

TOWN OF SEABROOK ISLAND

Planning Commission Regular Meeting

January 13, 2021 – 1:30 PM

Virtual Meeting (Zoom)

[Watch Live Stream \(YouTube\)](#)



AGENDA

CALL TO ORDER

ELECTION OF CHAIR & VICE-CHAIR FOR 2021

APPOINTMENT OF SECRETARY FOR 2021

APPROVAL OF MINUTES

1. Regular Meeting: November 4, 2020

[Pages 2–5]

OLD BUSINESS ITEMS

There are no Old Business Items

NEW BUSINESS ITEMS

There are no New Business Items

ITEMS FOR INFORMATION / DISCUSSION

1. Temporary Encroachment Permit: 2021 PGA Championship Parking [Pages 6–56]
2. Proposed Changes to Charleston County ZLDR Re: R-4 Zoning District [Pages 57–75]
3. 2021 Meeting Schedule [Page 76]

ADJOURN

TOWN OF SEABROOK ISLAND

Planning Commission Regular Meeting

November 4, 2020 – 1:30 PM



Virtual Meeting Hosted via Zoom

[Live Streamed on YouTube](#)

MINUTES

Present: Ken Otstot (Chair), Stan Ullner (Vice Chair), Wayne Billian, Jim Newton, Sharon Welch, Joe Cronin (Town Administrator)

Absent: None

Guests: Heather Paton (SIPOA)

Chairman Otstot called the meeting to order at 1:33 PM and welcomed everyone in attendance. Town Administrator Cronin confirmed that the requirements of the Freedom of Information Act were fulfilled and that the meeting agenda was properly posted.

APPROVAL OF MINUTES

1. **Regular Meeting: October 14, 2020:** Town Administrator Cronin noted that Ms. Welch had recused herself from voting on New Business Item #1 but was erroneously listed as voting in favor. He recommended correcting the minutes to document her recusal. Ms. Welch made a motion to approve the minutes from the October 14, 2020, meeting as corrected. Dr. Ullner seconded the motion. The motion was **APPROVED** by a vote of 5-0.

OLD BUSINESS ITEMS

There were no Old Business Items.

NEW BUSINESS ITEMS

1. **Rezoning Request: 2726 Old Forest Drive:** Town Administrator Cronin provided a brief overview of the request, the purpose of which was to review and provide a recommendation to Town Council on the request to rezone Charleston County Tax Map Number 149-06-00-010, containing approximately 0.25 +/- acres located at 2726 Old Forest Drive, from SFR Single-Family Residential to AGC Agricultural-Conservation. Town Administrator Cronin noted that the request was submitted by the Seabrook Island Property Owners Association, which acquired the property from the Seabrook Island Greenspace Conservancy. The property was intended to be maintained as greenspace.

Mr. Billian asked how many properties have been acquired and set aside for conservation to

date. Ms. Paton responded that there were 37 such properties.

Chairman Otstot recommended that SIPOA alert residents when these types of lots are acquired since they will no longer be subject to SIPOA dues. Ms. Paton responded that the SIPOA Board accepts public comments at meetings prior to accepting properties for conservation.

There being no further discussion, Dr. Ullner made a motion to recommend in favor of approving the rezoning request from SFR to AGC. Mr. Newton seconded the motion. The motion was **APPROVED** by a vote of 4-0, with Chairman Otstot abstaining.

2. **Text Amendment: Accessory Dwelling Units, Short-Term Rentals, Vacation Club Units and Timeshares:** Town Administrator Cronin stated that the Mayor and Council established an ad hoc committee earlier this year to study issues related to short-term rental units within the town. That committee, made up of Councilmembers Jeri Finke and Pat Fox, submitted its recommendations to the full Council in October. He then provided a presentation outlining the key provisions in the draft ordinance which would regulate Accessory Dwelling Units (ADU), Short-Term Rentals (STR) and Vacation Club Units (VCU) and modify the requirements for Vacation Multiple Ownership Interests and Timeshares.

Mr. Newton asked if there were any VCU's operating on the island. Town Administrator responded that he has heard of some operating but didn't know of any specific operators or addresses off-hand.

Mr. Newton then asked if the committee considered added restrictions on loud noises. Town Administrator Cronin stated that the committee did discuss noise and other issues commonly associated with STR's, such as the storage of beach equipment, towels, trash, etc. However, the committee wanted the focus of the ordinance to be on public safety; noise and other nuisance issues would best be left to SIPOA or individual regimes.

Chairman Otstot asked how many STR's are currently operating on the island. Town Administrator Cronin responded that the number varies based on the season, but that there are typically between 400-500 STR's.

Chairman Otstot then asked how the ordinance would be enforced if it were adopted. Town Administrator Cronin responded that the town was currently evaluating two options: hiring additional part-time code enforcement officers for the evening and weekend hours or contracting with a third-party company for code enforcement.

Mr. Billian left the meeting at 2:21 pm.

Ms. Welch inquired about provisions restricting rentals for non-permitted work. Town Administrator Cronin responded that under state law, a property could not be rented for a period of two years if an owner undertakes work that would otherwise be required to be completed by a licensed contractor. This provision was making our ordinance consistent with state law.

Chairman Otstot asked if SIPOA regulated noise. Ms. Paton responded that SIPOA rules did not specifically address noise, but security officers can issue citations for disturbing the peace.

Ms. Welch stated that she was concerned about the lack of a noise ordinance which can be enforced by the town. Mr. Newton responded that this was beyond the scope of the ordinance and was more of a problem for SIPOA and the Club.

There being no further discussion, Mr. Newton made a motion to recommend in favor of adopting the text amendment. Ms. Welch seconded the motion. The motion was **APPROVED** by a vote of 4-0.

3. **Text Amendment: Fee Schedule:** Town Administrator Cronin provided a brief overview of the request, the purpose of which was to review and provide a recommendation to Town Council on an ordinance to update the schedule of planning and zoning fees. He stated that the town has not undertaken a comprehensive review and update of its fee schedule in more than a decade. As part of the analysis, he stated that he had considered the town's actual cost of providing various services, and also reviewed the fee schedules for Charleston County and other neighboring municipalities. He stated that while most fees would increase under the proposed schedule, some would also decrease. He also noted a couple new fees in the schedule, including a "field verification fee" for certain instances in lieu of submitting a plat or survey, as well as an "ex post facto fee" when work begins prior to obtaining a town permit.

Chairman Otstot asked by what percentage the fees would be increasing. Town Administrator Cronin responded that there wasn't a fixed percentage since some would be increasing more than others, while others would remain unchanged or even decrease.

There being no further discussion, Ms. Welch made a motion to recommend in favor of adopting the text amendment. Dr. Ullner seconded the motion. The motion was **APPROVED** by a vote of 4-0.

4. **Text Amendment: Building Height:** Town Administrator Cronin provided a brief overview of the request, the purpose of which was to review and provide a recommendation to Town Council on an ordinance to amend the regulations on building height. He stated that the new FEMA flood maps will take effect on January 29, 2021. Under these new maps, many properties on the island will have a lower base flood elevation (BFE), some as much as 4-5 feet lower. Because the town's maximum building height is tied to BFE, this will result in new homes having to be built shorter than is currently allowed. This would prevent owners from being able to park their vehicles under their home or having to significantly alter the building design to comply with the new height requirement. To alleviate this issue, staff prepared a text amendment which would allow new development undertaken between January 29, 2021, and July 31, 2021, to utilize the BFE in effect as of the adoption date for the purpose of calculating building height, as long as the BFE in effect prior to January 29, 2021 was higher than that in effect beginning on January 29, 2021.

There being no further discussion, Ms. Welch made a motion to recommend in favor of

adopting the text amendment. Dr. Ullner seconded the motion. The motion was **APPROVED** by a vote of 4-0.

ITEMS FOR INFORMATION / DISCUSSION

1. **Update on the Effective Date of New FEMA Flood Maps**: Town Administrator Cronin informed members that the new FEMA flood maps would go into effect on January 29, 2021. Both the town and Charleston County have updated their flood ordinances to adopt and reflect the new flood maps.

There being no further business, Chairman Otstot asked for a motion to adjourn. Mr. Newton made a motion to adjourn the meeting. Ms. Welch seconded the motion. The motion was **APPROVED** by a vote of 4-0, and the meeting was adjourned at 2:57 PM.

Minutes Approved:



Joseph M. Cronin
Town Administrator


APPLICATION FOR ENCROACHMENT PERMIT

Town of Seabrook Island

Street or Road: Seabrook Island Parkway Subdivision: TMS #205-00-00-005 Date: 12-11-2020

The undersigned applicant (owner) hereby applies to the Town of Seabrook Island for a permit to encroach on a public right-of-way.

(Attach a print of the sketch of plan to each copy of this form)


(Applicant [Owner's [Signature)

12/11/20
(Date)

ENCROACHMENT PERMIT PERMIT No: _____

Issued to: (Name) _____ Street or Road: _____

Address: _____ Subdivision: _____

Telephone No: _____

In Compliance with your request and subject to all the provisions, terms, conditions, and restrictions written herein, you are authorized and permitted to:

Town of Seabrook Island

By: _____ Date: _____
Zoning Administrator, Town of Seabrook Island

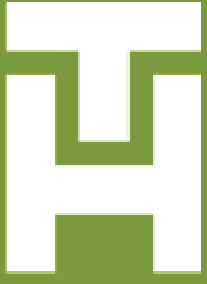
(Note) This form is to be submitted to the Zoning Administrator, Town of Seabrook Island. When submitting the form the applicant shall sign the application for the encroachment permit and acceptance of the provision, etc on the back.

Provisions, Terms, Conditions and Restrictions

1. **PERMITTEE:** The word "Permittee" used herein shall mean the name of the person, firm or corporation to whom this permit is issued, his, her, its heirs, successors, and assigns.
2. **FUTURE MOVING OF ENCROACHMENT:** If, in the opinion of The Town of Seabrook Island it should become necessary to relocate or remove the encroachment, or any part thereof contemplated herein, on account of improvements, relocation or widening of the road or street, or for any other sufficient reason, such moving or removing shall be done on demand of the duly authorized representative of the Town of Seabrook Island at the expense of the Permittee.
3. **PROTECTION OF TRAVELING PUBLIC:** Adequate provision shall be made for the protection of the traveling public at all times such that, during the process of the work, all necessary detours, barricades, warning signs and watchmen shall be provided by and at the expense of the Permittee. The Permittee agrees to observe all rules and regulations of the Town of Seabrook Island while carrying on the work.
4. **RESPONSIBILITY:** The Permittee, its successors or assigns, assumes full responsibility for any accidents to persons or damage to property, including the street or road, that may be caused by the construction, maintenance, use, moving, or removing of the encroachment contemplated herein, and agrees to indemnify the Town of Seabrook Island for any liability incurred or injury or damage sustained by it.
5. **PERMIT SUBJECT TO INSPECTION:** This permit shall be kept at the site of the work at all times while said work is underway, and must be shown to any representative of the Town of Seabrook Island or Law Enforcement Officers on demand.
6. **STANDARDS OF CONSTRUCTION:** All work shall conform to recognized standards of construction and shall be performed in a workman like manner. No pavement shall be cut, no tunneling shall be permitted and no excavation shall be made nearer than two feet to the edge of any type pavement unless specifically authorized herein. All trenches within the limits of the Roadway shall be backfilled with suitable material and thoroughly tamped in layers not greater than six inches in thickness. All pipes, conduit, cables, etc shall have a minimum cover of 30 inches.
7. **PERMITTEE** shall at all times comply with all provisions of the Town Code and Development Standards Ordinance of the Town of Seabrook Island.

I, we, accept the permit herein granted and agree to comply with all the provisions, terms, conditions and restrictions set out herein.

Date: 12/11/20 Permittee: Matt Clark



THOMAS
&
HUTTON

TRAFFIC IMPACT ANALYSIS

PGA – PATRON & BUS PARKING
AREA TRAFFIC STUDY
CHARLESTON COUNTY, SOUTH CAROLINA

Prepared for:
PGA of AMERICA

J – 28631.0000

AUGUST 2020

TABLE OF CONTENTS

1. IntroductionPage 1

2. Existing ConditionsPage 1

3. Base ConditionsPage 4

4. Trip GenerationPage 5

5. Trip Distribution.....Page 5

6. Future 2021 ConditionsPage 6

7. Summary / ConclusionsPage 8

8. RecommendationsPage 9

FIGURES

Site Location MapFigure 1

2021 Base Traffic Volumes.....Figure 2

Event-Generated Traffic VolumesFigure 3

2021 Event Traffic VolumesFigure 4

APPENDICES

Existing Traffic Counts Appendix A

Calculations for the Conversion of midweek to Friday and Saturday Volumes.....Appendix B

Trip Generation Calculations..... Appendix C

Synchro™ Analyses, 2021 Build Out Peak Hour Volumes Appendix D

1. INTRODUCTION

A PGA Tour event is planned for The Ocean Course on Kiawah Island, South Carolina, in May 2021. This study is undertaken in support of an encroachment permit for a temporary driveway connection on Seabrook Island Road to accommodate traffic entering and exiting the event. This study area does not extend beyond Seabrook Island Road in Seabrook Island, SC.

Parking for patrons, media, and officials is proposed off Seabrook Island Road, and bus shuttles will run to and from the golf course from Kiawah Island Parkway. A site location map is shown in **Figure 1**. A limited number of tickets are sold for the site, and information on scheduling and ticket sales is provided by the PGA, based on attendance at previous events.

This study will examine the traffic impacts of the proposed golf tournament on the intersection of Seabrook Island Road and Andell Bluff Boulevard/proposed PGA parking access driveway. Traffic control measures to accommodate event traffic will be identified.

Design hour conditions for the event are identified based upon spectator arrivals and departures as well as background (base) traffic volumes on Seabrook Island Road. The design hours are identified as Friday 11:00 – 12:00 noon; Saturday 11:00 – 12:00 noon; Saturday 3:00 – 4:00 pm; and Saturday 6:00 – 7:00 pm. The intersection of Seabrook Island Road and Andell Bluff Boulevard/the proposed PGA Parking access driveway is focus of this study.

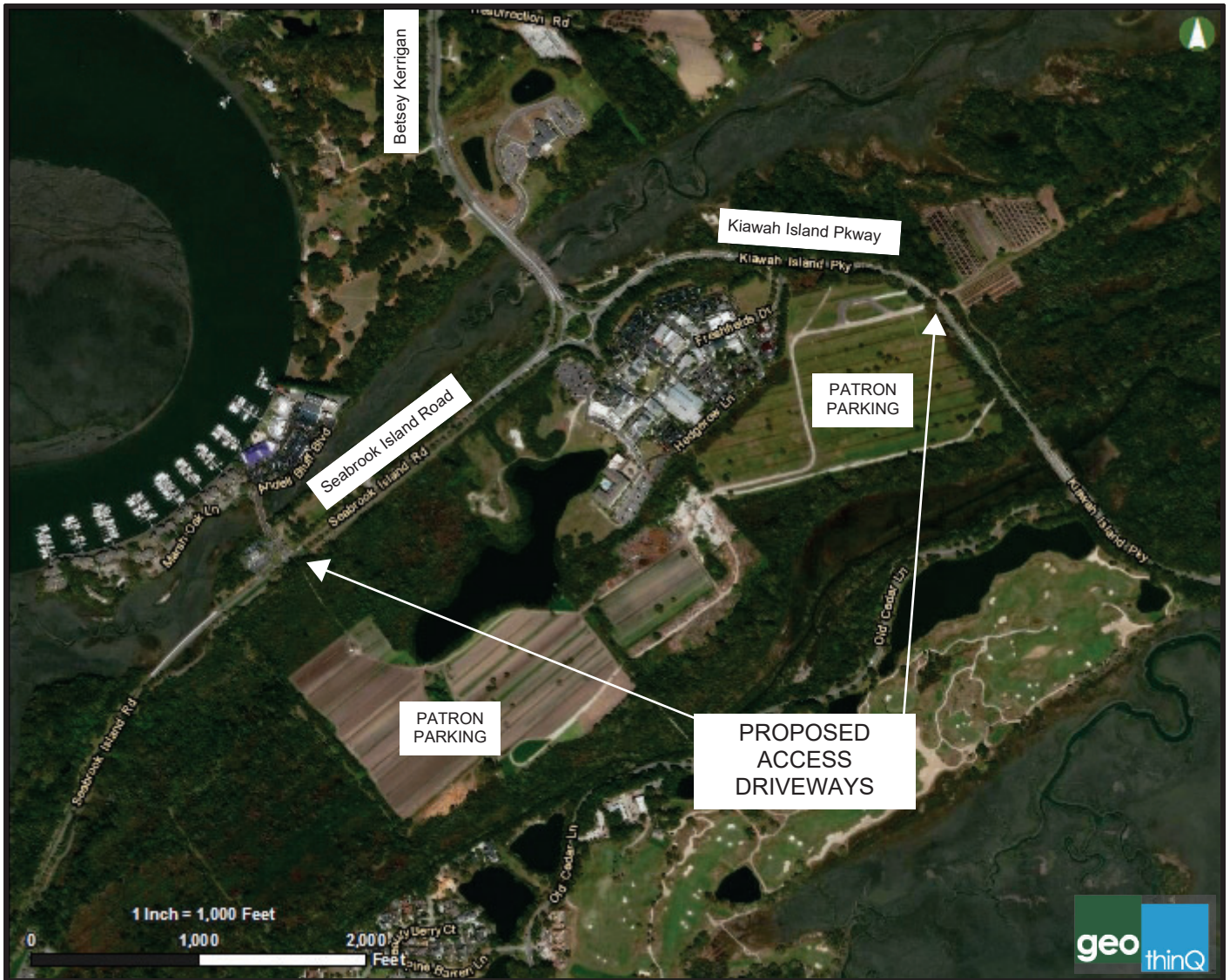
2. EXISTING CONDITIONS

Roadway Conditions

Seabrook Island Road is an east-west, two-lane major collector roadway with a posted speed limit of 35 mph. Seabrook Island Road provides access to the Town of Seabrook Island.

Andell Bluff Boulevard is a north-south, two-lane roadway with a grass median at its intersection with Seabrook Island Road. There is no posted speed limit. This road provides access to a gated residential community and to a marina village. Andell Bluff Boulevard terminates at Seabrook Island Road at a stop controlled T-intersection.

The access driveway to the patron and bus parking area is approximately opposite from Andell Bluff Boulevard. The access driveway is unimproved due to its limited usage.



**PGA Patron & Bus Parking
The Ocean Course**

**FIGURE 1
PROJECT LOCATION MAP**

Charleston County, SC

J28631.0000



Traffic Conditions

Traffic operations at intersections are typically evaluated in terms of “Level of Service” or LOS. The LOS is a measurement of delay incurred at an intersection or for a particular movement. LOS is defined by the Transportation Research Board’s Highway Capacity Manual (HCM) from which LOS A represents free flow conditions with minimal delays; LOS F represents congested conditions. Generally, a LOS D or E is considered acceptable; however, for event conditions, LOS is typically in the E or F range, depending on the size and location of the event.

Table 1 shows the HCM criteria for signalized and unsignalized intersections.

Table 1. Level of Service definitions

LEVEL OF SERVICE	Control Delay per Vehicle (seconds)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	≤ 10
B	>10 and ≤ 20	>10 and ≤ 15
C	>20 and ≤ 35	>15 and ≤ 25
D	>35 and ≤ 55	>25 and ≤ 35
E	>55 and ≤ 80	>35 and ≤ 50
F	>80	>50

3. BASE CONDITIONS

South Carolina Department of Transportation count station 723 is located on Seabrook Island Road, south of Andell Bluff Boulevard, and South Carolina Department of Transportation count station 348 is located on Betsey Kerrigan Parkway, south of River Road. Historical volumes, obtained for the SCDOT count stations, are shown in Table 2.

Table 2. SCDOT Count Station Data

Count Station	2012 ADT	2013 ADT	2014 ADT	2015 ADT	2016 ADT	2017 ADT	2018 ADT	2019 ADT
#723 – Seabrook Island Rd	5,900	6,000	5,400	5,600	4,600	5,600	6,100	6,600
#348 – B. Kerrigan Pkwy	13,000	13,300	12,300	14,000	12,400	13,900	13,700	14,800

Based on data from the nearby SCDOT count stations, traffic volumes in the study area have fluctuated in the past several years. The 2016 and 2017 traffic volumes are lower than those counted in 2014; however, there has been positive growth over the past three years. Given this information, growth of 2% percent per year is determined to be an appropriate background growth rate.

Collecting accurate traffic counts is currently not feasible due to the impacts of Covid 19. For this reason, traffic counts collected in May 2018 are adjusted by 2% annually to represent 2021 base traffic conditions.

Since Friday and Saturday traffic volumes were not counted in 2018, the midweek afternoon peak hour 2018 traffic counts are factored to develop base traffic volumes for the four design hours; Friday and Saturday 11:00 – 12:00 pm, Saturday 3:00 – 4:00 and 6:00 - 7:00. SCDOT Continuous Count Stations provide hourly historic traffic data that can be used to determine how traffic fluctuates during the course of a week. Using historical traffic count data from October 2019, the Friday peak hour volumes are adjusted to reflect the four base study conditions. The count data are included in Appendix A. The calculations are included in Appendix B.

The base traffic volumes for the design hours are shown in **Figure 2**.

4. TRIP GENERATION

Trips generated by the PGA Tour event are estimated using data provided by PGA of America. The PGA data includes shuttle ridership numbers (two hour ridership volumes are provided for various hours of the event, from Monday through Sunday). Also included are vehicle occupancy numbers, ticket redemption rates, and numbers of patrons, officials, members of the media, and VIP's that are expected to use the parking lots and the shuttle busses. The information provided by PGA is included in Appendix C, and a summary of the projected trips is shown in Table 3.

Table 3. Trip Generation

Time Period	Event-Generated Traffic	
	Enter	Exit
Saturday 11:00 am– 12:00 pm	2,525	146
Saturday 3:00 pm – 4:00 pm	2,029	1458
Saturday 6:00 pm – 7:00 pm	87	2186
Friday 11:00 am – 12:00	2,835	130

During peak hours of the tournament, traffic volumes entering the PGA Tour event are higher than the capacity of one inbound lane. Access to the patron parking areas is provided from Seabrook Island Road and from Kiawah Island Parkway. During most of the qualifying rounds, either the Seabrook Island Road access or the Kiawah Island Parkway access can accommodate the incoming traffic. As incoming tournament traffic increases, two access points are needed to accommodate the event traffic. The traffic volumes in Table 3 are 100 % of the event traffic; however, during peak inbound times of the event, 25% of this traffic is assigned to the Seabrook Island Road access and 75% is assigned to the Kiawah Island Parkway access. At non-peak traffic times, the access driveway on Seabrook Island Road can handle a higher percentage (up to 100%) of inbound traffic.

5. TRIP DISTRIBUTION

Based on existing road network, the event-generated vehicular trip distribution for the PGA event is as follows:

- 100% to/from the north via Betsy Kerrison Parkway

The site generated trips are assigned to the study intersection and access points based on the trip distribution assumptions, with 25% of the heaviest entering volumes assigned to the study intersection. (75% of inboound traffic is assumed to use the Kiawah Island driveway, where inbound traffic has a continuous inbound right turn.) Site generated trips are shown in **Figure 3**.

6. FUTURE 2021 EVENT CONDITIONS

For event conditions on Seabrook Island Road, the site generated volumes (Figure 3) are added to the base volumes (Figure 2) to determine the design hour 2021 event volumes (Figure 4). The future volumes are used to calculate the intersection Levels of Service for the event.

Traffic moving through the intersection of Seabrook Island Road and Andell Bluff Boulevard/ the proposed PGA parking access driveway will be controlled manually during peak traffic times of the tournament event. In the scenario where an unsignalized intersection is controlled by an officer/flagperson, the operation of the intersection is no longer similar to a stop-controlled intersection; instead the intersection operates as a traffic signal with the traffic control officer assigning "green time" to various approaches to the intersection. For this reason, the level of service of the intersection is determined using a signalized intersection model.

The Synchro model assumes split "phases" for the eastbound and westbound approaches of Seabrook Island Road, and another green "phase" for northbound and southbound traffic. Northbound right-turning traffic exiting the PGA driveway can run simultaneously with the westbound green traffic. Users of the nonmotorized vehicle path along the south side of Seabrook Island Road can cross the PGA driveway when the eastbound Seabrook Island Road traffic is moving. Therefore the Synchro model assumes three phases at the study intersection.

The results of the capacity analyses at the intersection of Seabrook Island Road and Andell Bluff Blvd/PGA Driveway are shown in the Table 4, and the Synchro reports are included Appendix D.

Table 4. Future Levels of Service (2021)

		Saturday 11:00 am (LOS/DELAY)	Saturday 3:00 pm (LOS/DELAY)	Saturday 6:00 pm (LOS/DELAY)	Friday 11:00 am (LOS/DELAY)
Seabrook Island Rd and Andell Bluff Blvd / PGA access	Officer Control				
SB approach (Andell Bluff Blvd)		A / 5	A / 2	A / 2	B / 20
NB approach (PGA Driveway)		A / 1	B / 11	C / 30	A / 1
EB approach (Seabrook Island Rd)		C / 29	C / 26	D / 41	D / 52
WB approach (Seabrook Island Rd)		C / 34	D / 41	E / 71	E / 55
Intersection Overall		C / 28	B / 14	D / 38	D / 48

The above values of delay and LOS assume traffic control from a traffic signal controller, while in reality, traffic control will be provided by a traffic control officer. For this reason, the values are approximate, and will vary based on how much time each approach is given to proceed. Nonetheless, the signalized intersection model is the most accurate way to model traffic control at the study intersection, and it provides insight into how traffic demand can be accommodated at the intersection.

In normal driving conditions, drivers expect to experience LOS C or D; however, drivers typically expect to experience slightly more delay than normal when driving to, from, or near a major event. Due to the volume of traffic generated by this PGA event, it is not feasible to expect LOS C or D for all approaches to the study intersection for the entire event.

At the study intersection, overall LOS D or better is expected as a weighted average of approach delay during the PGA event. During the peak traffic times of Friday am and Saturday pm, LOS E, with delay ranging from 55 seconds to 73 seconds per vehicle is anticipated at the westbound approach to the intersection of Seabrook Island Road and Andell Bluff Boulevard/ the PGA driveway. All other movements are expected to experience LOS D or better during these peak times. Similarly, LOS D or better is expected during the midweek, before the event generates higher traffic volumes as it nears the weekend rounds. A Synchro analysis of Wednesday morning traffic conditions, included in Appendix D, shows LOS D or better on all approaches.

LOS on Friday, Saturday, and Sunday evening (studied in the worst case Sat 6:00 pm event) is expected to drop to LOS E on some approaches, when traffic is exiting the tournament. During these time periods, the traffic control officer(s) can use the PGA parking area driveway to store vehicles, while keeping the public road queues minimized.

The Friday late morning event (11:00 am) experiences the highest traffic demand of all study periods. During this time period, 2,835 vehicles are projected to drive to the shuttle parking area of the PGA event, the highest of the four study periods; and the base traffic volumes on Seabrook Island Road and Andell Bluff Boulevard are also higher than the other study periods. With traffic split 25%/75% between the two access driveways, overall LOS D is anticipated at the study intersection. During this time period, the 321 eastbound vehicles on Seabrook Island Road are expected to experience LOS D, with projected delay of 52 seconds per vehicle. This level of delay is within the range of delay that is considered to be generally acceptable.

SimTraffic was used to predict traffic queues during the study times. With approximately 1900 feet between the PGA driveway and the roundabout at Betsey Kerrigan Parkway/ Freshfields Village and Seabrook Island Road/Kiawah Island Parkway, it will be important to limit westbound queues at the study intersection. As shown in Table 4, westbound queues on Seabrook Island Road will need to be monitored to prevent backups during peak inbound traffic periods.

Table 5. Future Queues (2021)

		Saturday 11:00 am (FEET)	Saturday 3:00 pm (FEET)	Saturday 6:00 pm (FEET)	Friday 11:00 am (FEET)
Seabrook Island Rd and Andell Bluff Blvd / PGA access	Officer Control				
SB approach (Andell Bluff Blvd)		86	86	86	96
NB approach (PGA Driveway)		77	456	620	56
EB approach (Seabrook Island Rd)		183	152	129	284
WB approach (Seabrook Island Rd)		409	427	200	1897

7. SUMMARY / CONCLUSIONS

A PGA Tour event is planned for The Ocean Course on Kiawah Island, South Carolina, in October 2021. An encroachment permit for a temporary driveway connection on Seabrook Island Road to accommodate traffic entering and exiting the event is required.

Parking for patrons, media, and officials is proposed off Seabrook Island Road and Kiawah Island Parkway, and bus shuttles will run between the golf course and Kiawah Island Road. Traffic conditions at the intersection of Seabrook Island Road and Andell Bluff Boulevard/ the PGA access driveway were studied in support of the encroachment permit application.

At the study intersection, overall LOS D or better is expected as a weighted average of approach delay during the PGA event. During the peak traffic times of Friday am and Saturday pm, LOS E, with delay ranging from 55 seconds to 73 seconds per vehicle is anticipated at the westbound approach to the intersection of Seabrook Island Road and Andell Bluff Boulevard/ the PGA driveway. All other movements are expected to experience LOS D or better during these peak times. Similarly, LOS D or better is expected during the midweek, before the event generates higher traffic volumes as it nears the weekend rounds.

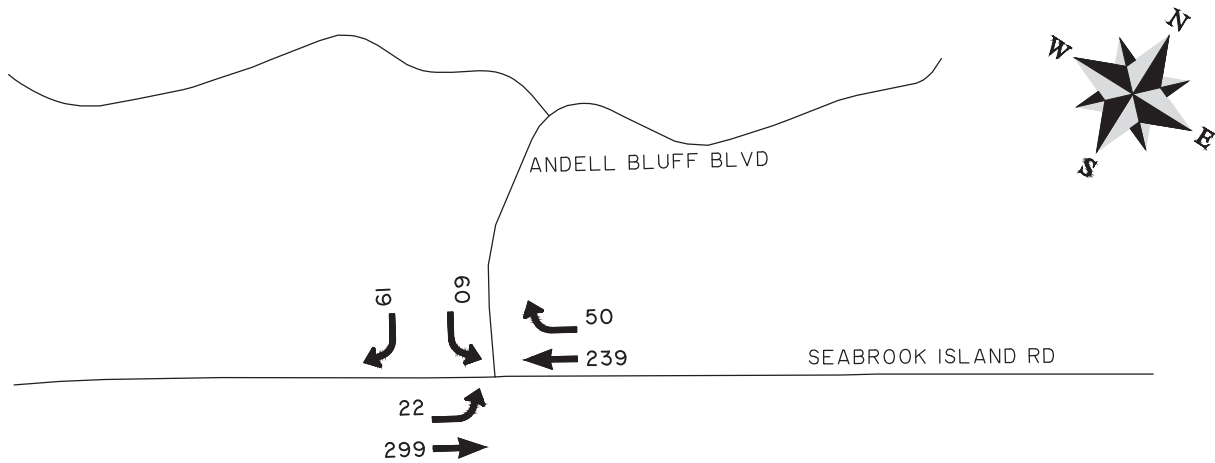
During the peak exiting time periods, the traffic control officer(s) can use the PGA parking area driveway to store vehicles, while keeping the public road queues minimized.

In addition to motor vehicles, there is a paved multi-purpose path that runs along the south side of Seabrook Island Road. Traffic control will need to be provided to monitor the multi-purpose path so these users can safely cross the proposed PGA driveway. The path users will be able to cross when eastbound Seabrook Island Road is moving.

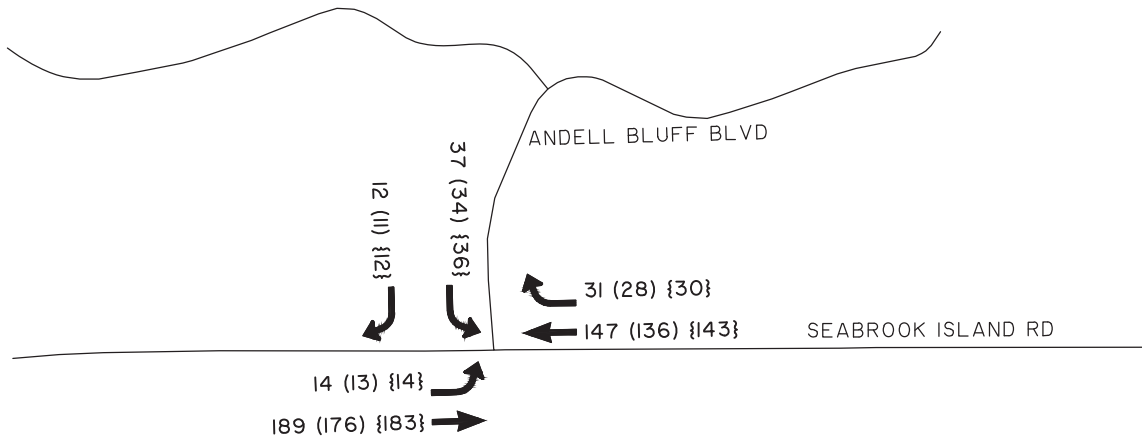
In summary, event traffic can reasonably be accommodated with the proposed access plan. Traffic control officers, variable message signs, and uninterrupted inbound parking lot flows are all expected to be utilized during the PGA event to minimize traffic impacts.

7. RECOMMENDATIONS:

1. Provide multiple parking lot attendants to open additional inbound parking lanes so vehicles waiting to park don't back up into the street.
2. Monitor the roundabout and communicate with traffic control persons at Seabrook Island Road and Andell Bluff Blvd/ PGA Driveway to facilitate moving inbound left turns into the parking area and/or assigning more traffic to the Kiawah Island driveway (This right turn movement should be free-flowing at almost all times) to prevent backup of traffic to roundabout.
3. Provide at least two traffic control persons at Seabrook Island Road and Andell Bluff Blvd/ PGA Driveway. Monitor the multi-purpose path so these users can safely cross the PGA Driveway.
4. During peak exit times, provide traffic control persons at the roundabout to alternate flow from the two exiting driveways.
5. Anticipate heavy inbound traffic needing two entrances. Place at least two (2) variable Message signs on Betsey Kerrigan Parkway, Southbound to direct drivers to two lanes when inbound traffic is heavy.
Anticipated times of heavy inbound traffic include:
Thursday through Sunday 8 am to noon
Saturday noon to 3:00 pm
Monday 8 am
6. During peak times, expect to take up to two minutes to "cycle" traffic among the three traffic splits at Seabrook Island Road, Andell Bluff Blvd, and PGA Driveway. Traffic Splits are:
Westbound Seabrook Island road and northbound right turns
Eastbound Seabrook Island Road
Northbound and southbound Andell Bluff Blvd/PGA Driveway



Friday 1:00 - 2:00 PM Traffic Volume →
2021 BASE TRAFFIC VOLUMES



Saturday Design Hour Volume →
11:00 am (3:00 pm) {6:00 pm}
2021 BASE TRAFFIC VOLUMES

PGA PATRON & BUS ACCESS STUDY

FIGURE 2
2021 BASE TRAFFIC VOLUMES

PGA of AMERICA

LOCATION: SEABROOK ISLAND, SC

DATE: AUGUST 2020

JOB NUMBER: J-28631

DRAWN BY: MB

REVIEWED BY: DPE

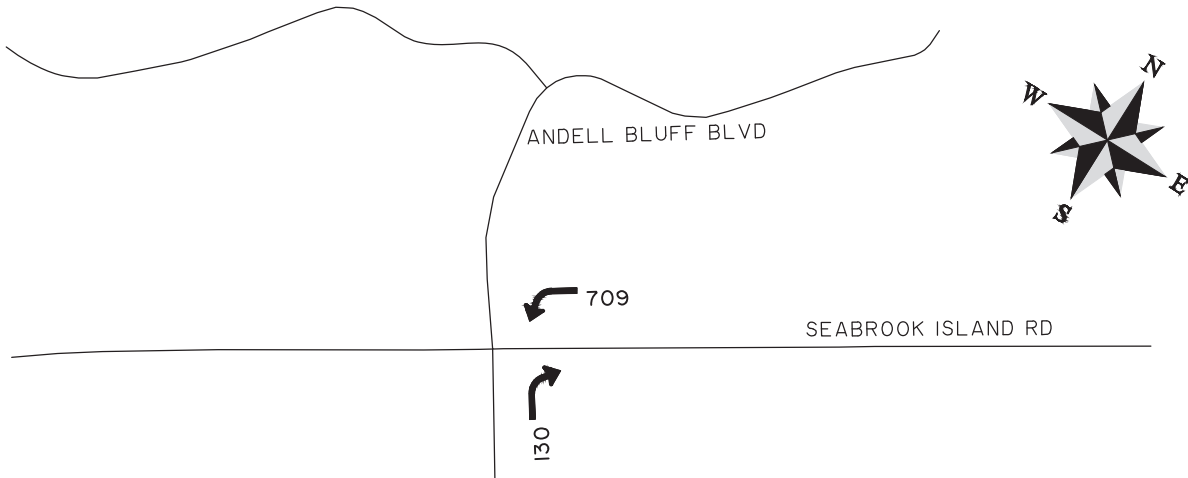
SHEET: FIGURE 2

SCALE: 1" = 300'

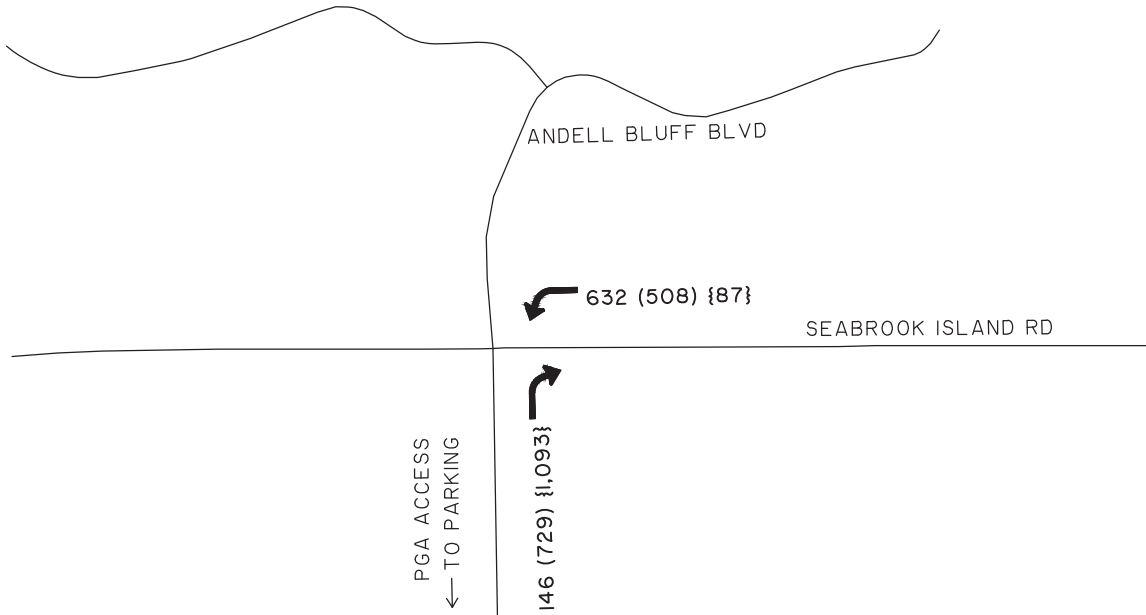


682 Johnnie Dodds Blvd. • Suite 100
Mt. Pleasant, SC 29464 • 843.849.0200

www.thomasandhutton.com



Friday 1:00 - 2:00 PM Traffic Volume →
EVENT-GENERATED TRAFFIC VOLUMES



Saturday Design Hour Volume →
11:00 am (3:00 pm) {6:00 pm}
EVENT-GENERATED TRAFFIC VOLUMES

PGA PATRON & BUS ACCESS STUDY

EVENT-GENERATED TRAFFIC VOLUMES

CLIENT:

PGA of AMERICA

LOCATION: SEABROOK ISLAND, SC

DATE: AUGUST 2020

JOB NUMBER: J-28631

DRAWN BY: MB

REVIEWED BY: DPE

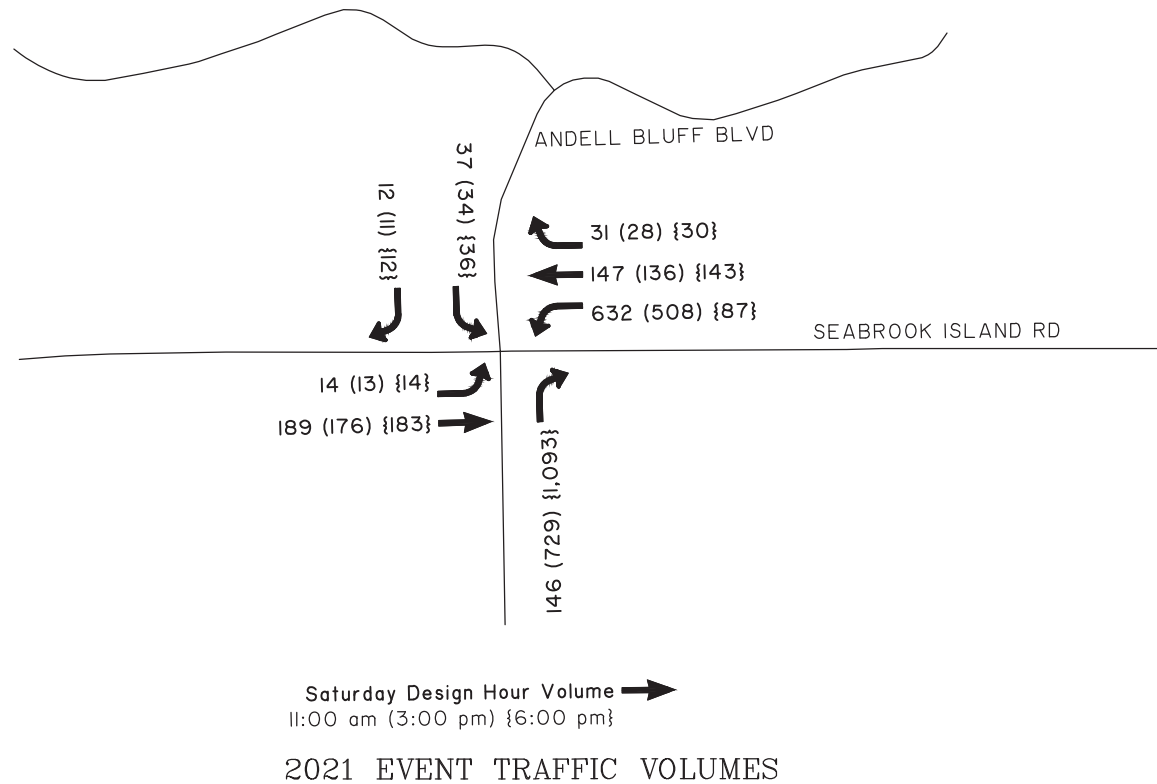
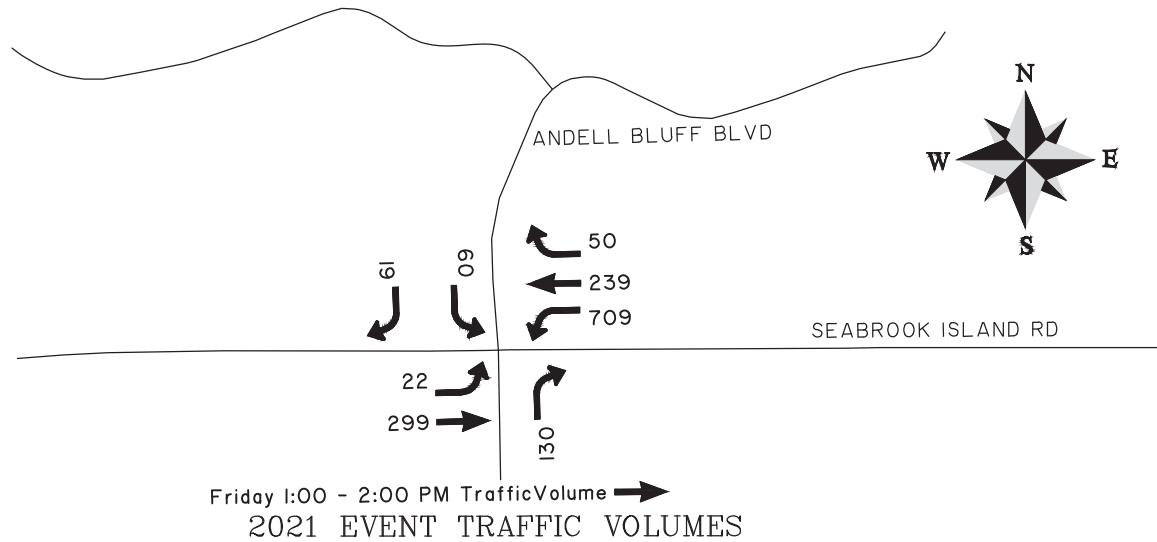
SHEET: FIGURE 3

SCALE: 1" = 300'



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PGA PATRON & BUS ACCESS STUDY

2021 EVENT TRAFFIC VOLUMES

CLIENT:

PGA of AMERICA

LOCATION: SEABROOK ISLAND, SC

DATE: AUGUST 2020

JOB NUMBER: J-28631

DRAWN BY: MB

REVIEWED BY: #####

SHEET: FIGURE 4

SCALE: 1" = 300'



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TRAFFIC IMPACT ANALYSIS

PGA – PATRON & BUS PARKING
AREA TRAFFIC STUDY

APPENDIX A

EXISTING TRAFFIC COUNTS

J – 28631.0000

August 2020

S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

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

File Name : Seabrook Island Rd @ Andell Bluff Blvd

Site Code :

Start Date : 5/29/2018

Page No : 1

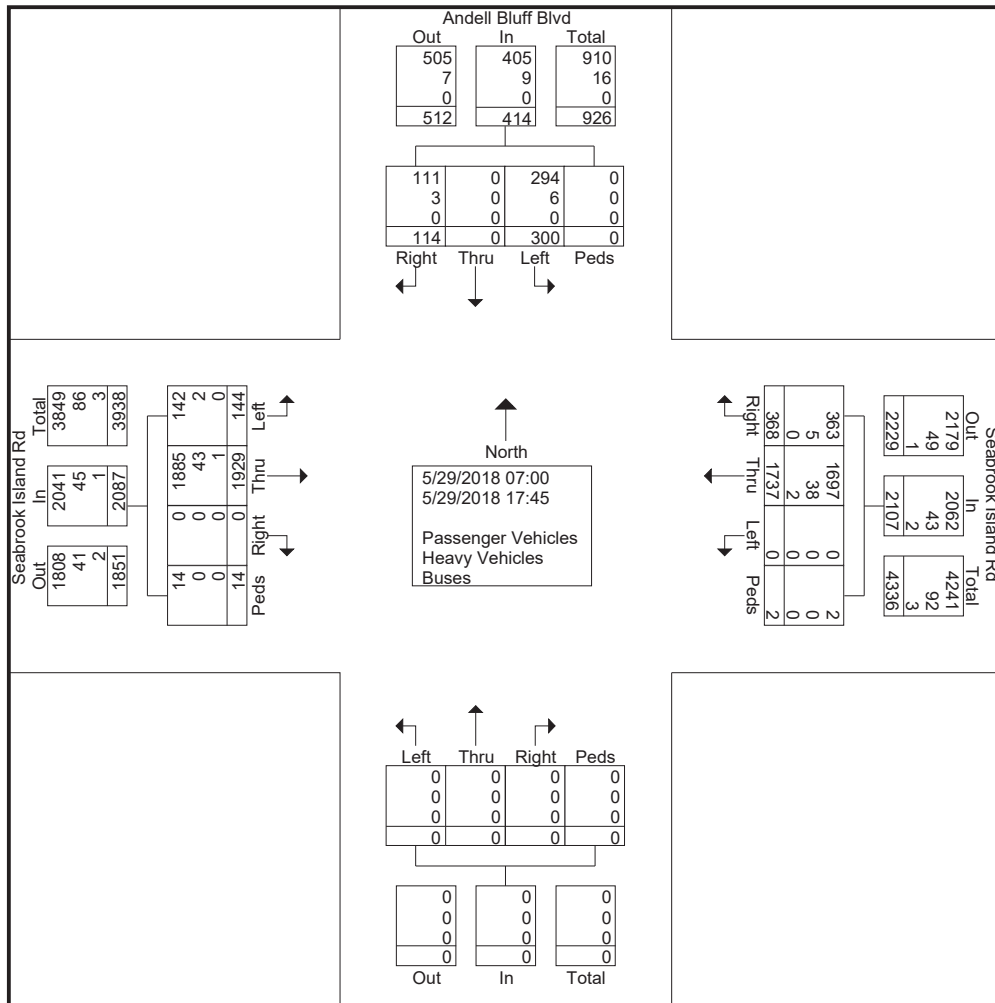
Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Andell Bluff Blvd Southbound				Seabrook Island Rd Westbound				Northbound				Seabrook Island Rd Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	4	0	1	0	0	23	4	0	0	0	0	0	1	36	0	1	70
07:15	3	0	0	0	0	35	2	0	0	0	0	0	1	23	0	0	64
07:30	0	0	4	0	0	38	13	0	0	0	0	0	1	41	0	1	98
07:45	4	0	6	0	0	41	10	0	0	0	0	0	3	39	0	1	104
Total	11	0	11	0	0	137	29	0	0	0	0	0	6	139	0	3	336
08:00	4	0	0	0	0	47	10	0	0	0	0	0	4	45	0	1	111
08:15	5	0	2	0	0	62	8	0	0	0	0	0	2	53	0	1	133
08:30	6	0	3	0	0	55	8	0	0	0	0	0	5	57	0	0	134
08:45	8	0	4	0	0	63	15	0	0	0	0	0	4	62	0	2	158
Total	23	0	9	0	0	227	41	0	0	0	0	0	15	217	0	4	536
11:00	9	0	3	0	0	61	14	0	0	0	0	0	4	69	0	0	160
11:15	19	0	6	0	0	40	12	0	0	0	0	0	7	69	0	1	154
11:30	11	0	3	0	0	57	16	0	0	0	0	0	4	61	0	0	152
11:45	16	0	3	0	0	63	14	0	0	0	0	0	4	78	0	0	178
Total	55	0	15	0	0	221	56	0	0	0	0	0	19	277	0	1	644
12:00	10	0	4	0	0	52	16	0	0	0	0	0	12	83	0	0	177
12:15	8	0	4	0	0	50	14	0	0	0	0	0	6	72	0	0	154
12:30	13	0	3	0	0	73	19	0	0	0	0	0	2	66	0	0	176
12:45	5	0	3	0	0	72	8	0	0	0	0	0	2	70	0	0	160
Total	36	0	14	0	0	247	57	0	0	0	0	0	22	291	0	0	667
14:00	6	0	5	0	0	57	11	0	0	0	0	0	2	55	0	0	136
14:15	14	0	3	0	0	58	15	0	0	0	0	0	2	58	0	1	151
14:30	14	0	2	0	0	51	10	1	0	0	0	0	7	81	0	0	166
14:45	18	0	9	0	0	60	12	0	0	0	0	0	5	59	0	3	166
Total	52	0	19	0	0	226	48	1	0	0	0	0	16	253	0	4	619
15:00	9	0	4	0	0	48	8	1	0	0	0	0	7	81	0	0	158
15:15	5	0	5	0	0	56	6	0	0	0	0	0	7	64	0	0	143
15:30	16	0	3	0	0	55	10	0	0	0	0	0	4	60	0	0	148
15:45	17	0	4	0	0	51	10	0	0	0	0	0	6	71	0	0	159
Total	47	0	16	0	0	210	34	1	0	0	0	0	24	276	0	0	608
16:00	12	0	3	0	0	56	14	0	0	0	0	0	3	64	0	0	152
16:15	7	0	5	0	0	75	6	0	0	0	0	0	3	55	0	0	151
16:30	10	0	3	0	0	51	10	0	0	0	0	0	0	66	0	1	141
16:45	9	0	3	0	0	47	9	0	0	0	0	0	5	54	0	0	127
Total	38	0	14	0	0	229	39	0	0	0	0	0	11	239	0	1	571
17:00	6	0	2	0	0	73	10	0	0	0	0	0	4	79	0	0	174
17:15	7	0	6	0	0	49	13	0	0	0	0	0	11	64	0	0	150
17:30	9	0	1	0	0	55	18	0	0	0	0	0	9	51	0	1	144
17:45	16	0	7	0	0	63	23	0	0	0	0	0	7	43	0	0	159
Total	38	0	16	0	0	240	64	0	0	0	0	0	31	237	0	1	627
Grand Total	300	0	114	0	0	1737	368	2	0	0	0	0	144	1929	0	14	4608
Approch %	72.5	0	27.5	0	0	82.4	17.5	0.1	0	0	0	0	6.9	92.4	0	0.7	
Total %	6.5	0	2.5	0	0	37.7	8	0	0	0	0	0	3.1	41.9	0	0.3	
Passenger Vehicles	294	0	111	0	0	1697	363	2	0	0	0	0	142	1885	0	14	4508
% Passenger Vehicles	98	0	97.4	0	0	97.7	98.6	100	0	0	0	0	98.6	97.7	0	100	97.8
Heavy Vehicles	6	0	3	0	0	38	5	0	0	0	0	0	2	43	0	0	97
% Heavy Vehicles	2	0	2.6	0	0	2.2	1.4	0	0	0	0	0	1.4	2.2	0	0	2.1
Buses	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
% Buses	0	0	0	0	0	0.1	0	2.9	0	0	0	0	0	0.1	0	0	0.1

S H O R T C O U N T S , L L C

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SHORT COUNTS, LLC

735 Maryland St
Columbia, SC 29201

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

File Name : Seabrook Island Rd @ Andell Bluff Blvd

Site Code :

Start Date : 5/29/2018

Page No : 3

Start Time	Andell Bluff Blvd Southbound					Seabrook Island Rd Westbound					Northbound					Seabrook Island Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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	4	0	0	0	4	0	47	10	0	57	0	0	0	0	0	4	45	0	1	50	111
08:15	5	0	2	0	7	0	62	8	0	70	0	0	0	0	0	2	53	0	1	56	133
08:30	6	0	3	0	9	0	55	8	0	63	0	0	0	0	0	5	57	0	0	62	134
08:45	8	0	4	0	12	0	63	15	0	78	0	0	0	0	0	4	62	0	2	68	158
Total Volume	23	0	9	0	32	0	227	41	0	268	0	0	0	0	0	15	217	0	4	236	536
% App. Total	71.9	0	28.1	0		0	84.7	15.3	0		0	0	0	0		6.4	91.9	0	1.7		
PHF	.719	.000	.563	.000	.667	.000	.901	.683	.000	.859	.000	.000	.000	.000	.000	.750	.875	.000	.500	.868	.848
Passenger Vehicles	23	0	8	0	31	0	219	41	0	260	0	0	0	0	0	14	216	0	4	234	525
% Passenger Vehicles																					
Heavy Vehicles	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	1	1	0	0	2	11
% Heavy Vehicles	0	0	11.1	0	3.1	0	3.5	0	0	3.0	0	0	0	0	0	6.7	0.5	0	0	0.8	2.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

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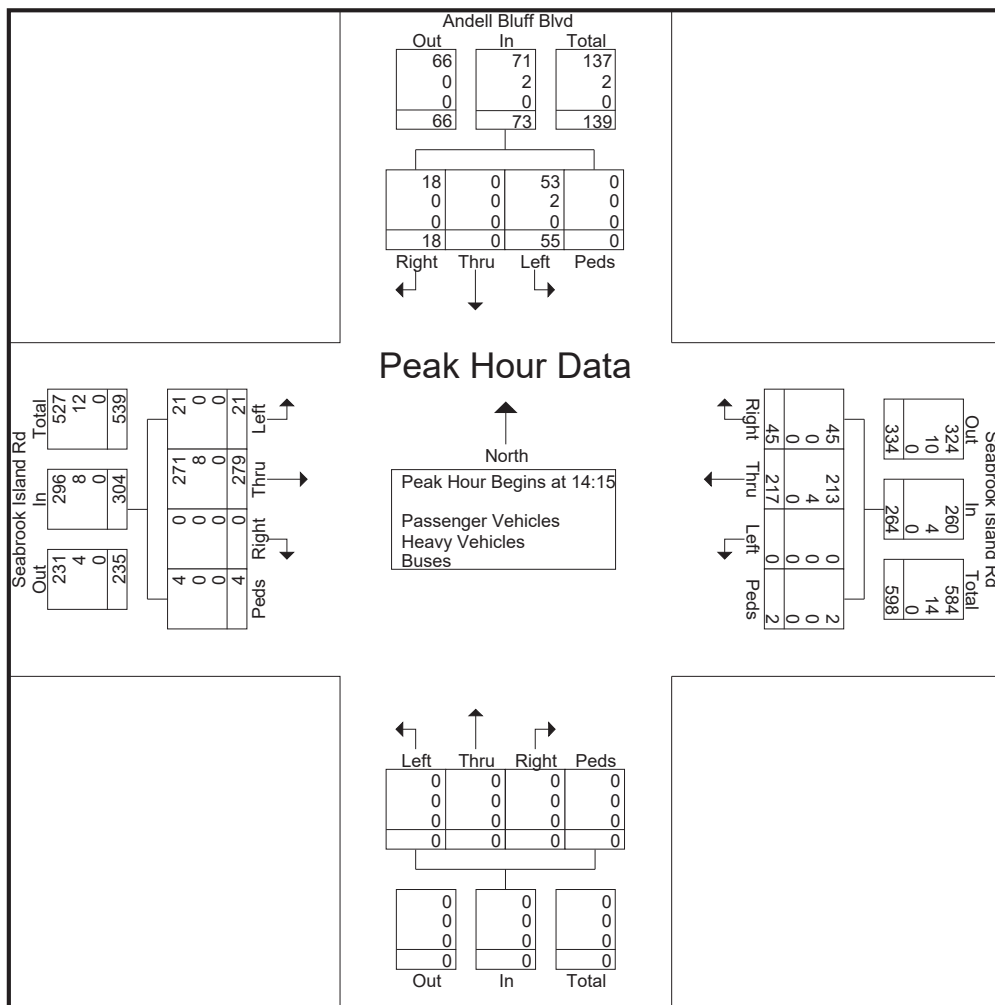
File Name : Seabrook Island Rd @ Andell Bluff Blvd

Site Code :

Start Date : 5/29/2018

Page No : 5

Start Time	Andell Bluff Blvd Southbound				Seabrook Island Rd Westbound					Northbound					Seabrook Island Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds		App. Total
Peak Hour Analysis From 14:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 14:15																					
14:15	14	0	3	0	17	0	58	15	0	73	0	0	0	0	0	2	58	0	1	61	151
14:30	14	0	2	0	16	0	51	10	1	62	0	0	0	0	0	7	81	0	0	88	166
14:45	18	0	9	0	27	0	60	12	0	72	0	0	0	0	0	5	59	0	3	67	166
15:00	9	0	4	0	13	0	48	8	1	57	0	0	0	0	0	7	81	0	0	88	158
Total Volume	55	0	18	0	73	0	217	45	2	264	0	0	0	0	0	21	279	0	4	304	641
% App. Total	75.3	0	24.7	0		0	82.2	17	0.8		0	0	0	0	0	6.9	91.8	0	1.3		
PHF	.764	.000	.500	.000	.676	.000	.904	.750	.500	.904	.000	.000	.000	.000	.000	.750	.861	.000	.333	.864	.965
Passenger Vehicles	53	0	18	0	71	0	213	45	2	260	0	0	0	0	0	21	271	0	4	296	627
% Passenger Vehicles																					
Heavy Vehicles	2	0	0	0	2	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	14
% Heavy Vehicles	3.6	0	0	0	2.7	0	1.8	0	0	1.5	0	0	0	0	0	0	2.9	0	0	2.6	2.2
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





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TRAFFIC IMPACT ANALYSIS

PGA – PATRON & BUS PARKING
AREA TRAFFIC STUDY

APPENDIX B

CONVERSION OF THURSDAY TO FRIDAY AND
SATURDAY TRAFFIC VOLUMES

J – 28631.0000

August 2020

PGA PATRON & BUS ACCESS STUDY

COMPARISON OF THURSDAY & SATURDAY COUNT DATA SCDOT CONTINUOUS COUNT STATION 0144

Thursday, October 17, 2019
Site 0144 - Charleston - James Island
SC 171 Between US 17 and Wappoo Creek Bridge

Saturday October 19, 2019
Site 0144 - Charleston - James Island
SC 171 Between US 17 and Wappoo Creek Bridge

Friday October 18, 2019
Site 0144 - Charleston - James Island
SC 171 Between US 17 and Wappoo Creek Bridge

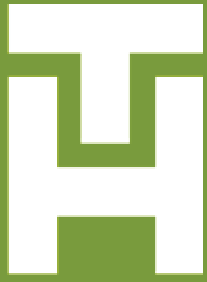
Northbound Southbound				Northbound Southbound				Northbound Southbound					
Time	Current	Current	NB+SB	Time	Current	Current	NB+SB	% of Thur pm peak	Time	Current	Current		
1:00	94	137		1:00	189	270			1:00	148	214		
2:00	65	82		2:00	148	189			2:00	80	122		
3:00	52	60		3:00	95	144			3:00	61	71		
4:00	47	49		4:00	58	81			4:00	54	46		
5:00	168	82		5:00	83	60			5:00	157	65		
6:00	489	270		6:00	194	116			6:00	436	275		
7:00	1523	824		7:00	348	291			7:00	1412	837		
8:00	2611	1401		8:00	562	492			8:00	2488	1336		
9:00	2159	1452		9:00	1012	792			9:00	2033	1523	% of Thurs pm peak	
10:00	1596	1382		10:00	1264	963			10:00	1580	1312	NB	SB
11:00	1556	1421		11:00	1472	1175	2647	61.7%	11:00	1568	1482	1.01	1.04
12:00	1651	1619	3270	12:00	1453	1477			12:00	1680	1599		% of Thur
13:00	1649	1687	3336	13:00	1373	1447			13:00	1812	1724	NB+SB	pm peak
14:00	1604	1697	3301	14:00	1210	1367			14:00	1498	1772	3270	0.99
15:00	1663	1785	3448	15:00	1162	1380	2542	59.3%	15:00	1708	1924	3632	1.05
16:00	1758	2226	3984	16:00	1180	1408			16:00	1823	2277	4100	1.03
17:00	1808	2479	4287	17:00	1158	1395			17:00	1751	2382	4133	0.96
18:00	1716	2465	4181	18:00	1066	1230	2296	53.6%	18:00	1671	2391	4062	0.97
19:00	1531	1871		19:00	968	1132			19:00	1486	1744	3230	
20:00	971	1405		20:00	707	945			20:00	1083	1311	2394	
21:00	629	978		21:00	607	701			21:00	799	970		
22:00	533	743		22:00	493	647			22:00	588	783		
23:00	352	532		23:00	386	506			23:00	428	701		
24:00:00	232	428		24:00:00	295	344			24:00:00	344	451		

PGA PATRON & BUS ACCESS STUDY

COMPARISON OF THURSDAY & SATURDAY COUNT DATA
SCDOT CONTINUOUS COUNT STATION 0143

Thursday, October 17, 2019			
Site 0143 - Charleston - Sullivans Island			
SC 703 - S51 to S199			
	Northbound	Southbound	
Time	Current	Current	NB+SB
1:00	19	13	32
2:00	19	9	28
3:00	7	9	16
4:00	0	0	0
5:00	12	3	15
6:00	34	31	65
7:00	124	183	307
8:00	504	402	906
9:00	503	553	1056
10:00	437	440	877
11:00	466	433	899
12:00	516	466	982
13:00	563	546	1109
14:00	525	572	1097
15:00	619	544	1163
16:00	593	638	1231
17:00	590	628	1218
18:00	554	599	1153
19:00	493	555	1048
20:00	383	299	682
21:00	205	212	417
22:00	188	158	346
23:00	106	98	204
24:00:00	53	68	121

Saturday October 19, 2019				
Site 0143 - Charleston - Sullivans Island				
SC 703 - S51 to S199				
	Northbound	Southbound		% of Thur
Time	Current	Current	NB+SB	pm peak
1:00	71	36	107	
2:00	24	33	57	
3:00	22	16	38	
4:00	11	9	20	
5:00	8	5	13	
6:00	15	16	31	
7:00	47	56	103	
8:00	122	147	269	
9:00	245	248	493	
10:00	373	310	683	
11:00	410	377	787	63.9%
12:00	399	441	840	
13:00	360	377	737	
14:00	347	370	717	
15:00	335	306	641	52.1%
16:00	374	381	755	
17:00	309	438	747	
18:00	301	464	765	62.1%
19:00	311	292	603	
20:00	265	234	499	
21:00	227	133	360	
22:00	206	151	357	
23:00	160	111	271	
24:00:00	121	68	189	



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TRAFFIC IMPACT ANALYSIS

PGA – PATRON & BUS PARKING
AREA TRAFFIC STUDY

APPENDIX C

TRIP GENERATION CALCULATIONS

J – 28631.0000

August 2020



2012 PGA Championship The Ocean Course: Shuttle Ridership (2 Hr Volume)

		11AM	3PM	6PM	Total
General Public/Volunteers Freshfields	Mon.	5075	3747	205	9027
	Tues	6711	3199	753	10663
	Wed.	6428	5061	104	11593
	Thurs	12425	3465	1567	17457
	Fri.	12782	6022	995	19799
	Sat.	11275	9315	305	20895
	Sun.	11974	7763	299	20036
	Corporate & PC's Night Heron Park	Mon.	397	122	25
Tues		465	221	44	730
Wed.		487	205	69	761
Thur		662	306	37	1005
Fri.		739	514	10	1263
Sat.		740	477	45	1262
Sun.		808	499	42	1349
Media Courtyard Waterfront Springhill Riverview Residence Inn		Mon.	34	18	8
	Tues	96	52	15	163
	Wed.	187	52	24	263
	Thur	216	152	4	372
	Fri.	214	12	7	233
	Sat.	161	22	2	185
	Sun.	148	318	1	467
	Officials Holiday Inn Express Holiday Inn Hilton Garden Inn	Mon.	28	6	7
Tues		87	7	3	97
Wed.		61	41	5	107
Thur		196	66	6	268
Fri.		145	8	18	171
Sat.		105	21	5	131
Sun.		85	26	0	111
VIP's Sanctuary		Mon.	91	39	12
	Tues	133	130	13	276
	Wed.	179	109	10	298
	Thur	211	108	35	354
	Fri.	295	232	47	574
	Sat.	344	308	34	686
	Sun.	262	339	62	663
	On Island Red	Mon.	455	341	560
Tues		588	583	429	1600
Wed.		725	497	229	1451
Thur		1319	672	249	2240
Fri.		1329	948	128	2405
Sat.		1107	1373	118	2598
Sun.		1046	1419	100	2565
On Island Blue		Mon.	233	240	210
	Tues	507	362	158	1027
	Wed.	414	297	248	959
	Thur	1078	430	148	1656
	Fri.	873	671	151	1695
	Sat.	677	1032	185	1894
	Sun.	653	1049	33	1735
	On Island Yellow	Mon.	145	310	371
Tues		304	463	113	880
Wed.		314	433	85	832
Thur		611	573	107	1291
Fri.		510	620	88	1218
Sat.		509	769	122	1400
Sun.		470	587	57	1114
TOTAL SHUTTLE RIDERSHIP TO EVENT		Mon.	5625	3932	257
	Tues	7492	3609	828	11929
	Wed.	7342	5468	212	13022
	Thur	13710	4097	1649	19456
	Fri.	14175	6788	1077	22040
	Sat.	12625	10143	391	23159
	Sun.	13277	8945	404	22626

2012 PGA Championship The Ocean Course

Estimated # of Vehicles (based on riders per vehicle)

	<u>Total Tickets</u>	<u>Actual Attendance</u>	<u>Redemption</u>	<u>Actual Ridership</u>	<u>1.5</u>	<u>2</u>	<u>2.5</u>	<u>3</u>
Mon.	36208	10581	29%	12679	8453	6340	5072	4226
Tues	37992	11886	31%	15436	10291	7718	6174	5145
Wed.	31293	13264	42%	16264	10843	8132	6506	5421
Thurs	36127	23830	66%	24643	16429	12322	9857	8214
Fri.	39130	28640	73%	27358	18239	13679	10943	9119
Sat.	37430	18273	49%	29051	19367	14526	11620	9684
Sun.	39383	28884	73%	28040	18693	14020	11216	9347

Estimated # of vehicles by Ridership @ Previous 6-year Average

Estimated # of Vehicles (based on riders per vehicle)

	<u>Total Actual Tickets</u>	<u>Redemption</u>	<u>Total Actual Riders</u>	<u>1.5</u>	<u>2</u>	<u>2.5</u>	<u>3</u>
Mon.	36208	30%	12679	8453	6340	5072	4226
Tues	37992	44%	15436	10291	7718	6174	5145
Wed.	31293	57%	16264	10843	8132	6506	5421
Thurs	36127	72%	24643	16429	12322	9857	8214
Fri.	39130	76%	27358	18239	13679	10943	9119
Sat.	37430	82%	29051	19367	14526	11620	9684
Sun.	39383	76%	28040	18693	14020	11216	9347



2021 PGA Championship The Ocean Course

Projected attendance @ Previous 6-year Average Redemption

	<u>Total Forecasted Tickets</u>	<u>Redemption</u>	<u>Projected Attendance</u>	Projected # of Vehicles (based on riders per vehicle)			
				<u>1.5</u>	<u>2</u>	<u>2.5</u>	<u>3</u>
Mon.	31760	30%	9528	6352	4764	3811	3176
Tues	32960	44%	14502	9668	7251	5801	4834
Wed.	25610	57%	14598	9732	7299	5839	4866
Thurs	37610	72%	27079	18053	13540	10832	9026
Fri.	39110	76%	29724	19816	14862	11889	9908
Sat.	39610	82%	32480	21653	16240	12992	10827
Sun.	39610	76%	30104	20069	15052	12041	10035

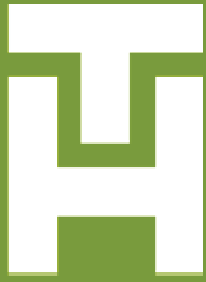
Projected attendance @ based on 2017 Redemption

	<u>Total Forecasted Tickets</u>	<u>Redemption</u>	<u>Projected Attendance</u>	Projected # of Vehicles (based on riders per vehicle)			
				<u>1.5</u>	<u>2</u>	<u>2.5</u>	<u>3</u>
Mon.	31760	30%	9528	6352	4764	3811	3176
Tues	32960	38%	12525	8350	6262	5010	4175
Wed.	25610	57%	14598	9732	7299	5839	4866
Thurs	37610	75%	28208	18805	14104	11283	9403
Fri.	39110	83%	32461	21641	16231	12985	10820
Sat.	39610	92%	36441	24294	18221	14576	12147
Sun.	39610	81%	32084	21389	16042	12834	10695

PGA EVENT - CALCULATION OF HOURLY TRAFFIC VOLUMES

DESIGN HOUR CONDITIONS:

ENTERING TRAFFIC:	EXITING TRAFFIC:
<p>Friday 11:00 am 14,175 Shuttle Riders over two hours - $\text{Hourly Volume} = \frac{14,175 \times 0.5}{1.0 \text{ phf}}$ $\frac{2.5 \text{ passengers/vehicle}}$ = 2,835 vehicles Assign 25% to Seabrook Island Rd = 709</p>	<p>Friday 11:00 am 1% of Daily Total = (0.01 x 12,985) = 130 vehicles Assign 100% to Seabrook Island Rd = 130</p>
<p>Saturday 11:00 am 12,625 Shuttle Riders over two hours - $\text{Hourly Volume} = \frac{12,625 \times 0.5}{1.0 \text{ phf}}$ $\frac{2.5 \text{ passengers/vehicle}}$ = 2,525 vehicles Assign 25% to Seabrook Island Rd = 632</p>	<p>Saturday 11:00 am 1% of Daily Total = (0.01 x 14,576) = 146 vehicles Assign 100% to Seabrook Island Rd = 146</p>
<p>Saturday 3:00 pm 10,143 Shuttle Riders over two hours - $\text{Hourly Volume} = \frac{10,143 \times 0.5}{1.0 \text{ phf}}$ $\frac{2.5 \text{ passengers/vehicle}}$ = 2,029 vehicles Assign 25% to Seabrook Island Rd = 508</p>	<p>Saturday 3:00 pm 10% of Daily Total = (0.10 x 14,576) = 1458 vehicles Assign 50% to Seabrook Island Rd = 729</p>
<p>Saturday 6:00 pm 391 Shuttle Riders over two hours - $\text{Hourly Volume} = \frac{391 \times 0.5}{0.9 \text{ phf}}$ $\frac{2.5 \text{ passengers/vehicle}}{= 87}$ = 87 Assign 100% to Seabrook Island Rd = 87</p>	<p>Saturday 6:00 pm 15% of Daily Total = (0.15 x 14,576) = 2186 vehicles Assign 50% to Seabrook Island Rd = 1093</p>



THOMAS
&
HUTTON

TRAFFIC IMPACT ANALYSIS

PGA – PATRON & BUS PARKING
AREA TRAFFIC STUDY

APPENDIX D

SYNCHRO 10th EDITION CAPACITY ANALYSES
2021 EVENT TRAFFIC VOLUMES

J – 28631.0000

August 2020

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Fri am
08/25/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕				↗		↕	
Traffic Volume (vph)	22	299	0	709	239	50	0	0	130	60	0	19
Future Volume (vph)	22	299	0	709	239	50	0	0	130	60	0	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.993				0.865		0.967	
Fl _t Protected		0.997			0.967						0.964	
Satd. Flow (prot)	0	1892	0	0	1823	0	0	0	1644	0	1736	0
Fl _t Permitted		0.997			0.967						0.964	
Satd. Flow (perm)	0	1892	0	0	1823	0	0	0	1644	0	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5				837			73
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		260			1815			610			170	
Travel Time (s)		5.1			35.4			16.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	24	325	0	709	260	54	0	0	141	65	0	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	349	0	0	1023	0	0	0	141	0	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2				1	1	2	
Detector Template	Left	Thru		Left	Thru				Right	Left	Thru	
Leading Detector (ft)	20	100		20	100				20	20	100	
Trailing Detector (ft)	0	0		0	0				0	0	0	
Detector 1 Position(ft)	0	0		0	0				0	0	0	
Detector 1 Size(ft)	20	6		20	6				20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Split	NA		Split	NA				Perm	Perm	NA	
Protected Phases	2	2		6	6						4	
Permitted Phases									8	4		
Detector Phase	2	2		6	6				8	4	4	
Switch Phase												

Lanes, Volumes, Timings
 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Fri am
 08/25/2020

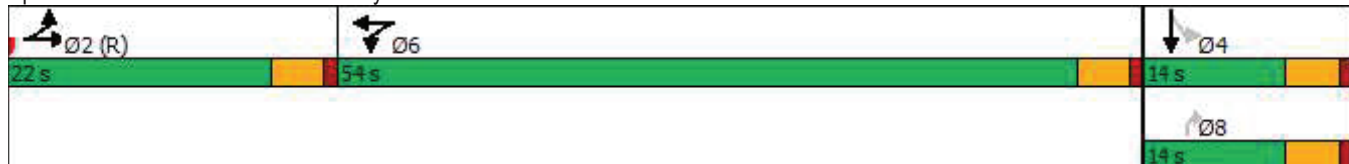


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0				1.0	5.0	5.0	
Minimum Split (s)	15.0	15.0		22.5	22.5				14.0	14.0	14.0	
Total Split (s)	22.0	22.0		54.0	54.0				14.0	14.0	14.0	
Total Split (%)	24.4%	24.4%		60.0%	60.0%				15.6%	15.6%	15.6%	
Maximum Green (s)	17.5	17.5		49.5	49.5				9.5	9.5	9.5	
Yellow Time (s)	3.5	3.5		3.5	3.5				3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0				1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0				0.0		0.0	
Total Lost Time (s)		4.5			4.5				4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	
Recall Mode	C-Min	C-Min		Min	Min				None	None	None	
Act Effct Green (s)		20.1			49.5				6.9		6.9	
Actuated g/C Ratio		0.22			0.55				0.08		0.08	
v/c Ratio		0.83			1.02				0.16		0.43	
Control Delay		52.2			55.2				0.4		19.6	
Queue Delay		0.0			0.0				0.0		0.0	
Total Delay		52.2			55.2				0.4		19.6	
LOS		D			E				A		B	
Approach Delay		52.2			55.2			0.4			19.6	
Approach LOS		D			E			A			B	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.02
 Intersection Signal Delay: 47.8
 Intersection Capacity Utilization 87.6%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Summary of All Intervals

Run Number	1	2	Avg
Start Time	6:57	6:57	6:57
End Time	8:00	8:00	8:00
Total Time (min)	63	63	63
Time Recorded (min)	60	60	60
# of Intervals	2	2	2
# of Recorded Intervals	1	1	1
Vehs Entered	1474	1606	1542
Vehs Exited	1480	1567	1522
Starting Vehs	42	34	38
Ending Vehs	36	73	55
Travel Distance (mi)	619	657	638
Travel Time (hr)	52.1	80.5	66.3
Total Delay (hr)	31.6	58.7	45.2
Total Stops	2061	1887	1972
Fuel Used (gal)	26.7	34.5	30.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	Avg
Vehs Entered	1474	1606	1542
Vehs Exited	1480	1567	1522
Starting Vehs	42	34	38
Ending Vehs	36	73	55
Travel Distance (mi)	619	657	638
Travel Time (hr)	52.1	80.5	66.3
Total Delay (hr)	31.6	58.7	45.2
Total Stops	2061	1887	1972
Fuel Used (gal)	26.7	34.5	30.6

Intersection: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	R	LTR
Maximum Queue (ft)	247	1583	56	96
Average Queue (ft)	189	1133	6	50
95th Queue (ft)	284	1897	36	89
Link Distance (ft)	232	1785	582	142
Upstream Blk Time (%)	11	20		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Sat am
08/25/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕				↗		↕	
Traffic Volume (vph)	14	189	0	632	147	31	0	0	146	37	0	12
Future Volume (vph)	14	189	0	632	147	31	0	0	146	37	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr t					0.994				0.865		0.967	
Flt Protected		0.997			0.963						0.964	
Satd. Flow (prot)	0	1892	0	0	1817	0	0	0	1644	0	1736	0
Flt Permitted		0.997			0.963						0.964	
Satd. Flow (perm)	0	1892	0	0	1817	0	0	0	1644	0	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				876		94	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		260			1815			610			170	
Travel Time (s)		5.1			35.4			16.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	15	205	0	632	160	34	0	0	159	40	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	220	0	0	826	0	0	0	159	0	53	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2				1	1	2	
Detector Template	Left	Thru		Left	Thru				Right	Left	Thru	
Leading Detector (ft)	20	100		20	100				20	20	100	
Trailing Detector (ft)	0	0		0	0				0	0	0	
Detector 1 Position(ft)	0	0		0	0				0	0	0	
Detector 1 Size(ft)	20	6		20	6				20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Split	NA		Split	NA				Perm	Perm	NA	
Protected Phases	2	2		6	6						4	
Permitted Phases									8	4		
Detector Phase	2	2		6	6				8	4	4	
Switch Phase												

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Sat am
08/25/2020

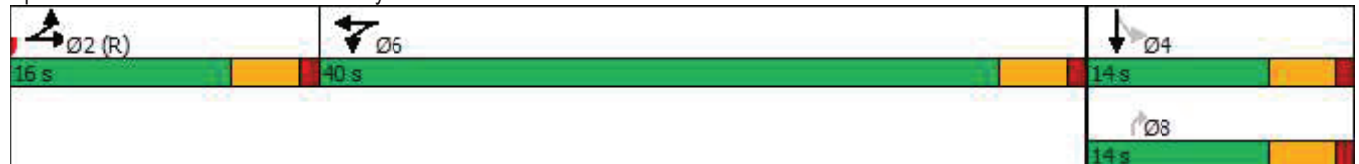


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0				1.0	5.0	5.0	
Minimum Split (s)	15.0	15.0		22.5	22.5				14.0	14.0	14.0	
Total Split (s)	16.0	16.0		40.0	40.0				14.0	14.0	14.0	
Total Split (%)	22.9%	22.9%		57.1%	57.1%				20.0%	20.0%	20.0%	
Maximum Green (s)	11.5	11.5		35.5	35.5				9.5	9.5	9.5	
Yellow Time (s)	3.5	3.5		3.5	3.5				3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0				1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0				0.0		0.0	
Total Lost Time (s)		4.5			4.5				4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	
Recall Mode	C-Min	C-Min		Min	Min				None	None	None	
Act Effct Green (s)		16.4			34.4				5.7		5.7	
Actuated g/C Ratio		0.23			0.49				0.08		0.08	
v/c Ratio		0.50			0.92				0.17		0.23	
Control Delay		28.6			34.3				0.4		5.1	
Queue Delay		0.0			0.0				0.0		0.0	
Total Delay		28.6			34.3				0.4		5.1	
LOS		C			C				A		A	
Approach Delay		28.6			34.3			0.4			5.1	
Approach LOS		C			C			A			A	

Intersection Summary

Area Type: Other
 Cycle Length: 70
 Actuated Cycle Length: 70
 Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 27.8
 Intersection Capacity Utilization 70.8%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Summary of All Intervals

Run Number	1	2	Avg
Start Time	6:57	6:57	6:57
End Time	8:00	8:00	8:00
Total Time (min)	63	63	63
Time Recorded (min)	60	60	60
# of Intervals	2	2	2
# of Recorded Intervals	1	1	1
Vehs Entered	1150	1333	1241
Vehs Exited	1154	1325	1239
Starting Vehs	24	22	22
Ending Vehs	20	30	24
Travel Distance (mi)	493	566	530
Travel Time (hr)	23.2	28.1	25.7
Total Delay (hr)	6.8	9.3	8.0
Total Stops	692	915	803
Fuel Used (gal)	17.2	19.9	18.5

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	Avg
Vehs Entered	1150	1333	1241
Vehs Exited	1154	1325	1239
Starting Vehs	24	22	22
Ending Vehs	20	30	24
Travel Distance (mi)	493	566	530
Travel Time (hr)	23.2	28.1	25.7
Total Delay (hr)	6.8	9.3	8.0
Total Stops	692	915	803
Fuel Used (gal)	17.2	19.9	18.5

Intersection: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	R	LTR
Maximum Queue (ft)	183	409	77	86
Average Queue (ft)	93	267	10	34
95th Queue (ft)	160	409	48	68
Link Distance (ft)	232	1785	582	142
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Sat 3 pm
08/25/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕				↗		↕	
Traffic Volume (vph)	13	176	0	508	136	28	0	0	729	34	0	11
Future Volume (vph)	13	176	0	508	136	28	0	0	729	34	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr t					0.994				0.865		0.967	
Fl t Protected		0.997			0.964						0.964	
Satd. Flow (prot)	0	1892	0	0	1819	0	0	0	1644	0	1736	0
Fl t Permitted		0.997			0.964						0.964	
Satd. Flow (perm)	0	1892	0	0	1819	0	0	0	1644	0	1736	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				842		101	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		260			1815			610			170	
Travel Time (s)		5.1			35.4			16.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	14	191	0	508	148	30	0	0	792	37	0	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	205	0	0	686	0	0	0	792	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2				1	1	2	
Detector Template	Left	Thru		Left	Thru				Right	Left	Thru	
Leading Detector (ft)	20	100		20	100				20	20	100	
Trailing Detector (ft)	0	0		0	0				0	0	0	
Detector 1 Position(ft)	0	0		0	0				0	0	0	
Detector 1 Size(ft)	20	6		20	6				20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Split	NA		Split	NA				Perm	Perm	NA	
Protected Phases	2	2		6	6						4	
Permitted Phases									8	4		
Detector Phase	2	2		6	6				8	4	4	
Switch Phase												

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Sat 3 pm
08/25/2020

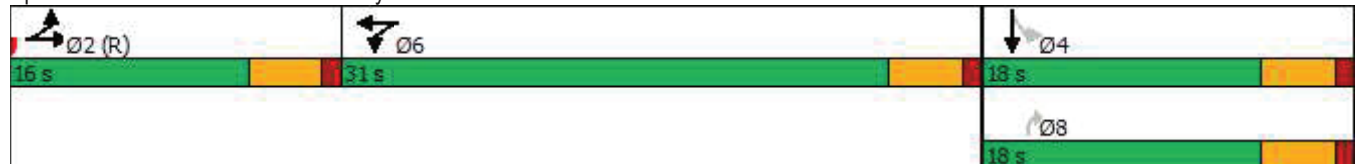


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0				1.0	5.0	5.0	
Minimum Split (s)	15.0	15.0		22.5	22.5				14.0	14.0	14.0	
Total Split (s)	16.0	16.0		31.0	31.0				18.0	18.0	18.0	
Total Split (%)	24.6%	24.6%		47.7%	47.7%				27.7%	27.7%	27.7%	
Maximum Green (s)	11.5	11.5		26.5	26.5				13.5	13.5	13.5	
Yellow Time (s)	3.5	3.5		3.5	3.5				3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0				1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0				0.0		0.0	
Total Lost Time (s)		4.5			4.5				4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	
Recall Mode	C-Min	C-Min		Min	Min				None	None	None	
Act Effct Green (s)		16.1			26.3				9.1		9.1	
Actuated g/C Ratio		0.25			0.40				0.14		0.14	
v/c Ratio		0.44			0.93				0.83		0.15	
Control Delay		26.0			40.7				10.6		2.1	
Queue Delay		0.0			0.0				0.0		0.0	
Total Delay		26.0			40.7				10.6		2.1	
LOS		C			D				B		A	
Approach Delay		26.0			40.7			10.6			2.1	
Approach LOS		C			D			B			A	

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle:	65
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.93
Intersection Signal Delay:	24.1
Intersection LOS:	C
Intersection Capacity Utilization:	70.3%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Summary of All Intervals

Run Number	1	2	Avg
Start Time	6:57	6:57	6:57
End Time	8:00	8:00	8:00
Total Time (min)	63	63	63
Time Recorded (min)	60	60	60
# of Intervals	2	2	2
# of Recorded Intervals	1	1	1
Vehs Entered	1566	1812	1688
Vehs Exited	1580	1814	1697
Starting Vehs	39	30	32
Ending Vehs	25	28	26
Travel Distance (mi)	684	785	734
Travel Time (hr)	33.2	42.5	37.8
Total Delay (hr)	9.2	14.8	12.0
Total Stops	1032	1394	1215
Fuel Used (gal)	24.4	29.0	26.7

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	Avg
Vehs Entered	1566	1812	1688
Vehs Exited	1580	1814	1697
Starting Vehs	39	30	32
Ending Vehs	25	28	26
Travel Distance (mi)	684	785	734
Travel Time (hr)	33.2	42.5	37.8
Total Delay (hr)	9.2	14.8	12.0
Total Stops	1032	1394	1215
Fuel Used (gal)	24.4	29.0	26.7

Intersection: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	R	LTR
Maximum Queue (ft)	152	427	456	86
Average Queue (ft)	73	230	210	36
95th Queue (ft)	124	366	436	72
Link Distance (ft)	232	1785	582	142
Upstream Blk Time (%)			1	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Lanes, Volumes, Timings

100% inbound - 50% outbound

2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕				↗		↕	
Traffic Volume (vph)	14	183	0	87	143	30	0	0	1093	36	0	12
Future Volume (vph)	14	183	0	87	143	30	0	0	1093	36	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.984				0.865		0.966	
Fl _t Protected		0.997			0.984						0.964	
Satd. Flow (prot)	0	1892	0	0	1835	0	0	0	1644	0	1735	0
Fl _t Permitted		0.997			0.984						0.964	
Satd. Flow (perm)	0	1892	0	0	1835	0	0	0	1644	0	1735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6				638		73	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		260			1815			610			170	
Travel Time (s)		5.1			35.4			16.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	15	199	0	87	155	33	0	0	1093	39	0	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	214	0	0	275	0	0	0	1093	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2				1	1	2	
Detector Template	Left	Thru		Left	Thru				Right	Left	Thru	
Leading Detector (ft)	20	100		20	100				20	20	100	
Trailing Detector (ft)	0	0		0	0				0	0	0	
Detector 1 Position(ft)	0	0		0	0				0	0	0	
Detector 1 Size(ft)	20	6		20	6				20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Split	NA		Split	NA				Perm	Perm	NA	
Protected Phases	2	2		6	6						4	
Permitted Phases									8	4		
Detector Phase	2	2		6	6				8	4	4	
Switch Phase												

Lanes, Volumes, Timings
 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

100% inbound - 50% outbound

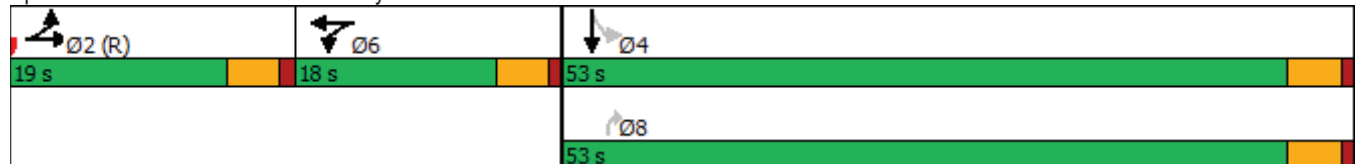


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0				1.0	5.0	5.0	
Minimum Split (s)	15.0	15.0		15.0	15.0				14.0	14.0	14.0	
Total Split (s)	19.0	19.0		18.0	18.0				53.0	53.0	53.0	
Total Split (%)	21.1%	21.1%		20.0%	20.0%				58.9%	58.9%	58.9%	
Maximum Green (s)	14.5	14.5		13.5	13.5				48.5	48.5	48.5	
Yellow Time (s)	3.5	3.5		3.5	3.5				3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0				1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0				0.0		0.0	
Total Lost Time (s)		4.5			4.5				4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	
Recall Mode	C-Min	C-Min		Min	Min				None	None	None	
Act Effct Green (s)		18.0			14.7				43.8		43.8	
Actuated g/C Ratio		0.20			0.16				0.49		0.49	
v/c Ratio		0.57			0.90				0.97		0.06	
Control Delay		41.4			71.0				30.3		1.6	
Queue Delay		0.0			0.0				0.0		0.0	
Total Delay		41.4			71.0				30.3		1.6	
LOS		D			E				C		A	
Approach Delay		41.4			71.0			30.3			1.6	
Approach LOS		D			E			C			A	

Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	0 (0%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle:	80
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.97
Intersection Signal Delay:	37.7
Intersection LOS:	D
Intersection Capacity Utilization:	93.5%
ICU Level of Service:	F
Analysis Period (min):	15

Splits and Phases: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Summary of All Intervals

Run Number	1	2	Avg
Start Time	6:57	6:57	6:57
End Time	8:00	8:00	8:00
Total Time (min)	63	63	63
Time Recorded (min)	60	60	60
# of Intervals	2	2	2
# of Recorded Intervals	1	1	1
Vehs Entered	1412	1447	1430
Vehs Exited	1403	1429	1415
Starting Vehs	39	31	35
Ending Vehs	48	49	48
Travel Distance (mi)	604	611	607
Travel Time (hr)	145.1	224.1	184.6
Total Delay (hr)	123.1	201.9	162.5
Total Stops	597	570	583
Fuel Used (gal)	49.0	67.3	58.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	Avg
Vehs Entered	1412	1447	1430
Vehs Exited	1403	1429	1415
Starting Vehs	39	31	35
Ending Vehs	48	49	48
Travel Distance (mi)	604	611	607
Travel Time (hr)	145.1	224.1	184.6
Total Delay (hr)	123.1	201.9	162.5
Total Stops	597	570	583
Fuel Used (gal)	49.0	67.3	58.1

Intersection: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	R	LTR
Maximum Queue (ft)	129	200	597	86
Average Queue (ft)	51	126	595	41
95th Queue (ft)	105	190	620	75
Link Distance (ft)	232	1785	582	142
Upstream Blk Time (%)			80	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Wednesday am peak
08/25/2020



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕				↗		↕	
Traffic Volume (vph)	16	230	0	735	241	43	0	0	150	24	0	9
Future Volume (vph)	16	230	0	735	241	43	0	0	150	24	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fr t					0.994				0.865		0.962	
Flt Protected		0.997			0.966						0.965	
Satd. Flow (prot)	0	1892	0	0	1823	0	0	0	1644	0	1729	0
Flt Permitted		0.997			0.966						0.965	
Satd. Flow (perm)	0	1892	0	0	1823	0	0	0	1644	0	1729	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				876		73	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		260			1815			610			170	
Travel Time (s)		5.1			35.4			16.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	0%	2%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	17	250	0	735	262	47	0	0	150	26	0	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	267	0	0	1044	0	0	0	150	0	36	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2				1	1	2	
Detector Template	Left	Thru		Left	Thru				Right	Left	Thru	
Leading Detector (ft)	20	100		20	100				20	20	100	
Trailing Detector (ft)	0	0		0	0				0	0	0	
Detector 1 Position(ft)	0	0		0	0				0	0	0	
Detector 1 Size(ft)	20	6		20	6				20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex				Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0				0.0	0.0	0.0	
Detector 2 Position(ft)		94			94						94	
Detector 2 Size(ft)		6			6						6	
Detector 2 Type		Cl+Ex			Cl+Ex						Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0						0.0	
Turn Type	Split	NA		Split	NA				Perm	Perm	NA	
Protected Phases	2	2		6	6						4	
Permitted Phases									8	4		
Detector Phase	2	2		6	6				8	4	4	
Switch Phase												

Lanes, Volumes, Timings
2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Event Condition Wednesday am peak
08/25/2020

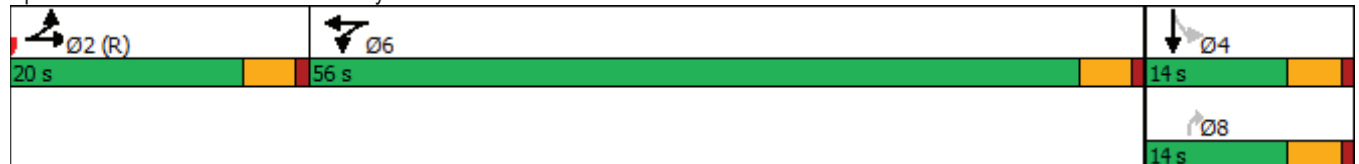


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0				1.0	5.0	5.0	
Minimum Split (s)	15.0	15.0		15.0	15.0				14.0	14.0	14.0	
Total Split (s)	20.0	20.0		56.0	56.0				14.0	14.0	14.0	
Total Split (%)	22.2%	22.2%		62.2%	62.2%				15.6%	15.6%	15.6%	
Maximum Green (s)	15.5	15.5		51.5	51.5				9.5	9.5	9.5	
Yellow Time (s)	3.5	3.5		3.5	3.5				3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0				1.0	1.0	1.0	
Lost Time Adjust (s)		0.0			0.0				0.0		0.0	
Total Lost Time (s)		4.5			4.5				4.5		4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0				3.0	3.0	3.0	
Recall Mode	C-Min	C-Min		Min	Min				None	None	None	
Act Effct Green (s)		18.8			52.1				5.6		5.6	
Actuated g/C Ratio		0.21			0.58				0.06		0.06	
v/c Ratio		0.68			0.99				0.16		0.20	
Control Delay		42.3			45.6				0.4		5.1	
Queue Delay		0.0			0.0				0.0		0.0	
Total Delay		42.3			45.6				0.4		5.1	
LOS		D			D				A		A	
Approach Delay		42.3			45.6			0.4			5.1	
Approach LOS		D			D			A			A	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.99
 Intersection Signal Delay: 39.5
 Intersection Capacity Utilization 84.4%
 Analysis Period (min) 15
 Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd



Summary of All Intervals

Run Number	1	2	Avg
Start Time	6:57	6:57	6:57
End Time	8:00	8:00	8:00
Total Time (min)	63	63	63
Time Recorded (min)	60	60	60
# of Intervals	2	2	2
# of Recorded Intervals	1	1	1
Vehs Entered	1488	1503	1495
Vehs Exited	1498	1491	1494
Starting Vehs	31	22	24
Ending Vehs	21	34	28
Travel Distance (mi)	633	639	636
Travel Time (hr)	37.0	32.7	34.9
Total Delay (hr)	16.1	11.8	13.9
Total Stops	1219	931	1076
Fuel Used (gal)	23.5	22.4	22.9

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	Avg
Vehs Entered	1488	1503	1495
Vehs Exited	1498	1491	1494
Starting Vehs	31	22	24
Ending Vehs	21	34	28
Travel Distance (mi)	633	639	636
Travel Time (hr)	37.0	32.7	34.9
Total Delay (hr)	16.1	11.8	13.9
Total Stops	1219	931	1076
Fuel Used (gal)	23.5	22.4	22.9

Intersection: 2: PGA Driveway/Andell Bluff & Seabrook Island Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	R	LTR
Maximum Queue (ft)	247	744	56	84
Average Queue (ft)	150	403	5	33
95th Queue (ft)	222	720	33	71
Link Distance (ft)	232	1785	582	142
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Joe Cronin

From: Joe Cronin
Sent: Monday, January 11, 2021 12:47 PM
To: jevans@charlestoncounty.org
Cc: Andrea Pietras; John Gregg
Subject: R-4 / R-6 District Question

Joel,

It has been brought to my attention that the Charleston County Planning Commission will be reviewing some proposed amendments to the ZLDR this afternoon. One of the proposed amendments will transition properties which are currently zoned R-4 to one of two districts: those which are classified with a Future Land Use designation of "Urban/Suburban Cultural Community Protection" will be converted to the new S-4 district (4 DUA), while all other R-4 zoned properties will be converted to the proposed R-6 district (6 DUA).

As you are probably aware, TM # 205-00-00-005 is a large parcel of land (+/- 300 acres) which sits between the Towns of Seabrook Island and Kiawah Island. This parcel is currently zoned R-4 and would allow up to 4 DUA under the current ZLDR. Because this parcel is not located within the "Urban/Suburban Cultural Community Protection" district on the Future Land Use Map, is it accurate that this parcel is intended to be converted from R-4 to R-6?

Given the limited access out on Seabrook and Kiawah Islands, combined with the state of the road network on Johns Island, a 50% increase in density will likely be of significant concern out this way.

What is the primary purpose for this increase? And are there any plans to proactively rezone TM # 205-00-00-005 to a less intense zoning district if this change goes through?

Joseph M. Cronin
Town Administrator
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Seabrook Island, SC 29455
Office: (843) 768-5321
Cell: (843) 637-9832
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CHAPTER 4, BASE ZONING DISTRICTS

Sec. 4.1.1, Establishment of Zoning Districts: Add new Zoning Districts: Natural Resource (NR) Management Zoning District; Parks, Recreation, and Open Space (OS) Zoning District; Special Management (S-4) Zoning District; Civic/ Institutional (CI) Zoning District; and Rural Industrial (RI) Zoning District to implement the Comprehensive Plan Future Land Use designations.

Table 4.1.1, Establishment of Zoning Districts: Add Comprehensive Plan Future Land Use Designations to show the relationship between each Zoning District and Future Land Use Designation.

Table 4.1.1, Establishment of Zoning Districts

District Name		Comprehensive Plan Land Use Designation
NR	Natural Resource Management	Conservation Management
OS	Parks, Recreation, and Open Space	Parks, Recreation, and Open Space
RM	Resource Management	Resource Management (Rural)
AG-15	Agricultural Preservation	Wadmalaw Agricultural Preservation (Rural)
AG-10	Agricultural Preservation	Agricultural Preservation (Rural)
AG-8	Rural Agricultural Preservation	Agricultural Preservation and Rural Agriculture (Rural)
AGR	Agricultural/Residential	Agricultural Residential (Rural)
RR-3	Rural Residential	Rural Residential (Rural)
S-3	Special Management-3	Residential/Special Management (Urban/Suburban) Cultural Community Protection
S-4	Special Management	Urban/Suburban Cultural Community Protection
R-64	Low Density Single Family Residential-4	Suburban Residential/Residential Low Density (Urban/Suburban) Mixed Use
M-8	Mixed Style Residential-8	Mixed Style Residential/Residential Moderate Density (Urban/Suburban)
M-12 UR	Mixed Style-12 Urban Residential	Mixed Style Residential/Residential Moderate Density (Urban/Suburban) Mixed Use
MHS	Low-Density Manufactured Housing Subdivision	(Urban/Suburban)
MHP	Manufactured Housing Park	Mixed Style Residential/Residential Moderate Density Urban/Suburban Mixed Use
ROOR	Residential Office	Commercial (Urban/Suburban) Mixed Use and Office
CI	Civic / Institutional	Civic / Institutional
GOOG	General Office	Commercial (Urban/Suburban) Urban/Suburban Mixed Use and Office
NCCN	Neighborhood Commercial	Commercial (Urban/Suburban) Urban/Suburban Mixed Use and Commercial
CT	Commercial Transition	Commercial (Urban/Suburban)
RCGR	Rural Commercial	Rural Commercial (Rural)
CC	Community Commercial	Commercial (Urban/Suburban)
RI	Rural Industrial	Rural Industrial and Rural Economic Development Area
IN	Industrial	Industrial (Urban/Suburban)
PD	Planned Development	Planned Development (All areas of Plan)

CHAPTER 4, BASE ZONING DISTRICTS

- Sec. 4.1.2, Zoning District References:
Assign zoning districts to classes of use:
 - Nonresidential
 - CI, Civic / Institutional;
 - NC, Neighborhood Commercial;
 - RC, Rural Commercial;
 - CC, Community Commercial;
 - RI, Rural Industrial; and
 - IN, Industrial.
 - Office
 - RO, Residential Office; and
 - GO, General Office.
 - Residential
 - RR, Rural Residential;
 - S-3, Special Management;
 - S-4, Special Management;
 - MHP, Manufactured Housing Park;
 - R-6, Low Density Residential; and
 - UR, Urban Residential.
 - Agricultural
 - NR, Natural Resource Management;
 - OS, Parks, Recreation and Open Space;
 - RM, Resource Management;
 - AG-15, Wadmalaw Agricultural Preservation;
 - AG-10, Agricultural Preservation;
 - AG-8, Rural Agricultural; and
 - AGR, Agricultural Residential.

CHAPTER 4, BASE ZONING DISTRICTS

- Sec. 4.1.3, Zoning District Hierarchy: Add the NR zoning district as the most restrictive zoning district.
- Sec. 4.2.1, Density: Clarify that density is the number of dwelling units (*lots*) per acre and that density in the Rural Area is calculated from the parent tract as it existed on April 21, 1999.
- Sec. 4.2.3, Setbacks:
 - Clarify that “unobstructed” and “unoccupied open area” refer to anything that is constructed or erected within the setback that is determined to have a permanent location on the ground.
 - Include a provision that Variances may not be required when a structure encroaches 12” or less into any required setback and that such administrative setback reductions shall be determined by the Director on a case by case basis.
 - Clarify that when the front, interior side and rear setbacks of the underlying zoning district reduces the buildable width of a lot to less than 40 feet, the Zoning and Planning Director shall be authorized to reduce the required setbacks as much as necessary *up to a 15-foot setback* (provided the setbacks are not reduced beyond the Critical Line Buffer depth).
- Sec. 4.2.4, Building and Structure Height:
 - Include a requirement that fences and walls not obstruct the flow of water in natural drainage courses or drainage easements and that when constructed in a public easement, fences may be removed for utility purposes with all costs for removal and restoration borne by the property owner.
 - Exempt roof-mounted solar collectors from height limits.

CHAPTER 4, BASE ZONING DISTRICTS

- Existing Zoning Districts:
 - Move the provision for a one-time subdivision of nonconforming lots of record existing prior to April 21, 1999 to the front of the Article to avoid duplicating it in each zoning district.
 - Clarify that density means Dwelling Units (*Lots*) per acre.
 - Add the Waterfront Development Standards (OCRM Critical Line Setback and Buffer, Minimum Lot Size, Minimum Lot Width/Average) to each zoning district's density/intensity and dimensional standards table for easier reference.
 - Move the NRM, Natural Resource Management District from Chapter 5 (Overlay and Special Purpose Zoning Districts) to Art. 4.3, NR, Natural Resource Management District.
 - Art. 4.10, RR-3 Zoning District: Change the density from 1 du/3ac to 1 du/ac (no changes to the development standards).
 - Art. 4.11, S-3 Zoning District: Allow 10,000 SF lots with 70' minimum lot widths when water and sewer are available (currently: 12,500 SF with 70' min. lot width if water or sewer is available).
 - Art. 4.14, MHP Zoning District: Clarify that 10' of separation is required between each manufactured housing unit and between manufactured housing units and other buildings.
 - GO (4.18), NC (4.19), RC (4.20), CC (4.21), and I (4.23) Zoning Districts: Change the minimum setbacks to match the minimum vegetated buffer requirements.
 - CC (4.21) and I (4.23) Zoning Districts: Add maximum building heights of 55 feet in the Urban/Suburban Area and 35 feet in the Rural Area.

CHAPTER 4, BASE ZONING DISTRICTS ADD THE OS, PARKS, RECREATION, AND OPEN SPACE DISTRICT

- Implements the OS, Parks, Recreation, and Open Space policies and Future Land Use recommendation of the Comprehensive Plan.
- Includes lands to remain in a predominantly natural state; lands protected through permanent Conservation Easements; publicly-owned lands that significantly restrict development; and open spaces, green spaces and parks and recreation.
- No properties will be rezoned to this district; rather, it serves as an option should a property owner want additional protection for his/her property.

	Non Waterfront Development Standards	Waterfront Development Standards
MAXIMUM DENSITY	1 Dwelling Unit (Lot) per 25 acres	
MINIMUM LOT AREA	1 acre	
MINIMUM LOT WIDTH	135 feet	200 feet
MINIMUM LOT WIDTH AVERAGE	N/A	250 feet
MINIMUM SETBACKS		
Front/Street Side	50 feet	
Interior Side	15 feet	
Rear	30 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	50 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	35 feet
MAXIMUM BUILDING COVER	30% of the Lot	
MAXIMUM HEIGHT	35 feet	

CHAPTER 4, BASE ZONING DISTRICTS

ADD THE S-4, SPECIAL MANAGEMENT DISTRICT

- Implements the Urban/Suburban Cultural Community Protection policies and Future Land Use recommendation of the Comprehensive Plan.
- Includes properties currently zoned R-4 that are classified with a Future Land Use of Urban/Suburban Cultural Community Protection (R-4 is being changed to R-6)
- No changes to density/intensity and dimensional standards.

	Non Waterfront Development Standards	Waterfront Development Standards
MAXIMUM DENSITY	4 Dwelling Units (Lots) per acre	
MINIMUM LOT AREA	14,500 square feet if water and sewer are not available	12,000 square feet
	10,000 square feet if water or sewer is available	
MINIMUM LOT WIDTH	7,250 square feet if water and sewer are available	90 feet
	60 feet if water and sewer are available	
MINIMUM LOT WIDTH AVERAGE	70 feet if public water and/or sewer are not available	100 feet
	N/A	
MINIMUM SETBACKS		
Front/Street Side	25 feet	
Interior Side	5 feet	
Rear	15 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	

CHAPTER 4, BASE ZONING DISTRICTS

R-6, LOW DENSITY RESIDENTIAL DISTRICT

- Combines the R-4 and MHS Zoning Districts utilizing the standards of the MHS Zoning District.
- Increases density for properties currently zoned R-4 from 4 du/ac to 6 du/ac.

	Non Waterfront Development Standards	Waterfront Development Standards
MAXIMUM DENSITY	6 Dwelling Units (Lots) per acre	
MINIMUM LOT AREA	5,000 square feet	12,000 square feet
MINIMUM LOT WIDTH	50 feet	90 feet
MINIMUM LOT WIDTH AVERAGE	N/A	100 feet
MINIMUM SETBACKS		
Front/Street Side	20 feet	
Interior Side	5 feet	
Rear	10 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	

CHAPTER 4, BASE ZONING DISTRICTS

UR, URBAN RESIDENTIAL DISTRICT

- Takes the place of the M-8 and M-12 Zoning Districts.
- Increases density for properties currently zoned M-8 from 8 du/ac to 16 du/ac and those zoned M-12 and CC from 12 du/ac to 16 du/ac.

	M-12 DENSITY/INTENSITY AND DIMENSIONAL STANDARDS Non Waterfront Development Standards	Waterfront Development Standards
MAXIMUM DENSITY	16 Dwelling Units (Lots) per acre	
MINIMUM LOT WIDTH	12 feet	
MINIMUM SETBACKS		
Front/Street Side	15 feet	
Interior Side	0/5 feet	
Rear	10 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK Critical Line	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	50% of Lot	
MAXIMUM HEIGHT	4 stories/50 feet	

CHAPTER 4, BASE ZONING DISTRICTS CI, CIVIC/INSTITUTIONAL DISTRICT

- Implements the Civic/Institutional policies and Future Land Use recommendation of the Comprehensive Plan.
- No properties will be rezoned to this district, but property owners can submit applications to rezone their properties to the district.

	Non Waterfront Development Standards	Waterfront Development Standards
MINIMUM LOT AREA	6,000 square feet	
MINIMUM LOT WIDTH	50 feet	
MINIMUM SETBACKS	Equivalent to required vegetated buffers	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	50 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	35 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	35 feet

CHAPTER 4, BASE ZONING DISTRICTS RI, RURAL INDUSTRIAL DISTRICT

- Implements the Rural Industrial policies and Future Land Use recommendation of the Comprehensive Plan.
- No properties will be rezoned to this district; property owners can submit applications to rezone their properties to this district.

	Non Waterfront Development Standards	Waterfront Development Standards
MINIMUM LOT AREA	40,000 square feet	
MINIMUM LOT WIDTH	125 feet	
MINIMUM SETBACKS¹	Equivalent to required vegetated buffers	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	50 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	35 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	

CHAPTER 4, BASE ZONING DISTRICTS PLANNED DEVELOPMENT ZONING DISTRICTS

- Sec. 4.25.2, Purpose: Replace with a reference to the strategies contained in the current Comprehensive Plan in effect.
- Sec. 4.25.5.A, Development Standards – Maximum Density: Delete the density increase provisions relating to common open space (these provisions are no longer in the Comprehensive Plan).
- Sec. 4.25.5.B, Modification of ZLDR Standards: Prohibit PDs from modifying ZLDR Chapters 1, 2, 3, 10, 11, 12, and Appendix A as well as the dimensional standards for the S-3 and S-4 Zoning Districts (already prohibited: Waterfront Development Standards, Architectural Design, Sign and Parking requirements).
- Sec. 4.25.5.E: Require a minimum Type A, 10' vegetated buffer around the perimeter of PDs.
- Sec. 4.25.5.G, Access:
 - Require stub outs to adjacent properties for access connections.
 - Allow cul-de-sacs, t-turnarounds, and dead-end streets only at the discretion of the Zoning & Planning Director.
 - Require that sidewalks and/or multi-use paths be provided as required by the ZLDR.
- Sec. 4.25.5.I, Industrial Areas: Require a minimum Type D, 40' vegetated buffer where industrial uses abut residential uses within a PD.

CHAPTER 4, BASE ZONING DISTRICTS PLANNED DEVELOPMENT ZONING DISTRICTS

- Sec. 4.25.6, Common Open Space: Require a minimum Type D, 40' vegetated buffer where industrial uses abut residential uses within a PD.
- Sec. 4.25.7, Affordable and Workforce Dwelling Units: Amend to allow density bonuses for PDs proposed for properties located in the Urban/Suburban Area when a minimum of 30% of the units are affordable or workforce dwelling units and the PD complies with the applicable requirements of Sec. 6.4.19.
- Sec. 4.25.8, Planned Development Procedure:
 - Require PD applicants presenting conceptual plans to the Planning Commission to submit a memo and presentation detailing the proposed development at least 20 days prior to the PC workshop.
 - Require PD applicants to notify Interested Parties and owners of property within 300 feet of the subject parcel(s) of community workshops.
 - Clarify that all required information must be submitted prior to staff review.
 - Clarify the application signatory requirements for properties owned by corporations and partnerships.
 - Codify the process for finalizing PDs that are approved by County Council.

CHAPTER 4, BASE ZONING DISTRICTS PLANNED DEVELOPMENT ZONING DISTRICTS

- Sec. 4.25.9, Planned Development Guidelines and Sketch Plan Requirements: Require a narrative and sketch plan detailing the proposed stormwater system design approach.
- Sec. 4.25.10, Variances and Other Modifications to approved PD Development Plans:
 - Minor modifications (administrative approval required):
 - Increases in Common Open Space, setbacks, area/dimensions/density of landscape buffers;
 - Decreases in density/numbers of dwelling units, building floor areas, numbers/sizes of signs; and
 - Minor shifts in the layouts of land uses and location of access points/internal roadways.
 - Major modifications (require PD amendment): All other modifications.
 - Allow variance requests for trees, setbacks, buffers, height, and maximum lot/building coverage for individual lots (all other changes/variances require PD amendments).
- 4.25.11, Subdivision of Land Located within Approved Planned Developments: Delete section as it is no longer necessary.



WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK Critical Line	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	30% of Llot	
MAXIMUM HEIGHT	35 feet	
[1] Minimum lot area of 12,500 sq. ft. if water or sewer is available.		
[2] 80 feet without public water and/or public sewer.		

Sec. 4.911.4 Other Regulations

Development in the S-3 ~~D~~district shall comply with all other applicable regulations of this Ordinance, including the development standards of ~~Chapter~~HAPTER 9, *Development Standards*. All waterfront property subdivided after April 21, 1999 shall be subject to the provisions of the Waterfront Development Standards contained in Article 4.22 of this Chapter. Existing lots of record on the waterfront shall be subject to the provisions of Wetlands, Waterways and OCRM Critical Line contained in Article 9.7.

~~Sec. 4.9.5 One Time Subdivision of Non-Conforming Lot of Record Existing Prior To April 21, 1999~~

~~A one time subdivision creating one lot from a non-conforming lot of record (lot existing prior to April 21, 1999) shall be allowed, if each lot resulting from the subdivision meets the minimum lot area of the S-3 zoning district. An Ingress/Egress Easement may be utilized to access a proposed lot (singular) to the rear of the property. The setback from the edge of the easement will be the required side setback required for Zoning District. The side setback from the edge of the easement will only be utilized to create one (1) proposed lot from the provision of: ONE TIME SUBDIVISION OF A NON-CONFORMING LOT OF RECORD EXISTING PRIOR TO APRIL 21, 1999.~~

ARTICLE 4.12 S-4, SPECIAL MANAGEMENT DISTRICT

Sec. 4.12.1 Purpose and Intent

The S-4, Special Management Residential Zoning District implements the Urban/Suburban Cultural Community Protection policies of the Comprehensive Plan.

Sec. 4.12.2 Use Regulations

Uses are allowed in the S-4 District in accordance with the Use Regulations of Chapter 6.

4.12.3 Density/Intensity and Dimensional Standards

All development in the S-4 District shall be subject to the following Density/Intensity and Dimensional Standards:

Table 4.12.3, S-4 Density/Intensity and Dimensional Standards		
	Non Waterfront Development Standards	Waterfront Development Standards
MAXIMUM DENSITY	4 Dwelling Units (Lots) per acre	
MINIMUM LOT AREA	14,500 square feet if water and sewer are not available	12,000 square feet



	10,000 square feet if water or sewer is available 7,250 square feet if water and sewer are available	
MINIMUM LOT WIDTH	60 feet if water and sewer are available 70 feet if public water and/or sewer are not available	90 feet
MINIMUM LOT WIDTH AVERAGE	N/A	100 feet
MINIMUM SETBACKS		
Front/Street Side	25 feet	
Interior Side	5 feet	
Rear	15 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	

4.12.4 Other Regulations

Development in the S-4 District shall comply with all other applicable regulations of this Ordinance, including the development standards of Chapter 9.

ARTICLE 4.10 R-4, SINGLE FAMILY RESIDENTIAL 4 DISTRICT

4.10.1 Purpose and intent

The R-4, Single Family Residential district implements the Suburban Residential/Residential Low Density (Urban/Suburban Area) policies of the *Comprehensive Plan*.

Effective on: 11/20/2001, as amended

4.10.2 Use Regulations

Uses are allowed in the R-4 district in accordance with the Use Regulations of CHAPTER 6:

Effective on: 11/20/2001, as amended

4.10.3 Density/Intensity and Dimensional Standards

All residential and nonresidential development in the R-4 district shall be subject to the following density, intensity and dimensional standards:

Table 4.10.3, R-4 Density/Intensity and Dimensional Standards	
R-4 DENSITY/INTENSITY AND DIMENSIONAL STANDARDS	
MAXIMUM DENSITY	4 dwelling units per acre
MINIMUM LOT AREA	
With Public Water AND Sewer	7,250 square feet



With Public Water OR Sewer	10,000 square feet
Without Public Water AND Sewer	14,500 square feet
MINIMUM LOT WIDTH	60 feet
MINIMUM SETBACKS	
— Front/Street Side	25 feet
— Interior Side	5 feet
— Rear	15 feet
OCRM Critical Line	35 feet
MAXIMUM BUILDING COVER	30% of lot
MAXIMUM HEIGHT	35 feet

Effective on: 11/20/2001, as amended

4.10.4 Other Regulations

Development in the R-4 district shall comply with all other applicable regulations of this Ordinance, including the development standards of CHAPTER 9. All waterfront property subdivided after April 21, 1999 shall be subject to the provisions of the Waterfront Development Standards contained in ARTICLE 4.22 of this Chapter. Existing lots of record on the waterfront shall be subject to the provisions of Wetlands, Waterways and OCRM Critical Line contained in ARTICLE 9.7.

Effective on: 11/20/2001, as amended

4.10.5 One Time Subdivision of Non-Conforming Lot of Record Existing Prior To April 21, 1999

A one time subdivision creating one lot from a non-conforming lot of record (lot existing prior to April 21, 1999) shall be allowed, if each lot resulting from the subdivision meets the minimum lot area of the R-4 zoning district. An Ingress/Egress Easement may be utilized to access a proposed lot (singular) to the rear of the property. The setback from the edge of the easement will be the required side setback required for Zoning District. The side setback from the edge of the easement will only be utilized to create one (1) proposed lot from the provision of: ONE TIME SUBDIVISION OF A NON-CONFORMING LOT OF RECORD EXISTING PRIOR TO APRIL 21, 1999.

ARTICLE 4.13 R-6, LOW DENSITY RESIDENTIAL DISTRICT

Sec. 4.13.1 Purpose and Intent

The R-6, Low Density Residential Zoning District implements the Urban/Suburban Mixed Use policies of the Comprehensive Plan.

Sec. 4.13.2 Use Regulations

Uses are allowed in the R-6 District in accordance with the Use Regulations of Chapter 6.

Sec. 4.13.3 Density/Intensity and Dimensional Standards

All development in the R-6 District shall be subject to the following Density/Intensity and Dimensional Standards:

<i>Table 4.13.3, R-6 Density/Intensity and Dimensional Standards</i>		
	<i>Non Waterfront Development Standards</i>	<i>Waterfront Development Standards</i>
MAXIMUM DENSITY	<i>6 Dwelling Units (Lots) per acre</i>	
MINIMUM LOT AREA	<i>5,000 square feet</i>	<i>12,000 square feet</i>



MINIMUM LOT WIDTH	50 feet	90 feet
MINIMUM LOT WIDTH AVERAGE	N/A	100 feet
MINIMUM SETBACKS		
Front/Street Side	20 feet	
Interior Side	5 feet	
Rear	10 feet	
WETLAND, WATERWAY and OCRM CRITICAL LINE SETBACK	N/A	35 feet
WETLAND, WATERWAY and OCRM CRITICAL LINE BUFFER	N/A	15 feet
MAXIMUM BUILDING COVER	30% of Lot	
MAXIMUM HEIGHT	35 feet	

Sec. 4.13.4 Other Regulations

Development in the R-6 District shall comply with all other applicable regulations of this Ordinance, including the development standards of Chapter 9.

ARTICLE 4.13 MHS, LOW-DENSITY MANUFACTURED HOUSING SUBDIVISION DISTRICT

§4.13.1 Purpose and intent

The MHS, Low-Density Manufactured Home Subdivision district implements the Mixed Style Residential/Residential Moderate Density (Urban/Suburban Area) policies and the housing policies of the *Comprehensive Plan*.

Effective on: 11/20/2001, as amended

4.13.2 Use Regulations

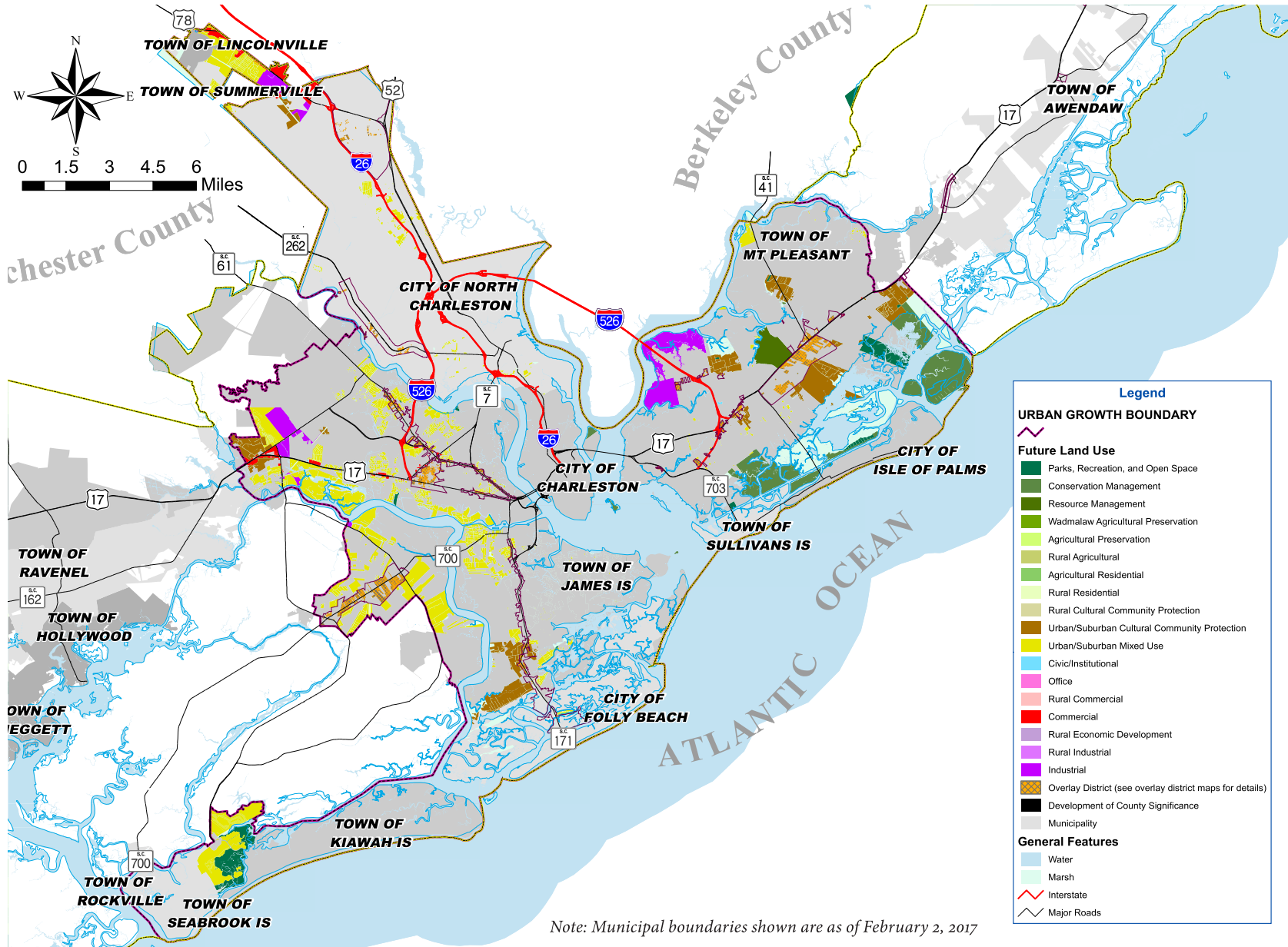
Uses are allowed in the MHS district in accordance with the Use Regulations of CHAPTER 6.

Effective on: 11/20/2001, as amended

4.13.3 Density/Intensity and Dimensional Standards

Table 4.13.3, MHS Density/Intensity and Dimensional Standards	
MHS	
DENSITY/INTENSITY AND DIMENSIONAL STANDARDS	
MAXIMUM DENSITY	6 dwelling units per acre
MINIMUM LOT AREA	5,000 square feet
MINIMUM LOT WIDTH	50 feet
MINIMUM SETBACKS	
—Front/Street Side	25 feet
—Interior Side	5 feet
—Rear	15 feet
OCRM Critical Line	35 feet
MAXIMUM BUILDING COVER	30% of lot
MAXIMUM HEIGHT	35 feet

MAP 3.1.5: URBAN/SUBURBAN FUTURE LAND USE DETAIL



Town of Seabrook Island 2021 Meeting Dates

	<i>4th Tue. @ 2:30 PM</i>	<i>2nd Tue. @ 1:00 PM</i>	<i>2nd Mon. @ 10:30 AM</i>	<i>2nd Wed. @ 1:30 PM</i>	<i>3rd Wed. @ 9:30 AM</i>
Month	Town Council	Ways & Means Comm.	Public Safety Comm.	Planning Commission	Utility Commission
January	Jan. 26, 2021	Jan. 12, 2021	Jan. 11, 2021	Jan. 13, 2021	Jan. 20, 2021
February	Feb. 23, 2021	Feb. 9, 2021	Feb. 8, 2021	Feb. 10, 2021	Feb. 17, 2021
March	Mar. 23, 2021	Mar. 9, 2021	Mar. 8, 2021	Mar. 10, 2021	Mar. 17, 2021
April	Apr. 27, 2021	Apr. 13, 2021	Apr. 12, 2021	Apr. 14, 2021	Apr. 21, 2021
May	May 25, 2021	May 11, 2021	May 10, 2021	May 12, 2021	May 19, 2021
June	Jun. 22, 2021	Jun. 8, 2021	Jun. 14, 2021	Jun. 9, 2021	Jun. 16, 2021
July	Jul. 27, 2021	Jul. 13, 2021	Jul. 12, 2021	Jul. 14, 2021	Jul. 21, 2021
August	Aug. 24, 2021	Aug. 10, 2021	Aug. 9, 2021	Aug. 11, 2021	Aug. 18, 2021
September	Sep. 28, 2021	Sep. 14, 2021	Sep. 13, 2021	Sep. 8, 2021	Sep. 15, 2021
October	Oct. 26, 2021	Oct. 12, 2021	Oct. 11, 2021	Oct. 13, 2021	Oct. 20, 2021
November	Nov. 16, 2021*	Nov. 9, 2021	Nov. 8, 2021	Nov. 10, 2021	Nov. 17, 2021
December	Dec. 21, 2021*	Dec. 14, 2021	Dec. 13, 2021	Dec. 8, 2021	Dec. 15, 2021

* Denotes a date change due to proximity to a Town Holiday

Accommodations Tax Advisory Committee
Meetings dates will be scheduled by the Chair as needed.

Board of Zoning Appeals
Meetings dates will be scheduled by the Chair as needed.

Meeting agendas will be posted on the town's website (www.townofseabrookisland.org) at least 24 hours prior to each meeting. All meetings will take place at Seabrook Island Town Hall, 2001 Seabrook Island Road, Seabrook Island, SC 29455, unless otherwise noted.

For more information, or to be added to the Town of Seabrook Island's agenda distribution list, please contact: Faye Allbritton (Town Clerk/Treasurer) by phone at (843) 768-9121 or by email at fallbritton@townofseabrookisland.org.