

Lady's Island Corridor Study

BEAUFORT, SC



May 19, 2017

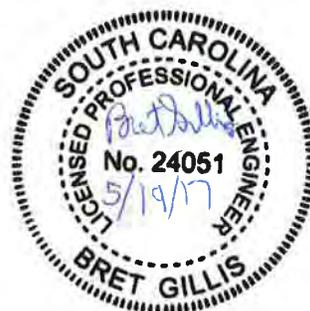


BEAUFORT
SOUTH CAROLINA



Table of Contents

1.0	INTRODUCTION	4
2.0	EXISTING CONDITIONS	5
2.1	PROJECT LOCATION	5
2.2	EXISTING ROADWAYS	6
2.3	COUNT DATA	7
2.4	CRASH DATA.....	8
3.0	PROJECTED CONDITIONS	11
3.1	GROWTH RATES	11
3.2	FUTURE VOLUMES	11
3.3	DEVELOPMENTS AND TRIP GENERATION.....	12
4.0	CONCEPT DEVELOPMENT	13
4.1	NO BUILD ALTERNATE.....	13
4.2	BUILD CONCEPT	13
4.3	OTHER ALTERNATES CONSIDERED	15
5.0	OPERATIONS ANALYSIS	17
5.1	INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS	17
5.2	NEW TRAFFIC SIGNALS.....	21
6.0	PHASES FOR IMPROVEMENTS	22
6.1	SC 802 SAMS POINT ROAD TURN LANE.....	23
6.2	HAZEL FARM ROAD AND S-7-497 GAY DRIVE.....	25
6.3	NEW LADY'S ISLAND MIDDLE SCHOOL ACCESS	27
6.4	S-7-186 SUNSET BOULEVARD AND S-7-187 MILLER DRIVE WEST.....	29
6.5	BEAUFORT HIGH SCHOOL ACCESS REALIGNMENT.....	31
6.6	US 21 BUSINESS, US 21, AND SC 802 MAINLINE IMPROVEMENTS.....	33
6.7	MEADOWBROOK DRIVE EXTENTION	35
6.8	MAYFAIR COURT EXTENSION	37
6.9	US 21 AIRPORT AREA AND FRONTAGE ROAD	39
7.0	CONCLUSION	41



List of Tables

Table 2.1 – Summary of Crash Data within Project Limits..... 5
Table 3.1 – Lady’s Island Area AADT and Growth Rates 8
Table 5.1 – HCM 2010 LOS Criteria for Unsignalized and Signalized Intersections..... 14
Table 5.2 – AM Peak Intersection LOS and Delay Results 16
Table 5.3 – 2038 Build Intersection Alternatives AM Peak Hour LOS and Delay
Results..... 16
Table 5.4 – PM Peak Intersection LOS and Delay Results..... 17
Table 5.5 – 2038 Build Intersection Alternatives PM Peak Hour LOS and Delay
Results..... 17

List of Figures

Figure 2.1 – Project Study Area 2
Figure 2.2 – Turning Movement Count Data Map 5
Figure 2.3 – Rear End Collisions Along Sea Island Parkway 6
Figure 2.4 – Angled Collisions on Sea Island Parkway Just West of SC 802 7

List of Appendices

APPENDIX A – TURNING MOVEMENT COUNTS AND TUBE COUNTS
APPENDIX B – VOLUME DEVELOPMENT
APPENDIX C – 2016 EXISTING SYNCHRO RESULTS
APPENDIX D – 2038 NO BUILD SYNCHRO RESULTS
APPENDIX E – 2038 BUILD SYNCHRO RESULTS
APPENDIX F – 2038 BUILD INTERSECTION ALTERNATIVES LOS AND DELAY RESULTS

1.0 Introduction

The purpose of the Lady's Island Corridor Study is to determine the most effective means of implementing the following improvements on Lady's Island:

- Improve congestion and reduce delays
- Improve safety
- Enhance bicycle and pedestrian accommodations

This traffic study intends to determine these means while maintaining the character of the area and enhancing the corridors with streetscape elements and lighting. Originally the study was focused on the two main corridors, US 21 Business / US 21 Sea Island Parkway and US 21 Lady's Island Drive / SC 802 Sams Point Road. In order to meet its stated goals, the scope was expanded to include several side streets as identified in this report.

The main intersection where these two corridors intersect is beginning to reach full capacity today in the AM and PM peak hours. With several developments underway, the intersection will likely exceed capacity by 2020. Long queues are expected to develop in the future, blocking access for side streets and driveways. Further to the east, a new Walmart development is under construction on US 21 Sea Island Parkway. Residential side streets in this area already have difficulties making left turns onto US 21. Future increases in the US 21 traffic volumes will increase the side street delays.

Traffic counts collected in 2016 show US 21 Business Sea Island Parkway has reached an ADT of 21,660 vehicles per day (vpd), while US 21 Lady's Island Drive has reached 26,000 vpd. These busy corridors are beginning to outgrow their existing two-way left-turn lanes. Raised medians, where feasible, can reduce right angle conflicts and potentially reduce right angle crashes.

This report documents the data collected, analyses performed, and conceptual improvements planned for the area. Concept plans have also been developed. They are provided separately.

2.0 Existing Conditions

2.1 PROJECT LOCATION

The project study area is approximately a total of 4.4 miles along US 21 Business Sea Island Parkway, SC 802 Sams Point Road, US 21 Lady's Island Drive, and US 21 Sea Island Parkway in Lady's Island. The study area along Sea Island Parkway begins at the Wood's Memorial Bridge and extends to the Chowan Creek Bridge. The study area along Sams Point Road begins at Miller Drive and extends to the intersection of Sea Island Parkway. The study area along Lady's Island Drive begins at the intersection of Sea Island Parkway and extends to Rue Du Bois. The study area is essentially divided into two distinct study sub areas by the natural marsh along Sea Island Parkway. The sub area to the west of the marsh includes the main US 21 Business/SC 802 Intersection and numerous commercial developments. The sub area to the east of the marsh includes the airport, the Walmart development, and the remainder of the study area to the Chowan Creek Bridge. Figure 2.1 below shows the project study area.



Figure 2.1 – Project Study Area

4.0 Concept Development

4.1 NO BUILD ALTERNATE

As with any project, there is a "do nothing" option where you consider leaving the project in the current conditions for comparison to the proposed conditions. With no improvements to the study area in Lady's Island, traffic congestion will continue to compound each year.

4.2 BUILD CONCEPT

The proposed concept plan is provided separately. It includes the following elements:

Greater Street Connectivity. Seven new connections are shown to provide alternate routes for relief of congested intersections and safer means for difficult turning movements. These connections include:

1. Enhanced access on Miller Drive West and Sunset Boulevard to avoid the congested main US 21 / SC 802 intersection
2. Paving of Hazel Farm Road and enhanced access on Gay Drive to avoid the congested main intersection
3. Relocation of the Beaufort High School access road to align with Sunset Boulevard
4. Additional access for Lady's Island Middle School, to align with Gay Drive
5. Extension of Mayfair Court to Miller Street
6. Extension of Meadowbrook Drive to Dow Road
7. New frontage road to provide better access for Lost Island Road and Little Creek Road

Each of these connections provide their own individual benefits. The first two connections will provide congestion relief from the main US 21 / SC 801 intersection, which is expected to otherwise develop major queues and delays over time. Relocation of the Beaufort High School access road allows the existing traffic signal to be relocated to Sunset Boulevard, providing better access for Sunset Boulevard. The Lady's Island Shopping Center would be redeveloped separately by others to accommodate this new access road. The additional access for Lady's Island Middle School will allow it to use the new traffic signal at Gay Drive, providing safer access onto US 21. Extending Mayfair Court will allow its residents access to the new Miller Drive signal on SC 802 Sams Point Road. Extending Meadowbrook Drive to Dow Road will provide access for Tidewatch Business Center and other properties to the new Gay Drive signal. Lastly, the new

frontage road will allow Lost Island Road and Little Creek Road residents direct access to the new Walmart traffic signal. This will make access onto US 21 safer for them.

Traffic Signal Improvements. New traffic signals are shown at the following locations:

- US 21 Business Sea Island Parkway and Sunset Boulevard / Beaufort High School (relocation from current Beaufort High School access)
- SC 802 Sams Point Road and Miller Drive
- US 21 Lady's Island Drive and Hazel Farm Road
- US 21 Sea Island Parkway and Gay Drive

The five traffic signals in this area are to be interconnected to improve vehicular progression and reduce rear end collisions.

Improvements to the Main Intersection of US 21 and SC 802. Limited space is available to widen this congested intersection. However, there are two additions that can be implemented. As part of the Harris Teeter development, a new right turn lane will be constructed for the US 21 Sea Island Parkway eastbound approach. The concept plan for this study shows a new right turn lane for the SC 802 southbound approach. It will allow the southbound approach to have two through lanes and a dedicated right turn lane. This will be especially beneficial for the morning peak, where very heavy right turn volumes occur.

Extension of the US 21 Sea Island Parkway Eastbound Outside Through Lane. The outside through lane currently tapers down just prior to Lost Island Road. This creates a rear end crash potential for eastbound drivers turning right onto Little Creek Road and Lost Island Road. With the planned Walmart development, extending this outside through lane past the commercial area would provide both congestion and safety benefits. Along with this extension, the westbound right turns onto the two Walmart site driveways will be converted to through-right lanes. This will provide congestion relief for westbound traffic, particularly in the morning peak.

Raised Medians for Access Management and Safety Improvements. The medians are shown in the concept plan for parts of US 21 Business Sea Island Parkway, US 21 Sea Island Parkway, SC 802 Sams Point Road, and US 21 Lady's Island Drive. Careful consideration is given to alternate routes associated with the medians. For example, a new driveway onto the newly signalized Hazel Farm Road is shown for Sea Island Presbyterian Church and Mayfair Court is extended to provide alternate access. Also, the three-lane segment of US 21 Business Sea Island Parkway

does not include a raised median, as it would be too tight to accommodate any u-turn movements.

Traffic Calming Elements. With Sunset Boulevard, Miller Drive, and Gay Drive being designed as alternate routes to relieve the main intersection, it will be important to preserve their residential character. A previous study of Sunset Boulevard and Miller Drive by SCDOT found that those two streets did not meet policy criteria for traffic calming due to speed limits and functional class. Based on public input and the proposed connectivity, this study recognizes there will at least be a need for regulating flows. In the concept plan, these streets are designed to provide traffic flows that are largely uninterrupted, yet at low speeds. The intent is for these streets to flow freely, but at speeds that are safe for residents and pedestrians. The traffic calming elements include groups of landscaped areas along their shoulders that alternate with median chicanes. Also included are 25 mph speed limit postings. Combined, these elements should make drivers feel compelled to drive at a more consistent, slow speed. Lastly, roundabouts are included to avoid delays that would result from stop control and to better regulate traffic flows. The Hazel Farm Road / Gay Drive roundabout has the added benefit of accommodating street geometry needs without displacing any properties.

Enhanced Bicycle and Pedestrian Accommodations. Sidewalks already exist along both major routes and all approaches except for SC 802 Sams Point Road have dedicated bicycle lanes. However, the City of Beaufort wishes to enhance bicycle and pedestrian accommodations, pursuant to its Civic Master Plan. The concept plan shows the sidewalks to be widened, with multi-use paths on SC 802 to account for the lack of dedicated bicycle lanes. Side streets Sunset Boulevard, Miller Drive West, and Gay Drive also feature sidewalk/path enhancements.

Corridor Enhancements. Landscaping, irrigation, and lighting are planned to enhance the main corridors, as well as Sunset Boulevard, Miller Drive West, Gay Drive, and the Beaufort High School access road. These elements should significantly enhance the area.

4.3 OTHER ALTERNATES CONSIDERED

Other design alternates were originally considered under this study. Among them included:

Widening of US 21 Business / US 21 Sea Island Parkway and/or US 21 Lady's Island Drive / SC 802 Sams Point Road. With commercial buildings, parking lots and large oak trees close to the

existing through lanes, no feasible options existed for widening the main corridors. Impacts would have been very significant, so this alternate was omitted from selection.

Hazel Farm Road Extension. Extension through the undeveloped area between Gay Drive and Meadowbrook Drive was considered in lieu of using Gay Drive. This would have routed traffic away from residential streets. However, it would have also incurred significantly higher property impacts and resulted in poor land use, with essentially unusable acreage along its length.

Omitting the US 21 Sea Island Parkway Eastbound Through Lane Extension. Omitting this extension was considered because of the wetland impacts it will require. However, it was determined that the safety benefits outweighed the wetland impacts. The congestion relief it offers is also warranted.

Maintaining the Existing Beaufort High School Traffic Signal. This alternate was considered in case relocating the traffic signal should be disallowed. A right turn acceleration lane from Sunset Boulevard onto US 21 Business westbound could accommodate heavy AM traffic flows in that direction. However, right of way impacts would be significant. It would also not accommodate the much needed left turn from US 21 Business onto Sunset Boulevard.

Other Traffic Signal Locations. Several other intersections were considered for traffic signals. Among them included US 21 Lady's Island Drive at Ferry Drive, US 21 Lady's Island Drive at Rue Du Bois, US 21 Sea Island Parkway at Sams Point Way, US 21 Sea Island Parkway at Ferry Road, and SC 802 Sams Point Road at Sams Point Way. None of these intersections were deemed feasible for signal installation, due to low side street volumes, close proximity to other existing signals, and potential queueing issues.

Table 5.2 – AM Peak Intersection LOS and Delay Results

Intersection	2016 No Build Peak Hour		2038 No Build Peak Hour		2038 Build Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
US 21 B (Sea Island Pky) & Meridian Rd	C	23.0 (NB)	F	110.7 (NB)	F	110.7 (NB)
US 21 B (Sea Island Pky) & Beaufort High School	C	21.9	D	40.4	F	98.1
US 21 B (Sea Island Pky) & Sunset Blvd	E	43.6 (SB)	F	N.A. (NB)	E	59.0
US 21 B (Sea Island Pky) & Youmans Dr	C	22.8 (SB)	E	47.8 (NB)	C	24.0 (SB)
US 21 B (Sea Island Pky) & Professional Village Cr	C	22.2 (SB)	F	96.2 (SB)	D	25.7 (SB)
US 21 (Sea Island Pky) & SC 802 (Sams Point Rd)	D	54.9	F	147.9	D	42.2
US 21 (Sea Island Pky) & Sams Point Way	C	17.2 (SB)	F	449.7 (NB)	C	20.2 (NB)
US 21 (Sea Island Pky) & Ferry Rd	D	31.3 (SB)	F	217.9 (SB)	C	21.8 (SB)
US 21 (Sea Island Pky) & Gay Dr	B	14.7 (NB)	D	25.4 (NB)	B	16.9
US 21 (Sea Island Pky) & Cougar Dr	F	62.2 (NB)	F	N.A. (SB)	-	+
US 21 (Sea Island Pky) & Lost Island Rd	B	14.5 (NB)	C	22.0 (NB)	B	12.4 (NB)
US 21 (Sea Island Pky) & Airport Circle	C	19.3 (SB)	B	17.3	B	16.5
US 21 (Sea Island Pky) & Old Distant Island Rd	C	20.9 (NB)	F	224.7 (NB)	F	224.7 (NB)
US 21 (Sea Island Pky) & Eustis Landing Road/Chowan Creek Bluff	C	21.1	E	59.4	E	59.4
US 21 (Lady's Island Drive) & Rue Du Bois	C	24.9 (EB)	F	74.9 (EB)	E	37.0 (EB)
US 21 (Lady's Island Drive) & Hazel Farm Rd	C	17.3 (WB)	D	26.4 (WB)	B	14.3
US 21 (Lady's Island Drive) & Ferry Dr	D	34.5 (WB)	F	284.4 (WB)	C	22.6 (WB)
SC 802 (Sams Point Road) & Sams Point Way	B	13.7 (WB)	C	22.9 (WB)	C	18.0 (WB)
SC 802 (Sams Point Road) & Ashland Park Rd	C	23.0 (EB)	E	43.6 (EB)	C	18.8 (EB)
SC 802 (Sams Point Road) & Miller Rd	D	33.8 (EB)	F	142.8 (EB)	D	35.8
US 21 B (Sea Island Pky) & Taco Bell	-	+	C	22.4 (NB)	B	12.5 (NB)
US 21 B (Sea Island Pky) & Walmart#3	-	+	E	45.5 (SB)	C	24.4 (SB)
US 21 B (Sea Island Pky) & Walmart#4	-	+	E	37.1 (SB)	C	16.9 (SB)

Table 5.3 – 2038 Build Intersection Alternatives AM Peak Hour LOS and Delay Results Comparison

AM Peak Hour LOS and Delay	Existing Stop Control		All Way Stop Control		Roundabout	
	2038 Build		2038 Build		2038 Build	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Sunset Boulevard & Miller Drive	D	27.5 (Westbound)	E	36.0 (Westbound)	A	9.6
Hazel Farm Road & Gay Drive	-	-	-	-	A	8.3

Table 5.4 – PM Peak Intersection LOS and Delay Results

Intersection	2016 No Build Peak Hour		2038 No Build Peak Hour		2038 Build Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
US 21 B (Sea Island Pky) & Meridian Rd	D	28.2 (NB)	F	855.8 (SB)	F	855.8 (SB)
US 21 B (Sea Island Pky) & Beaufort High School	C	20.8	D	45.0	E	46.6 (SB)
US 21 B (Sea Island Pky) & Sunset Blvd	C	19.7 (SB)	F	N.A. (SB)	D	52.6
US 21 B (Sea Island Pky) & Youmans Dr	D	32.9 (SB)	F	N.A. (SB)	F	N.A. (SB)
US 21 B (Sea Island Pky) & Professional Village Cr	C	24.4 (SB)	F	223.9 (SB)	E	53.0 (SB)
US 21 (Sea Island Pky) & SC 802 (Sams Point Rd)	D	53.9	F	153.9	E	69.6
US 21 (Sea Island Pky) & Sams Point Way	C	15.9 (NB)	F	2667.8 (NB)	D	25.8 (NB)
US 21 (Sea Island Pky) & Ferry Rd	C	21.9 (SB)	F	126.1 (SB)	D	34.4 (SB)
US 21 (Sea Island Pky) & Gay Dr	C	20.1 (NB)	F	51.8 (NB)	C	21.6
US 21 (Sea Island Pky) & Cougar Dr	D	34.4 (NB)	F	325.5 (NB)	-	+
US 21 (Sea Island Pky) & Lost Island Rd	C	19.7 (NB)	F	55.0 (NB)	C	17.3 (NB)
US 21 (Sea Island Pky) & Airport Circle	B	13.3 (SB)	D	46.6	C	24.0
US 21 (Sea Island Pky) & Old Distant Island Rd	C	17.2 (NB)	D	32.6 (NB)	D	32.6 (NB)
US 21 (Sea Island Pky) & Eustis Landing Road/Chowan Creek Bluff	C	20.1	E	75.7	E	75.7
US 21 (Lady's Island Drive) & Rue Du Bois	D	25.0 (WB)	F	89.6 (WB)	F	81.4 (WB)
US 21 (Lady's Island Drive) & Hazel Farm Rd	D	27.1 (WB)	F	57.2 (WB)	B	14.1
US 21 (Lady's Island Drive) & Ferry Dr	F	53.0 (WB)	F	744.2 (WB)	C	24.7 (WB)
SC 802 (Sams Point Road) & Sams Point Way	D	30.5 (WB)	F	287.5 (WB)	F	125.0 (WB)
SC 802 (Sams Point Road) & Ashland Park Rd	C	18.1 (EB)	E	35.3 (EB)	C	16.8 (EB)
SC 802 (Sams Point Road) & Miller Rd	E	40.5 (WB)	F	183.8 (WB)	C	25.7
US 21 B (Sea Island Pky) & Taco Bell	-	+	F	53.0 (NB)	C	17.0 (NB)
US 21 B (Sea Island Pky) & Walmart#3	-	+	F	N.A. (SB)	C	17.9 (SB)
US 21 B (Sea Island Pky) & Walmart#4	-	+	C	21.1 (SB)	B	13.4 (SB)

Table 5.5 – 2038 Build Intersection Alternatives PM Peak Hour LOS and Delay Results Comparison

PM Peak Hour LOS and Delay	Existing Stop Control		All Way Stop Control		Roundabout	
	2038 Build		2038 Build		2038 Build	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Sunset Boulevard & Miller Drive	C	19.5 (Westbound)	C	20.3 (Northbound)	A	8.6
Hazel Farm Road & Gay Drive	-	-	-	-	A	8.2

5.2 NEW TRAFFIC SIGNALS

The 2038 Build Concept includes recommendations regarding traffic signals along the corridors. Three new traffic signals are recommended: one at the intersections of Sams Point Road and Miller Drive, one at Sea Island Parkway and Gay Drive, and one at Lady's Island Drive and Hazel Farm Road. One traffic signal on US 21 Sea Island Parkway is recommended to be relocated from the current Beaufort High School Access Road intersection to the Sunset Boulevard intersection to accommodate Sunset Boulevard traffic. The high school's main entrance will be relocated to align with Sunset Drive and the new signal. These signals will facilitate traffic in the future to utilize the alternative routes proposed in the concept plan. They are currently scoped to include mast arms to match the streetscape enhancements.

Based on a review of the proposed traffic signals, the AM and PM peak hours whose volumes were counted are expected to meet the *Manual of Uniform Traffic Control Devices'* (MUTCD's) one-hour, four-hour, and eight-hour warrants. Hours beyond the AM and PM peaks have not been counted. Based on anticipated traffic patterns, the four-hour warrant is likely to be met at all signals. Some intersections may meet the eight-hour warrant; however, this is difficult to predict.

Currently there are no funds for improvements. By the time any construction can occur, key developments identified, such as Walmart, Harris Teeter, etc., will likely be completed. Thus volumes will be lower than the 2038 turning movement counts projected, but not significantly lower. This study anticipates that by the time these signals can be funded and installed with roadway improvements, they will be warranted. Additional signal warrant analysis may be warranted during the design phase. Like this study, it would need to account for the latent turning movement demand that will exist but not necessarily show up in the volume counts due to difficulties in making these turns without a traffic signal.

6.0 Phases for Improvements

This study recognizes that the improvements will need to be constructed in phases, as individual projects. For planning and budgeting purposes, this study separates the proposed improvements into nine distinct improvement projects. These individual projects are listed below. The pages that follow provide descriptions for each project, with opinions of probable costs.

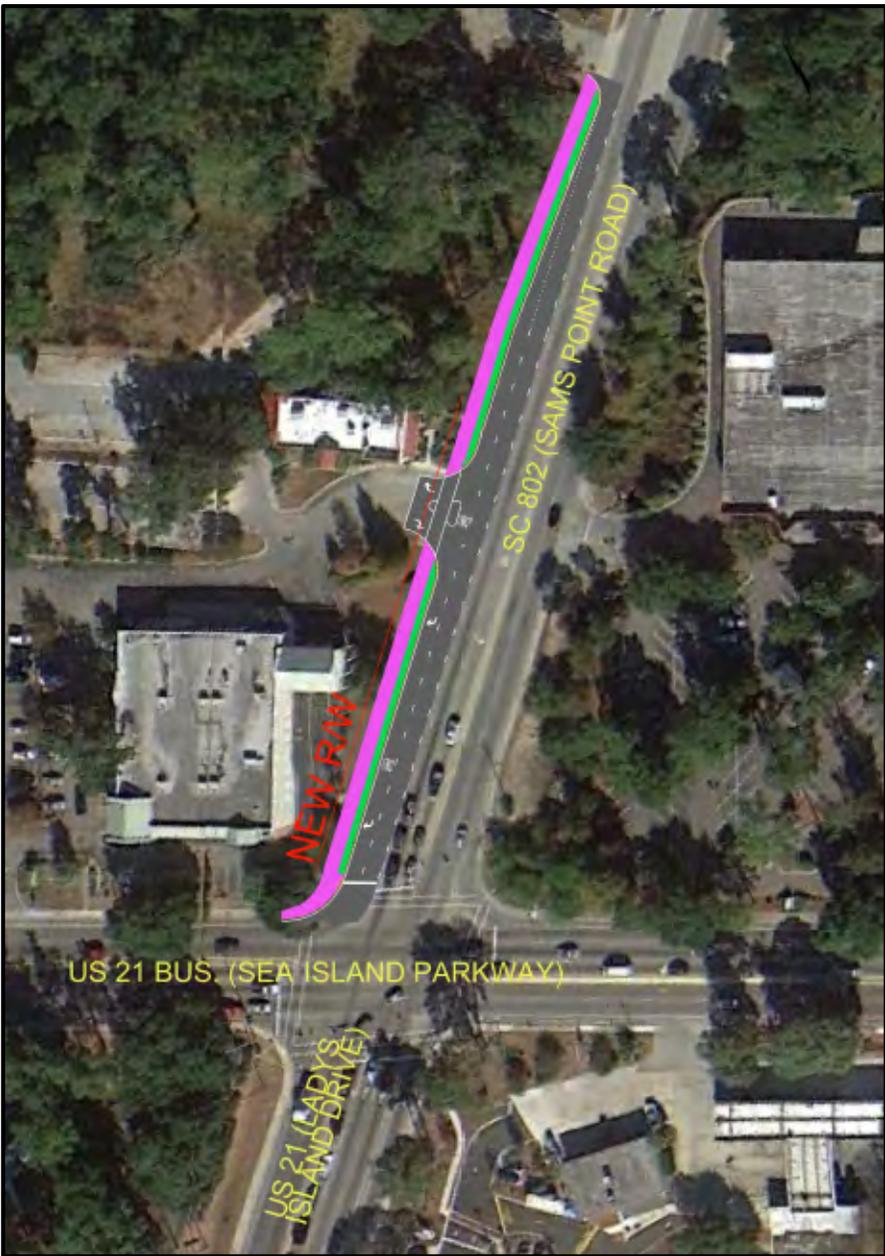
1. SC 802 Sams Point Road Right Turn Lane
2. Hazel Farm Road and S-7-497 Gay Drive
3. New Lady's Island Middle School Access
4. S-7-186 Sunset Boulevard and S-7-187 Miller Drive West
5. Beaufort High School Access Realignment
6. US 21 Business, US 21, and SC 802 Mainline Improvements
7. Meadowbrook Drive Extension
8. Mayfair Court Extension
9. US 21 Airport Area and Frontage Road

Each individual project provides its own specific benefits. Normally, the projects would be prioritized based on order of need. For Lady's Island, prioritization of these projects will depend somewhat on availability. For example, the Beaufort High School Access Realignment will require redevelopment of the adjacent shopping center.

It is not possible to precisely delineate the limits of each individual project because the elements of each project will depend partially on what elements have already been completed. In other words, the individual projects are somewhat interdependent of each other. For example, Hazel Farm Road and S-7-497 Gay Drive improvements will require turn lane / median improvements to Sea Island Parkway and Lady's Island Drive. The extent of those improvements will depend on whether the Hazel Farm / Gay Drive improvements begin first or the Sea Island Parkway and Lady's Island Drive improvements begin first. So the limits and costs for each individual project will likely change over time based on scheduling, but the overall totals should not change significantly.

6.1 SC 802 SAMS POINT ROAD TURN LANE

This project would include addition of the right turn lane at SC 802 (Sams Point Road) and US 21 Business. The dedicated right turn lane would open the existing right turn lane for conversion to a thru lane at the signal. This would benefit the intersection by providing relief for the heavy morning peak right turn movement and capacity for the through movement. The right turn is a good candidate for initial construction and can proceed the other projects. Upgrading the US 21 / SC 802 traffic signal to include mast arms would also be accomplished with this project.



SC 802 SAMS POINT TURN LANE					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$30,000.00	\$30,000.00
2027000	REM. & DISP. OF EXISTING CONC.	10.000	CY	\$29.00	\$290.00
2031200	SITE EXCAVATION	1.000	LS	\$65,000.00	\$65,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	180.000	TON	\$85.00	\$15,300.00
4011004	LIQUID ASPHALT BINDER PG64-22	25.000	TON	\$750.00	\$18,750.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	1,098.000	SY	\$19.00	\$20,862.00
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	60.000	TON	\$90.00	\$5,400.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	170.000	TON	\$105.00	\$17,850.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	580.000	LF	\$21.00	\$12,180.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	598.000	SY	\$54.00	\$32,292.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	50.000	SY	\$170.00	\$8,500.00
	TRAFFIC CONTROL	1.000	LS	\$35,000.00	\$35,000.00
	PAVEMENT MARKINGS	1.000	LS	\$10,000.00	\$10,000.00
	EROSION CONTROL	1.000	LS	\$12,000.00	\$12,000.00
	DRAINAGE	1.000	LS	\$80,400.00	\$80,400.00
	TRAFFIC SIGNAL UPGRADES WITH MAST ARMS	1.000	LS	\$140,000.00	\$140,000.00
				CONSTRUCTION COST=	\$503,824.00
				PRELIMINARY ENGINEERING =	\$55,000.00
				REIMBURSABLE UTILITY RELOCATION=	\$40,000.00
				PERMITTING=	\$500.00
				CONSTRUCTION OVERSIGHT=	\$35,000.00
				SUBTOTAL =	\$634,324.00
				CONTINGENCIES AT 20% =	\$126,864.80
				TOTAL PROJECT COST =	\$761,188.80
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.2 HAZEL FARM ROAD AND S-7-497 GAY DRIVE

The Hazel Farm Road and S-7-497 Gay Drive project would include paving of Hazel Farm Road, improvements to Gay Drive, construction of the roundabout, installation of new traffic signals at each end, and signal interconnection with the US 21 / SC 802 signal. Upgrading these roads would provide beneficial street connectivity, increased pedestrian and bike safety, and congestion relief for the main intersection. With new signal implementation, this project is interdependent with improvements to mainline SC 802/US 21 Bus (Sea Island Parkway) and alignment of the new Lady's Island Middle School Access project. Addition of tune lanes, realignment of the middle school access, and median work to provide access management is needed at the connection of Hazel Farm at SC 802 and Gay Drive at US 21 Bus (Sea Island Parkway) to provide the full benefit of the signal interconnection.



HAZEL FARM ROAD AND S-7-497 GAY DRIVE					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$120,000.00	\$120,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	1,335.000	SY	\$35.00	\$46,725.00
2031200	SITE EXCAVATION (INCLUDING DET. POND)	1.000	LS	\$450,000.00	\$450,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	1,170.000	TON	\$85.00	\$99,450.00
4011004	LIQUID ASPHALT BINDER PG64-22	175.000	TON	\$750.00	\$131,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	1,122.222	SY	\$19.00	\$21,322.22
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	585.000	TON	\$90.00	\$52,650.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	1,652.208	TON	\$105.00	\$173,481.88
5019010	STAINED CONCRETE PAVEMENT (8" UNIFORM)	192.111	SY	\$130.00	\$24,974.44
7201000	CONCRETE CURB (9" X 15")	230.000	LF	\$27.00	\$6,210.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	310.000	LF	\$29.00	\$8,990.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,092.000	SY	\$54.00	\$58,968.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	175.000	SY	\$170.00	\$29,750.00
	TRAFFIC CONTROL	1.000	LS	\$150,000.00	\$150,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$75,000.00	\$75,000.00
	TWO TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	\$280,000.00	\$280,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	\$45,000.00	\$45,000.00
	EROSION CONTROL	1.000	LS	\$80,000.00	\$80,000.00
	DRAINAGE	1.000	LS	\$94,000.00	\$94,000.00
	LANDSCAPING	1.000	LS	\$23,192.50	\$23,192.50
	IRRIGATION	1.000	LS	\$75,000.00	\$75,000.00
CONSTRUCTION COST=					\$2,045,964.04
PRELIMINARY ENGINEERING =					\$250,000.00
REIMBURSABLE UTILITY RELOCATION=					\$50,000.00
PERMITTING=					\$500.00
CONSTRUCTION OVERSIGHT=					\$140,000.00
SUBTOTAL =					\$2,486,464.04
CONTINGENCIES AT 20% =					\$497,292.81
TOTAL PROJECT COST =					\$2,983,756.85
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.3 NEW LADY'S ISLAND MIDDLE SCHOOL ACCESS

The new Lady's Island Middle School Access project includes realigning the main entrance road to the middle school with Gay Drive and tie-ins to the middle school driveways, existing Cougar Drive, and Robin Drive. Cougar Drive would become right in right out. The benefits of this configuration include safer access to US 21 and street connectivity with the surrounding neighborhood near Robin drive. This project is dependent on improvements to the medians on mainline US 21 Bus (Sea Island Parkway) and signalization with the Gay Drive Project.



NEW LADY'S ISLAND MIDDLE SCHOOL ACCESS					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$75,000.00	\$75,000.00
2031200	SITE EXCAVATION	1.000	LS	\$245,000.00	\$245,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	680.000	TON	\$85.00	\$57,800.00
4011004	LIQUID ASPHALT BINDER PG64-22	80.000	TON	\$750.00	\$60,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	333.333	SY	\$19.00	\$6,333.33
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	340.000	TON	\$90.00	\$30,600.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	500.000	TON	\$105.00	\$52,500.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	1,500.000	LF	\$29.00	\$43,500.00
	TRAFFIC CONTROL	1.000	LS	\$75,000.00	\$75,000.00
	PAVEMENT MARKINGS	1.000	LS	\$50,000.00	\$50,000.00
	EROSION CONTROL	1.000	LS	\$75,000.00	\$75,000.00
	DRAINAGE	1.000	LS	\$260,000.00	\$260,000.00
CONSTRUCTION COST=					\$1,030,733.33
PRELIMINARY ENGINEERING =					\$110,000.00
REIMBURSABLE UTILITY RELOCATION=					\$20,000.00
PERMITTING=					\$5,000.00
CONSTRUCTION OVERSIGHT=					\$70,000.00
SUBTOTAL =					\$1,235,733.33
CONTINGENCIES AT 20% =					\$247,146.67
TOTAL PROJECT COST =					\$1,482,880.00
<u>NOTES:</u>					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.4 S-7-186 SUNSET BOULEVARD AND S-7-187 MILLER DRIVE WEST

S-7-186 Sunset Boulevard and S-7-187 Miller Drive West includes improvements to both streets, traffic calming, installation of a new traffic signal at the Miller Drive West intersection with SC 802, and signal interconnection with the US 21 / SC 802 signal. This would increase pedestrian safety on Sunset Boulevard and Miller Drive and provide congestion relief for the main US 21 / SC 801 intersection. These improvements are interdependent with the US 21 / SC 802 mainline project and the Beaufort High School Access Realignment.



S-7-186 SUNSET BOULEVARD AND S-7-187 MILLER DRIVE WEST					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$120,000.00	\$120,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	1,115.000	SY	\$35.00	\$39,025.00
2031200	SITE EXCAVATION	1.000	LS	\$250,000.00	\$250,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	350.000	TON	\$85.00	\$29,750.00
4011004	LIQUID ASPHALT BINDER PG64-22	160.000	TON	\$750.00	\$120,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	6,000.000	SY	\$19.00	\$114,000.00
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	175.000	TON	\$90.00	\$15,750.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	2,524.736	TON	\$105.00	\$265,097.29
5019010	STAINED CONCRETE PAVEMENT (8" UNIFORM)	199.222	SY	\$130.00	\$25,898.89
7201000	CONCRETE CURB (9" X 15")	690.000	LF	\$27.00	\$18,630.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	6,282.000	LF	\$29.00	\$182,178.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	5,219.444	SY	\$54.00	\$281,850.00
7206000	CONCRETE MEDIAN	0.000	SY	\$105.00	\$0.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	150.000	SY	\$170.00	\$25,500.00
	TRAFFIC CONTROL	1.000	LS	\$180,000.00	\$180,000.00
	PAVEMENT MARKINGS	1.000	LS	\$95,000.00	\$95,000.00
	TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	\$140,000.00	\$140,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	\$72,000.00	\$72,000.00
	EROSION CONTROL	1.000	LS	\$125,000.00	\$125,000.00
	DRAINAGE	1.000	LS	\$355,000.00	\$355,000.00
	LANDSCAPING	1.000	LS	\$51,450.00	\$51,450.00
	IRRIGATION	1.000	LS	\$100,000.00	\$100,000.00
	LIGHTING	1.000	LS	\$784,000.00	\$784,000.00
CONSTRUCTION COST=					\$3,390,129.18
PRELIMINARY ENGINEERING =					\$370,000.00
REIMBURSABLE UTILITY RELOCATION=					\$100,000.00
PERMITTING=					\$5,000.00
CONSTRUCTION OVERSIGHT=					\$170,000.00
SUBTOTAL =					\$4,035,129.18
CONTINGENCIES AT 20% =					\$807,025.84
TOTAL PROJECT COST =					\$4,842,155.02
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.5 BEAUFORT HIGH SCHOOL ACCESS REALIGNMENT

Beaufort High School Access includes realignment of the access road, tie-ins to the existing access and to the Lady's Island Shopping Center redevelopment, relocation of the existing traffic signal, and signal interconnection with the US 21 / SC 802 signal. This project improves the connection to US 21 with an alignment of Sunset Boulevard. Some sections are dependent upon coordination with property owners. For example, the Beaufort High School Access Realignment is dependent upon coordination with Lady's Island Shopping Center redevelopment. It requires relocation of the existing traffic signal. It could precede the Sunset Boulevard / Miller Drive West improvements, or otherwise the Sunset / Miller improvements would just not experience its full benefits until the signal was relocated.



BEAUFORT HIGH SCHOOL ACCESS REALIGNMENT					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$75,000.00	\$75,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	2,225.000	SY	\$35.00	\$77,875.00
2031200	SITE EXCAVATION	1.000	LS	\$225,000.00	\$225,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	135.000	TON	\$85.00	\$11,475.00
4011004	LIQUID ASPHALT BINDER PG64-22	55.000	TON	\$750.00	\$41,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	555.556	SY	\$19.00	\$10,555.56
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	70.000	TON	\$90.00	\$6,300.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	833.583	TON	\$105.00	\$87,526.25
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	2,290.000	LF	\$21.00	\$48,090.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,532.222	SY	\$54.00	\$82,740.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	75.000	SY	\$170.00	\$12,750.00
	TRAFFIC CONTROL	1.000	LS	\$130,000.00	\$130,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$35,000.00	\$35,000.00
	TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	\$140,000.00	\$140,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	\$65,000.00	\$65,000.00
	EROSION CONTROL	1.000	LS	\$45,000.00	\$45,000.00
	DRAINAGE	1.000	LS	\$180,000.00	\$180,000.00
CONSTRUCTION COST=					\$1,273,561.81
PRELIMINARY ENGINEERING =					\$95,000.00
REIMBURSABLE UTILITY RELOCATION=					\$50,000.00
PERMITTING=					\$5,000.00
CONSTRUCTION OVERSIGHT=					\$70,000.00
SUBTOTAL =					\$1,493,561.81
CONTINGENCIES AT 20% =					\$298,712.36
TOTAL PROJECT COST =					\$1,792,274.17
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.6 US 21 BUSINESS, US 21, AND SC 802 MAINLINE IMPROVEMENTS

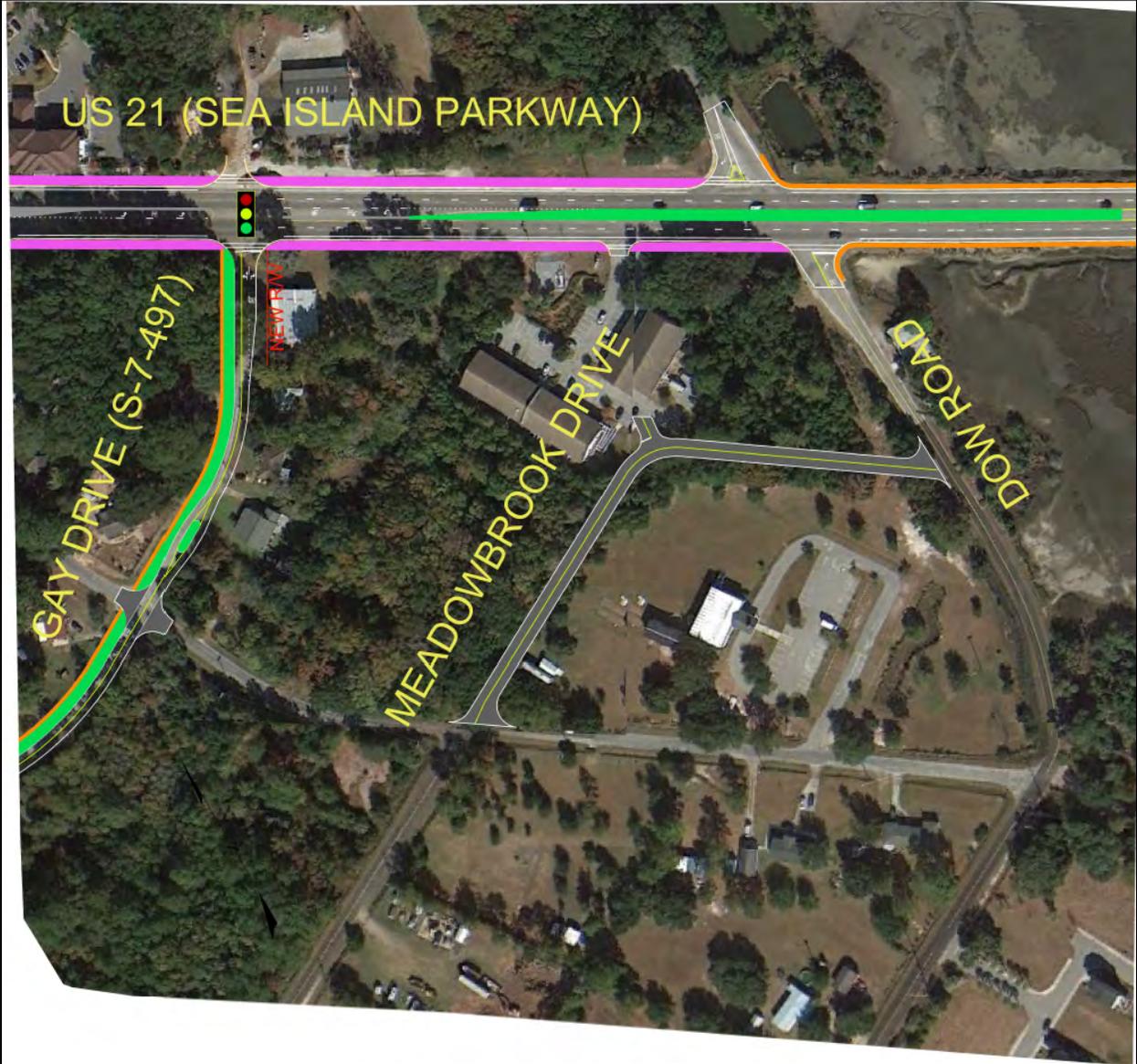
US 21 Business, US 21, and SC 802 Mainline includes all improvements to both corridors as shown below and on sheet 1 of the concept plan. The improvements include medians for access management, grass buffers and multi-use paths, lighting, and landscaping. These improvements would create a complete streets feel to the corridor and benefits include enhancing bicycle and pedestrian accommodations, safety, and improved vehicular progression. The full benefit of this project is interdependent with completion of the other projects.



US 21 BUSINESS, US 21, AND SC 802 MAINLINE IMPROVEMENTS					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$225,000.00	\$225,000.00
2027000	REM. & DISP. OF EXISTING CONC.	10.000	CY	\$29.00	\$290.00
2031200	SITE EXCAVATION	1.000	LS	\$325,000.00	\$325,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	190.000	TON	\$85.00	\$16,150.00
4011004	LIQUID ASPHALT BINDER PG64-22	685.000	TON	\$750.00	\$513,750.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	126,069.191	SY	\$7.50	\$945,518.93
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	65.000	TON	\$90.00	\$5,850.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	12,675.000	TON	\$105.00	\$1,330,875.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	3,182.000	LF	\$29.00	\$92,278.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	26,263.111	SY	\$54.00	\$1,418,208.00
7206000	CONCRETE MEDIAN	1,734.333	SY	\$105.00	\$182,105.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	2,500.000	SY	\$170.00	\$425,000.00
	TRAFFIC CONTROL	1.000	LS	\$250,000.00	\$250,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$125,000.00	\$125,000.00
	EROSION CONTROL	1.000	LS	\$225,000.00	\$225,000.00
	DRAINAGE	1.000	LS	\$110,000.00	\$110,000.00
	LANDSCAPING	1.000	LS	\$289,762.50	\$289,762.50
	IRRIGATION	1.000	LS	\$160,000.00	\$160,000.00
	RETAINING WALLS	1.000	LS	\$100,000.00	\$100,000.00
	LIGHTING	1.000	LS	\$1,300,000.00	\$1,300,000.00
CONSTRUCTION COST=					\$8,039,787.43
PRELIMINARY ENGINEERING =					\$600,000.00
REIMBURSABLE UTILITY RELOCATION=					\$100,000.00
PERMITTING=					\$20,000.00
CONSTRUCTION OVERSIGHT=					\$220,000.00
SUBTOTAL =					\$8,979,787.43
CONTINGENCIES AT 20% =					\$1,795,957.49
TOTAL PROJECT COST =					\$10,775,744.92
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.7 MEADOWBROOK DRIVE EXTENTION

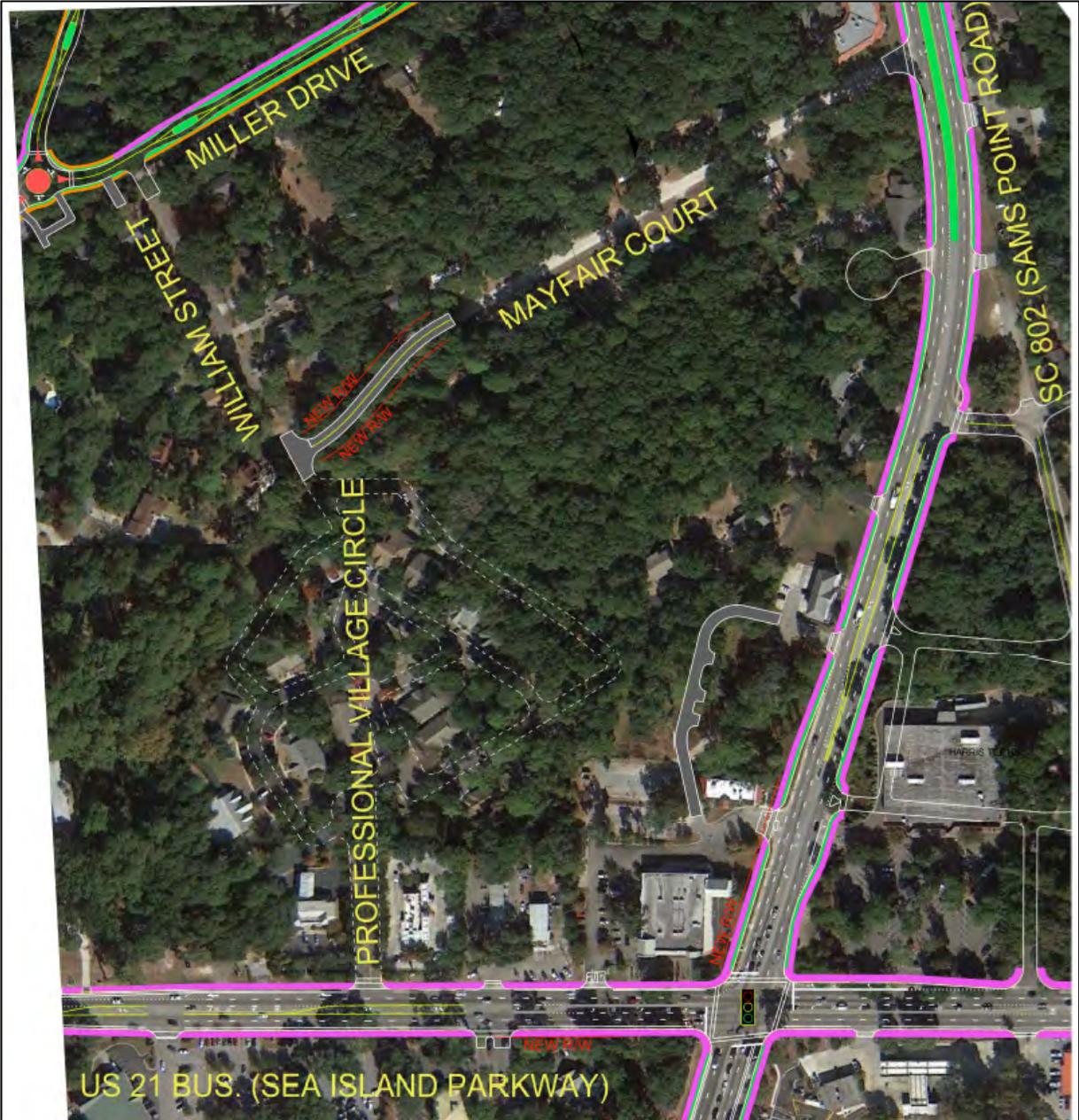
Extension of Meadowbrook Drive to Dow Road involves roadway work in existing right of way. The extension would increase roadway connectivity with access to the proposed signal at Gay Drive. This will be beneficial when Dow Road becomes right-in right-out. The Meadowbrook Drive Extension is not dependent on other projects, but its benefits would not be fully realized without US 21 Sea Island Parkway and Gay Drive improvements.



MEADOWBROOK DRIVE EXTENSION					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$75,000.00	\$75,000.00
2031200	SITE EXCAVATION	1.000	LS	\$165,000.00	\$165,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	500.000	TON	\$85.00	\$42,500.00
4011004	LIQUID ASPHALT BINDER PG64-22	50.000	TON	\$750.00	\$37,500.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	333.333	SY	\$19.00	\$6,333.33
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	250.000	TON	\$90.00	\$22,500.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	250.000	TON	\$105.00	\$26,250.00
	TRAFFIC CONTROL	1.000	LS	\$12,000.00	\$12,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$50,000.00	\$50,000.00
	EROSION CONTROL	1.000	LS	\$50,000.00	\$50,000.00
CONSTRUCTION COST=					\$487,083.33
PRELIMINARY ENGINEERING =					\$65,000.00
REIMBURSABLE UTILITY RELOCATION=					\$20,000.00
PERMITTING=					\$40,000.00
CONSTRUCTION OVERSIGHT=					\$35,000.00
SUBTOTAL =					\$647,083.33
CONTINGENCIES AT 20% =					\$129,416.67
TOTAL PROJECT COST =					\$776,500.00
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.8 MAYFAIR COURT EXTENSION

Extension of Mayfair Court to William Street involves a new roadway connection and is dependent upon coordination with property owners. The Mayfair Court Extension is warranted before or during improvements to SC 802 Sams Point Road are made, as a median will be installed on SC 802. The Mayfair Court Extension may be combined with the mainline improvements. This benefits roadway connectivity and traffic progression on mainline SC 802 (Sams Point Road).



MAYFAIR COURT EXTENSION					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$25,000.00	\$25,000.00
2031200	SITE EXCAVATION	1.000	LS	\$125,000.00	\$125,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	160.000	TON	\$85.00	\$13,600.00
4011004	LIQUID ASPHALT BINDER PG64-22	20.000	TON	\$750.00	\$15,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	435.111	SY	\$19.00	\$8,267.11
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	80.000	TON	\$90.00	\$7,200.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	125.000	TON	\$105.00	\$13,125.00
	TRAFFIC CONTROL	1.000	LS	\$50,000.00	\$50,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$20,000.00	\$20,000.00
	EROSION CONTROL	1.000	LS	\$25,000.00	\$25,000.00
CONSTRUCTION COST=					\$302,192.11
PRELIMINARY ENGINEERING =					\$40,000.00
REIMBURSABLE UTILITY RELOCATION=					\$10,000.00
PERMITTING=					\$500.00
CONSTRUCTION OVERSIGHT=					\$22,000.00
SUBTOTAL =					\$374,692.11
CONTINGENCIES AT 20% =					\$74,938.42
TOTAL PROJECT COST =					\$449,630.53
<u>NOTES:</u>					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

6.9 US 21 AIRPORT AREA AND FRONTAGE ROAD

US 21 Airport Area and Frontage Road includes all improvements shown below and in sheet 2 of the concept plan. These improvements would provide reduced travel delays and improved access management on US 21. They would also provide Little Creek Road and Lost Island Road access to the traffic signal. The US 21 Airport Area and the Frontage road improvements are dependent upon right of way acquisitions from property owners.



US 21 AIRPORT AREA AND FRONTAGE ROAD					
SECTION	ITEM	QUANTITY	UNIT	UNIT PRICE	NET PRICE
1031000	MOBILIZATION	1.000	LS	\$225,000.00	\$225,000.00
2027000	REM. & DISP. OF EXISTING CONC.	205.000	CY	\$29.00	\$5,945.00
2031200	SITE EXCAVATION	1.000	LS	\$205,000.00	\$205,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	2,025.000	TON	\$85.00	\$172,125.00
4011004	LIQUID ASPHALT BINDER PG64-22	375.000	TON	\$750.00	\$281,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	35,841.000	SY	\$9.50	\$340,489.50
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	810.000	TON	\$90.00	\$72,900.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	4,395.000	TON	\$105.00	\$461,475.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	5,670.000	LF	\$29.00	\$164,430.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,809.444	SY	\$54.00	\$97,710.00
7206000	CONCRETE MEDIAN	485.111	SY	\$105.00	\$50,936.67
7209000	PEDESTRIAN RAMP CONSTRUCTION	200.000	SY	\$170.00	\$34,000.00
	TRAFFIC CONTROL	1.000	LS	\$190,000.00	\$190,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	\$125,000.00	\$125,000.00
	TRAFFIC SIGNAL	1.000	LS	\$190,000.00	\$190,000.00
	EROSION CONTROL	1.000	LS	\$175,000.00	\$175,000.00
	DRAINAGE	1.000	LS	\$370,000.00	\$370,000.00
	LANDSCAPING	1.000	LS	\$43,992.00	\$43,992.00
	IRRIGATION	1.000	LS	\$30,000.00	\$30,000.00
				CONSTRUCTION COST=	\$3,235,253.17
				PRELIMINARY ENGINEERING =	\$380,000.00
				REIMBURSABLE UTILITY RELOCATION=	\$100,000.00
				PERMITTING=	\$210,000.00
				CONSTRUCTION OVERSIGHT=	\$225,000.00
				SUBTOTAL =	\$4,150,253.17
				CONTINGENCIES AT 20% =	\$830,050.63
				TOTAL PROJECT COST =	\$4,980,303.80
NOTES:					
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.					
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.					
3. ALL COSTS ARE IN 2017 DOLLARS.					

7.0 Conclusion

The Lady's Island Corridor Study originated with the goals of Improving congestion and reducing delays, improving safety, enhancing bicycle and pedestrian accommodations, and enhancing aesthetics. The project team consisted of the City of Beaufort, Ward Edwards Engineering, and Stantec Consulting. Beaufort County and SCDOT provided additional cooperation. While developing the study, the team held several stakeholder meetings and two Public Information Meetings. Stakeholder meetings included:

- Area Developers and Engineers
- Various Property Owners
- Public Safety Representatives
- Lady's Island Community Preservation
- Sea Island Coalition
- Coastal Conservation League
- Beaufort County School District
- Northern Regional Plan Implementation Committee

The first Public Information Meeting was held on September 29, 2016. In that meeting, the team introduced the study's goals and objectives and requested citizen input on how the roadway corridors may be improved. The team collected public comments from that meeting and continued developing the study. The second Public Information Meeting was held on February 16, 2017. In that meeting, the team presented the results of the study and presented the concept plans. The team collected public comments from that meeting and then completed the study. The final concept plans and this report are the result of the team's analysis, stakeholder coordination, and feedback from the Public Information Meetings. The proposed improvements as shown in the concept plans will fully meet the intended objectives and significantly improve the corridors.

Programming and funding are needed to accomplish the proposed improvements. Improvements are expected to occur in phases, with the order of phasing to be determined in the near future based on availability and coordination with property owners.