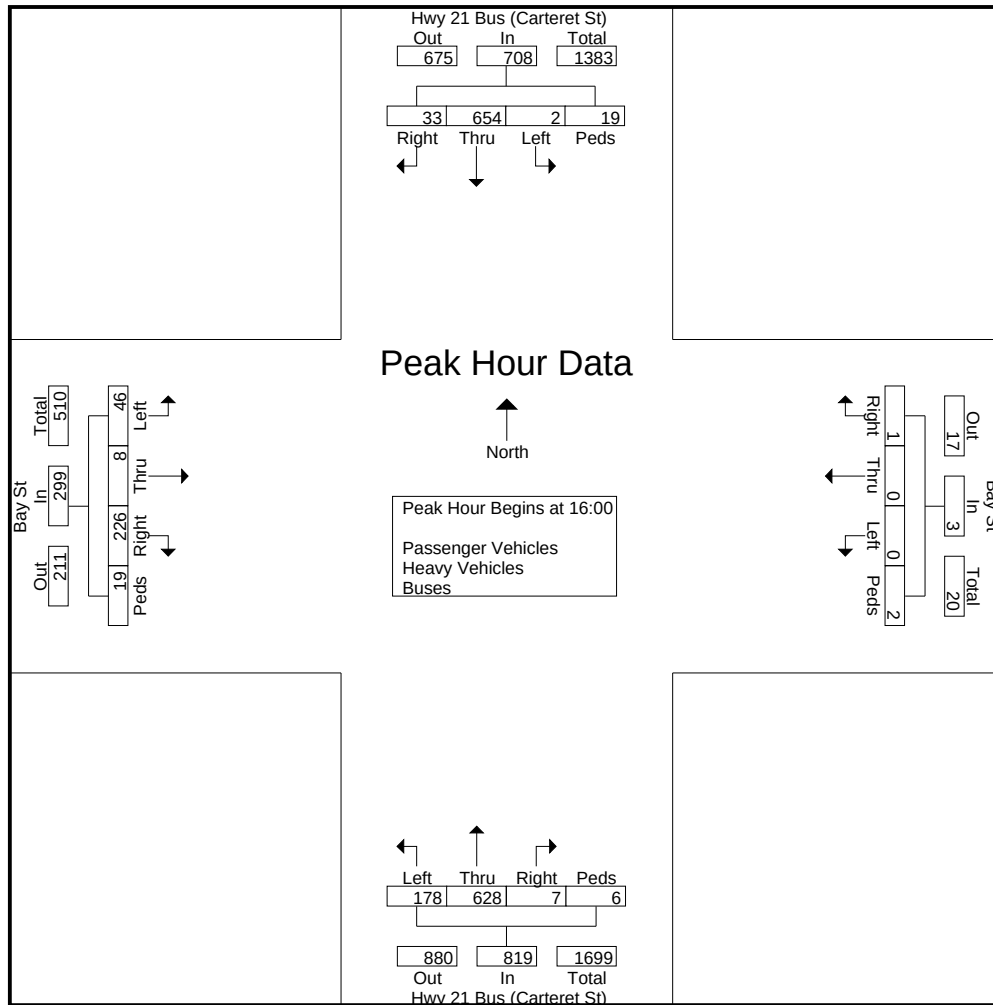
File Name : Hwy 21 Bus @ Bay St

Site Code :

Start Date : 8/24/2017

Page No : 4

	Hwy 21 Bus (Carteret St) Southbound					Bay St Westbound					Hwy 21 Bus (Carteret St) Northbound					Bay St Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	165	9	4	178	0	0	0	1	1	63	173	0	2	238	8	0	69	3	80	497
16:15	1	169	9	6	185	0	0	0	0	0	41	169	5	1	216	12	3	60	3	78	479
16:30	1	153	4	3	161	0	0	0	0	0	33	135	1	2	171	13	1	51	9	74	406
16:45	0	167	11	6	184	0	0	1	1	2	41	151	1	1	194	13	4	46	4	67	447
Total Volume	2	654	33	19	708	0	0	1	2	3	178	628	7	6	819	46	8	226	19	299	1829
% App. Total	0.3	92.4	4.7	2.7		0	0	33.3	66.7		21.7	76.7	0.9	0.7		15.4	2.7	75.6	6.4		
PHF	.500	.967	.750	.792	.957	.000	.000	.250	.500	.375	.706	.908	.350	.750	.860	.885	.500	.819	.528	.934	.920



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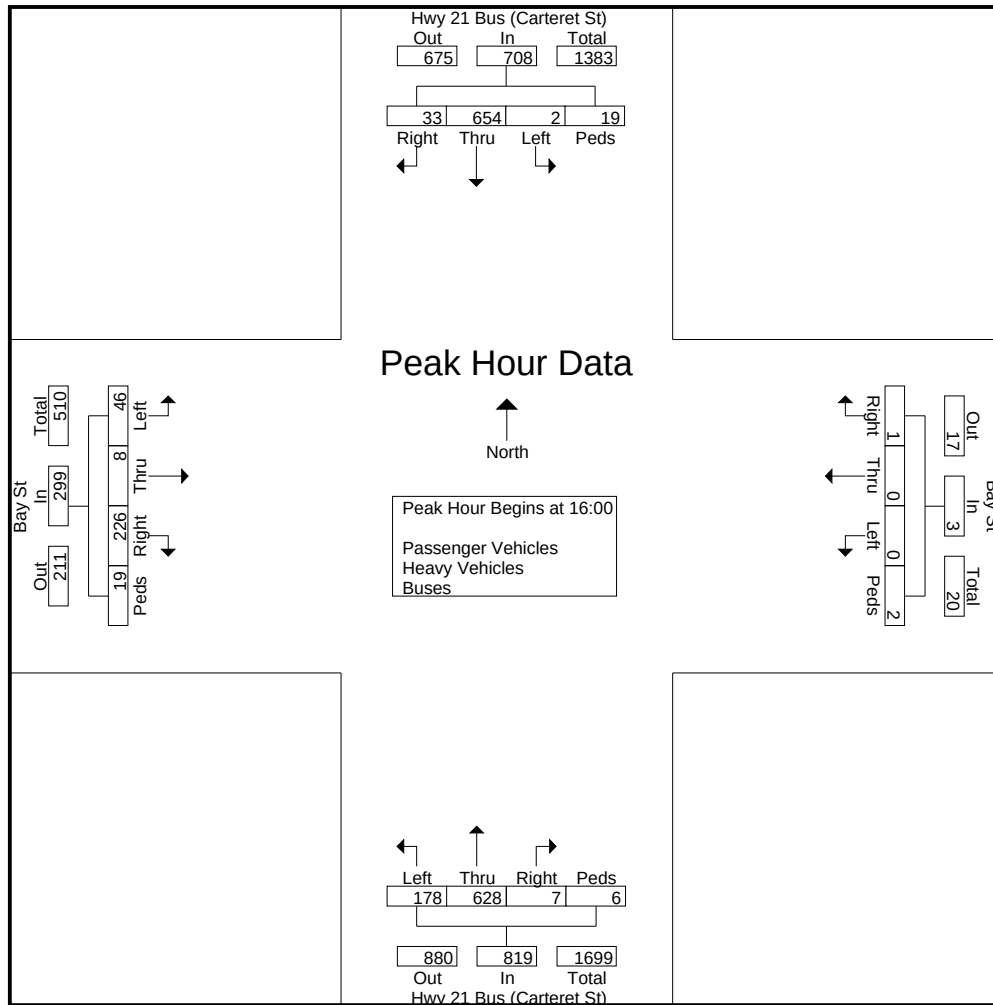
File Name : Hwy 21 Bus @ Bay St

Site Code :

Start Date : 8/24/2017

Page No : 4

	Hwy 21 Bus (Carteret St) Southbound					Bay St Westbound					Hwy 21 Bus (Carteret St) Northbound					Bay St Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	165	9	4	178	0	0	0	1	1	63	173	0	2	238	8	0	69	3	80	497
16:15	1	169	9	6	185	0	0	0	0	0	41	169	5	1	216	12	3	60	3	78	479
16:30	1	153	4	3	161	0	0	0	0	0	33	135	1	2	171	13	1	51	9	74	406
16:45	0	167	11	6	184	0	0	1	1	2	41	151	1	1	194	13	4	46	4	67	447
Total Volume	2	654	33	19	708	0	0	1	2	3	178	628	7	6	819	46	8	226	19	299	1829
% App. Total	0.3	92.4	4.7	2.7		0	0	33.3	66.7		21.7	76.7	0.9	0.7		15.4	2.7	75.6	6.4		
PHF	.500	.967	.750	.792	.957	.000	.000	.250	.500	.375	.706	.908	.350	.750	.860	.885	.500	.819	.528	.934	.920



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File Name : Meridian Rd @ Harborview Cir North

Site Code :

Start Date : 8/24/2017

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

[illegible]

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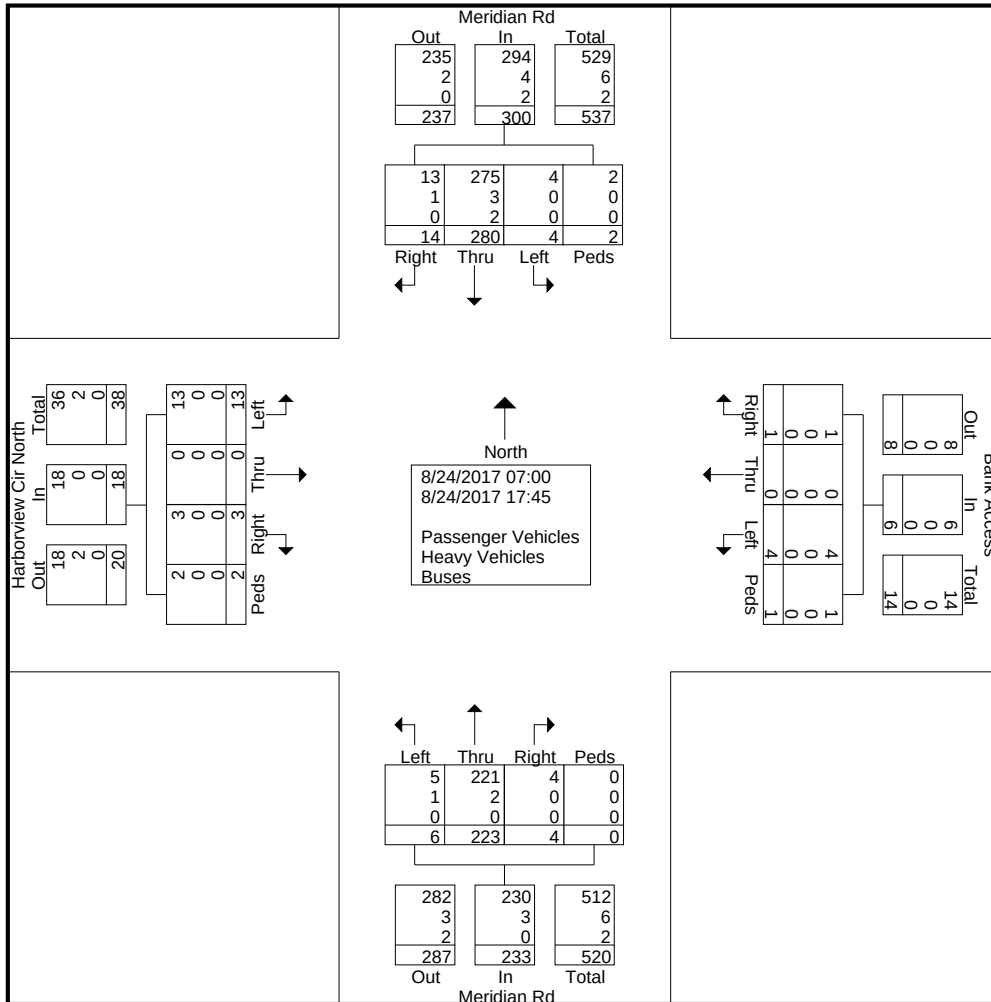
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File Name : Meridian Rd @ Harborview Cir North

Site Code :

Start Date : 8/24/2017

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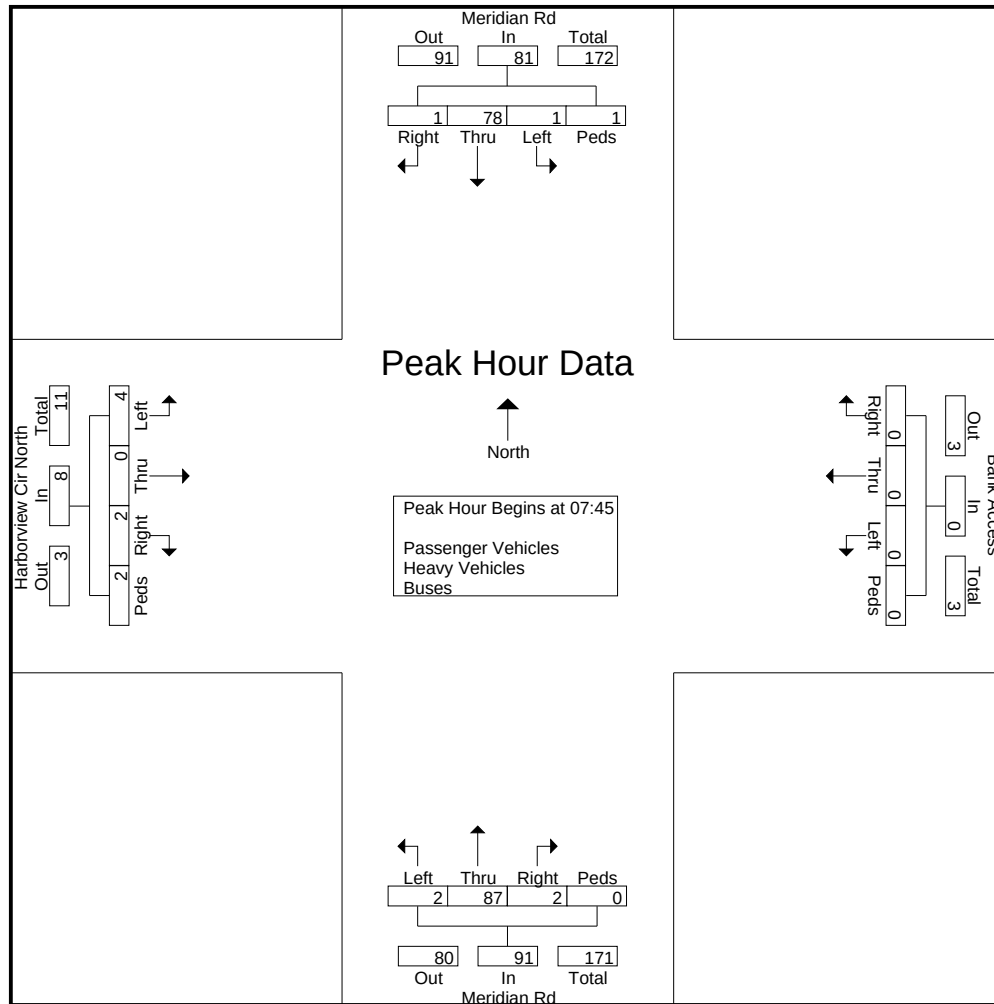
File Name : Meridian Rd @ Harborview Cir North

Site Code :

Start Date : 8/24/2017

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	Meridian Rd Southbound					Bank Access Westbound					Meridian Rd Northbound					Harborview Cir North Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	0	20	1	0	21	0	0	0	0	0	1	9	0	0	10	3	0	0	1	4	35
08:00	0	18	0	0	18	0	0	0	0	0	0	29	0	0	29	0	0	1	0	1	48
08:15	1	23	0	0	24	0	0	0	0	0	0	25	1	0	26	0	0	0	0	0	50
08:30	0	17	0	1	18	0	0	0	0	0	1	24	1	0	26	1	0	1	1	3	47
Total Volume	1	78	1	1	81	0	0	0	0	0	2	87	2	0	91	4	0	2	2	8	180
% App. Total	1.2	96.3	1.2	1.2		0	0	0	0		2.2	95.6	2.2	0		50	0	25	25		
PHF	.250	.848	.250	.250	.844	.000	.000	.000	.000	.000	.500	.750	.500	.000	.784	.333	.000	.500	.500	.500	.900



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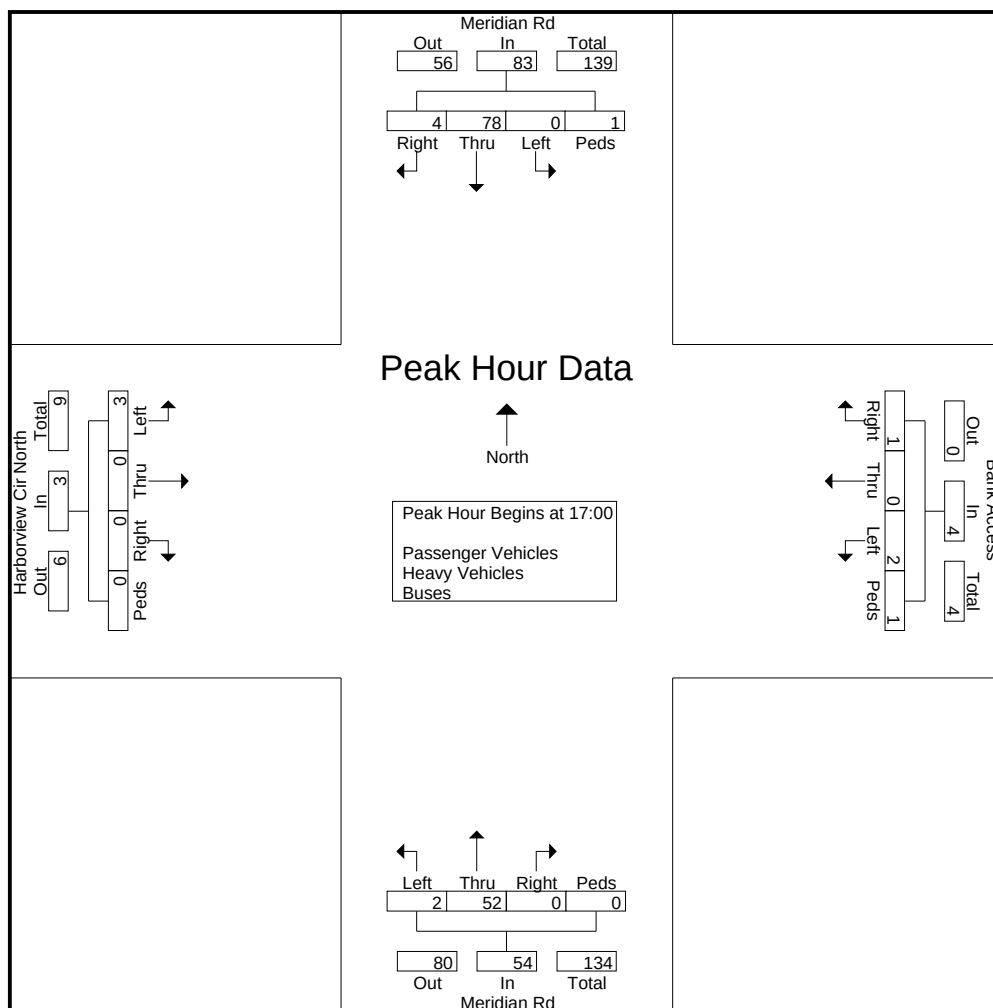
File Name : Meridian Rd @ Harborview Cir North

Site Code :

Start Date : 8/24/2017

Page No : 4

	Meridian Rd Southbound					Bank Access Westbound					Meridian Rd Northbound					Harborview Cir North Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	24	1	1	26	2	0	1	1	4	1	13	0	0	14	0	0	0	0	0	44
17:15	0	17	1	0	18	0	0	0	0	0	1	11	0	0	12	1	0	0	0	1	31
17:30	0	18	1	0	19	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	32
17:45	0	19	1	0	20	0	0	0	0	0	0	15	0	0	15	2	0	0	0	2	37
Total Volume	0	78	4	1	83	2	0	1	1	4	2	52	0	0	54	3	0	0	0	3	144
% App. Total	0	94	4.8	1.2		50	0	25	25		3.7	96.3	0	0		100	0	0	0		
PHF	.000	.813	1.00	.250	.798	.250	.000	.250	.250	.250	.500	.867	.000	.000	.900	.375	.000	.000	.000	.375	.818



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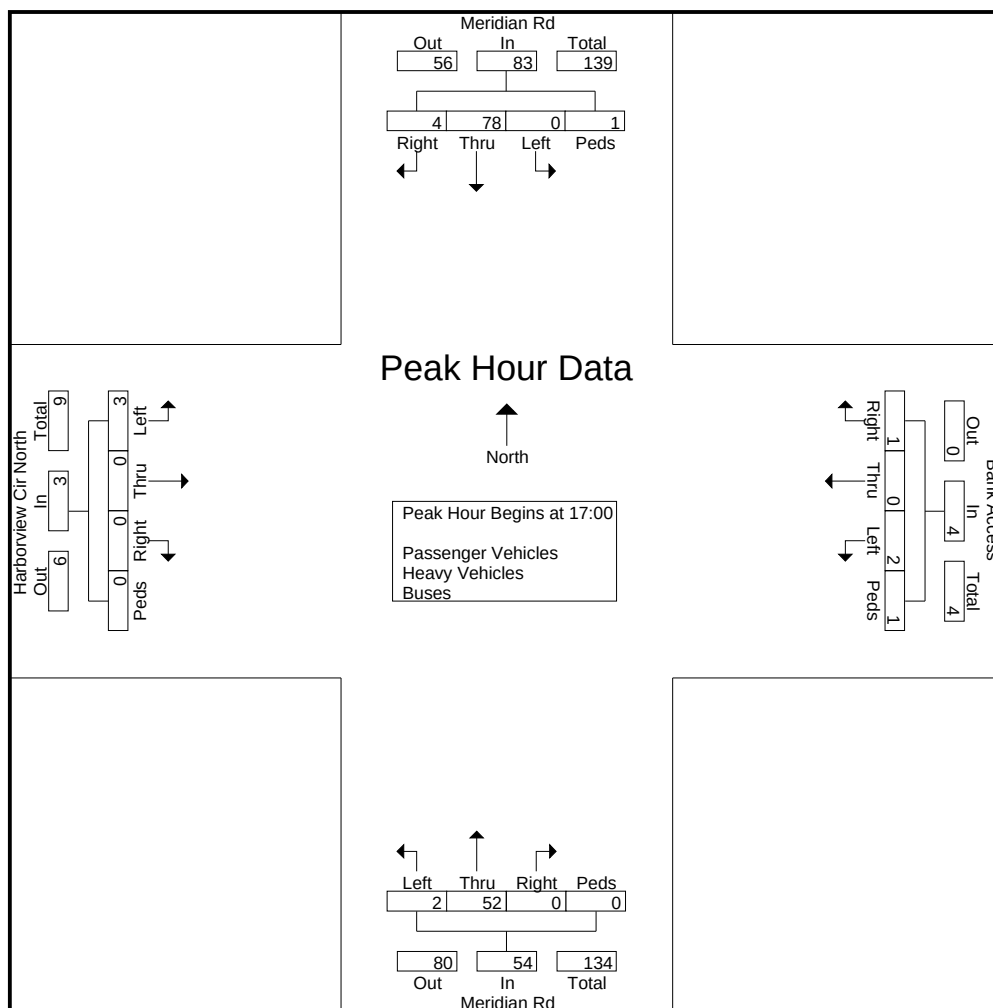
File Name : Meridian Rd @ Harborview Cir North

Site Code :

Start Date : 8/24/2017

Page No : 4

	Meridian Rd Southbound					Bank Access Westbound					Meridian Rd Northbound					Harborview Cir North Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	24	1	1	26	2	0	1	1	4	1	13	0	0	14	0	0	0	0	0	44
17:15	0	17	1	0	18	0	0	0	0	0	1	11	0	0	12	1	0	0	0	1	31
17:30	0	18	1	0	19	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	32
17:45	0	19	1	0	20	0	0	0	0	0	0	15	0	0	15	2	0	0	0	2	37
Total Volume	0	78	4	1	83	2	0	1	1	4	2	52	0	0	54	3	0	0	0	3	144
% App. Total	0	94	4.8	1.2		50	0	25	25		3.7	96.3	0	0		100	0	0	0		
PHF	.000	.813	1.00	.250	.798	.250	.000	.250	.250	.250	.500	.867	.000	.000	.900	.375	.000	.000	.000	.375	.818



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File Name : Meridian Rd @ Harborview Cir South
Site Code :
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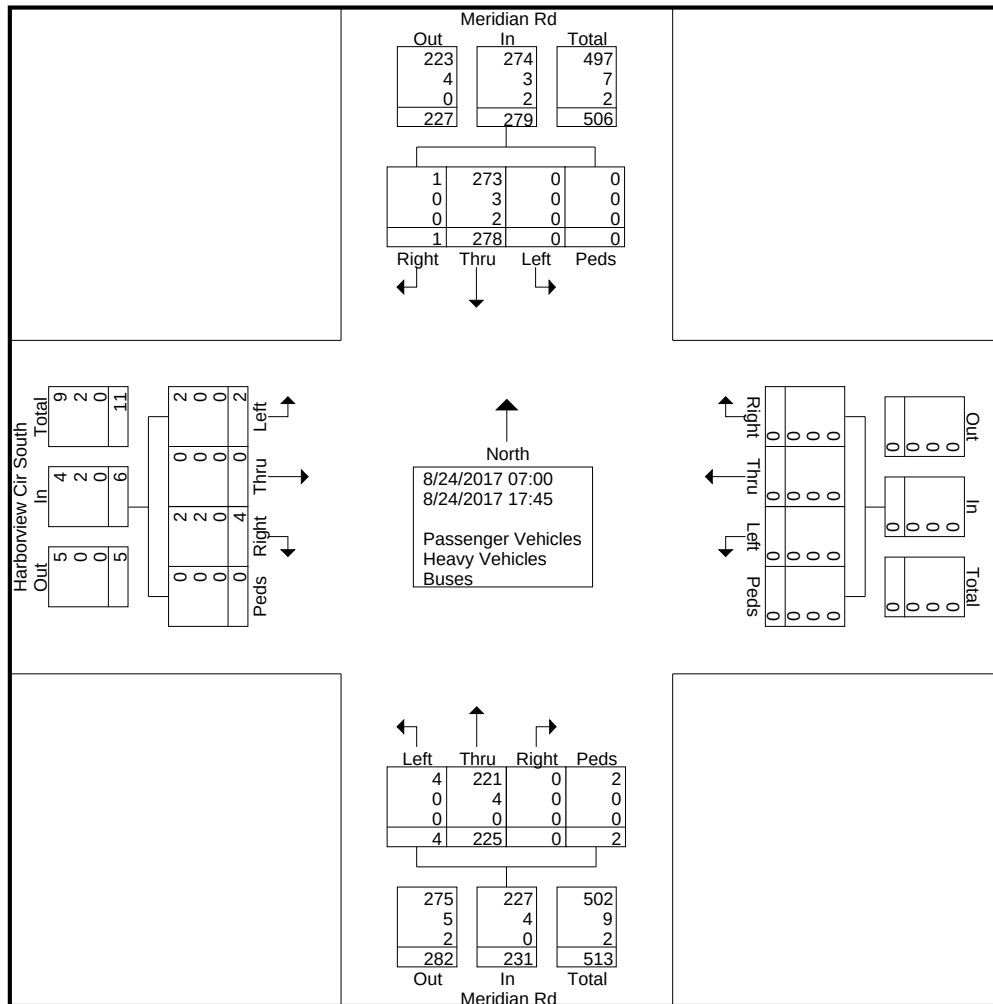
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File Name : Meridian Rd @ Harborview Cir South

Site Code :

Start Date : 8/24/2017

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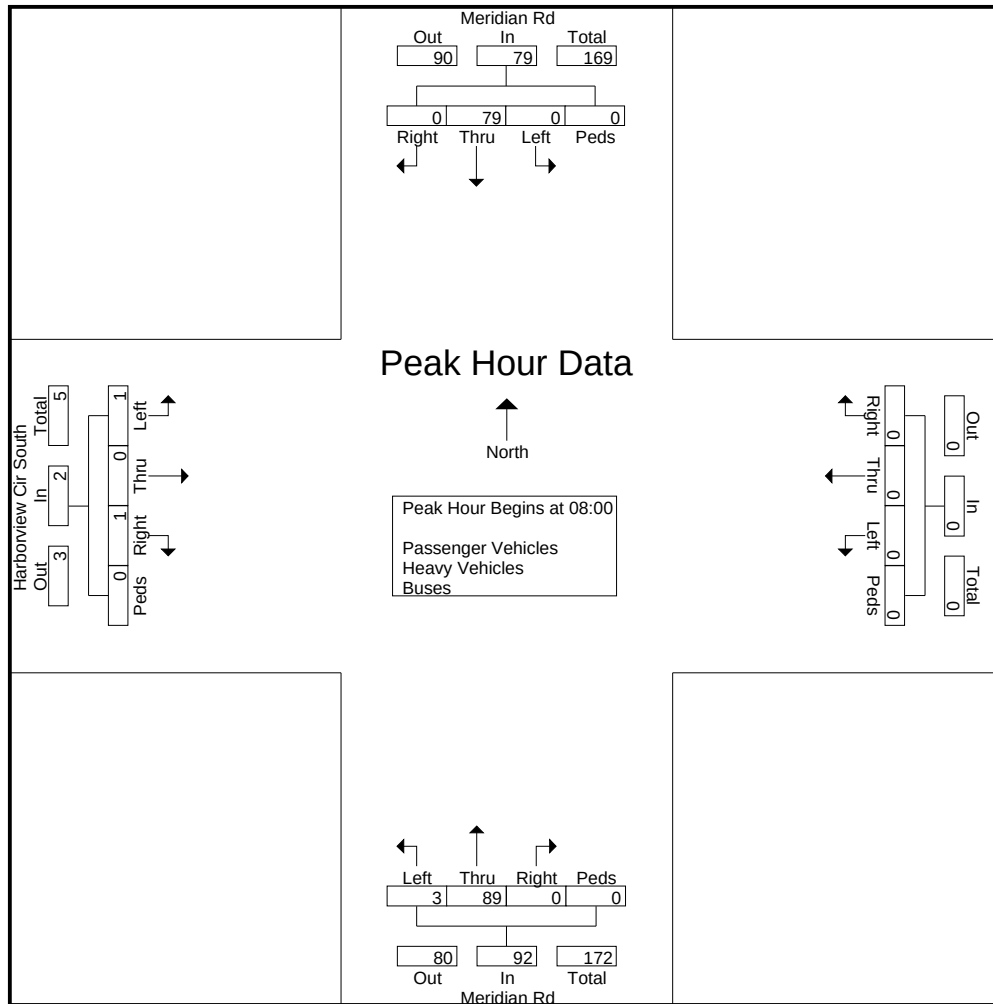
File Name : Meridian Rd @ Harborview Cir South

Site Code :

Start Date : 8/24/2017

Page No : 3

	Meridian Rd Southbound					Westbound					Meridian Rd Northbound					Harborview Cir South Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	24	0	0	24	0	0	0	0	0	0	24	0	0	24	0	0	0	0	0	48
08:15	0	21	0	0	21	0	0	0	0	0	0	31	0	0	31	0	0	1	0	1	53
08:30	0	19	0	0	19	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	42
08:45	0	15	0	0	15	0	0	0	0	0	3	11	0	0	14	1	0	0	0	1	30
Total Volume	0	79	0	0	79	0	0	0	0	0	3	89	0	0	92	1	0	1	0	2	173
% App. Total	0	100	0	0		0	0	0	0		3.3	96.7	0	0		50	0	50	0		
PHF	.000	.823	.000	.000	.823	.000	.000	.000	.000	.000	.250	.718	.000	.000	.742	.250	.000	.250	.000	.500	.816



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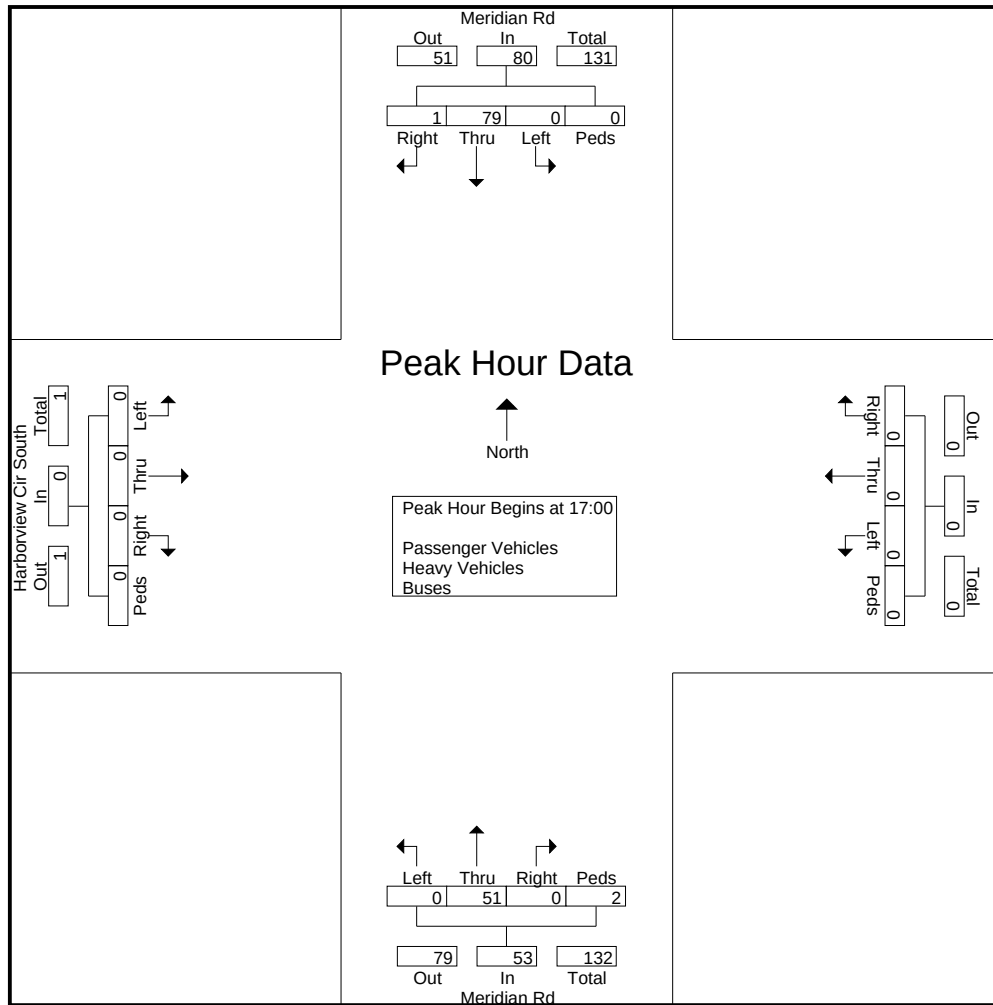
File Name : Meridian Rd @ Harborview Cir South

Site Code :

Start Date : 8/24/2017

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	Meridian Rd Southbound					Westbound					Meridian Rd Northbound					Harborview Cir South Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	26	0	0	26	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	39
17:15	0	20	0	0	20	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	30
17:30	0	14	1	0	15	0	0	0	0	0	0	13	0	1	14	0	0	0	0	0	29
17:45	0	19	0	0	19	0	0	0	0	0	0	15	0	1	16	0	0	0	0	0	35
Total Volume	0	79	1	0	80	0	0	0	0	0	0	51	0	2	53	0	0	0	0	0	133
% App. Total	0	98.8	1.2	0		0	0	0	0		0	96.2	0	3.8		0	0	0	0		
PHF	.000	.760	.250	.000	.769	.000	.000	.000	.000	.000	.000	.850	.000	.500	.828	.000	.000	.000	.000	.000	.853



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File Name : Meridian Rd @ Ladys Island Dr
Site Code :
Start Date : 8/24/2017
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Ladys Island Dr Southbound				Westbound				Ladys Island Dr Northbound				Meridian Rd Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	229	0	0	0	0	0	0	8	112	1	0	2	0	9	0	361
07:15	0	293	0	0	0	0	0	0	8	133	0	1	1	0	11	0	447
07:30	0	339	0	0	0	0	0	0	15	216	1	0	1	0	13	0	585
07:45	0	371	1	0	0	0	0	0	14	252	1	0	2	0	17	0	658
Total	0	1232	1	0	0	0	0	0	45	713	3	1	6	0	50	0	2051
08:00	0	366	3	0	0	0	0	0	26	219	3	0	0	0	17	0	634
08:15	0	288	2	0	0	0	0	0	28	240	2	0	0	0	19	0	579
08:30	0	224	0	0	0	0	0	0	22	251	2	0	0	0	15	0	514
08:45	0	245	0	0	0	0	0	0	13	190	0	0	0	0	12	0	460
Total	0	1123	5	0	0	0	0	0	89	900	7	0	0	0	63	0	2187
16:00	0	262	0	0	0	0	0	0	0	371	0	0	3	0	18	0	654
16:15	0	222	0	0	0	0	0	0	0	357	0	0	0	0	17	0	596
16:30	0	214	0	0	0	0	0	0	0	343	0	0	0	0	11	0	568
16:45	0	238	0	0	0	0	0	0	0	365	0	0	0	0	6	0	609
Total	0	936	0	0	0	0	0	0	0	1436	0	0	3	0	52	0	2427
17:00	0	270	0	0	0	0	0	0	0	354	0	0	1	0	9	0	634
17:15	0	263	0	0	0	0	0	0	0	336	0	0	0	0	11	0	610
17:30	0	208	0	0	0	0	0	0	0	346	0	0	1	0	6	0	561
17:45	0	205	1	0	0	0	0	0	0	323	0	0	0	0	8	0	537
Total	0	946	1	0	0	0	0	0	0	1359	0	0	2	0	34	0	2342
Grand Total	0	4237	7	0	0	0	0	0	134	4408	10	1	11	0	199	0	9007
Apprch %	0	99.8	0.2	0	0	0	0	0	2.9	96.8	0.2	0	5.2	0	94.8	0	
Total %	0	47	0.1	0	0	0	0	0	1.5	48.9	0.1	0	0.1	0	2.2	0	
Passenger Vehicles	0	4146	7	0	0	0	0	0	133	4316	0	1	9	0	194	0	8806
% Passenger Vehicles	0	97.9	100	0	0	0	0	0	99.3	97.9	0	100	81.8	0	97.5	0	97.8
Heavy Vehicles	0	78	0	0	0	0	0	0	0	80	0	0	1	0	5	0	164
% Heavy Vehicles	0	1.8	0	0	0	0	0	0	0	1.8	0	0	9.1	0	2.5	0	1.8
Buses	0	13	0	0	0	0	0	0	1	12	10	0	1	0	0	0	37
% Buses	0	0.3	0	0	0	0	0	0	0.7	0.3	100	0	9.1	0	0	0	0.4

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Page No : 2

The diagram illustrates the intersection of Meridian Rd and Ladys Island Dr. It includes traffic flow arrows, vehicle counts for various movements, and a central timing box.

Meridian Rd Traffic Flow:

- Northbound:**
 - Out: 140, In: 203, Total: 343
 - Counts: 0, 6, 2
- Southbound:**
 - Out: 0, In: 6, Total: 351
 - Counts: 1, 1, 2

Ladys Island Dr Traffic Flow:

- Westbound:**
 - Out: 4325, In: 4153, Total: 8478
 - Counts: 81, 78, 159
 - Counts: 13, 13, 26
 - Counts: 4419, 4244, 8663
- Eastbound:**
 - Out: 4340, In: 4450, Total: 8790
 - Counts: 83, 80, 163
 - Counts: 13, 23, 36
 - Counts: 4436, 4553, 8989

Central Timing Box:

- 8/24/2017 07:00
- 8/24/2017 17:45
- Passenger Vehicles
- Heavy Vehicles
- Buses

Intersection Details:

- Northbound (Meridian Rd):**
 - Right: 7, Thru: 0, Left: 0
 - Counts: 0, 0, 0
 - Counts: 0, 0, 0
 - Counts: 7, 4237, 0
- Southbound (Meridian Rd):**
 - Right: 0, Thru: 0, Left: 0
 - Counts: 0, 0, 0
 - Counts: 0, 0, 0
 - Counts: 0, 0, 0
- Westbound (Ladys Island Dr):**
 - Left: 133, Thru: 4316, Right: 0, Peds: 1
 - Counts: 0, 80, 0, 0
 - Counts: 1, 12, 10, 0
 - Counts: 134, 4408, 10, 1
- Eastbound (Ladys Island Dr):**
 - Left: 0, Thru: 0, Right: 0, Peds: 0
 - Counts: 0, 0, 0, 0
 - Counts: 0, 0, 0, 0
 - Counts: 0, 0, 0, 0

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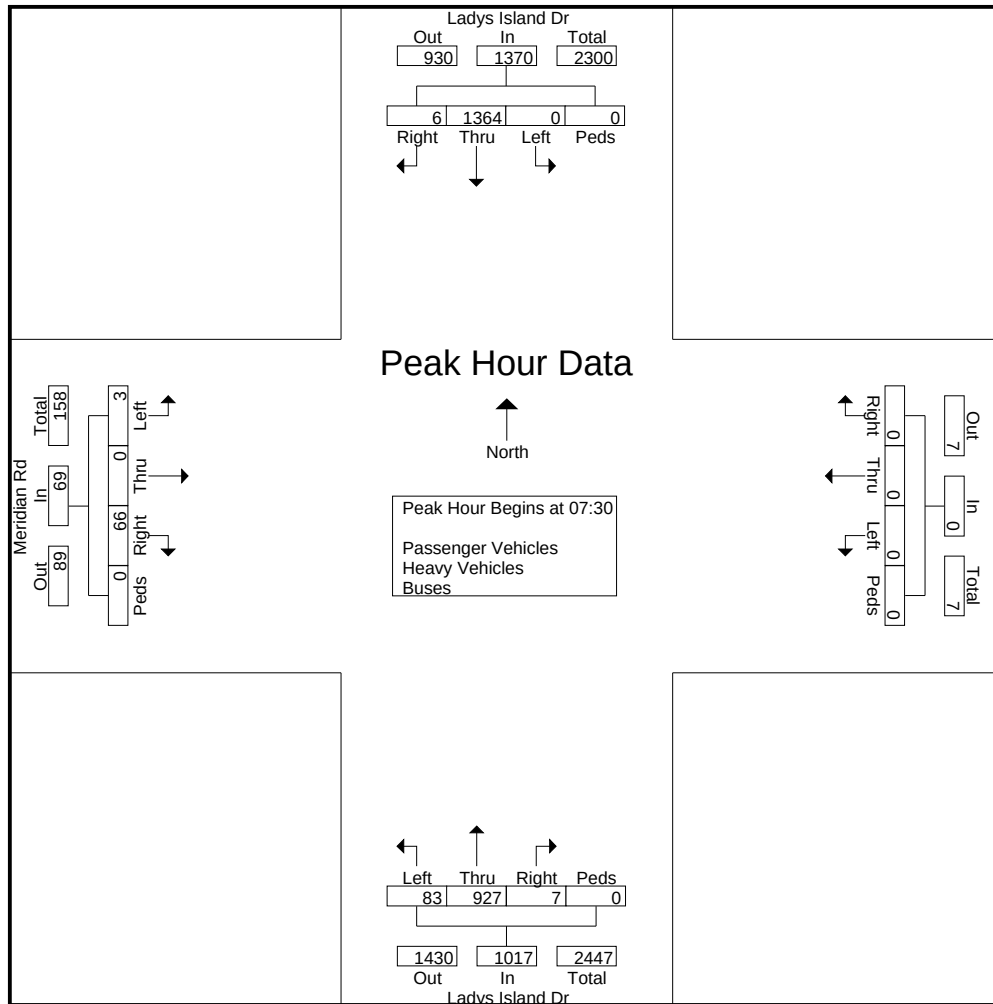
File Name : Meridian Rd @ Ladys Island Dr

Site Code :

Start Date : 8/24/2017

Page No : 3

	Ladys Island Dr Southbound					Westbound					Ladys Island Dr Northbound					Meridian Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	339	0	0	339	0	0	0	0	0	15	216	1	0	232	1	0	13	0	14	585
07:45	0	371	1	0	372	0	0	0	0	0	14	252	1	0	267	2	0	17	0	19	658
08:00	0	366	3	0	369	0	0	0	0	0	26	219	3	0	248	0	0	17	0	17	634
08:15	0	288	2	0	290	0	0	0	0	0	28	240	2	0	270	0	0	19	0	19	579
Total Volume	0	1364	6	0	1370	0	0	0	0	0	83	927	7	0	1017	3	0	66	0	69	2456
% App. Total	0	99.6	0.4	0		0	0	0	0		8.2	91.2	0.7	0		4.3	0	95.7	0		
PHF	.000	.919	.500	.000	.921	.000	.000	.000	.000	.000	.741	.920	.583	.000	.942	.375	.000	.868	.000	.908	.933



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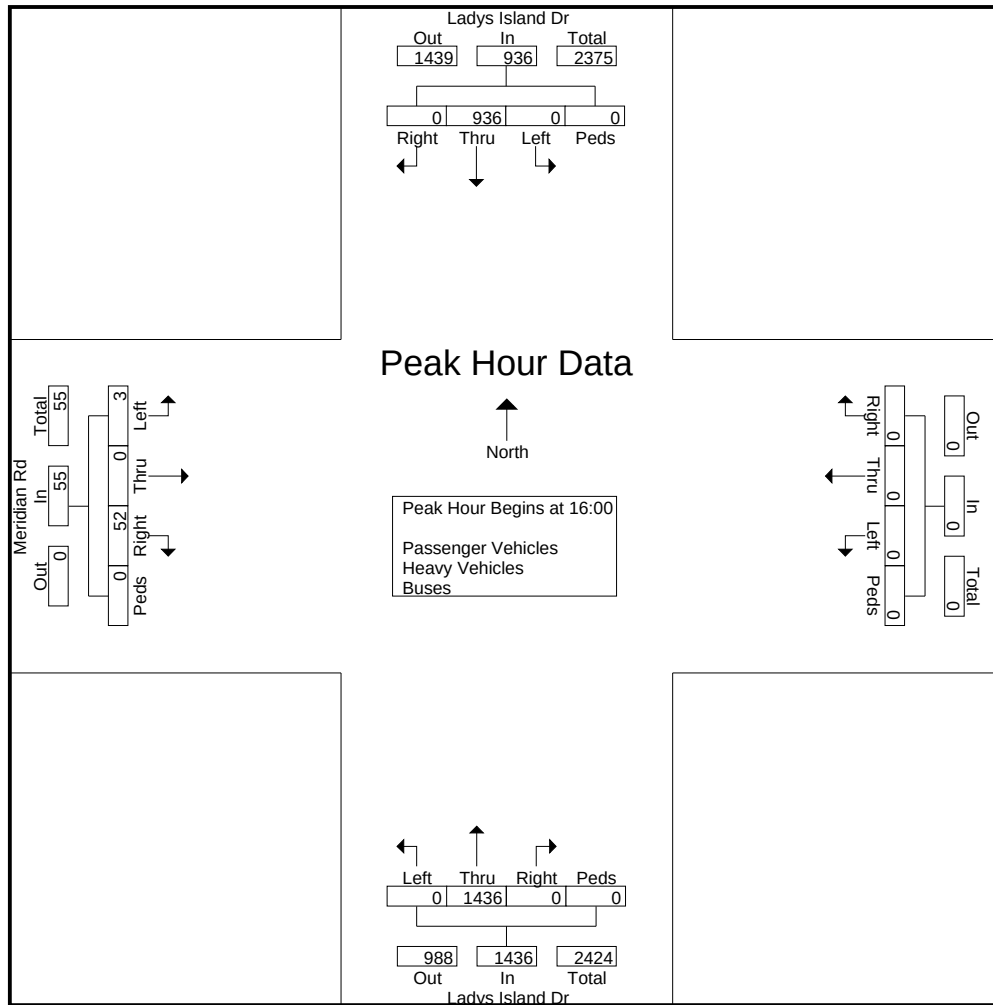
File Name : Meridian Rd @ Ladys Island Dr

Site Code :

Start Date : 8/24/2017

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	Ladys Island Dr Southbound					Westbound					Ladys Island Dr Northbound					Meridian Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	262	0	0	262	0	0	0	0	0	0	371	0	0	371	3	0	18	0	21	654
16:15	0	222	0	0	222	0	0	0	0	0	0	357	0	0	357	0	0	17	0	17	596
16:30	0	214	0	0	214	0	0	0	0	0	0	343	0	0	343	0	0	11	0	11	568
16:45	0	238	0	0	238	0	0	0	0	0	0	365	0	0	365	0	0	6	0	6	609
Total Volume	0	936	0	0	936	0	0	0	0	0	0	1436	0	0	1436	3	0	52	0	55	2427
% App. Total	0	100	0	0		0	0	0	0		0	100	0	0		5.5	0	94.5	0		
PHF	.000	.893	.000	.000	.893	.000	.000	.000	.000	.000	.000	.968	.000	.000	.968	.250	.000	.722	.000	.655	.928



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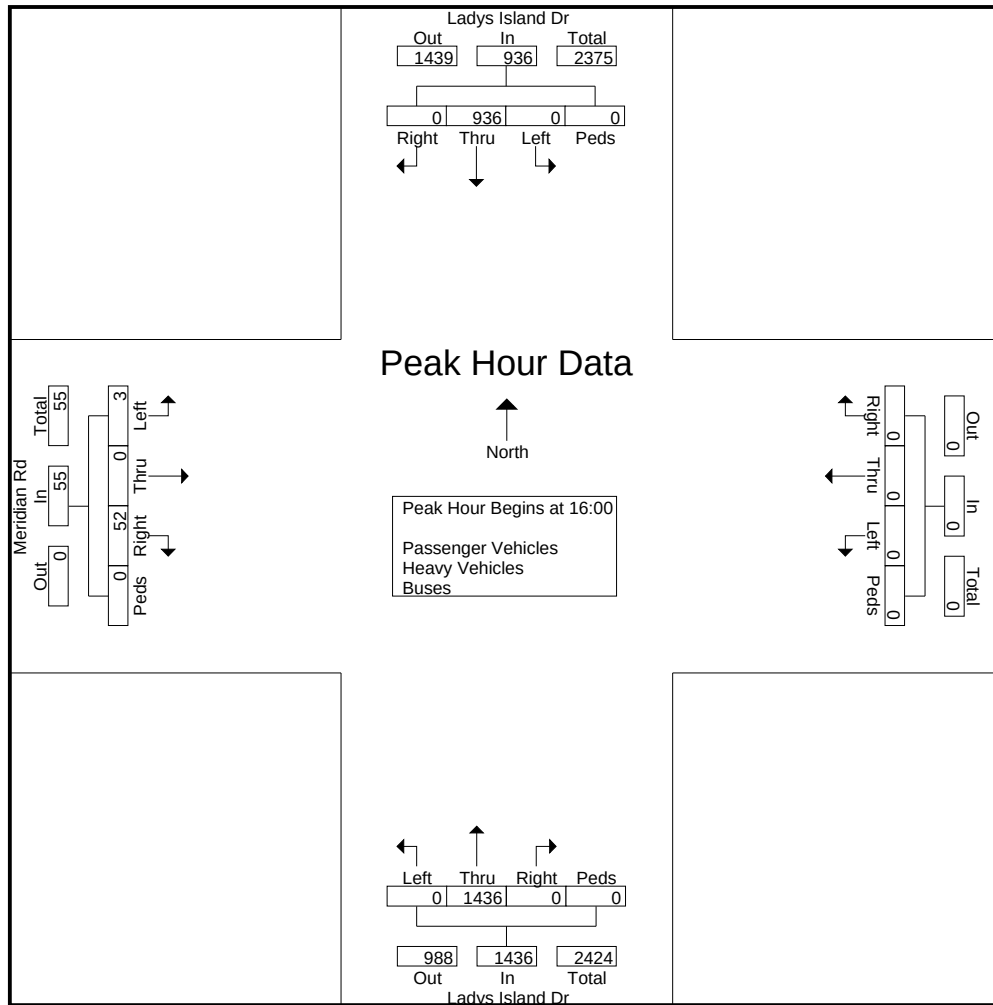
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	Ladys Island Dr Southbound					Westbound					Ladys Island Dr Northbound					Meridian Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	262	0	0	262	0	0	0	0	0	0	371	0	0	371	3	0	18	0	21	654
16:15	0	222	0	0	222	0	0	0	0	0	0	357	0	0	357	0	0	17	0	17	596
16:30	0	214	0	0	214	0	0	0	0	0	0	343	0	0	343	0	0	11	0	11	568
16:45	0	238	0	0	238	0	0	0	0	0	0	365	0	0	365	0	0	6	0	6	609
Total Volume	0	936	0	0	936	0	0	0	0	0	0	1436	0	0	1436	3	0	52	0	55	2427
% App. Total	0	100	0	0		0	0	0	0		0	100	0	0		5.5	0	94.5	0		
PHF	.000	.893	.000	.000	.893	.000	.000	.000	.000	.000	.000	.968	.000	.000	.968	.250	.000	.722	.000	.655	.928



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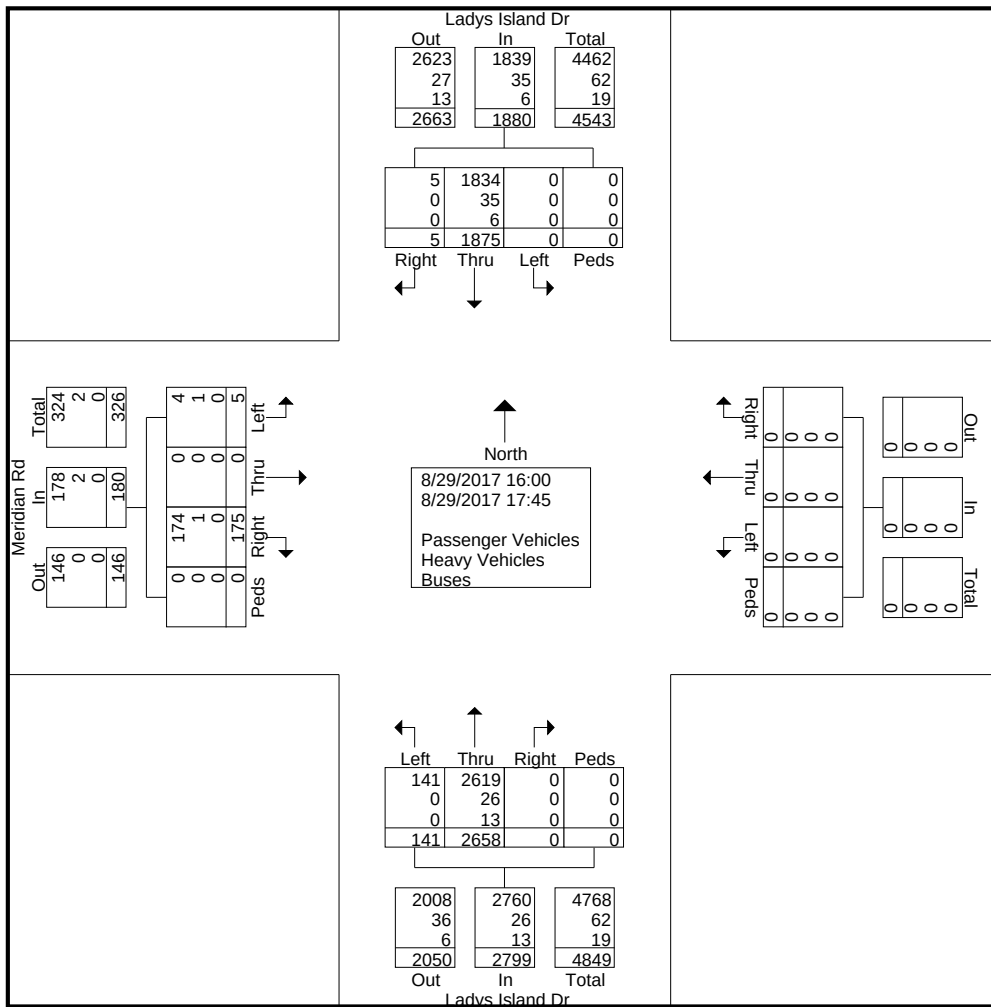
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File Name : Meridian Rd @ Ladys Island Dr PM
Site Code :
Start Date : 8/29/2017
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Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Ladys Island Dr Southbound				Westbound				Ladys Island Dr Northbound				Meridian Rd Eastbound				Int. Total
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
16:00	0	244	0	0	0	0	0	0	18	350	0	0	2	0	14	0	628
16:15	0	227	0	0	0	0	0	0	20	337	0	0	0	0	17	0	601
16:30	0	222	1	0	0	0	0	0	21	321	0	0	0	0	30	0	595
16:45	0	235	2	0	0	0	0	0	16	353	0	0	0	0	24	0	630
Total	0	928	3	0	0	0	0	0	75	1361	0	0	2	0	85	0	2454
17:00	0	265	1	0	0	0	0	0	19	327	0	0	1	0	20	0	633
17:15	0	271	0	0	0	0	0	0	23	323	0	0	1	0	19	0	637
17:30	0	201	1	0	0	0	0	0	15	329	0	0	1	0	26	0	573
17:45	0	210	0	0	0	0	0	0	9	318	0	0	0	0	25	0	562
Total	0	947	2	0	0	0	0	0	66	1297	0	0	3	0	90	0	2405
Grand Total	0	1875	5	0	0	0	0	0	141	2658	0	0	5	0	175	0	4859
Apprch %	0	99.7	0.3	0	0	0	0	0	5	95	0	0	2.8	0	97.2	0	
Total %	0	38.6	0.1	0	0	0	0	0	2.9	54.7	0	0	0.1	0	3.6	0	
Passenger Vehicles	0	1834	5	0	0	0	0	0	141	2619	0	0	4	0	174	0	4777
% Passenger Vehicles	0	97.8	100	0	0	0	0	0	100	98.5	0	0	80	0	99.4	0	98.3
Heavy Vehicles	0	35	0	0	0	0	0	0	0	26	0	0	1	0	1	0	63
% Heavy Vehicles	0	1.9	0	0	0	0	0	0	0	1	0	0	20	0	0.6	0	1.3
Buses	0	6	0	0	0	0	0	0	0	13	0	0	0	0	0	0	19
% Buses	0	0.3	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0.4



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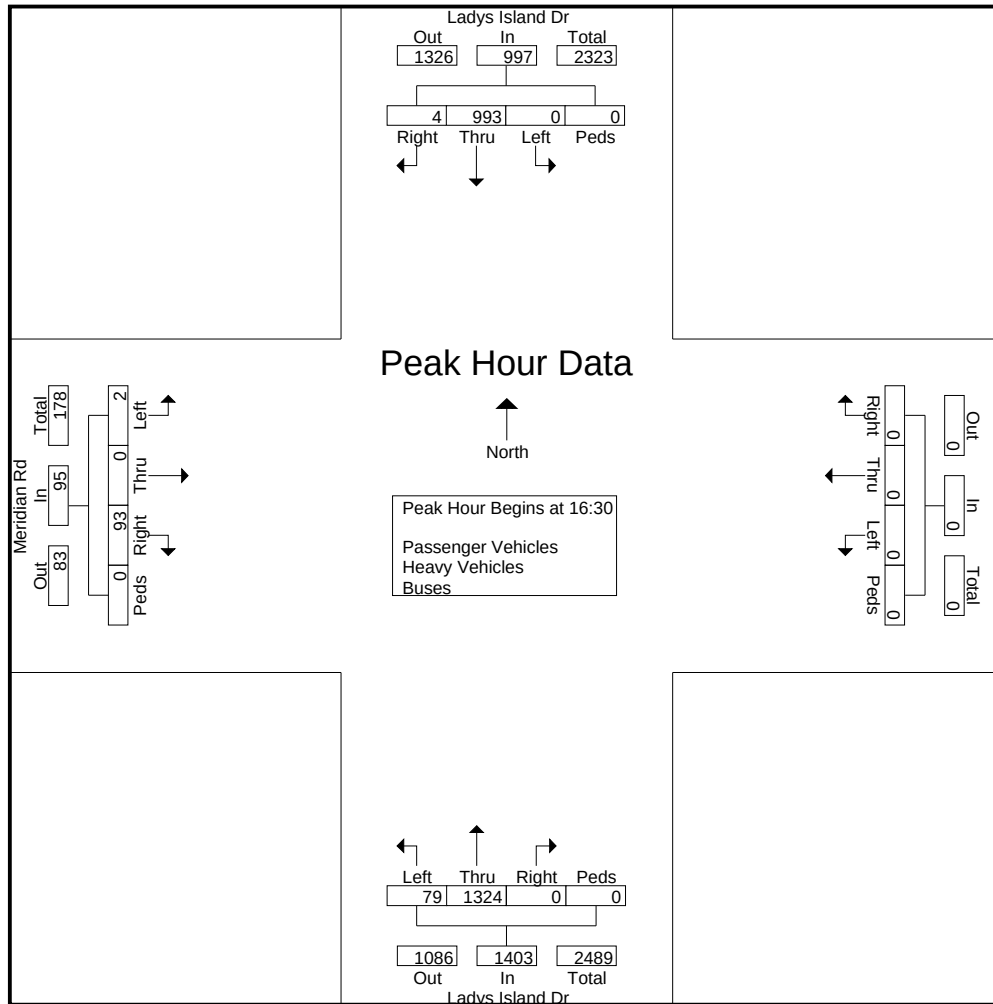
File Name : Meridian Rd @ Ladys Island Dr PM

Site Code :

Start Date : 8/29/2017

Page No : 2

	Ladys Island Dr Southbound					Westbound					Ladys Island Dr Northbound					Meridian Rd Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	0	222	1	0	223	0	0	0	0	0	21	321	0	0	342	0	0	30	0	30	595
16:45	0	235	2	0	237	0	0	0	0	0	16	353	0	0	369	0	0	24	0	24	630
17:00	0	265	1	0	266	0	0	0	0	0	19	327	0	0	346	1	0	20	0	21	633
17:15	0	271	0	0	271	0	0	0	0	0	23	323	0	0	346	1	0	19	0	20	637
Total Volume	0	993	4	0	997	0	0	0	0	0	79	1324	0	0	1403	2	0	93	0	95	2495
% App. Total	0	99.6	0.4	0		0	0	0	0		5.6	94.4	0	0		2.1	0	97.9	0		
PHF	.000	.916	.500	.000	.920	.000	.000	.000	.000	.000	.859	.938	.000	.000	.951	.500	.000	.775	.000	.792	.979



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File Name : Meridian Rd @ Sea Island Pkwy

Site Code :

Start Date : 8/24/2017

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Parking Southbound				Sea Island Pkwy Westbound				Meridian Rd Northbound				Sea Island Pkwy Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	1	0	0	1	2	200	1	0	7	0	3	0	0	90	4	0	309
07:15	0	0	1	2	7	210	1	0	11	0	4	2	1	138	5	0	382
07:30	0	0	0	0	9	267	0	0	13	0	3	1	0	150	5	0	448
07:45	0	0	0	0	8	261	1	0	7	0	5	0	0	160	13	0	455
Total	1	0	1	3	26	938	3	0	38	0	15	3	1	538	27	0	1594
08:00	0	0	0	1	7	235	0	0	16	0	13	1	0	146	13	0	432
08:15	0	0	0	0	6	217	0	0	11	0	14	1	0	153	19	0	421
08:30	1	0	0	0	6	169	0	0	13	0	11	0	0	136	10	0	346
08:45	1	0	0	0	8	169	0	0	10	0	4	0	0	139	13	0	344
Total	2	0	0	1	27	790	0	0	50	0	42	2	0	574	55	0	1543
16:00	2	0	1	0	13	210	0	0	12	0	7	1	0	215	18	0	479
16:15	0	0	0	0	9	184	0	0	0	0	5	0	0	220	9	0	427
16:30	0	0	1	0	3	185	1	0	7	0	2	0	0	191	19	0	409
16:45	0	0	0	0	8	170	1	0	4	0	3	0	0	203	9	0	398
Total	2	0	2	0	33	749	2	0	23	0	17	1	0	829	55	0	1713
17:00	0	0	0	0	11	173	3	0	9	0	6	0	0	242	11	0	455
17:15	1	0	1	0	10	179	1	0	7	0	3	2	0	247	10	0	461
17:30	0	0	0	0	14	179	1	0	11	0	4	0	0	237	7	0	453
17:45	1	0	0	0	5	183	0	0	13	0	4	0	0	182	14	0	402
Total	2	0	1	0	40	714	5	0	40	0	17	2	0	908	42	0	1771
Grand Total	7	0	4	4	126	3191	10	0	151	0	91	8	1	2849	179	0	6621
Apprch %	46.7	0	26.7	26.7	3.8	95.9	0.3	0	60.4	0	36.4	3.2	0	94.1	5.9	0	
Total %	0.1	0	0.1	0.1	1.9	48.2	0.2	0	2.3	0	1.4	0.1	0	43	2.7	0	
Passenger Vehicles	6	0	4	4	123	3177	9	0	151	0	89	8	1	2825	177	0	6574
% Passenger Vehicles	85.7	0	100	100	97.6	99.6	90	0	100	0	97.8	100	100	99.2	98.9	0	99.3
Heavy Vehicles	1	0	0	0	3	9	1	0	0	0	2	0	0	14	0	0	30
% Heavy Vehicles	14.3	0	0	0	2.4	0.3	10	0	0	0	2.2	0	0	0.5	0	0	0.5
Buses	0	0	0	0	0	5	0	0	0	0	0	0	0	10	2	0	17
% Buses	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0.4	1.1	0	0.3

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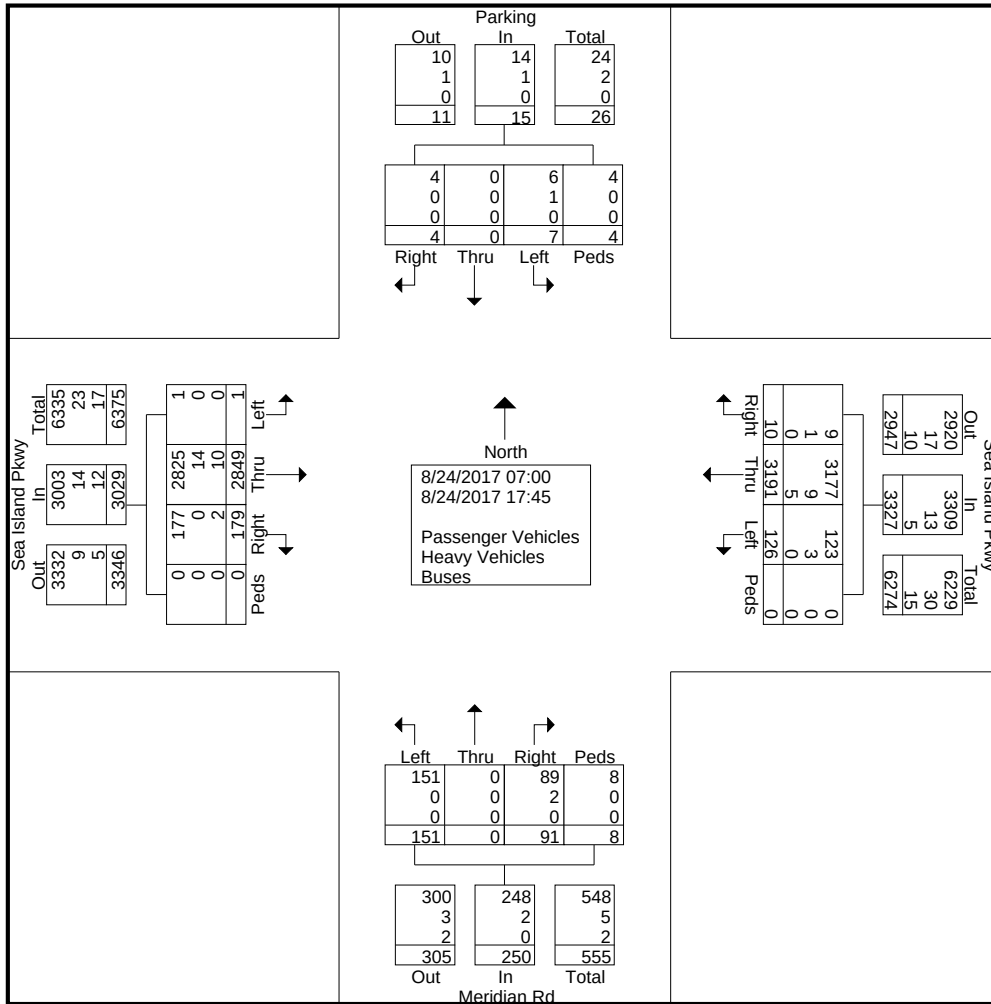
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File Name : Meridian Rd @ Sea Island Pkwy

Site Code :

Start Date : 8/24/2017

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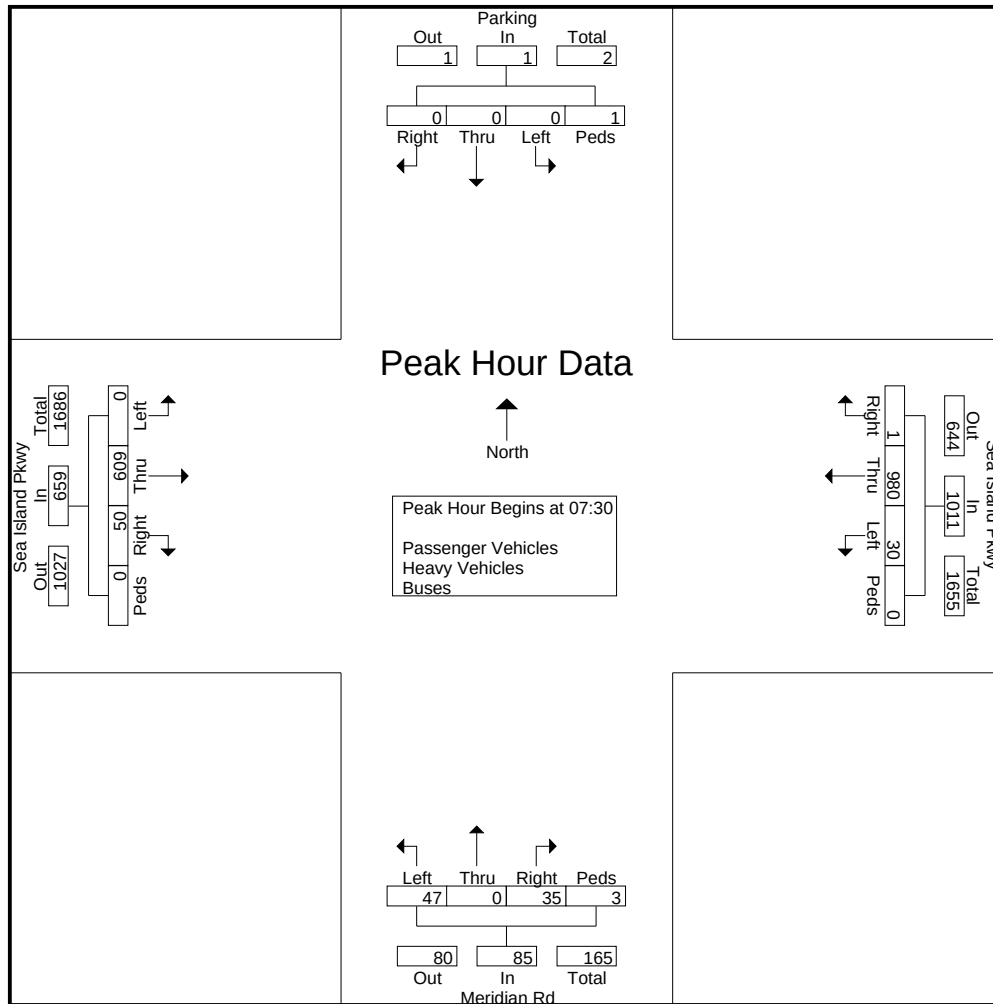
File Name : Meridian Rd @ Sea Island Pkwy

Site Code :

Start Date : 8/24/2017

Page No : 3

	Parking Southbound					Sea Island Pkwy Westbound					Meridian Rd Northbound					Sea Island Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	0	0	0	0	9	267	0	0	276	13	0	3	1	17	0	150	5	0	155	448
07:45	0	0	0	0	0	8	261	1	0	270	7	0	5	0	12	0	160	13	0	173	455
08:00	0	0	0	1	1	7	235	0	0	242	16	0	13	1	30	0	146	13	0	159	432
08:15	0	0	0	0	0	6	217	0	0	223	11	0	14	1	26	0	153	19	0	172	421
Total Volume	0	0	0	1	1	30	980	1	0	1011	47	0	35	3	85	0	609	50	0	659	1756
% App. Total	0	0	0	100		3	96.9	0.1	0		55.3	0	41.2	3.5		0	92.4	7.6	0		
PHF	.000	.000	.000	.250	.250	.833	.918	.250	.000	.916	.734	.000	.625	.750	.708	.000	.952	.658	.000	.952	.965



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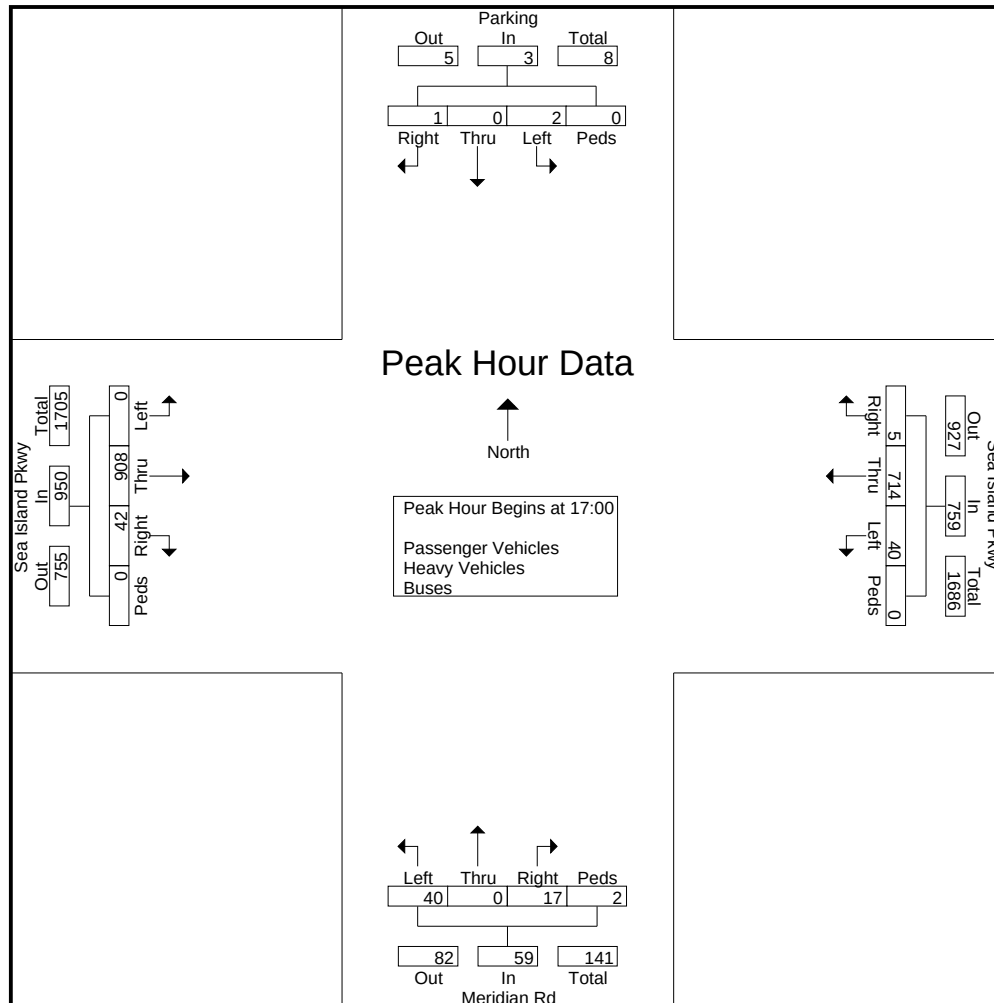
File Name : Meridian Rd @ Sea Island Pkwy

Site Code :

Start Date : 8/24/2017

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	Parking Southbound					Sea Island Pkwy Westbound					Meridian Rd Northbound					Sea Island Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	11	173	3	0	187	9	0	6	0	15	0	242	11	0	253	455
17:15	1	0	1	0	2	10	179	1	0	190	7	0	3	2	12	0	247	10	0	257	461
17:30	0	0	0	0	0	14	179	1	0	194	11	0	4	0	15	0	237	7	0	244	453
17:45	1	0	0	0	1	5	183	0	0	188	13	0	4	0	17	0	182	14	0	196	402
Total Volume	2	0	1	0	3	40	714	5	0	759	40	0	17	2	59	0	908	42	0	950	1771
% App. Total	66.7	0	33.3	0		5.3	94.1	0.7	0		67.8	0	28.8	3.4		0	95.6	4.4	0		
PHF	.500	.000	.250	.000	.375	.714	.975	.417	.000	.978	.769	.000	.708	.250	.868	.000	.919	.750	.000	.924	.960



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Then Click the Comments Tab

File Name : Sea Island Pkwy @ High School Entrance
Site Code :
Start Date : 8/24/2017
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

	Business Access Southbound				Sea Island Pkwy Westbound				High School Entrance (Geechie Rd) Northbound				Sea Island Pkwy Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00	0	0	1	0	9	203	2	0	1	0	3	3	0	85	2	0	309
07:15	2	0	2	0	10	218	3	0	2	0	2	0	1	136	4	0	380
07:30	1	0	3	1	12	271	2	0	7	0	2	0	0	141	7	0	447
07:45	0	0	1	1	34	260	2	1	12	0	11	2	0	164	19	0	507
Total	3	0	7	2	65	952	9	1	22	0	18	5	1	526	32	0	1643
08:00	0	0	0	0	61	223	0	1	23	0	19	0	0	138	20	0	485
08:15	0	0	1	0	95	194	2	1	27	0	43	1	0	112	44	0	520
08:30	0	0	1	3	53	150	0	0	23	1	47	0	0	138	25	0	441
08:45	0	0	2	1	14	173	1	0	7	0	11	1	1	127	6	0	344
Total	0	0	4	4	223	740	3	2	80	1	120	2	1	515	95	0	1790
16:00	0	0	1	0	16	205	2	0	32	0	49	0	0	217	8	0	530
16:15	0	0	1	0	6	189	1	0	11	0	21	0	0	246	6	0	481
16:30	0	0	0	0	6	185	0	0	12	0	10	1	0	202	4	0	420
16:45	0	0	0	0	6	185	1	0	6	0	14	0	0	209	8	0	429
Total	0	0	2	0	34	764	4	0	61	0	94	1	0	874	26	0	1860
17:00	0	0	1	1	15	180	0	0	10	0	10	0	1	245	6	0	469
17:15	1	0	0	2	18	196	0	1	3	0	11	0	0	248	5	0	485
17:30	0	0	2	0	9	188	3	0	11	0	16	0	0	234	8	0	471
17:45	0	0	0	0	14	188	1	0	5	0	9	0	0	204	11	0	432
Total	1	0	3	3	56	752	4	1	29	0	46	0	1	931	30	0	1857
Grand Total	4	0	16	9	378	3208	20	4	192	1	278	8	3	2846	183	0	7150
Apprch %	13.8	0	55.2	31	10.5	88.9	0.6	0.1	40.1	0.2	58	1.7	0.1	93.9	6	0	
Total %	0.1	0	0.2	0.1	5.3	44.9	0.3	0.1	2.7	0	3.9	0.1	0	39.8	2.6	0	
Passenger Vehicles	4	0	16	9	378	3184	20	4	192	1	278	8	3	2809	181	0	7087
% Passenger Vehicles	100	0	100	100	100	99.3	100	100	100	100	100	100	100	98.7	98.9	0	99.1
Heavy Vehicles	0	0	0	0	0	21	0	0	0	0	0	0	0	27	1	0	49
% Heavy Vehicles	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0.9	0.5	0	0.7
Buses	0	0	0	0	0	3	0	0	0	0	0	0	0	10	1	0	14
% Buses	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.4	0.5	0	0.2

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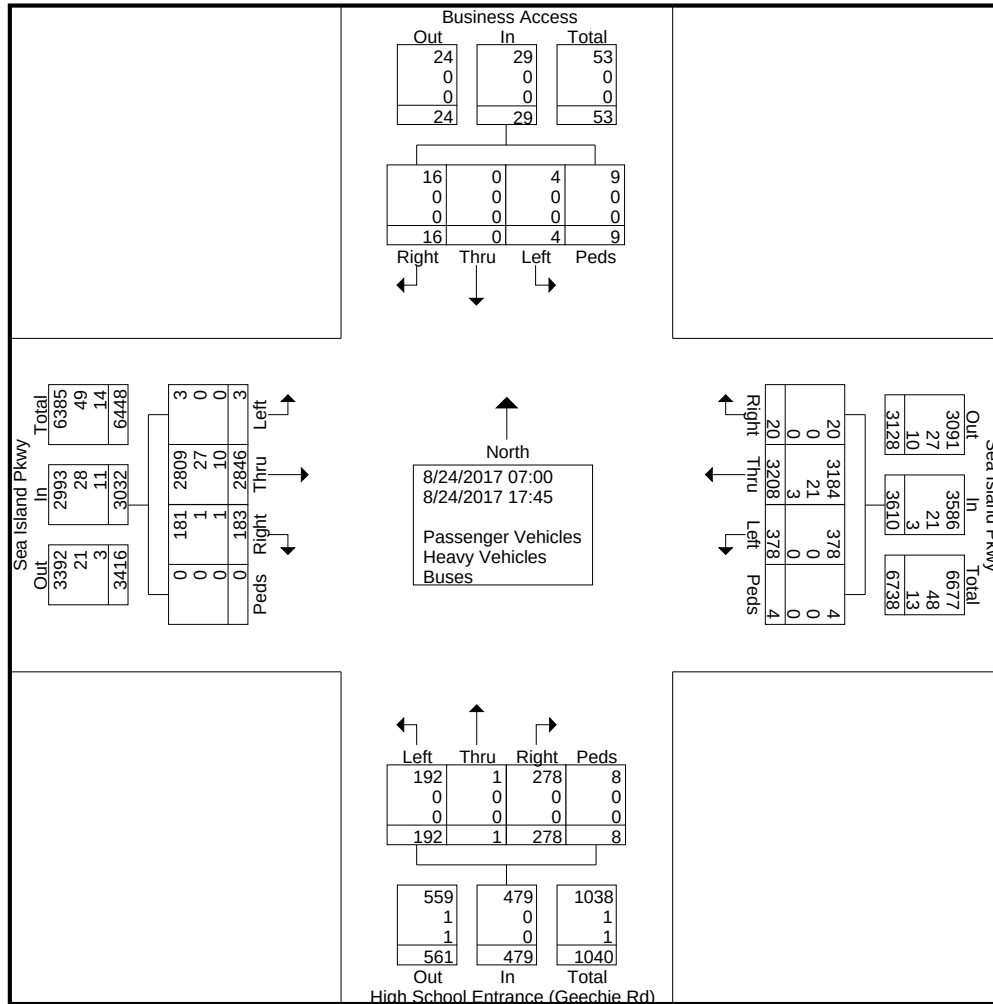
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File Name : Sea Island Pkwy @ High School Entrance

Site Code :

Start Date : 8/24/2017

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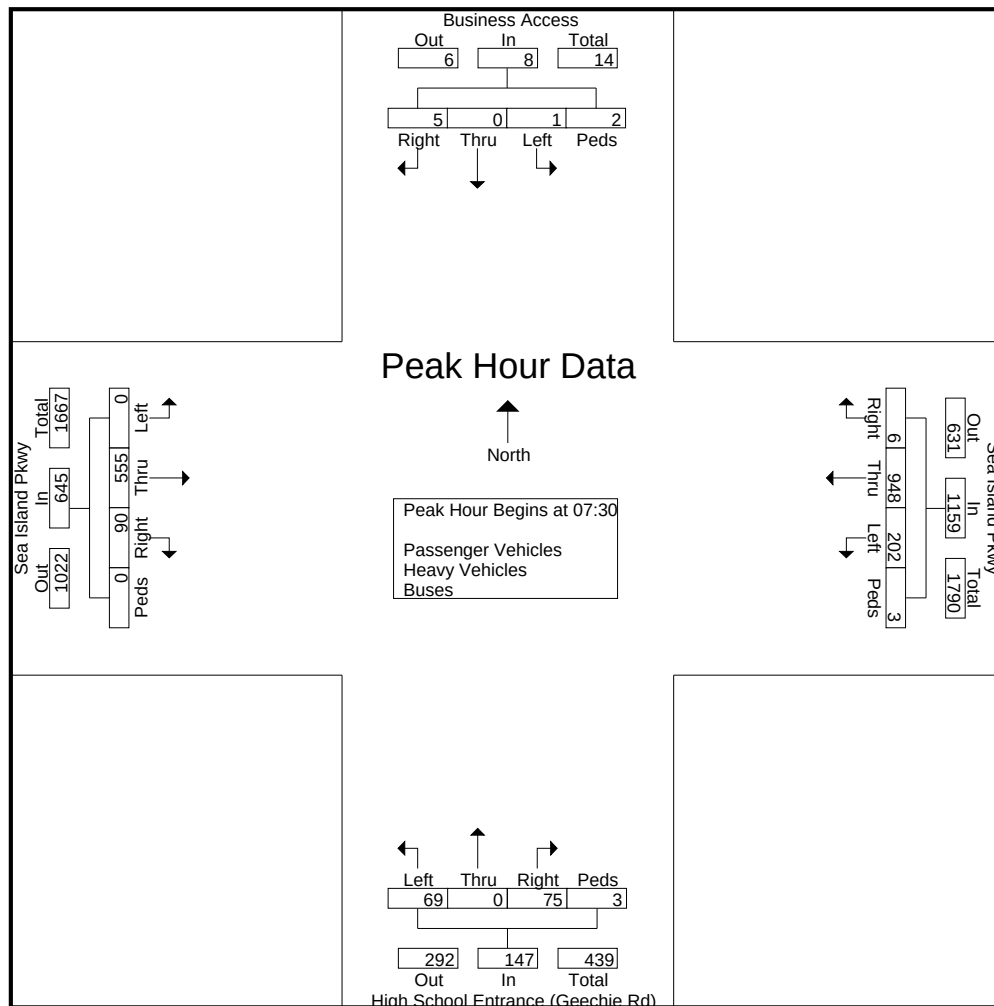
File Name : Sea Island Pkwy @ High School Entrance

Site Code :

Start Date : 8/24/2017

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	Business Access Southbound					Sea Island Pkwy Westbound					High School Entrance (Geechie Rd) Northbound					Sea Island Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	1	0	3	1	5	12	271	2	0	285	7	0	2	0	9	0	141	7	0	148	447
07:45	0	0	1	1	2	34	260	2	1	297	12	0	11	2	25	0	164	19	0	183	507
08:00	0	0	0	0	0	61	223	0	1	285	23	0	19	0	42	0	138	20	0	158	485
08:15	0	0	1	0	1	95	194	2	1	292	27	0	43	1	71	0	112	44	0	156	520
Total Volume	1	0	5	2	8	202	948	6	3	1159	69	0	75	3	147	0	555	90	0	645	1959
% App. Total	12.5	0	62.5	25		17.4	81.8	0.5	0.3		46.9	0	51	2		0	86	14	0		
PHF	.250	.000	.417	.500	.400	.532	.875	.750	.750	.976	.639	.000	.436	.375	.518	.000	.846	.511	.000	.881	.942



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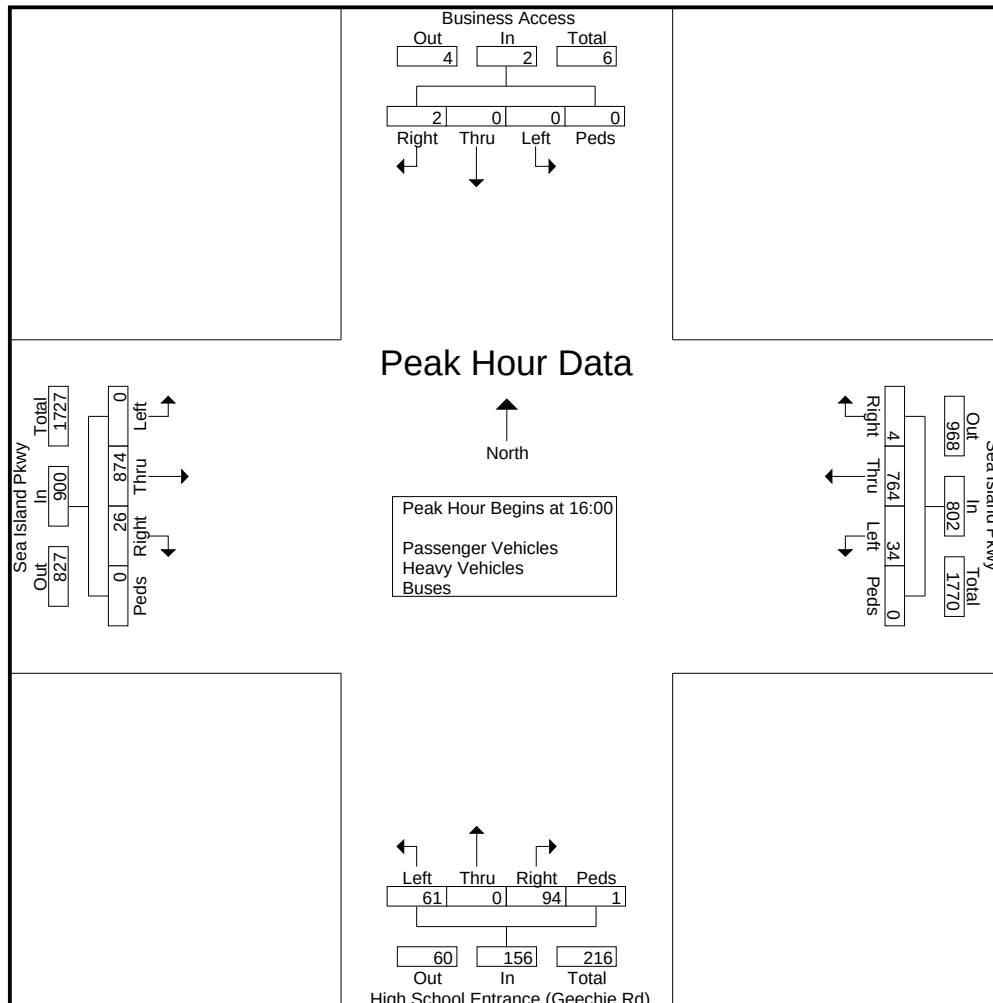
File Name : Sea Island Pkwy @ High School Entrance

Site Code :

Start Date : 8/24/2017

Page No : 4

	Business Access Southbound					Sea Island Pkwy Westbound					High School Entrance (Geechie Rd) Northbound					Sea Island Pkwy Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	1	0	1	16	205	2	0	223	32	0	49	0	81	0	217	8	0	225	530
16:15	0	0	1	0	1	6	189	1	0	196	11	0	21	0	32	0	246	6	0	252	481
16:30	0	0	0	0	0	6	185	0	0	191	12	0	10	1	23	0	202	4	0	206	420
16:45	0	0	0	0	0	6	185	1	0	192	6	0	14	0	20	0	209	8	0	217	429
Total Volume	0	0	2	0	2	34	764	4	0	802	61	0	94	1	156	0	874	26	0	900	1860
% App. Total	0	0	100	0		4.2	95.3	0.5	0		39.1	0	60.3	0.6		0	97.1	2.9	0		
PHF	.000	.000	.500	.000	.500	.531	.932	.500	.000	.899	.477	.000	.480	.250	.481	.000	.888	.813	.000	.893	.877



APPENDIX C

Traffic Volume Development Worksheets

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business/Carteret Street & Bay Street

TRAFFIC CONTROL: Signalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	16	4	154				284	798	4	2	524	7
Years To Buildout (2023)	3	3	3				3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%				1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	1	0	7				13	36	0	0	24	0
2023 NO-BUILD TRAFFIC VOLUMES	17	4	161				297	834	4	2	548	7
New Project Traffic			3				11	18			6	
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	17	4	164				308	852	4	2	554	7

PM PEAK HOUR (4:00-5:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	48	8	236				186	656	7	2	683	34
Years To Buildout (2023)	3	3	3				3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%				1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	2	0	11				8	30	0	0	31	2
2023 NO-BUILD TRAFFIC VOLUMES	50	8	247				194	686	7	2	714	36
New Project Traffic			12				7	13			21	
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	50	8	259				201	699	7	2	735	36

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business/Sea Island Parkway & North Project Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES		689	0	0	1,073		0		0			
Years To Buildout (2023)		3	3	3	3		3		3			
Yearly Growth Rate		1.5%	1.5%	1.5%	1.5%		1.5%		1.5%			
Background Traffic Growth		31	0	0	48		0		0			
2023 NO-BUILD TRAFFIC VOLUMES		720	0	0	1,121		0		0			
New Project Traffic		2	7		29				14			
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES		722	7	0	1,150		0		14			

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES		993	0	0	789		0		0			
Years To Buildout (2023)		3	3	3	3		3		3			
Yearly Growth Rate		1.5%	1.5%	1.5%	1.5%		1.5%		1.5%			
Background Traffic Growth		45	0	0	36		0		0			
2023 NO-BUILD TRAFFIC VOLUMES		1,038	0	0	825		0		0			
New Project Traffic		8	25		20				10			
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES		1,046	25	0	845		0		10			

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business/Sea Island Parkway & Meridian Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0	636	52	31	1,024	1	49	0	37	0	0	0
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	29	2	1	46	0	2	0	2	0	0	0
2023 NO-BUILD TRAFFIC VOLUMES	0	665	54	32	1,070	1	51	0	39	0	0	0
New Project Traffic		14	2	6			29		7			
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	0	679	56	38	1,070	1	80	0	46	0	0	0

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0	949	44	42	746	5	42	0	18	2	0	1
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	43	2	2	34	0	2	0	1	0	0	0
2023 NO-BUILD TRAFFIC VOLUMES	0	992	46	44	780	5	44	0	19	2	0	1
New Project Traffic		10	8	24			20		6			
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	0	1,002	54	68	780	5	64	0	25	2	0	1

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business/Sea Island Parkway & Beaufort High School Driveway

TRAFFIC CONTROL: Signalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0	580	94	211	991	6	72	0	78	1	0	5
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	26	4	9	45	0	3	0	4	0	0	0
2023 NO-BUILD TRAFFIC VOLUMES	0	606	98	220	1,036	6	75	0	82	1	0	5
New Project Traffic		21			6							
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	0	627	98	220	1,042	6	75	0	82	1	0	5

PM PEAK HOUR (4:00-5:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0	913	27	36	798	4	64	0	98	0	0	2
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	41	1	2	36	0	3	0	4	0	0	0
2023 NO-BUILD TRAFFIC VOLUMES	0	954	28	38	834	4	67	0	102	0	0	2
New Project Traffic		16			24							
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	0	970	28	38	858	4	67	0	102	0	0	2

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Meridian Road & East Project Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0		0				0	95			84	0
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	4			4	0
2023 NO-BUILD TRAFFIC VOLUMES	0		0				0	99			88	0
New Project Traffic	29		14				4	7			2	6
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	29		14				4	106			90	6

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0		0				0	59			86	0
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	3			4	0
2023 NO-BUILD TRAFFIC VOLUMES	0		0				0	62			90	0
New Project Traffic	20		10				17	6			8	24
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	20		10				17	68			98	24

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Meridian Road & Harborview Circle (North)

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:45-8:45 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	4	0	2	0	0	0	2	91	2	1	82	1
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	0	0	0	0	0	0	4	0	0	4	0
2023 NO-BUILD TRAFFIC VOLUMES	4	0	2	0	0	0	2	95	2	1	86	1
New Project Traffic	7							4			14	2
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	11	0	2	0	0	0	2	99	2	1	100	3

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	3	0	0	2	0	1	2	54	0	0	82	4
Years To Buildout (2023)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Background Traffic Growth	0	0	0	0	0	0	0	2	0	0	4	0
2023 NO-BUILD TRAFFIC VOLUMES	3	0	0	2	0	1	2	56	0	0	86	4
New Project Traffic	6							17			10	8
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	9	0	0	2	0	1	2	73	0	0	96	12

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Meridian Road & Harborview Circle (South)

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (8:00-9:00 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	1		1				3	93			83	0
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	4			4	0
2023 NO-BUILD TRAFFIC VOLUMES	1		1				3	97			87	0
New Project Traffic			8				2	4			14	
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	1		9				5	101			101	0

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0		0				0	53			83	1
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	2			4	0
2023 NO-BUILD TRAFFIC VOLUMES	0		0				0	55			87	1
New Project Traffic			5				8	17			10	
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	0		5				8	72			97	1

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Harborview Circle & Harborview Drive/South Project Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: N/A

AM PEAK HOUR (8:00-9:00 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0		0				0	0			0	0
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	0			0	0
2023 NO-BUILD TRAFFIC VOLUMES	0		0				0	0			0	0
New Project Traffic	7		8				2					2
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	7		8				2	0			0	2

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	0		0				0	0			0	0
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		0				0	0			0	0
2023 NO-BUILD TRAFFIC VOLUMES	0		0				0	0			0	0
New Project Traffic	6		5				8					8
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	6		5				8	0			0	8

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21/Lady's Island Drive & Meridian Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Thursday, August 24, 2017

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	3		69				87	969			1,425	6
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		3				4	44			64	0
2023 NO-BUILD TRAFFIC VOLUMES	3		72				91	1,013			1,489	6
New Project Traffic			22				6					
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	3		94				97	1,013			1,489	6

PM PEAK HOUR (4:30-5:30 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2020 TRAFFIC VOLUMES	2		97				83	1,384			1,038	4
Years To Buildout (2023)	3		3				3	3			3	3
Yearly Growth Rate	1.5%		1.5%				1.5%	1.5%			1.5%	1.5%
Background Traffic Growth	0		4				4	62			47	0
2023 NO-BUILD TRAFFIC VOLUMES	2		101				87	1,446			1,085	4
New Project Traffic			15				25					
Pass-By Project Traffic												
2023 BUILD TRAFFIC VOLUMES	2		116				112	1,446			1,085	4

APPENDIX D

Synchro Analysis Worksheets (2020 Existing Conditions)

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	689	0	0	1073	0	0
Future Vol, veh/h	689	0	0	1073	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	766	0	0	1192	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	- - - 766
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - - 6.22
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - - 3.318
Pot Cap-1 Maneuver	-	-	0 - 0 403
Stage 1	-	-	0 - 0
Stage 2	-	-	0 - 0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - - 403
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

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

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

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	636	52	31	1024	1	49	0	37	0	0	0
Future Vol, veh/h	0	636	52	31	1024	1	49	0	37	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	656	54	32	1056	1	51	0	38	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1057	0	0	710	0	0	1804	1804	683	1823	1831	1057
Stage 1	-	-	-	-	-	-	683	683	-	1121	1121	-
Stage 2	-	-	-	-	-	-	1121	1121	-	702	710	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	659	-	-	889	-	-	61	79	449	60	76	273
Stage 1	-	-	-	-	-	-	439	449	-	250	282	-
Stage 2	-	-	-	-	-	-	250	282	-	429	437	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	659	-	-	889	-	-	59	76	449	53	73	273
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	76	-	53	73	-
Stage 1	-	-	-	-	-	-	439	449	-	250	272	-
Stage 2	-	-	-	-	-	-	241	272	-	393	437	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			158.7			0		
HCM LOS							F			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	94	659	-	-	889	-	-	-				
HCM Lane V/C Ratio	0.943	-	-	-	0.036	-	-	-				
HCM Control Delay (s)	158.7	0	-	-	9.2	-	-	0				
HCM Lane LOS	F	A	-	-	A	-	-	A				
HCM 95th %tile Q(veh)	5.4	0	-	-	0.1	-	-	-				

HCM 2010 TWSC
103: Meridian Road & South Project Driveway

2020 Existing Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 0

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations 

Traffic Vol, veh/h 0 0 0 95 84 0

Future Vol, veh/h 0 0 0 95 84 0

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 90 90 90 90 90 90

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 0 0 0 106 93 0

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 199 93 93 0 - 0

Stage 1 93 - - - - -

Stage 2 106 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 790 964 1501 - - -

Stage 1 931 - - - - -

Stage 2 918 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 790 964 1501 - - -

Mov Cap-2 Maneuver 790 - - - - -

Stage 1 931 - - - - -

Stage 2 918 - - - - -

Approach EB NB SB

HCM Control Delay, s 0 0 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1501 - - - -

HCM Lane V/C Ratio - - - -

HCM Control Delay (s) 0 - 0 - -

HCM Lane LOS A - A - -

HCM 95th %tile Q(veh) 0 - - - -

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	2	0	0	0	2	91	2	1	82	1
Future Vol, veh/h	4	0	2	0	0	0	2	91	2	1	82	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	2	0	0	0	2	101	2	1	91	1
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	200	201	92	201	200	102	92	0	0	103	0	0
Stage 1	94	94	-	106	106	-	-	-	-	-	-	-
Stage 2	106	107	-	95	94	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	750	688	954	757	696	953	1503	-	-	1489	-	-
Stage 1	903	809	-	900	807	-	-	-	-	-	-	-
Stage 2	890	799	-	912	817	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	749	687	954	754	695	953	1503	-	-	1489	-	-
Mov Cap-2 Maneuver	749	687	-	754	695	-	-	-	-	-	-	-
Stage 1	902	808	-	899	806	-	-	-	-	-	-	-
Stage 2	889	798	-	909	816	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.5		0		0.2		0.1					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1503	-	-	807	-	1489	-	-				
HCM Lane V/C Ratio	0.001	-	-	0.008	-	0.001	-	-				
HCM Control Delay (s)	7.4	0	-	9.5	0	7.4	0	-				
HCM Lane LOS	A	A	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-				

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	6	6	2
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1622	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	3	93	83	0
Future Vol, veh/h	1	1	3	93	83	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	1	1	4	113	101	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	222	101	101	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	121	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.12	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.218	-	-	-
Pot Cap-1 Maneuver	757	943	1491	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	755	943	1491	-	-	-
Mov Cap-2 Maneuver	755	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1491	-	839	-	-	
HCM Lane V/C Ratio	0.002	-	0.003	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	69	87	969	1425	6
Future Vol, veh/h	3	69	87	969	1425	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	74	94	1042	1532	6

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	2244	769	1538
Stage 1	1535	-	-
Stage 2	709	-	-
Critical Hdwy	6.84	6.94	4.14
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	36	344	428
Stage 1	164	-	-
Stage 2	449	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	28	344	428
Mov Cap-2 Maneuver	28	-	-
Stage 1	128	-	-
Stage 2	449	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.8	1.3	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	428	-	234	-	-
HCM Lane V/C Ratio	0.219	-	0.331	-	-
HCM Control Delay (s)	15.7	-	27.8	-	-
HCM Lane LOS	C	-	D	-	-
HCM 95th %tile Q(veh)	0.8	-	1.4	-	-

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2020 Existing Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	4	154	0	0	0	284	798	4	2	524	7
Future Volume (veh/h)	16	4	154	0	0	0	284	798	4	2	524	7
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	18	4	171				316	887	4	2	582	8
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	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
Cap, veh/h	173	38	308				593	1437	6	30	1201	1023
Arrive On Green	0.12	0.12	0.12				0.08	0.78	0.78	0.65	0.65	0.65
Sat Flow, veh/h	1464	325	1583				1774	1853	8	1	1860	1583
Grp Volume(v), veh/h	22	0	171				316	0	891	584	0	8
Grp Sat Flow(s),veh/h/ln	1790	0	1583				1774	0	1861	1861	0	1583
Q Serve(g_s), s	1.3	0.0	11.9				6.9	0.0	25.1	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.3	0.0	11.9				6.9	0.0	25.1	19.7	0.0	0.2
Prop In Lane	0.82		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	211	0	308				593	0	1444	1231	0	1023
V/C Ratio(X)	0.10	0.00	0.56				0.53	0.00	0.62	0.47	0.00	0.01
Avail Cap(c_a), veh/h	384	0	461				683	0	1538	1231	0	1023
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	44.4				8.2	0.0	5.9	11.1	0.0	7.7
Incr Delay (d2), s/veh	0.2	0.0	1.6				0.6	0.0	0.7	1.3	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
%ile BackOfQ(50%),veh/ln	0.7	0.0	5.3				3.4	0.0	12.9	10.5	0.0	0.1
LnGrp Delay(d),s/veh	48.3	0.0	46.0				8.8	0.0	6.6	12.5	0.0	7.7
LnGrp LOS	D		D				A		A	B		A
Approach Vol, veh/h		193						1207			592	
Approach Delay, s/veh		46.2						7.2			12.4	
Approach LOS		D						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	15.8	85.0				100.8		21.2				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 79				* 1E2		26.2				
Max Q Clear Time (g_c+l1), s	8.9	21.7				27.1		13.9				
Green Ext Time (p_c), s	0.4	4.9				10.0		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			12.5									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2020 Existing Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	580	94	211	991	72	78		
Future Volume (veh/h)	580	94	211	991	72	78		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	617	100	224	1054	77	83		
Adj No. of Lanes	1	0	1	1	1	1		
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	1210	196	584	1586	122	109		
Arrive On Green	0.77	0.77	0.04	0.85	0.07	0.07		
Sat Flow, veh/h	1564	254	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	717	224	1054	77	83		
Grp Sat Flow(s),veh/h/ln	0	1818	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	20.8	3.5	27.3	6.0	7.3		
Cycle Q Clear(g_c), s	0.0	20.8	3.5	27.3	6.0	7.3		
Prop In Lane		0.14	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1406	584	1586	122	109		
V/C Ratio(X)	0.00	0.51	0.38	0.66	0.63	0.76		
Avail Cap(c_a), veh/h	0	1406	886	1586	361	322		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	6.0	5.0	3.6	63.9	64.5		
Incr Delay (d2), s/veh	0.0	0.4	0.3	2.2	5.3	10.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	10.5	2.0	14.7	3.1	3.5		
LnGrp Delay(d),s/veh	0.0	6.4	5.3	5.8	69.3	75.1		
LnGrp LOS		A	A	A	E	E		
Approach Vol, veh/h	717			1278	160			
Approach Delay, s/veh	6.4			5.7	72.3			
Approach LOS	A			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.0	115.0				126.0		15.0
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	30.0	85.0				120.0		28.7
Max Q Clear Time (g_c+I), s	15.5	22.8				29.3		9.3
Green Ext Time (p_c), s	0.4	8.9				20.1		0.4
Intersection Summary								
HCM 2010 Ctrl Delay		10.9						
HCM 2010 LOS		B						

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	993	0	0	789	0	0
Future Vol, veh/h	993	0	0	789	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1103	0	0	877	0	0
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	1103
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	257
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	257
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		0		
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	0	-	-	-		
HCM Lane LOS	A	-	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	949	44	42	746	5	42	0	18	2	0	1
Future Vol, veh/h	0	949	44	42	746	5	42	0	18	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	989	46	44	777	5	44	0	19	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	782	0	0	1035	0	0	1880	1882	1012	1890	1903	780
Stage 1	-	-	-	-	-	-	1012	1012	-	868	868	-
Stage 2	-	-	-	-	-	-	868	870	-	1022	1035	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	836	-	-	672	-	-	54	71	290	53	69	395
Stage 1	-	-	-	-	-	-	288	317	-	347	370	-
Stage 2	-	-	-	-	-	-	347	369	-	285	309	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	836	-	-	672	-	-	51	66	290	47	65	395
Mov Cap-2 Maneuver	-	-	-	-	-	-	51	66	-	47	65	-
Stage 1	-	-	-	-	-	-	288	317	-	347	346	-
Stage 2	-	-	-	-	-	-	323	345	-	267	309	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.6			188.8			61.3		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	68	836	-	-	672	-	-	67
HCM Lane V/C Ratio	0.919	-	-	-	0.065	-	-	0.047
HCM Control Delay (s)	188.8	0	-	-	10.7	-	-	61.3
HCM Lane LOS	F	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4.5	0	-	-	0.2	-	-	0.1

HCM 2010 TWSC
103: Meridian Road & South Project Driveway

2020 Existing Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	59	86	0
Future Vol, veh/h	0	0	0	59	86	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	66	96	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	162	96	96
Stage 1	96	-	-
Stage 2	66	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	829	960	1498
Stage 1	928	-	-
Stage 2	957	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	829	960	1498
Mov Cap-2 Maneuver	829	-	-
Stage 1	928	-	-
Stage 2	957	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	0	2	0	1	2	54	0	0	82	4
Future Vol, veh/h	3	0	0	2	0	1	2	54	0	0	82	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	0	2	0	1	2	66	0	0	100	5
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	174	173	103	173	175	66	105	0	0	66	0	0
Stage 1	103	103	-	70	70	-	-	-	-	-	-	-
Stage 2	71	70	-	103	105	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	780	713	941	790	718	998	1486	-	-	1536	-	-
Stage 1	893	802	-	940	837	-	-	-	-	-	-	-
Stage 2	929	829	-	903	808	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	778	712	941	789	717	998	1486	-	-	1536	-	-
Mov Cap-2 Maneuver	778	712	-	789	717	-	-	-	-	-	-	-
Stage 1	892	802	-	939	836	-	-	-	-	-	-	-
Stage 2	927	828	-	903	808	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.6		9.3			0.3			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1486	-	-	778	848	1536	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.005	0.004	-	-	-				
HCM Control Delay (s)	7.4	0	-	9.6	9.3	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.16	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.254	-	-	-
Pot Cap-1 Maneuver	1022	1084	1596	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1596	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1596	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

HCM 2010 TWSC
106: Meridian Road & Harborview Circle (South)

2020 Existing Conditions
PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	53	83	1
Future Vol, veh/h	0	0	0	53	83	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	0	0	0	62	98	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	161	99	99	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	62	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.12	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.218	-	-	-
Pot Cap-1 Maneuver	821	946	1494	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	821	946	1494	-	-	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1494	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	97	83	1384	1038	4
Future Vol, veh/h	2	97	83	1384	1038	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	99	85	1412	1059	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1937	532	1063	0	-	0
Stage 1	1061	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	57	492	651	-	-	-
Stage 1	294	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	50	492	651	-	-	-
Mov Cap-2 Maneuver	50	-	-	-	-	-
Stage 1	255	-	-	-	-	-
Stage 2	368	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.4	0.6		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	651	-	417	-	-	
HCM Lane V/C Ratio	0.13	-	0.242	-	-	
HCM Control Delay (s)	11.4	-	16.4	-	-	
HCM Lane LOS	B	-	C	-	-	
HCM 95th %tile Q(veh)	0.4	-	0.9	-	-	

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2020 Existing Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	8	236	0	0	0	186	656	7	2	683	34
Future Volume (veh/h)	48	8	236	0	0	0	186	656	7	2	683	34
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	52	9	257				202	713	8	2	742	37
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	256	44	349				426	1366	15	25	1203	1023
Arrive On Green	0.17	0.17	0.17				0.05	0.74	0.74	0.65	0.65	0.65
Sat Flow, veh/h	1523	264	1583				1774	1838	21	1	1861	1583
Grp Volume(v), veh/h	61	0	257				202	0	721	744	0	37
Grp Sat Flow(s),veh/h/ln	1787	0	1583				1774	0	1859	1862	0	1583
Q Serve(g_s), s	4.3	0.0	22.1				5.4	0.0	23.8	0.0	0.0	1.2
Cycle Q Clear(g_c), s	4.3	0.0	22.1				5.4	0.0	23.8	34.4	0.0	1.2
Prop In Lane	0.85		1.00				1.00		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	300	0	349				426	0	1382	1228	0	1023
V/C Ratio(X)	0.20	0.00	0.74				0.47	0.00	0.52	0.61	0.00	0.04
Avail Cap(c_a), veh/h	344	0	388				521	0	1382	1228	0	1023
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.5	0.0	53.1				13.2	0.0	7.9	15.2	0.0	9.4
Incr Delay (d2), s/veh	0.3	0.0	6.4				0.6	0.0	1.4	2.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	10.3				2.9	0.0	12.6	18.3	0.0	0.6
LnGrp Delay(d),s/veh	52.8	0.0	59.5				13.8	0.0	9.3	17.5	0.0	9.4
LnGrp LOS	D		E				B		A	B		A
Approach Vol, veh/h		318						923			781	
Approach Delay, s/veh		58.3						10.3			17.1	
Approach LOS		E						B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	14.2	100.8				115.0		31.4				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 87				* 1.1E2		28.2				
Max Q Clear Time (g_c+I1), s	7.4	36.4				25.8		24.1				
Green Ext Time (p_c), s	0.3	7.2				6.8		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			20.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2020 Existing Conditions
 PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	913	27	36	798	64	98		
Future Volume (veh/h)	913	27	36	798	64	98		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1038	31	41	907	73	111		
Adj No. of Lanes	1	0	1	1	1	1		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1356	40	337	1540	155	139		
Arrive On Green	0.75	0.75	0.04	0.83	0.09	0.09		
Sat Flow, veh/h	1800	54	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	1069	41	907	73	111		
Grp Sat Flow(s),veh/h/ln	0	1853	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	44.3	0.6	21.7	5.2	9.1		
Cycle Q Clear(g_c), s	0.0	44.3	0.6	21.7	5.2	9.1		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1396	337	1540	155	139		
V/C Ratio(X)	0.00	0.77	0.12	0.59	0.47	0.80		
Avail Cap(c_a), veh/h	0	1396	449	1540	400	357		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.5	11.4	3.9	57.2	59.0		
Incr Delay (d2), s/veh	0.0	2.8	0.1	1.7	2.2	10.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	23.3	0.6	11.5	2.6	4.3		
LnGrp Delay(d),s/veh	0.0	12.2	11.5	5.5	59.4	69.1		
LnGrp LOS		B	B	A	E	E		
Approach Vol, veh/h	1069			948	184			
Approach Delay, s/veh	12.2			5.8	65.3			
Approach LOS	B			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	105.3				115.0		16.9
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	91.0					109.0		29.7
Max Q Clear Time (g_c+I), s	46.3					23.7		11.1
Green Ext Time (p_c), s	0.0	17.7				13.9		0.5
Intersection Summary								
HCM 2010 Ctrl Delay		13.9						
HCM 2010 LOS		B						

APPENDIX E

Synchro Analysis Worksheets (2023 No-Build Conditions)

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	720	0	0	1121	0	0
Future Vol, veh/h	720	0	0	1121	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	800	0	0	1246	0	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	800
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	385
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	385
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	0	-	-	-		
HCM Lane LOS	A	-	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Intersection

Int Delay, s/veh 12.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	665	54	32	1070	1	51	0	39	0	0	0
Future Vol, veh/h	0	665	54	32	1070	1	51	0	39	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	700	57	34	1126	1	54	0	41	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1127	0	0	757	0	0	1924	1924	729	1944	1952	1127
Stage 1	-	-	-	-	-	-	729	729	-	1195	1195	-
Stage 2	-	-	-	-	-	-	1195	1195	-	749	757	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	620	-	-	854	-	-	~ 51	67	423	49	64	249
Stage 1	-	-	-	-	-	-	414	428	-	227	260	-
Stage 2	-	-	-	-	-	-	227	260	-	404	416	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	620	-	-	854	-	-	~ 49	64	423	43	61	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 49	64	-	43	61	-
Stage 1	-	-	-	-	-	-	414	428	-	227	250	-
Stage 2	-	-	-	-	-	-	218	250	-	365	416	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	258.5	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	79	620	-	-	854	-	-	-
HCM Lane V/C Ratio	1.199	-	-	-	0.039	-	-	-
HCM Control Delay (s)	258.5	0	-	-	9.4	-	-	0
HCM Lane LOS	F	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	7	0	-	-	0.1	-	-	-

Notes

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

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	99	88	0
Future Vol, veh/h	0	0	0	99	88	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	110	98	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	208	98	98	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	780	958	1495	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	780	958	1495	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1495	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	2	0	0	0	2	95	2	1	86	1
Future Vol, veh/h	4	0	2	0	0	0	2	95	2	1	86	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	2	0	0	0	2	106	2	1	96	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	210	211	97	211	210	107	97	0	0	108	0	0
Stage 1	99	99	-	111	111	-	-	-	-	-	-	-
Stage 2	111	112	-	100	99	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	739	679	948	746	687	947	1496	-	-	1483	-	-
Stage 1	898	805	-	894	804	-	-	-	-	-	-	-
Stage 2	884	795	-	906	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	738	678	948	743	686	947	1496	-	-	1483	-	-
Mov Cap-2 Maneuver	738	678	-	743	686	-	-	-	-	-	-	-
Stage 1	897	804	-	893	803	-	-	-	-	-	-	-
Stage 2	883	794	-	903	812	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.6		0		0.1		0.1	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1496	-	-	797	-	1483	-
HCM Lane V/C Ratio	0.001	-	-	0.008	-	0.001	-
HCM Control Delay (s)	7.4	0	-	9.6	0	7.4	0
HCM Lane LOS	A	A	-	A	A	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.16	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.254	-	-	-
Pot Cap-1 Maneuver	1022	1084	1596	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1596	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1596	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	3	97	87	0
Future Vol, veh/h	1	1	3	97	87	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	1	1	3	108	97	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	211	97	97	0	-	0
Stage 1	97	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.12	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.218	-	-	-
Pot Cap-1 Maneuver	768	948	1496	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	766	948	1496	-	-	-
Mov Cap-2 Maneuver	766	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	901	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0.2		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1496	-	847	-	-	
HCM Lane V/C Ratio	0.002	-	0.003	-	-	
HCM Control Delay (s)	7.4	0	9.3	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	72	91	1013	1489	6
Future Vol, veh/h	3	72	91	1013	1489	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	77	98	1089	1601	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2345	804	1607	0	-	0
Stage 1	1604	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	30	326	403	-	-	-
Stage 1	150	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	326	403	-	-	-
Mov Cap-2 Maneuver	23	-	-	-	-	-
Stage 1	114	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	31.8	1.4		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	403	-	213	-	-	
HCM Lane V/C Ratio	0.243	-	0.379	-	-	
HCM Control Delay (s)	16.8	-	31.8	-	-	
HCM Lane LOS	C	-	D	-	-	
HCM 95th %tile Q(veh)	0.9	-	1.7	-	-	

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2023 No-Build Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	4	161	0	0	0	297	834	4	2	548	7
Future Volume (veh/h)	17	4	161	0	0	0	297	834	4	2	548	7
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	19	4	179				330	927	4	2	609	8
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	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
Cap, veh/h	180	38	320				573	1432	6	30	1190	1013
Arrive On Green	0.12	0.12	0.12				0.08	0.77	0.77	0.64	0.64	0.64
Sat Flow, veh/h	1478	311	1583				1774	1853	8	1	1860	1583
Grp Volume(v), veh/h	23	0	179				330	0	931	611	0	8
Grp Sat Flow(s),veh/h/ln	1789	0	1583				1774	0	1861	1861	0	1583
Q Serve(g_s), s	1.4	0.0	12.5				7.4	0.0	28.1	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.4	0.0	12.5				7.4	0.0	28.1	21.7	0.0	0.2
Prop In Lane	0.83		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	218	0	320				573	0	1438	1220	0	1013
V/C Ratio(X)	0.11	0.00	0.56				0.58	0.00	0.65	0.50	0.00	0.01
Avail Cap(c_a), veh/h	380	0	463				654	0	1523	1220	0	1013
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.1	0.0	44.2				9.1	0.0	6.4	11.9	0.0	8.0
Incr Delay (d2), s/veh	0.2	0.0	1.5				0.7	0.0	0.9	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	5.6				3.7	0.0	14.6	11.5	0.0	0.1
LnGrp Delay(d),s/veh	48.3	0.0	45.7				9.9	0.0	7.3	13.4	0.0	8.1
LnGrp LOS	D		D				A		A	B		A
Approach Vol, veh/h		202						1261			619	
Approach Delay, s/veh		46.0						8.0			13.3	
Approach LOS		D						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	16.4	85.0				101.4		21.8				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 79				* 1E2		26.2				
Max Q Clear Time (g_c+l1), s	9.4	23.7				30.1		14.5				
Green Ext Time (p_c), s	0.4	5.3				10.9		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			13.2									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2023 No-Build Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	606	98	220	1036	75	82		
Future Volume (veh/h)	606	98	220	1036	75	82		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	645	104	234	1102	80	87		
Adj No. of Lanes	1	0	1	1	1	1		
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	1206	194	560	1581	126	113		
Arrive On Green	0.77	0.77	0.04	0.85	0.07	0.07		
Sat Flow, veh/h	1566	252	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	749	234	1102	80	87		
Grp Sat Flow(s),veh/h/ln	0	1818	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	22.8	3.7	30.9	6.2	7.6		
Cycle Q Clear(g_c), s	0.0	22.8	3.7	30.9	6.2	7.6		
Prop In Lane		0.14	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1400	560	1581	126	113		
V/C Ratio(X)	0.00	0.54	0.42	0.70	0.63	0.77		
Avail Cap(c_a), veh/h	0	1400	860	1581	360	321		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	6.4	5.7	4.0	63.9	64.5		
Incr Delay (d2), s/veh	0.0	0.5	0.4	2.6	5.2	10.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	11.4	2.4	16.4	3.2	3.7		
LnGrp Delay(d),s/veh	0.0	6.9	6.0	6.5	69.0	75.1		
LnGrp LOS		A	A	A	E	E		
Approach Vol, veh/h	749			1336	167			
Approach Delay, s/veh	6.9			6.4	72.2			
Approach LOS	A			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.2	114.8				126.0		15.4
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	30.0	85.0				120.0		28.7
Max Q Clear Time (g_c+I), s	15.7	24.8				32.9		9.6
Green Ext Time (p_c), s	0.5	9.6				22.5		0.4
Intersection Summary								
HCM 2010 Ctrl Delay		11.5						
HCM 2010 LOS		B						

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1038	0	0	825	0	0
Future Vol, veh/h	1038	0	0	825	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1153	0	0	917	0	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	1153
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	240
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	240
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		0		
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	-	-	-	-		
HCM Lane V/C Ratio	-	-	-	-		
HCM Control Delay (s)	0	-	-	-		
HCM Lane LOS	A	-	-	-		
HCM 95th %tile Q(veh)	-	-	-	-		

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	992	46	44	780	5	44	0	19	2	0	1
Future Vol, veh/h	0	992	46	44	780	5	44	0	19	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1044	48	46	821	5	46	0	20	2	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	826	0	0	1092	0	0	1984	1986	1068	1994	2008	824
Stage 1	-	-	-	-	-	-	1068	1068	-	916	916	-
Stage 2	-	-	-	-	-	-	916	918	-	1078	1092	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	805	-	-	639	-	-	~ 46	61	269	45	59	373
Stage 1	-	-	-	-	-	-	268	298	-	326	351	-
Stage 2	-	-	-	-	-	-	326	350	-	265	291	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	805	-	-	639	-	-	~ 43	57	269	39	55	373
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 43	57	-	39	55	-
Stage 1	-	-	-	-	-	-	268	298	-	326	326	-
Stage 2	-	-	-	-	-	-	302	325	-	245	291	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.6			280.9			73.1		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	58	805	-	-	639	-	-	56				
HCM Lane V/C Ratio	1.143	-	-	-	0.072	-	-	0.056				
HCM Control Delay (s)	280.9	0	-	-	11.1	-	-	73.1				
HCM Lane LOS	F	A	-	-	B	-	-	F				
HCM 95th %tile Q(veh)	5.5	0	-	-	0.2	-	-	0.2				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	62	90	0
Future Vol, veh/h	0	0	0	62	90	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	69	100	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	169	100	100	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	69	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	821	956	1493	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	821	956	1493	-	-	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	954	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1493	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	0	2	0	1	2	56	0	0	86	4
Future Vol, veh/h	3	0	0	2	0	1	2	56	0	0	86	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	0	2	0	1	2	62	0	0	96	4

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	165	164	98	164	166	62	100	0	0	62	0	0
Stage 1	98	98	-	66	66	-	-	-	-	-	-	-
Stage 2	67	66	-	98	100	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	791	721	947	801	727	1003	1493	-	-	1541	-	-
Stage 1	899	806	-	945	840	-	-	-	-	-	-	-
Stage 2	933	832	-	908	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	789	720	947	800	726	1003	1493	-	-	1541	-	-
Mov Cap-2 Maneuver	789	720	-	800	726	-	-	-	-	-	-	-
Stage 1	898	806	-	944	839	-	-	-	-	-	-	-
Stage 2	931	831	-	908	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	9.2	0.3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1493	-	-	789 858	1541	-	-
HCM Lane V/C Ratio	0.001	-	-	0.004 0.004	-	-	-
HCM Control Delay (s)	7.4	0	-	9.6 9.2	0	-	-
HCM Lane LOS	A	A	-	A A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	0	0	0	0	0	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.16	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.254	-	-	-
Pot Cap-1 Maneuver	1022	1084	1596	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1596	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1596	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	55	87	1
Future Vol, veh/h	0	0	0	55	87	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	0	0	0	61	97	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	159	98	98	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.12	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.218	-	-	-
Pot Cap-1 Maneuver	823	947	1495	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	823	947	1495	-	-	-
Mov Cap-2 Maneuver	823	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1495	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	101	87	1446	1085	4
Future Vol, veh/h	2	101	87	1446	1085	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	106	92	1522	1142	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2089	573	1146	0	-	0
Stage 1	1144	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	45	463	605	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	38	463	605	-	-	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.2	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	605	-	380	-	-	
HCM Lane V/C Ratio	0.151	-	0.285	-	-	
HCM Control Delay (s)	12	-	18.2	-	-	
HCM Lane LOS	B	-	C	-	-	
HCM 95th %tile Q(veh)	0.5	-	1.2	-	-	

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2023 No-Build Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	8	247	0	0	0	194	686	7	2	714	36
Future Volume (veh/h)	50	8	247	0	0	0	194	686	7	2	714	36
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	54	9	268				211	746	8	2	776	39
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	266	44	362				400	1358	15	25	1190	1012
Arrive On Green	0.17	0.17	0.17				0.05	0.74	0.74	0.64	0.64	0.64
Sat Flow, veh/h	1531	255	1583				1774	1840	20	1	1861	1583
Grp Volume(v), veh/h	63	0	268				211	0	754	778	0	39
Grp Sat Flow(s),veh/h/ln	1786	0	1583				1774	0	1859	1862	0	1583
Q Serve(g_s), s	4.5	0.0	23.2				5.8	0.0	26.3	0.0	0.0	1.3
Cycle Q Clear(g_c), s	4.5	0.0	23.2				5.8	0.0	26.3	38.1	0.0	1.3
Prop In Lane	0.86		1.00				1.00		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	310	0	362				400	0	1373	1215	0	1012
V/C Ratio(X)	0.20	0.00	0.74				0.53	0.00	0.55	0.64	0.00	0.04
Avail Cap(c_a), veh/h	342	0	390				490	0	1373	1215	0	1012
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.2	0.0	52.8				15.1	0.0	8.5	16.5	0.0	9.8
Incr Delay (d2), s/veh	0.3	0.0	6.9				0.8	0.0	1.6	2.6	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
%ile BackOfQ(50%),veh/ln	2.2	0.0	10.8				3.5	0.0	14.0	20.3	0.0	0.6
LnGrp Delay(d),s/veh	52.5	0.0	59.7				15.9	0.0	10.1	19.1	0.0	9.9
LnGrp LOS	D		E				B		B	B		A
Approach Vol, veh/h		331						965			817	
Approach Delay, s/veh		58.3						11.4			18.6	
Approach LOS		E						B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	14.6	100.4				115.0		32.4				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 87				* 1.1E2		28.2				
Max Q Clear Time (g_c+l1), s	7.8	40.1				28.3		25.2				
Green Ext Time (p_c), s	0.3	7.7				7.3		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			21.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2023 No-Build Conditions
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	954	28	38	834	67	102		
Future Volume (veh/h)	954	28	38	834	67	102		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1060	31	42	927	74	113		
Adj No. of Lanes	1	0	1	1	1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1354	40	322	1538	158	141		
Arrive On Green	0.75	0.75	0.04	0.83	0.09	0.09		
Sat Flow, veh/h	1801	53	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	1091	42	927	74	113		
Grp Sat Flow(s),veh/h/ln	0	1853	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	46.9	0.6	22.8	5.2	9.2		
Cycle Q Clear(g_c), s	0.0	46.9	0.6	22.8	5.2	9.2		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1394	322	1538	158	141		
V/C Ratio(X)	0.00	0.78	0.13	0.60	0.47	0.80		
Avail Cap(c_a), veh/h	0	1394	434	1538	399	356		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	9.9	12.5	4.0	57.2	59.0		
Incr Delay (d2), s/veh	0.0	3.2	0.1	1.8	2.2	10.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	24.9	0.6	12.1	2.7	4.5		
LnGrp Delay(d),s/veh	0.0	13.0	12.6	5.8	59.3	69.1		
LnGrp LOS		B	B	A	E	E		
Approach Vol, veh/h	1091			969	187			
Approach Delay, s/veh	13.0			6.1	65.2			
Approach LOS	B			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	105.3				115.0		17.0
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	91.0					109.0		29.7
Max Q Clear Time (g_c+I2), s	48.9					24.8		11.2
Green Ext Time (p_c), s	0.0	18.0				14.6		0.5
Intersection Summary								
HCM 2010 Ctrl Delay		14.4						
HCM 2010 LOS		B						

APPENDIX F

Synchro Analysis Worksheets (2023 Build Conditions)

HCM 6th TWSC
101: North Project Driveway & US 21B/Sea Island Parkway

2023 Build Conditions
AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	722	7	0	1150	0	14
Future Vol, veh/h	722	7	0	1150	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	802	8	0	1278	0	16
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	-	-	-	806
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	382
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		14.8		
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	382	-	-	-		
HCM Lane V/C Ratio	0.041	-	-	-		
HCM Control Delay (s)	14.8	-	-	-		
HCM Lane LOS	B	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		

Intersection

Int Delay, s/veh 37

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	679	56	38	1070	1	80	0	46	0	0	0
Future Vol, veh/h	0	679	56	38	1070	1	80	0	46	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	715	59	40	1126	1	84	0	48	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1127	0	0	774	0	0	1952	1952	745	1976	1981	1127
Stage 1	-	-	-	-	-	-	745	745	-	1207	1207	-
Stage 2	-	-	-	-	-	-	1207	1207	-	769	774	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	620	-	-	842	-	-	~ 48	64	414	46	62	249
Stage 1	-	-	-	-	-	-	406	421	-	224	256	-
Stage 2	-	-	-	-	-	-	224	256	-	394	408	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	620	-	-	842	-	-	~ 46	61	414	39	59	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 46	61	-	39	59	-
Stage 1	-	-	-	-	-	-	406	421	-	224	244	-
Stage 2	-	-	-	-	-	-	213	244	-	348	408	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	\$ 575.4	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	68	620	-	-	842	-	-	-
HCM Lane V/C Ratio	1.95	-	-	-	0.048	-	-	-
HCM Control Delay (s)	\$ 575.4	0	-	-	9.5	-	-	0
HCM Lane LOS	F	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	12.2	0	-	-	0.1	-	-	-

Notes

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

HCM 6th TWSC
103: Meridian Road & South Project Driveway

2023 Build Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	14	4	106	90	6
Future Vol, veh/h	29	14	4	106	90	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	16	4	118	100	7

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	230	104	107
Stage 1	104	-	-
Stage 2	126	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	758	951	1484
Stage 1	920	-	-
Stage 2	900	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	756	951	1484
Mov Cap-2 Maneuver	756	-	-
Stage 1	917	-	-
Stage 2	900	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1484	-	810	-	-
HCM Lane V/C Ratio	0.003	-	0.059	-	-
HCM Control Delay (s)	7.4	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	2	0	0	0	2	99	2	1	100	3
Future Vol, veh/h	11	0	2	0	0	0	2	99	2	1	100	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	2	0	0	0	2	110	2	1	111	3

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	230	231	113	231	231	111	114	0	0	112	0	0
Stage 1	115	115	-	115	115	-	-	-	-	-	-	-
Stage 2	115	116	-	116	116	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	717	662	929	724	669	942	1475	-	-	1478	-	-
Stage 1	880	793	-	890	800	-	-	-	-	-	-	-
Stage 2	880	792	-	889	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	716	661	929	721	668	942	1475	-	-	1478	-	-
Mov Cap-2 Maneuver	716	661	-	721	668	-	-	-	-	-	-	-
Stage 1	879	792	-	889	799	-	-	-	-	-	-	-
Stage 2	879	791	-	886	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	0	0.1	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1475	-	-	742	-	1478	-
HCM Lane V/C Ratio	0.002	-	-	0.019	-	0.001	-
HCM Control Delay (s)	7.4	0	-	9.9	0	7.4	0
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-

Intersection						
Int Delay, s/veh	7.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	8	2	0	0	2
Future Vol, veh/h	7	8	2	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	8	9	2	0	0	2
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	5	1	2	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.16	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.254	-	-	-
Pot Cap-1 Maneuver	1017	1084	1594	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1016	1084	1594	-	-	-
Mov Cap-2 Maneuver	1016	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.5	7.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1594	-	1051	-	-	
HCM Lane V/C Ratio	0.001	-	0.016	-	-	
HCM Control Delay (s)	7.3	0	8.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
106: Meridian Road & Harborview Circle (South)

2023 Build Conditions
AM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	9	5	101	101	0
Future Vol, veh/h	1	9	5	101	101	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	1	10	6	112	112	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	236	112	112	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.46	6.26	4.12	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	2.218	-	-	-
Pot Cap-1 Maneuver	743	930	1478	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	740	930	1478	-	-	-
Mov Cap-2 Maneuver	740	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1478	-	907	-	-	
HCM Lane V/C Ratio	0.004	-	0.012	-	-	
HCM Control Delay (s)	7.4	0	9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	94	97	1013	1489	6
Future Vol, veh/h	3	94	97	1013	1489	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	101	104	1089	1601	6
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2357	804	1607	0	-	0
Stage 1	1604	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	30	326	403	-	-	-
Stage 1	150	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	22	326	403	-	-	-
Mov Cap-2 Maneuver	22	-	-	-	-	-
Stage 1	111	-	-	-	-	-
Stage 2	426	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	33.4	1.5		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	403	-	228	-	-	
HCM Lane V/C Ratio	0.259	-	0.457	-	-	
HCM Control Delay (s)	17	-	33.4	-	-	
HCM Lane LOS	C	-	D	-	-	
HCM 95th %tile Q(veh)	1	-	2.2	-	-	

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2023 Build Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	4	164	0	0	0	308	852	4	2	554	7
Future Volume (veh/h)	17	4	164	0	0	0	308	852	4	2	554	7
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	19	4	182				342	947	4	2	616	8
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	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
Cap, veh/h	182	38	326				569	1430	6	30	1184	1008
Arrive On Green	0.12	0.12	0.12				0.08	0.77	0.77	0.64	0.64	0.64
Sat Flow, veh/h	1478	311	1583				1774	1854	8	1	1860	1583
Grp Volume(v), veh/h	23	0	182				342	0	951	618	0	8
Grp Sat Flow(s),veh/h/ln	1789	0	1583				1774	0	1861	1861	0	1583
Q Serve(g_s), s	1.4	0.0	12.8				7.8	0.0	29.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.4	0.0	12.8				7.8	0.0	29.5	22.4	0.0	0.2
Prop In Lane	0.83		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	221	0	326				569	0	1436	1213	0	1008
V/C Ratio(X)	0.10	0.00	0.56				0.60	0.00	0.66	0.51	0.00	0.01
Avail Cap(c_a), veh/h	378	0	466				644	0	1515	1213	0	1008
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.2	0.0	44.1				9.6	0.0	6.6	12.3	0.0	8.2
Incr Delay (d2), s/veh	0.2	0.0	1.5				1.0	0.0	1.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	5.7				4.1	0.0	15.2	11.8	0.0	0.1
LnGrp Delay(d),s/veh	48.4	0.0	45.6				10.6	0.0	7.6	13.8	0.0	8.2
LnGrp LOS	D		D				B		A	B		A
Approach Vol, veh/h		205						1293			626	
Approach Delay, s/veh		45.9						8.4			13.7	
Approach LOS		D						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	16.8	85.0				101.8		22.1				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 79				* 1E2		26.2				
Max Q Clear Time (g_c+l1), s	9.8	24.4				31.5		14.8				
Green Ext Time (p_c), s	0.4	5.3				11.4		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			13.6									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2023 Build Conditions
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	627	98	220	1042	75	82		
Future Volume (veh/h)	627	98	220	1042	75	82		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	667	104	234	1109	80	87		
Adj No. of Lanes	1	0	1	1	1	1		
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	1212	189	546	1581	126	113		
Arrive On Green	0.77	0.77	0.04	0.85	0.07	0.07		
Sat Flow, veh/h	1574	245	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	771	234	1109	80	87		
Grp Sat Flow(s),veh/h/ln	0	1819	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	23.9	3.7	31.4	6.2	7.6		
Cycle Q Clear(g_c), s	0.0	23.9	3.7	31.4	6.2	7.6		
Prop In Lane		0.13	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1401	546	1581	126	113		
V/C Ratio(X)	0.00	0.55	0.43	0.70	0.63	0.77		
Avail Cap(c_a), veh/h	0	1401	845	1581	360	321		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	6.5	6.0	4.0	63.9	64.5		
Incr Delay (d2), s/veh	0.0	0.6	0.4	2.6	5.2	10.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	12.0	2.5	16.9	3.2	3.7		
LnGrp Delay(d),s/veh	0.0	7.1	6.4	6.6	69.0	75.1		
LnGrp LOS		A	A	A	E	E		
Approach Vol, veh/h	771			1343	167			
Approach Delay, s/veh	7.1			6.6	72.2			
Approach LOS	A			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.2	114.8				126.0		15.4
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	30.0	85.0				120.0		28.7
Max Q Clear Time (g_c+I), s	15.7	25.9				33.4		9.6
Green Ext Time (p_c), s	0.5	10.1				22.9		0.4
Intersection Summary								
HCM 2010 Ctrl Delay		11.5						
HCM 2010 LOS		B						

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1046	25	0	845	0	10
Future Vol, veh/h	1046	25	0	845	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1162	28	0	939	0	11

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	- - - 1176
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - - 6.22
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - - 3.318
Pot Cap-1 Maneuver	-	-	0 - 0 233
Stage 1	-	-	0 - 0 -
Stage 2	-	-	0 - 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - - 233
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	21.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	233	-	-	-
HCM Lane V/C Ratio	0.048	-	-	-
HCM Control Delay (s)	21.2	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection

Int Delay, s/veh 27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1002	54	68	780	5	64	0	25	2	0	1
Future Vol, veh/h	0	1002	54	68	780	5	64	0	25	2	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	300	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1055	57	72	821	5	67	0	26	2	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	826	0	0	1112	0	0	2052	2054	1084	2065	2080	824
Stage 1	-	-	-	-	-	-	1084	1084	-	968	968	-
Stage 2	-	-	-	-	-	-	968	970	-	1097	1112	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	805	-	-	628	-	-	~ 41	55	264	40	53	373
Stage 1	-	-	-	-	-	-	263	293	-	305	332	-
Stage 2	-	-	-	-	-	-	305	331	-	258	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	805	-	-	628	-	-	~ 37	49	264	33	47	373
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 37	49	-	33	47	-
Stage 1	-	-	-	-	-	-	263	293	-	305	294	-
Stage 2	-	-	-	-	-	-	269	293	-	232	284	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	\$ 608.2	87
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	49	805	-	-	628	-	-	47
HCM Lane V/C Ratio	1.912	-	-	-	0.114	-	-	0.067
HCM Control Delay (s)	\$ 608.2	0	-	-	11.5	-	-	87
HCM Lane LOS	F	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	9.3	0	-	-	0.4	-	-	0.2

Notes

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

HCM 6th TWSC
103: Meridian Road & South Project Driveway

2020 Build Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 1.8

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations						
Traffic Vol, veh/h	20	10	17	68	98	24
Future Vol, veh/h	20	10	17	68	98	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	11	19	76	109	27

Major/Minor Minor2 Major1 Major2

Conflicting Flow All	237	123	136	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	751	928	1448	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	740	928	1448	-	-	-
Mov Cap-2 Maneuver	740	-	-	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach EB NB SB

HCM Control Delay, s	9.7	1.5	0
HCM LOS	A		

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h)	1448	-	794	-	-
HCM Lane V/C Ratio	0.013	-	0.042	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	0	2	0	1	2	73	0	0	96	12
Future Vol, veh/h	9	0	0	2	0	1	2	73	0	0	96	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	0	2	0	1	2	81	0	0	107	13
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	200	199	114	199	205	81	120	0	0	81	0	0
Stage 1	114	114	-	85	85	-	-	-	-	-	-	-
Stage 2	86	85	-	114	120	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	750	690	928	760	691	979	1468	-	-	1517	-	-
Stage 1	881	793	-	923	824	-	-	-	-	-	-	-
Stage 2	912	817	-	891	796	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	749	689	928	759	690	979	1468	-	-	1517	-	-
Mov Cap-2 Maneuver	749	689	-	759	690	-	-	-	-	-	-	-
Stage 1	880	793	-	922	823	-	-	-	-	-	-	-
Stage 2	910	816	-	891	796	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	9.9		9.4		0.2		0					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1468	-	-	749	820	1517	-	-				
HCM Lane V/C Ratio	0.002	-	-	0.013	0.004	-	-	-				
HCM Control Delay (s)	7.5	0	-	9.9	9.4	0	-	-				
HCM Lane LOS	A	A	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	5	8	0	0	8
Future Vol, veh/h	6	5	8	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	7	6	9	0	0	9
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	23	5	9	0	-	0
Stage 1	5	-	-	-	-	-
Stage 2	18	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.16	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.254	-	-	-
Pot Cap-1 Maneuver	993	1078	1585	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	1005	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	987	1078	1585	-	-	-
Mov Cap-2 Maneuver	987	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1005	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	8.6	7.3		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1585	-	1026	-	-	
HCM Lane V/C Ratio	0.006	-	0.012	-	-	
HCM Control Delay (s)	7.3	0	8.6	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

HCM 6th TWSC
106: Meridian Road & Harborview Circle (South)

2020 Build Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 0.5

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations 

Traffic Vol, veh/h 0 5 8 72 97 1

Future Vol, veh/h 0 5 8 72 97 1

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 90 90 90 90 90 90

Heavy Vehicles, % 6 6 2 2 2 2

Mvmt Flow 0 6 9 80 108 1

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 207 109 109 0 - 0

Stage 1 109 - - - - -

Stage 2 98 - - - - -

Critical Hdwy 6.46 6.26 4.12 - - -

Critical Hdwy Stg 1 5.46 - - - - -

Critical Hdwy Stg 2 5.46 - - - - -

Follow-up Hdwy 3.554 3.354 2.218 - - -

Pot Cap-1 Maneuver 772 934 1481 - - -

Stage 1 906 - - - - -

Stage 2 916 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 767 934 1481 - - -

Mov Cap-2 Maneuver 767 - - - - -

Stage 1 901 - - - - -

Stage 2 916 - - - - -

Approach EB NB SB

HCM Control Delay, s 8.9 0.7 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1481 - 934 - -

HCM Lane V/C Ratio 0.006 - 0.006 - -

HCM Control Delay (s) 7.4 0 8.9 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0 - -

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	116	112	1446	1085	4
Future Vol, veh/h	2	116	112	1446	1085	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	122	118	1522	1142	4
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2141	573	1146	0	-	0
Stage 1	1144	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	42	463	605	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	34	463	605	-	-	-
Mov Cap-2 Maneuver	34	-	-	-	-	-
Stage 1	214	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19	0.9		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	605	-	381	-	-	
HCM Lane V/C Ratio	0.195	-	0.326	-	-	
HCM Control Delay (s)	12.4	-	19	-	-	
HCM Lane LOS	B	-	C	-	-	
HCM 95th %tile Q(veh)	0.7	-	1.4	-	-	

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2020 Build Conditions
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	8	259	0	0	0	201	699	7	2	735	36
Future Volume (veh/h)	50	8	259	0	0	0	201	699	7	2	735	36
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	54	9	282				218	760	8	2	799	39
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	276	46	376				380	1347	14	25	1175	1000
Arrive On Green	0.18	0.18	0.18				0.06	0.73	0.73	0.63	0.63	0.63
Sat Flow, veh/h	1531	255	1583				1774	1840	19	1	1861	1583
Grp Volume(v), veh/h	63	0	282				218	0	768	801	0	39
Grp Sat Flow(s),veh/h/ln	1786	0	1583				1774	0	1859	1862	0	1583
Q Serve(g_s), s	4.5	0.0	24.6				6.2	0.0	28.0	0.0	0.0	1.4
Cycle Q Clear(g_c), s	4.5	0.0	24.6				6.2	0.0	28.0	41.3	0.0	1.4
Prop In Lane	0.86		1.00				1.00		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	322	0	376				380	0	1361	1200	0	1000
V/C Ratio(X)	0.20	0.00	0.75				0.57	0.00	0.56	0.67	0.00	0.04
Avail Cap(c_a), veh/h	339	0	391				464	0	1361	1200	0	1000
HCM Platoon Ratio	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	0.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	52.6				17.0	0.0	9.1	17.7	0.0	10.4
Incr Delay (d2), s/veh	0.3	0.0	7.6				1.0	0.0	1.7	3.0	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
%ile BackOfQ(50%),veh/ln	2.2	0.0	11.5				4.0	0.0	14.9	22.1	0.0	0.6
LnGrp Delay(d),s/veh	52.0	0.0	60.2				18.0	0.0	10.8	20.7	0.0	10.4
LnGrp LOS	D		E				B		B	C		B
Approach Vol, veh/h		345						986			840	
Approach Delay, s/veh		58.7						12.4			20.2	
Approach LOS		E						B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	15.0	100.0				115.0		33.6				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 87				* 1.1E2		28.2				
Max Q Clear Time (g_c+I1), s	8.2	43.3				30.0		26.6				
Green Ext Time (p_c), s	0.3	8.0				7.6		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			22.8									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 109: Beaufort High School Driveway & US 21B/Sea Island Parkway

2020 Build Conditions
 PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	970	28	38	858	67	102		
Future Volume (veh/h)	970	28	38	858	67	102		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1078	31	42	953	74	113		
Adj No. of Lanes	1	0	1	1	1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1355	39	311	1538	158	141		
Arrive On Green	0.75	0.75	0.04	0.83	0.09	0.09		
Sat Flow, veh/h	1802	52	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	1109	42	953	74	113		
Grp Sat Flow(s),veh/h/ln	0	1854	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	48.8	0.6	24.1	5.2	9.2		
Cycle Q Clear(g_c), s	0.0	48.8	0.6	24.1	5.2	9.2		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1394	311	1538	158	141		
V/C Ratio(X)	0.00	0.80	0.13	0.62	0.47	0.80		
Avail Cap(c_a), veh/h	0	1394	423	1538	399	356		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.1	13.3	4.1	57.2	59.0		
Incr Delay (d2), s/veh	0.0	3.5	0.1	1.9	2.2	10.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	26.0	0.7	13.0	2.7	4.5		
LnGrp Delay(d),s/veh	0.0	13.6	13.4	6.0	59.3	69.1		
LnGrp LOS		B	B	A	E	E		
Approach Vol, veh/h	1109			995	187			
Approach Delay, s/veh	13.6			6.3	65.2			
Approach LOS	B			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	105.3				115.0		17.0
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	91.0					109.0		29.7
Max Q Clear Time (g_c+I2), s	50.8					26.1		11.2
Green Ext Time (p_c), s	0.0	18.2				15.5		0.5
Intersection Summary								
HCM 2010 Ctrl Delay			14.6					
HCM 2010 LOS			B					

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	679	56	38	1070	1	80	0	46	0	0	0
Future Volume (veh/h)	0	679	56	38	1070	1	80	0	46	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	715	59	40	1126	1	84	0	48	0	0	0
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	1208	100	483	1503	1	196	0	109	0	128	0
Arrive On Green	0.00	0.71	0.71	0.03	0.81	0.81	0.07	0.00	0.07	0.00	0.00	0.00
Sat Flow, veh/h	1774	1698	140	1774	1861	2	1774	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	774	40	0	1127	84	0	48	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1838	1774	0	1862	1774	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	20.3	0.6	0.0	28.6	4.5	0.0	2.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	20.3	0.6	0.0	28.6	4.5	0.0	2.8	0.0	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	331	0	1308	483	0	1504	196	0	109	0	128	0
V/C Ratio(X)	0.00	0.00	0.59	0.08	0.00	0.75	0.43	0.00	0.44	0.00	0.00	0.00
Avail Cap(c_a), veh/h	494	0	1308	587	0	1504	513	0	392	0	461	0
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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	7.0	5.5	0.0	4.6	44.1	0.0	43.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.0	0.1	0.0	3.5	1.5	0.0	2.8	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	0.0	10.8	0.3	0.0	15.5	2.3	0.0	1.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	8.9	5.5	0.0	8.0	45.6	0.0	46.1	0.0	0.0	0.0
LnGrp LOS			A	A		A	D		D			
Approach Vol, veh/h		774			1167			132			0	
Approach Delay, s/veh		8.9			7.9			45.8			0.0	
Approach LOS		A			A			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	75.0		12.7	0.0	84.3		12.7				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	69.0		24.0	9.0	69.0		24.0				
Max Q Clear Time (g_c+l1), s	2.6	22.3		0.0	0.0	30.6		6.5				
Green Ext Time (p_c), s	0.0	6.3		0.0	0.0	12.5		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				10.7								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2023 Build + Improvements Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	4	164	0	0	0	308	852	4	2	554	7
Future Volume (veh/h)	17	4	164	0	0	0	308	852	4	2	554	7
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	19	4	182				342	947	4	2	616	8
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	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
Cap, veh/h	182	38	326				569	1430	6	30	1184	1008
Arrive On Green	0.12	0.12	0.12				0.08	0.77	0.77	0.64	0.64	0.64
Sat Flow, veh/h	1478	311	1583				1774	1854	8	1	1860	1583
Grp Volume(v), veh/h	23	0	182				342	0	951	618	0	8
Grp Sat Flow(s),veh/h/ln	1789	0	1583				1774	0	1861	1861	0	1583
Q Serve(g_s), s	1.4	0.0	12.8				7.8	0.0	29.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	1.4	0.0	12.8				7.8	0.0	29.5	22.4	0.0	0.2
Prop In Lane	0.83		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	221	0	326				569	0	1436	1213	0	1008
V/C Ratio(X)	0.10	0.00	0.56				0.60	0.00	0.66	0.51	0.00	0.01
Avail Cap(c_a), veh/h	378	0	466				644	0	1515	1213	0	1008
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.2	0.0	44.1				9.6	0.0	6.6	12.3	0.0	8.2
Incr Delay (d2), s/veh	0.2	0.0	1.5				1.0	0.0	1.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	5.7				4.1	0.0	15.2	11.8	0.0	0.1
LnGrp Delay(d),s/veh	48.4	0.0	45.6				10.6	0.0	7.6	13.8	0.0	8.2
LnGrp LOS	D		D				B		A	B		A
Approach Vol, veh/h		205						1293			626	
Approach Delay, s/veh		45.9						8.4			13.7	
Approach LOS		D						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	16.8	85.0				101.8		22.1				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 79				* 1E2		26.2				
Max Q Clear Time (g_c+l1), s	9.8	24.4				31.5		14.8				
Green Ext Time (p_c), s	0.4	5.3				11.4		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			13.6									
HCM 2010 LOS			B									
Notes												

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	627	98	220	1042	75	82		
Future Volume (veh/h)	627	98	220	1042	75	82		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	667	104	234	1109	80	87		
Adj No. of Lanes	1	0	1	1	1	1		
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	1212	189	546	1581	126	113		
Arrive On Green	0.77	0.77	0.04	0.85	0.07	0.07		
Sat Flow, veh/h	1574	245	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	771	234	1109	80	87		
Grp Sat Flow(s),veh/h/ln	0	1819	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	23.9	3.7	31.4	6.2	7.6		
Cycle Q Clear(g_c), s	0.0	23.9	3.7	31.4	6.2	7.6		
Prop In Lane		0.13	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1401	546	1581	126	113		
V/C Ratio(X)	0.00	0.55	0.43	0.70	0.63	0.77		
Avail Cap(c_a), veh/h	0	1401	845	1581	360	321		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	6.5	6.0	4.0	63.9	64.5		
Incr Delay (d2), s/veh	0.0	0.6	0.4	2.6	5.2	10.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	12.0	2.5	16.9	3.2	3.7		
LnGrp Delay(d),s/veh	0.0	7.1	6.4	6.6	69.0	75.1		
LnGrp LOS		A	A	A	E	E		
Approach Vol, veh/h	771			1343	167			
Approach Delay, s/veh	7.1			6.6	72.2			
Approach LOS	A			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.2	114.8				126.0		15.4
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	30.0	85.0				120.0		28.7
Max Q Clear Time (g_c+I1), s	5.7	25.9				33.4		9.6
Green Ext Time (p_c), s	0.5	10.1				22.9		0.4
Intersection Summary								
HCM 2010 Ctrl Delay			11.5					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary

2023 Build + Improvements Conditions

102: Meridian Road/Boat Landing Driveway & US 21B/Sea Island Parkway

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1002	54	68	780	5	64	0	25	2	0	1
Future Volume (veh/h)	0	1002	54	68	780	5	64	0	25	2	0	1
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1055	57	72	821	5	67	0	26	2	0	1
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	497	1218	66	268	1478	9	144	3	33	136	12	43
Arrive On Green	0.00	0.70	0.70	0.04	0.80	0.80	0.08	0.00	0.08	0.08	0.00	0.08
Sat Flow, veh/h	1774	1751	95	1774	1849	11	1017	38	409	944	146	545
Grp Volume(v), veh/h	0	0	1112	72	0	826	93	0	0	3	0	0
Grp Sat Flow(s),veh/h/ln	1774	0	1846	1774	0	1861	1464	0	0	1635	0	0
Q Serve(g_s), s	0.0	0.0	45.8	1.1	0.0	15.9	5.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	45.8	1.1	0.0	15.9	6.2	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.01	0.72		0.28	0.67		0.33
Lane Grp Cap(c), veh/h	497	0	1284	268	0	1487	179	0	0	191	0	0
V/C Ratio(X)	0.00	0.00	0.87	0.27	0.00	0.56	0.52	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	656	0	1284	352	0	1487	415	0	0	424	0	0
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)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.6	15.8	0.0	3.6	44.8	0.0	0.0	42.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	8.0	0.5	0.0	1.5	2.3	0.0	0.0	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	0.0	25.7	1.1	0.0	8.7	2.6	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	19.6	16.4	0.0	5.1	47.2	0.0	0.0	42.1	0.0	0.0
LnGrp LOS			B	B		A	D			D		
Approach Vol, veh/h		1112			898			93			3	
Approach Delay, s/veh		19.6			6.0			47.2			42.1	
Approach LOS		B			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	75.0		13.9	0.0	85.3		13.9				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	69.0		24.0	9.0	69.0		24.0				
Max Q Clear Time (g_c+I1), s	3.1	47.8		2.2	0.0	17.9		8.2				
Green Ext Time (p_c), s	0.1	9.6		0.0	0.0	7.0		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			15.0									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary
108: US 21B/Carteret Street & Bay Street

2023 Build + Improvements Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	8	259	0	0	0	201	699	7	2	735	36
Future Volume (veh/h)	50	8	259	0	0	0	201	699	7	2	735	36
Number	3	8	18				1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	54	9	282				218	760	8	2	799	39
Adj No. of Lanes	0	1	1				1	1	0	0	1	1
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	276	46	376				380	1347	14	25	1175	1000
Arrive On Green	0.18	0.18	0.18				0.06	0.73	0.73	0.63	0.63	0.63
Sat Flow, veh/h	1531	255	1583				1774	1840	19	1	1861	1583
Grp Volume(v), veh/h	63	0	282				218	0	768	801	0	39
Grp Sat Flow(s),veh/h/ln	1786	0	1583				1774	0	1859	1862	0	1583
Q Serve(g_s), s	4.5	0.0	24.6				6.2	0.0	28.0	0.0	0.0	1.4
Cycle Q Clear(g_c), s	4.5	0.0	24.6				6.2	0.0	28.0	41.3	0.0	1.4
Prop In Lane	0.86		1.00				1.00		0.01	0.00		1.00
Lane Grp Cap(c), veh/h	322	0	376				380	0	1361	1200	0	1000
V/C Ratio(X)	0.20	0.00	0.75				0.57	0.00	0.56	0.67	0.00	0.04
Avail Cap(c_a), veh/h	339	0	391				464	0	1361	1200	0	1000
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	52.6				17.0	0.0	9.1	17.7	0.0	10.4
Incr Delay (d2), s/veh	0.3	0.0	7.6				1.0	0.0	1.7	3.0	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
%ile BackOfQ(50%),veh/ln	2.2	0.0	11.5				4.0	0.0	14.9	22.1	0.0	0.6
LnGrp Delay(d),s/veh	52.0	0.0	60.2				18.0	0.0	10.8	20.7	0.0	10.4
LnGrp LOS	D		E				B		B	C		B
Approach Vol, veh/h		345						986			840	
Approach Delay, s/veh		58.7						12.4			20.2	
Approach LOS		E						B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	15.0	100.0				115.0		33.6				
Change Period (Y+Rc), s	6.5	* 6.2				* 6.2		6.8				
Max Green Setting (Gmax), s	15.5	* 87				* 1.1E2		28.2				
Max Q Clear Time (g_c+I1), s	8.2	43.3				30.0		26.6				
Green Ext Time (p_c), s	0.3	8.0				7.6		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			22.8									
HCM 2010 LOS			C									
Notes												

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	970	28	38	858	67	102		
Future Volume (veh/h)	970	28	38	858	67	102		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1078	31	42	953	74	113		
Adj No. of Lanes	1	0	1	1	1	1		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1355	39	311	1538	158	141		
Arrive On Green	0.75	0.75	0.04	0.83	0.09	0.09		
Sat Flow, veh/h	1802	52	1774	1863	1774	1583		
Grp Volume(v), veh/h	0	1109	42	953	74	113		
Grp Sat Flow(s),veh/h/ln	0	1854	1774	1863	1774	1583		
Q Serve(g_s), s	0.0	48.8	0.6	24.1	5.2	9.2		
Cycle Q Clear(g_c), s	0.0	48.8	0.6	24.1	5.2	9.2		
Prop In Lane		0.03	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1394	311	1538	158	141		
V/C Ratio(X)	0.00	0.80	0.13	0.62	0.47	0.80		
Avail Cap(c_a), veh/h	0	1394	423	1538	399	356		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	10.1	13.3	4.1	57.2	59.0		
Incr Delay (d2), s/veh	0.0	3.5	0.1	1.9	2.2	10.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	26.0	0.7	13.0	2.7	4.5		
LnGrp Delay(d),s/veh	0.0	13.6	13.4	6.0	59.3	69.1		
LnGrp LOS		B	B	A	E	E		
Approach Vol, veh/h	1109			995	187			
Approach Delay, s/veh	13.6			6.3	65.2			
Approach LOS	B			A	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.7	105.3				115.0		17.0
Change Period (Y+Rc), s	5.0	6.0				6.0		5.3
Max Green Setting (Gmax), s	13.0	91.0				109.0		29.7
Max Q Clear Time (g_c+I1), s	2.6	50.8				26.1		11.2
Green Ext Time (p_c), s	0.0	18.2				15.5		0.5
Intersection Summary								
HCM 2010 Ctrl Delay			14.6					
HCM 2010 LOS			B					

APPENDIX G

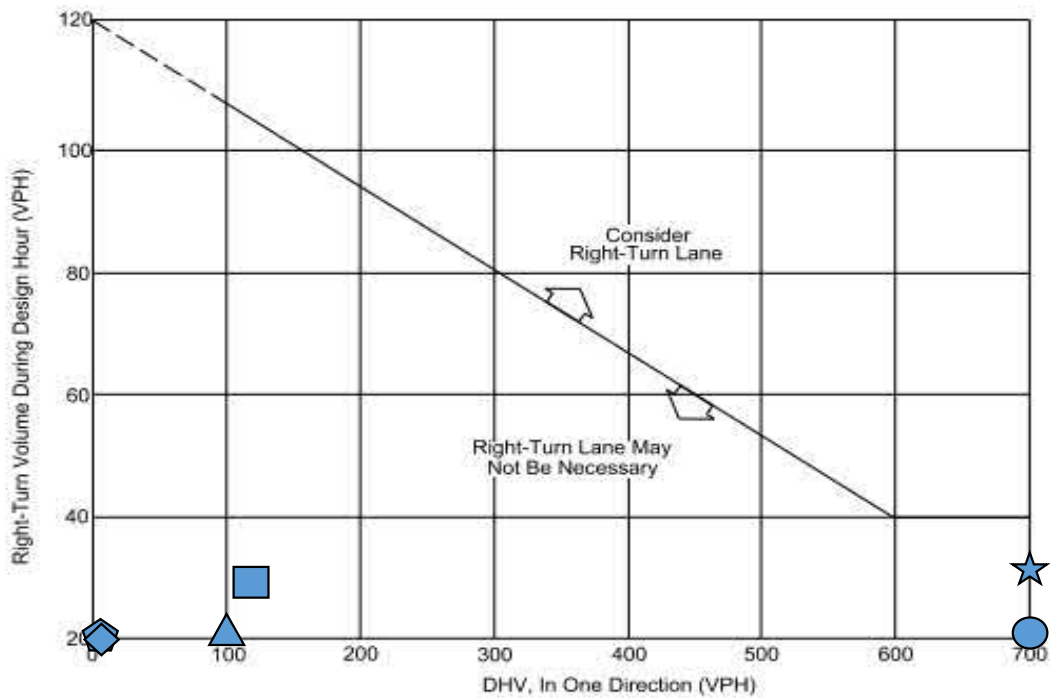
Turn-Lane Analysis Worksheet

**WHITEHALL MIXED-USE DEVELOPMENT
RIGHT-TURN LANE WARRANT REVIEW**

9.5-2

INTERSECTIONS

March 2017



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.

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

Figure 9.5-A

INTERSECTION: US 21 (Sea Island Parkway)/Meridan Road/Harborview Circle & Project Driveways

MOVEMENT: Eastbound/Southbound Right Turn

SCENARIO		Design-Hour Volume	Right-Turn Volume	Symbol
North Project Driveway	AM Peak Hour	729	7	●
	PM Peak Hour	1071	25	★
East Project Driveway	AM Peak Hour	96	6	▲
	PM Peak Hour	122	24	■
South Project Driveway	AM Peak Hour	2	2	◆
	PM Peak Hour	8	8	◇

APPENDIX H

Signal Warrant Analysis Worksheets

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 10th Edition

Land Use Code	220				
Land Use	Multifamily Housing (Low-Rise)				
Setting	General Urban/Suburban		Dense Multi-Use Urban		
Time Period	Weekday		Weekday		
Trip Type	Vehicle		Vehicle		
# Data Sites	9		1		
	% of 24-Hour Traffic		% of 24-Hour Traffic		
Time	Entering	Exiting		Entering	Exiting
12-1 AM	0.7	0.3	0.5	1.6	0
1-2 AM	0.4	0.1	0.3	0.4	0
2-3 AM	0.3	0.3	0.3	0.0	0
3-4 AM	0.3	0.4	0.4	0.0	0.4
4-5 AM	0.4	1.0	0.7	0.4	1.6
5-6 AM	0.1	2.6	1.4	0.4	2.7
6-7 AM	1.1	5.8	3.5	1.6	8.6
7-8 AM	2.6	12.9	7.8	6.2	14.5
8-9 AM	4.0	9.1	6.6	3.5	7.5
9-10 AM	3.9	7.2	5.6	3.9	3.9
10-11 AM	3.9	4.7	4.3	3.5	3.9
11-12 PM	4.9	5.5	5.2	2.3	2.7
12-1 PM	5.6	5.4	5.5	4.7	3.5
1-2 PM	4.8	4.9	4.9	3.1	5.9
2-3 PM	5.9	6.0	6.0	6.2	5.9
3-4 PM	8.3	5.2	6.8	7.0	5.1
4-5 PM	10.0	5.1	7.6	7.4	5.5
5-6 PM	11.4	6.7	9.1	7.0	7.1
6-7 PM	9.5	6.3	7.9	10.9	5.5
7-8 PM	7.1	4.3	5.7	6.2	4.7
8-9 PM	5.7	3.5	4.6	7.8	2.4
9-10 PM	4.7	1.4	3.1	7.8	5.1
10-11 PM	2.9	1.0	2.0	4.7	2.7
11-12 AM	1.5	0.4	1.0	3.5	0.8

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 10th Edition

Land Use Code	411		
Land Use	Public Park		
Setting	General Urban/Suburban		
Time Period	Saturday		
Trip Type	Vehicle		
# Data Sites	1		
	% of 24-Hour Traffic		
Time	Entering	Exiting	
12-1 AM	0	0.4	0.2
1-2 AM	0	0	0.0
2-3 AM	0.1	0	0.1
3-4 AM	0	0	0.0
4-5 AM	0.1	0	0.1
5-6 AM	0.3	0	0.2
6-7 AM	5.8	0	2.9
7-8 AM	12.2	1.4	6.8
8-9 AM	15.8	5.3	10.6
9-10 AM	15.5	10.6	13.1
10-11 AM	13.4	18.1	15.8
11-12 PM	6.6	16.7	11.7
12-1 PM	5.8	10.2	8.0
1-2 PM	6.5	8.5	7.5
2-3 PM	4.4	7.3	5.9
3-4 PM	4.6	4.9	4.8
4-5 PM	3.4	5.5	4.5
5-6 PM	1.5	4.6	3.1
6-7 PM	2.5	3.9	3.2
7-8 PM	1.0	2.5	1.8
8-9 PM	0.1	0.2	0.2
9-10 PM	0.1	0	0.1
10-11 PM	0.1	0	0.1
11-12 AM	0.1	0	0.1

WHITEHALL TS
Hourly Volume Estimates for the Projected Traffic Signal Warrant Analysis
US 21 Business/Sa Island Parkway & Meridian Road Intersection

TTE Daily Trip Generation Estimates						
Land Use	Land Use Category	ITE LUC Code	Size	Unit	Daily Trips	
					In	Out
Multifamily Housing (Low Rise)	Residential	220	202	DU	743	743
	Recreational	411	10	Acres	47	48
Residential Land Use Category Total:					790	791
Retail Land Use Category Total:					791	1,581
Grand Total:					790	1,581

Start Hour	Hourly Apartment Trip Distribution							Hourly Public Park Trip Distribution						
	ITE % of Daily Traffic	Hourly Total	EBR (IN)	WBL (IN)	EBT (OUT)	NBL (OUT)	NBR (OUT)	ITE % of Daily Traffic	Hourly Total	EBR (IN)	WBL (IN)	EBT (OUT)	NBL (OUT)	NBR (OUT)
6:00 AM	3.5%	52	5	16	10	21	5	2.5%	3	0	1	1	1	0
7:00 AM	7.8%	116	12	35	23	46	12	6.8%	6	1	2	3	2	1
8:00 AM	6.6%	98	10	29	20	39	10	10.6%	10	1	3	2	4	1
9:00 AM	5.6%	83	8	25	17	33	8	13.1%	12	1	4	2	5	1
10:00 AM	4.3%	64	6	19	13	26	6	15.8%	15	2	5	3	6	2
11:00 AM	5.2%	77	8	23	15	31	8	11.7%	11	1	3	2	4	1
12:00 PM	5.5%	82	8	25	16	33	8	8.0%	8	1	2	2	3	1
1:00 PM	4.9%	73	7	22	15	29	7	7.5%	7	1	2	1	3	1
2:00 PM	6.0%	89	9	27	18	36	9	5.9%	6	1	2	1	2	1
3:00 PM	6.8%	101	10	30	20	40	10	4.8%	5	1	2	4	2	1
4:00 PM	7.6%	113	11	34	23	45	11	4.5%	4	0	1	1	2	0
5:00 PM	9.1%	135	14	41	27	54	14	3.1%	3	0	1	1	1	0
6:00 PM	7.9%	117	12	35	23	47	12	3.2%	3	0	1	1	1	0

Movement	Whitchell Project Volumes						
	EBT	EBR	WBL	WBL	NBL	NBR	
Movement Type:	Existing	Entering	Entering	Existing	Existing	Existing	
Project Traffic Distribution ² :	20%	10%	30%	0%	40%	10%	
6:00 AM	11	6	17	0	22	6	
7:00 AM	24	12	37	0	49	12	
8:00 AM	22	11	32	0	43	11	
9:00 AM	19	10	29	0	38	10	
10:00 AM	16	8	24	0	32	8	
11:00 AM	18	9	26	0	35	9	
12:00 PM	18	9	27	0	36	9	
1:00 PM	14	7	21	0	31	7	
2:00 PM	19	10	29	0	38	10	
3:00 PM	21	11	32	0	42	11	
4:00 PM	23	12	35	0	47	12	
5:00 PM	28	14	41	0	55	14	
6:00 PM	24	12	36	0	48	12	

Start Hour

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business/Sea Island Parkway & Meridian Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Tuesday, November 7, 2017

2017 EXISTING TRAFFIC VOLUMES												
START HOUR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6:00 AM	0	161	13	3	498	0	15	0	8	1	0	0
7:00 AM	0	510	27	19	920	6	31	0	36	2	0	0
8:00 AM	0	565	47	37	776	6	42	0	52	4	0	0
9:00 AM	1	451	39	48	582	2	31	0	35	2	0	1
10:00 AM	0	493	41	35	616	2	37	0	30	8	0	2
11:00 AM	0	560	25	24	553	4	32	1	30	3	1	0
12:00 PM	3	595	45	52	594	5	27	0	41	1	0	7
1:00 PM	0	650	44	32	635	6	16	2	26	6	1	2
2:00 PM	1	610	41	50	604	4	28	0	42	4	0	1
3:00 PM	1	770	50	52	701	1	52	0	47	5	0	0
4:00 PM	1	824	53	44	749	1	52	0	32	1	0	0
5:00 PM	0	963	50	39	671	2	58	0	46	2	0	0
6:00 PM	0	661	25	29	496	1	27	0	19	0	0	1

2020 EXISTING TRAFFIC VOLUMES												
START HOUR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6:00 AM	0	168	14	3	521	0	16	0	8	1	0	0
7:00 AM	0	533	28	20	962	6	32	0	38	2	0	0
8:00 AM	0	591	49	39	812	6	44	0	54	4	0	0
9:00 AM	1	472	41	50	609	2	32	0	37	2	0	1
10:00 AM	0	516	43	37	644	2	39	0	31	8	0	2
11:00 AM	0	586	26	25	578	4	33	1	31	3	1	0
12:00 PM	3	622	47	54	621	5	28	0	43	1	0	7
1:00 PM	0	680	46	33	664	6	17	2	27	6	1	2
2:00 PM	1	638	43	52	632	4	29	0	44	4	0	1
3:00 PM	1	805	52	54	733	1	54	0	49	5	0	0
4:00 PM	1	862	55	46	783	1	54	0	33	1	0	0
5:00 PM	0	1,007	52	41	702	2	61	0	48	2	0	0
6:00 PM	0	691	26	30	519	1	28	0	20	0	0	1

PROJECT TRAFFIC VOLUMES												
START HOUR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6:00 AM	0	11	6	17	0	0	22	0	6	0	0	0
7:00 AM	0	24	12	37	0	0	49	0	12	0	0	0
8:00 AM	0	22	11	32	0	0	43	0	11	0	0	0
9:00 AM	0	19	10	29	0	0	38	0	10	0	0	0
10:00 AM	0	16	8	24	0	0	32	0	8	0	0	0
11:00 AM	0	18	9	26	0	0	35	0	9	0	0	0
12:00 PM	0	18	9	27	0	0	36	0	9	0	0	0
1:00 PM	0	16	8	24	0	0	32	0	8	0	0	0
2:00 PM	0	19	10	29	0	0	38	0	10	0	0	0
3:00 PM	0	21	11	32	0	0	42	0	11	0	0	0
4:00 PM	0	23	12	35	0	0	47	0	12	0	0	0
5:00 PM	0	28	14	41	0	0	55	0	14	0	0	0
6:00 PM	0	24	12	36	0	0	48	0	12	0	0	0

2023 NO-BUILD TRAFFIC VOLUMES												
START HOUR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6:00 AM	0	176	14	3	544	0	16	0	9	1	0	0
7:00 AM	0	557	30	21	1,006	7	34	0	39	2	0	0
8:00 AM	0	618	51	40	848	7	46	0	57	4	0	0
9:00 AM	1	493	43	52	636	2	34	0	38	2	0	1
10:00 AM	0	539	45	38	673	2	40	0	33	9	0	2
11:00 AM	0	612	27	26	604	4	35	1	33	3	1	0
12:00 PM	3	650	49	57	649	5	30	0	45	1	0	8
1:00 PM	0	710	48	35	694	7	17	2	28	7	1	2
2:00 PM	1	667	45	55	660	4	31	0	46	4	0	1
3:00 PM	1	842	55	57	766	1	57	0	51	5	0	0
4:00 PM	1	901	58	48	819	1	57	0	35	1	0	0
5:00 PM	0	1,053	55	43	733	2	63	0	50	2	0	0
6:00 PM	0	723	27	32	542	1	30	0	21	0	0	1

2023 BUILD TRAFFIC VOLUMES												
START HOUR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
6:00 AM	0	187	20	20	544	0	38	0	14	1	0	0
7:00 AM	0	582	42	57	1,006	7	83	0	52	2	0	0
8:00 AM	0	639	62	73	848	7	89	0	68	4	0	0
9:00 AM	1	512	52	81	636	2	72	0	48	2	0	1
10:00 AM	0	555	53	62	673	2	72	0	41	9	0	2
11:00 AM	0	630	36	53	605	4	70	1	42	3	1	0
12:00 PM	3	668	58	84	649	5	66	0	54	1	0	8
1:00 PM	0	726	56	59	694	7	49	2	36	7	1	2
2:00 PM	1	686	54	83	660	4	69	0	55	4	0	1
3:00 PM	1	863	65	89	766	1	99	0	62	5	0	0
4:00 PM	1	924	70	83	819	1	104	0	47	1	0	0
5:00 PM	0	1,080	68	84	733	2	119	0	64	2	0	0
6:00 PM	0	747	39	68	542	1	78	0	33	0	0	1

Traffic Signal Warrant Analysis

Warrants 1 - 3 (Volume Warrants)

Project Name	Whitehall TIS
Project/File #	18056
Scenario	2023 Build with ITE% Volumes (50% RT reduction)

Intersection Information			
Major Street (E/W Road)	US 21 Business	Minor Street (N/S Road)	Meridian Road
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Approach Volume	19598.35133 vehicles	Total Approach Volume	1684.9165 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	50 percent applied

No high speed or isolated community reduction applied to the Volume Warrant thresholds.

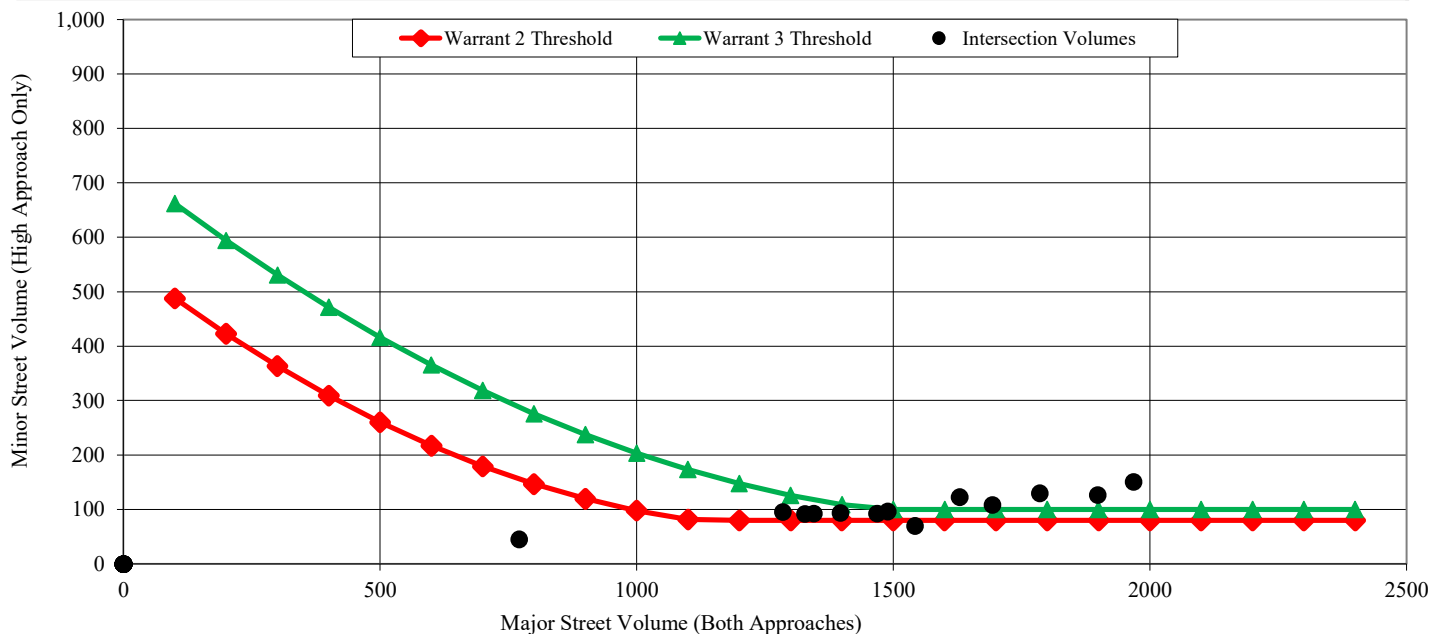
Warrant 1, Eight Hour Vehicular Volume			
	Condition A	Condition B	Condition A+B*
Condition Satisfied?	Not Satisfied	Satisfied	Not Satisfied
Required values reached for	1 hour	11 hours	4 (Cond. A) & 12 (Cond. B)
Criteria - Major Street (veh/hr)	500	750	400 (Cond. A) & 600 (Cond. B)
Criteria - Minor Street (veh/hr)	150	75	120 (Cond. A) & 60 (Cond. B)

* Should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.

Warrant 2, Four Hour Vehicular Volume	
Condition Satisfied?	Satisfied
Required values reached for	11 hours
Criteria	See Figure Below

Warrant 3, Peak Hour Vehicular Volume		
	Condition A	Condition B
Condition Satisfied?	Not Satisfied	Satisfied
Required values reached for	2153 total, 183 minor, 0 delay	5 hours
Criteria - Total Approach Volume (veh in one hour)	800	See Figure Below
Criteria - Minor Street High Side Volume (veh in one hour)	100	
Criteria - Minor Street High Side Delay (veh-hrs)	4	

Figure 4C-1 (Warrant 2) & Figure 4C-3 (Warrant 3)



Traffic Signal Warrant Analysis

Warrants 4 to 6 (Pedestrian, School, Coordinated Systems)

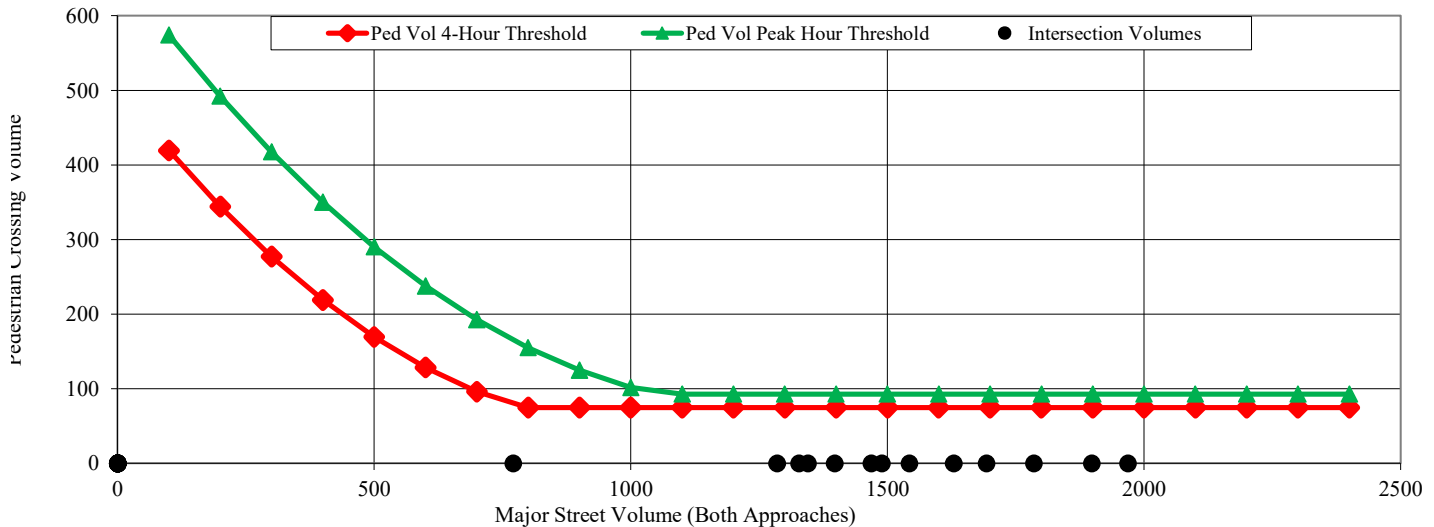
Project Name	Whitehall TIS
Project/File #	18056
Scenario	Build 2020

Intersection Information			
Major Street (E/W Road)	US 21 Business	Minor Street (N/S Road)	Meridian Road
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Approach Volume	19598.35133 vehicles	Total Approach Volume	1684.9165 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	50 percent applied

Reduction applied to Pedestrian Warrant thresholds due to high speeds on US 21 Business.

Warrant 4, Pedestrian Volume		
	Condition A - Four Hour Vol.	Condition B - Peak Hour Vol.
Condition Satisfied?	Not Examined	Not Examined
Required values reached for		
Criteria - Min. Distance to Nearest Controlled Crossing		
Criteria - Major Street Volume and Crossing Volume		

Figure 4C-5 & Figure 4C-7 (Warrant 4 Four Hour & Peak Hour)



Warrant 5, School Crossing	
Condition Satisfied?	Not Examined
Criteria - School Crossing Data	

Warrant 6, Coordinated Signal System	
Condition Satisfied?	Not Examined
Criteria - Coordinated Signal System	

Traffic Signal Warrant Analysis

Warrants 7-9 (Crash, Network, Rail Crossing)

Project Name	Whitehall TIS
Project/File #	18056
Scenario	Build 2020

Intersection Information

Major Street (E/W Road)	US 21 Business	Minor Street (N/S Road)	Meridian Road
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Approach Volume	19598.35133 vehicles	Total Approach Volume	1684.9165 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	50 percent applied

Reduction applied to Crash and Roadway Network Warrant thresholds due to high speed on US 21 Business.

Warrant 7, Crash Experience

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Alternatives	
Criteria - Reported Crashes (within 12-month period)	
Criteria - Major Street (veh/hr)	
- Minor Street (veh/hr)	
(Alternative Volume Requirement) Criteria - Pedestrian Volume	

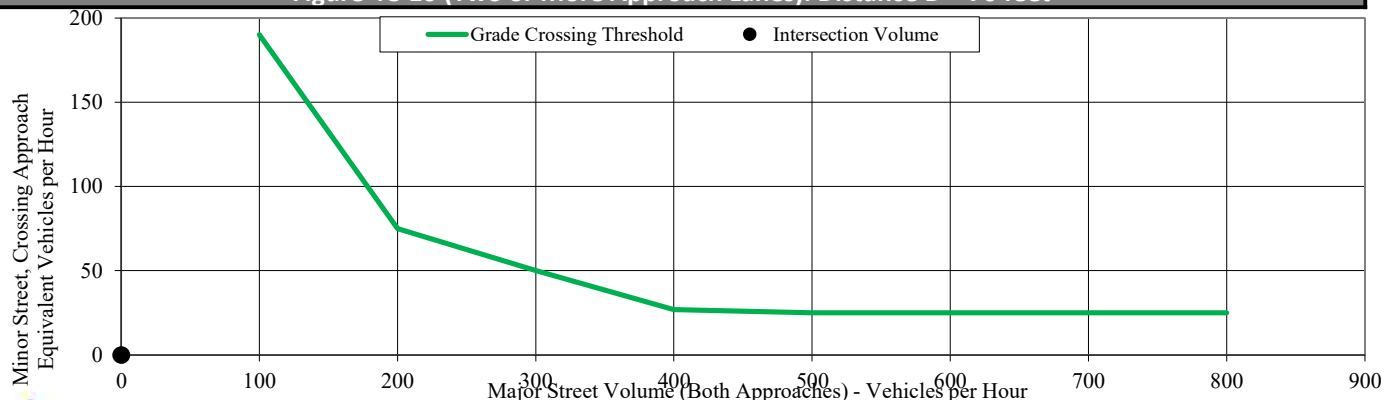
Warrant 8, Roadway Network

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Common Intersection of Two Major Routes	
Criteria - Existing or Immediately Projected Entering Volume	
Criteria - Warrants	
(Alternative Requirement) Criteria - Non-normal Business Day	

Warrant 9, Intersection Near a Grade Crossing

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Alternatives	
Criteria - Max. Distance to Nearest Controlled Crossing	
Criteria - Major Street Volume and Crossing Volume	

Figure 4C-10 (Two or More Approach Lanes): Distance D = 70 feet



Traffic Signal Warrant Analysis

Warrants 7-9 (Crash, Network, Rail Crossing)

Project Name	Whitehall TIS
Project/File #	18056
Scenario	Build 2020

Intersection Information

Major Street (E/W Road)	US 21 Business	Minor Street (N/S Road)	Meridian Road
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Approach Volume	19598.35133 vehicles	Total Approach Volume	1684.9165 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	50 percent applied

Reduction applied to Crash and Roadway Network Warrant thresholds due to high speed on US 21 Business.

Warrant 7, Crash Experience

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Alternatives	
Criteria - Reported Crashes (within 12-month period)	
Criteria - Major Street (veh/hr)	
- Minor Street (veh/hr)	
(Alternative Volume Requirement) Criteria - Pedestrian Volume	

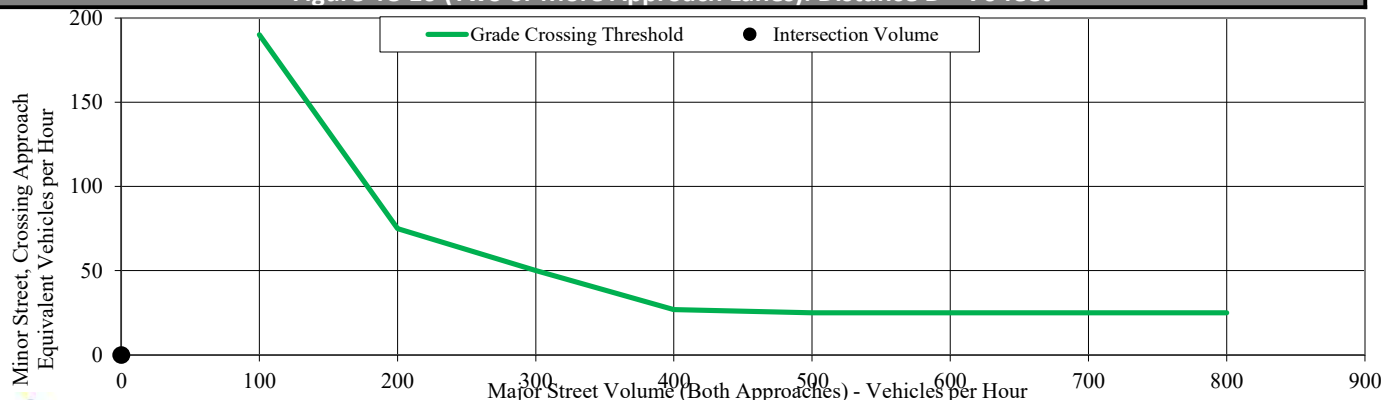
Warrant 8, Roadway Network

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Common Intersection of Two Major Routes	
Criteria - Existing or Immediately Projected Entering Volume	
Criteria - Warrants	
(Alternative Requirement) Criteria - Non-normal Business Day	

Warrant 9, Intersection Near a Grade Crossing

Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Alternatives	
Criteria - Max. Distance to Nearest Controlled Crossing	
Criteria - Major Street Volume and Crossing Volume	

Figure 4C-10 (Two or More Approach Lanes): Distance D = 70 feet



Traffic Signal Warrant Analysis

Multi-Way Stop Warrants

Project Name	Whitehall TIS
Project/File #	18056
Scenario	Build 2020

Intersection Information			
Major Street (E/W Road)	US 21 Business	Minor Street (N/S Road)	Meridian Road
Analyzed with	1 approach lane	Analyzed with	1 Approach Lane
Total Approach Volume	19598.35133 vehicles	Total Approach Volume	1684.9165 vehicles
Total Ped/Bike Volume	0 crossings	Total Ped/Bike Volume	0 crossings
Right turn reduction of	0 percent applied	Right turn reduction of	50 percent applied

No high speed or isolated community reduction applied to the Multi-Way Stop Warrant thresholds.

Condition A - Traffic Signal Warrant	
Condition Satisfied?	Not Examined
Criteria*	

* Multi-way stop control may be used as an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

Condition B - Crash Experience	
Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Crash Experience	

Condition C - Intersection Volume & Delay	
Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Major Street (veh/hr)	
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	
Criteria - Delay (average sec/veh)	

Condition D - Combination Volume, Crash Experience, & Delay	
Condition Satisfied?	Not Examined
Required values reached for	
Criteria - Major Street (veh/hr)	
Criteria - Minor Street (total vol-veh, ped, & bikes/hr)	
Criteria - Crash Experience	
Criteria - Delay (average sec/veh)	



MAJOR SUBDIVISION PROCESS CONCEPTUAL / PRELIMINARY PLAT APPLICATION

Community & Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Application Fee: \$0

OFFICE USE ONLY: Date Filed: 6/30 Application #: 20729 Zoning District: T4-N
Site Area: 1.304 Meeting Date: 7-20-20-MPC

Schedule: The Metropolitan Planning Commission (MPC) typically meets the 3rd Monday of each month at 5:30pm. The complete schedule, along with the list of deadlines, may be found here - <http://www.cityofbeaufort.org/metropolitan-planning-commission.aspx>

Review Request: ☒ Conceptual ☐ Preliminary

Submittal Requirements: 7 hard copies and 1 digital copy of all forms and information are required. In addition to a complete application form, applicants are required to submit the following information. Additional information, such as traffic studies, stormwater concepts/calculations, arborist report, may be required.

Conceptual Request: Sketch Plan as described in Section 9.3.1.B, Conceptual Plat showing lots, roads and street sections, sidewalks, existing/proposed trees, open space.

Preliminary Request: Site Plan for Preliminary Plat as described in Section 9.3.1.C

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application? ☐ Yes ☒ No

Applicant, Property, and Project Information

Applicant Name: Whitehall Point Holdings LLC

Applicant Address: 11124 Park West Blvd., Suite 101, Mount Pleasant, SC 29466

Applicant E-mail: sam.levin234@gmail.com Applicant Phone Number: 843-345-0824

Applicant Title: ☐ Homeowner ☐ Tenant ☐ Architect ☐ Engineer ☒ Developer ☐ Contractor

Owner (if other than the Applicant): _____

Owner Address: _____

Project Name: Whitehall

Property Address: _____

Property Identification Number (s): (Tax Map & Parcel Number): R 123 014 000 0149 0000

Meeting Date Requested: _____

Certification of Correctness: I/we certify that the information in this application is correct.

Applicant's Signature: [Signature] Date: June 22, 2020



MAJOR SUBDIVISION PROCESS CONCEPTUAL / PRELIMINARY PLAT APPLICATION

Department of Planning & Development Services
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Application Fee: \$0

Required Project Information

Project Name: Whitehall

Site Area in Acres: ±10 acres Zoning District: T4N

Proposed Allocations (in acres and gross %):

Developed Area: +/-10 acres Civic/Open Space: 10% proposed- see plan

Provide a brief Project Narrative:

Subdivision of +/-10 acre parcel located the intersection of Sea Island Parkway and Meridian Road.

The subdivision will result in 2 lots. See attached narrative and supporting plans

CONTACT INFORMATION – Application form & supplementary information may be submitted via email:

Attention: Julie A. Bachety, Administrative Assistant II

City of Beaufort Department of Planning & Development Services

1911 Boundary Street, Beaufort, South Carolina 29902

E-Mail: jbachety@cityofbeaufort.org | Phone: (843) 525-7011 | Fax: (843) 986-5606



June 22, 2020

Mr. David Prichard
City of Beaufort – Community and Economic Development Director

RE: Whitehall – Sketch Master Plan Submittal Narrative

Dear Mr. Prichard,

On behalf of the Applicant, Whitehall Point Holdings, we are submitting for the July 2020 Planning Commission Sketch Master Plan review for the +/- 10.0 acre property bordering Sea Island Parkway (north); Beaufort River (west) and Harbor View Circle / Meridian Road (east). The property name for this application is **Whitehall**.

The Plan for Whitehall is using the by-right zoning, which is T4-Neighborhood (T4-N). The applicants' plan is to subdivide the property into a mix of potential mixed-use commercial and residential uses. T4-N allows a wide range of building types, including, but not limited to, *commercial retail, apartment buildings, multi-family buildings, mixed use buildings, row homes, and single family housing*. The 1st floor of the buildings fronting Sea Island Parkway will be designed to accommodate a mix of uses (commercial and residential) based on market conditions. The buildings fronting the Beaufort River will be residential in scale and maintain a private access off Harbor View Circle.

The buildings and streetscape will be designed in the Coastal Vernacular that ties to the History of Beaufort while remaining inspired, innovative and authentic.

Along with review of the Sketch Master Plan; following are items for endorsement by the Planning Commission at the July 2020 meeting:

1. Vehicular Circulation and Street sections:

Following the guidance of the Beaufort Code, Street Network Diagram, the applicant has proposed 3 vehicular connection points including one off Sea Island Parkway, one access point off Meridian Road and a secondary access point off Harbor View Circle.

The internal street network is designed using a modified grid to preserve existing landmark trees and tie in to the designated access points. The internal east / west street (Street 'B') terminates on the proposed Whitehall Park.

A traffic Impact study has been completed based the conceptual master plan. The report supports the access points and development proposed within Whitehall. See attached Traffic Impact study.

2. Pedestrian and Bicycle Circulation:

The applicant has proposed sidewalks on all the streets within Whitehall. As outlined on the conceptual master plan, sidewalks will tie into the existing walkway along Sea Island Parkway and provide for future connectivity to sidewalks / bike paths along Meridian road.

3. Tree Preservation, Tree Removal, and Proposed Street Trees

The preliminary plat takes into account the sensitive elements of the site and surrounding neighborhoods. All trees and vegetation on the waterfront perimeter of the site will be preserved. This will ensure the view-sheds from the Woods Memorial Bridge, Downtown Beaufort and the surrounding neighborhoods are preserved.

The applicant has obtained a tree survey for all trees greater than 8" Diameter at Breast Height (DBH) on the property. Road layout, lot lines, and potential building locations have been adjusted to accommodate Landmark and specimen trees as outlined on the arborist report.

4. Parks and Open Space

+/- 10% of Whitehall is designated as Open space, Park and Greens. Open spaces and Parks will be utilized for tree preservation; Storm-water management; and Passive / Active recreation.

(Site plan attached showing open space)

5. Stormwater

Storm water runoff will be routed to above ground or underground detention/retention or a combination of these methods before leaving the site. Innovative methods including vegetated bio-retention corridors; and pervious surfaces; are planned for the open spaces within Whitehall. The drainage design will be submitted to the City of Beaufort for review and approval as well as to the South Carolina Department of Health and Environmental Control's Office of Ocean and Coastal Resource Management.

6. Building Setbacks

Building setbacks will follow the District Development Standards outlined in 2.4.1 of the Beaufort Code. The Final plat will indicate special setbacks to preserve trees and provide protection of natural resources.

7. Utilities

-Water and sewer will be provided by BJWSA

- Electric and gas will be provided by SCE&G
- Cable and telephone will be provided by Hargray

8. Phasing

Whitehall roadways and infrastructure will be phased based on market conditions. Any proposed phasing will be included in the final development plans.

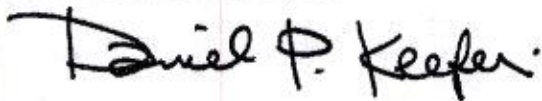
Attached are the following:

- a. Application
- b. Sketch Master Plan / Open Space Plan
- c. Traffic Impact Study Previously submitted

Please contact myself to discuss any questions or comments.

Sincerely,

Witmer♦Jones♦Keefer, Ltd.

A handwritten signature in black ink that reads "Daniel P. Keefer". The signature is written in a cursive, flowing style.

Daniel Keefer, ASLA
Principal

Cc: Sam Levin
Tim Brutcher (Carolina Engineering)

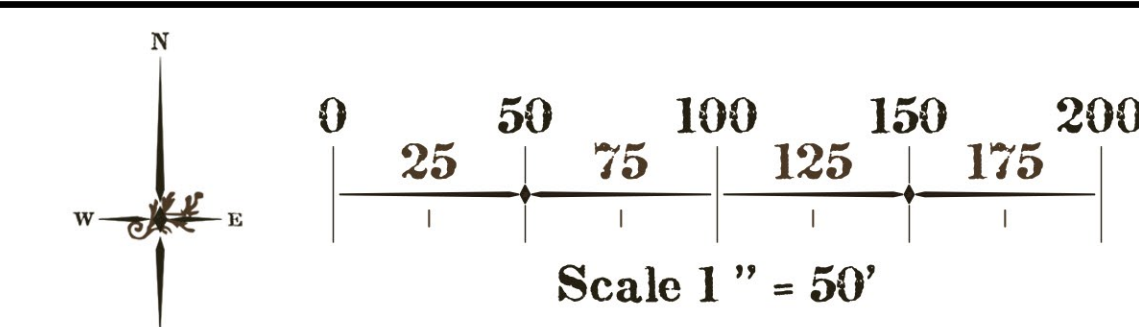
WHITEHALL

SKETCH PLAN

FOR ILLUSTRATIVE PURPOSES



DATE: 22 JUNE 2020
LOCATION: BEAUFORT, SC



DRAFT

Note: Plan is conceptual in nature and subject to change.

Witmer Jones Keefer
Ltd.
landscape architecture
land planning
www.wjklttd.com



June 22, 2020

Mr. David Prichard
City of Beaufort – Community and Economic Development Director

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23 Promenade Street, Suite 201
Bluffton, SC 29910
Tel: 843-757-7411

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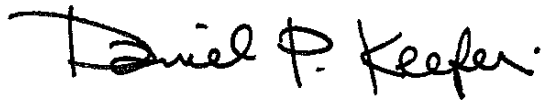
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Daniel Keefer, ASLA
Principal

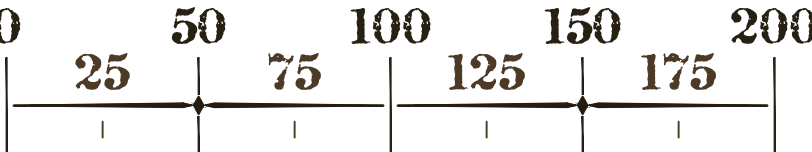
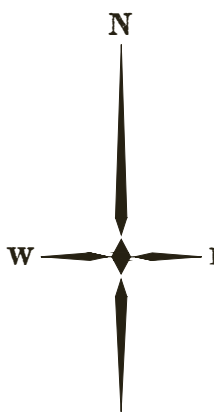
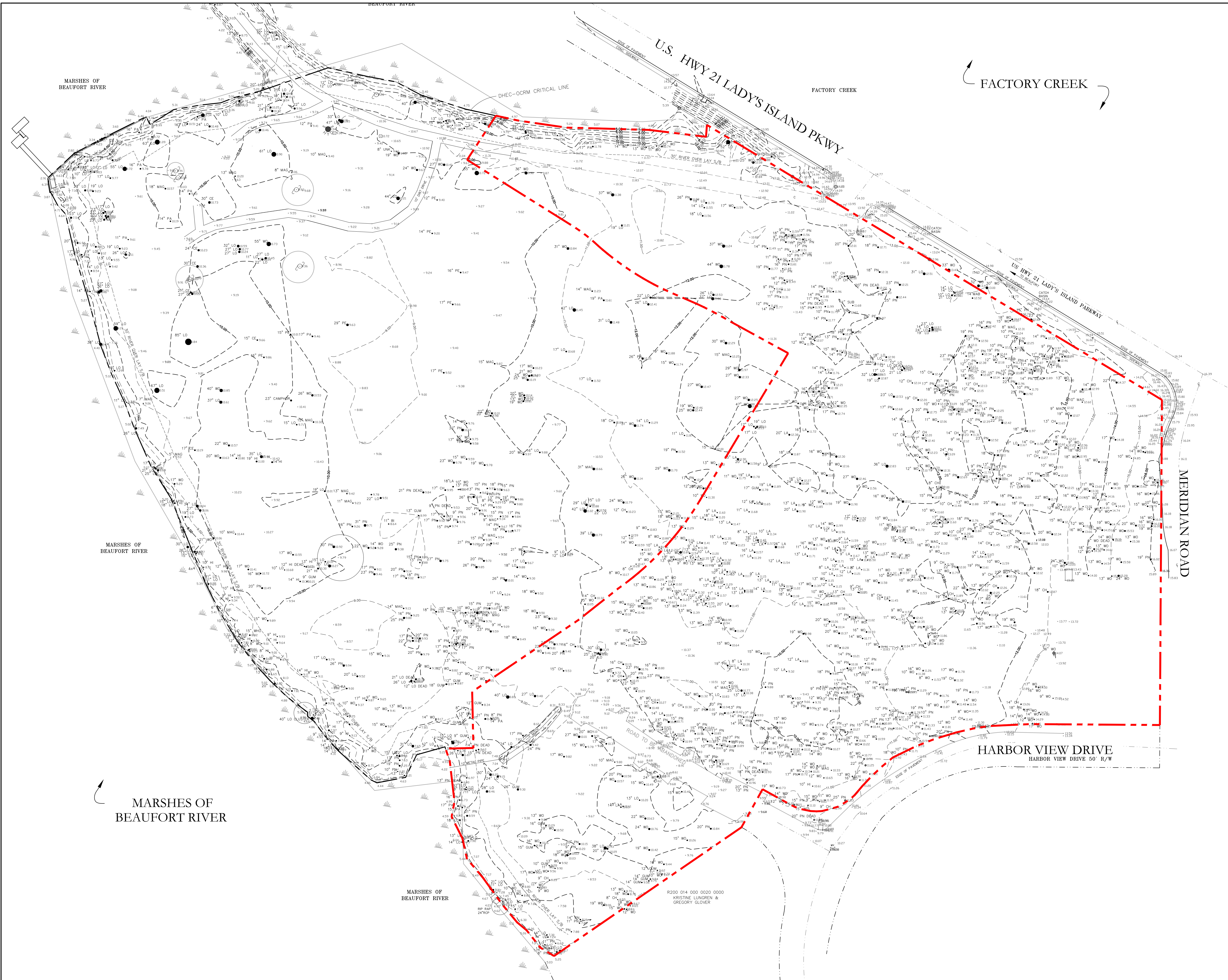
Cc: Sam Levin
Tim Brutcher (Carolina Engineering)

WHITEHALL

EXISTING CONDITIONS

APRIL 7, 2020

DRAFT



Scale 1" = 50'

Witmer Jones Keefer
Ltd.
landscape architecture
land planning
www.wjklt.com

28 Promenade Street, Suite 201 | Bluffton, South Carolina | 29910 | ph 843.757.7411

PLAN IS CONCEPTUAL IN NATURE
NOT FOR CONSTRUCTION



Staff Report for MPC

From the Director of Community and Economic Development

July 20, 2020

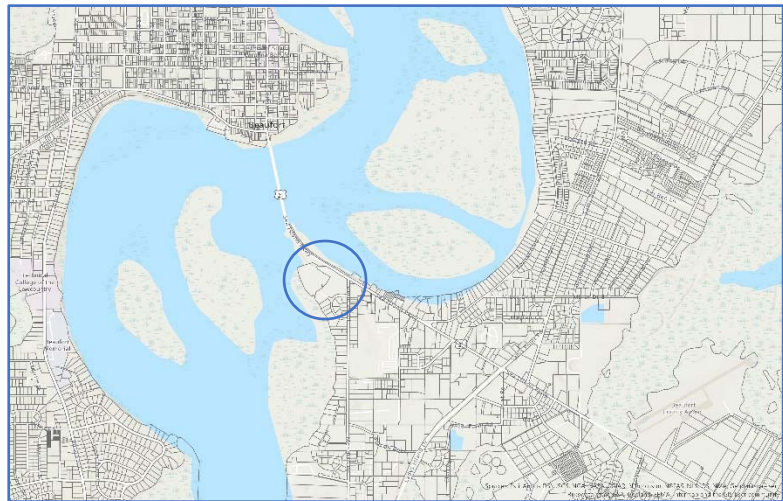
SUBJECT: Whitehall Major Subdivision

Request: The applicant, Sam Levin, has requested a major subdivision of approximately 10.1 acres located at 4 Harborview Circle (Whitehall) (R123 014 000 0149 0000). The subdivision will result in 2 lots (8.4 ac and 1.6 ac) and new streets.

The zoning district is T4-N.

The size of the parcel and the creation of new streets

designates this as a Major subdivision and requires a sketch plan approval from the Metropolitan Planning Commission (MPC).



Sketch plans are to provide the general layout of lots and streets, reviewed by the MPC, for the sole purpose of subdividing the land. The intent is to provide the applicant confirmation that the “simple line drawing” is consistent with the development code in terms of lot dimensions, street connectivity, street dimensions, and the allocation of required open space, in order for the applicant to confidently proceed with investing in technical drawings. It is not a building development plan.

The MPC determines that the provisions of the code regarding the subdivision of land have been met.

In accordance with the Beaufort Development Code § 9.9.3.E, the MPC “shall approve, approve with conditions, or disapprove the sketch plan within 60 days after submission. Unless this time limit is extended by mutual agreement, failing to act within the time limit constitutes approval

of the sketch plan. If the proposed sketch plan is approved by the MPC, the MPC shall advise the applicant in writing of:

- a. the conditions of such approval, if any;
- b. certification of the plan by the city; and
- c. the date on which the MPC granted approval.

If the MPC disapproves the sketch plan, written notice will be given to the applicant.

If the MPC approves the sketch plan, the applicant will submit a preliminary plat incorporating any conditions required by the MPC. The preliminary plat will inform the site plan for the development and will be reviewed by the TRC.

STAFF ASSESSMENT

The Sketch Plan is consistent with the City of Beaufort Code:

Section 2.4 District Development Standards - The parcel is zoned T4-N. There are no lot-width-at-front-setback standards, nor is there a minimum lot size requirement.

Section 7.2 Street Network and Design Standards – staff is satisfied with the street layout.

Section 7.4 – Community Space/Open Space is shown to exceed the 10% minimum.

Suitability and adequacy of required infrastructure, given the future plans for the property, will be assessed during preliminary plat review by the Technical Review Committee in accordance with the Beaufort Development Code Chapter 7 (Land Development), Chapter 8 (Environmental & Resource Protection) and Chapter 9 (Development Review Procedures).

Building form, orientation, and access will be evaluated as part of development design review (§ 9.8) prior to the submittal for a project permit.

STAFF RECOMMENDATION

Approve.