TOWN OF SEABROOK ISLAND

Public Works Committee Regular Meeting March 7, 2022 – 12:00PM



Virtual Meeting (Zoom)
Watch Live Stream (YouTube)

Participate in the Meeting: Individuals who wish to participate in the meeting via Zoom may access the meeting as follows:

- Instructions for Joining & Participating in the Virtual Meeting
- To join by computer, tablet or mobile device: https://us02web.zoom.us/j/88163162840?pwd=cTAvb1B0Z1BKSXVmWHE4VDJ2ek1EZz09
- To join by phone: Call (646) 558-8656 *Please note that long distance rates may apply*
- Meeting ID: 881 6316 2840 Passcode: 108759

AGENDA

CALL TO ORDER

Confirm meeting was posted and all requirements for the meeting are in accordance with SC FOIA.

APPROVAL OF MINUTES

1. Regular Meeting: Minutes from February 7, 2022

OLD BUSINESS ITEMS

- 1. Update Seabrook Island Road design options provided by ESP Associates.
- 2. Status of Town Hall Garage architect proposal.

NEW BUSINESS ITEMS

- 1. Request Architect provide TOSI what other information is needed for design (survey, geotechnical, civil/site design, etc.) and a budget/estimate for garage structure
- 2. Future meetings in person or virtual

ITEMS FOR INFORMATION / DISCUSSION

1. Open

ADJOURN

TOWN OF SEABROOK ISLAND

Public Works Committee Regular Meeting February 7, 2022

Virtual Meeting Hosted via Zoom Live Streamed on YouTube



MINUTES

Members Present: Barry Goldstein, Glen Cox, Ed Heskamp, Jeff Homeier, Barry Hand

Members Absent: None

Guests Present: None

Chairman Barry Goldstein called the meeting to order at 12:01 P.M. Chairman Goldstein confirmed with the TOSI clerk that the requirements of the Freedom of Information Act were fulfilled, and the meeting agenda was properly posted.

APPROVAL OF MINUTES

1. <u>Regular Meeting</u>: Since this was the first meeting of the Public Works Committee, there are no prior meetings minutes to be reviewed or approved of.

OLD BUSINESS ITEMS

1. Since this was the first meeting of the Public Works Committee, there was no old business to be summarized, discussed, questioned, or commented on.

NEW BUSINESS ITEMS

- 1. <u>Election of Officers:</u> The Chairman agreed to perform the duties of the Secretary. Mr. Heskamp agreed to be Vice Chair. His nomination was seconded by Mr. Hand and unamoulsy approved.
- 2. <u>Discuss purpose of PWC</u>: Briefly discussed the purpose of the PWC Include summarizing the scope tasked by the Town.
- 3. <u>Discuss future PWC meetings dates and time:</u> It was agreed that the meeting will be held monthly on the first Monday of each month at 12 P.M. When the meeting date falls on a holiday or a day when the Town Hall is closed, the meeting will be held on the second Monday of the month, at the same 12 P.M. time.
- **4.** Reviewed Seabrook Island Road Re-Paving/Upgrade Project: The Chairman provided background on the project. This included work done to date by ESP Associates, the Engineering Firm retained by the Town. Other background information provided included

Charleston County design road elevations, approximate existing road elevations along Seabrook Island Road, and the purpose of repaving and raising the road grades as it relates to nuisance flooding. It was noted that raising the roadway grade to the County minimum of 6.5 ft NAVD88 (this elevation is for "new construction", not a requirement for SI Road but a target to strive for) would only help alleviate nuisance flooding, not eliminate it. Raising the road grade will not address flooding from hurricanes. Four possible alternatives to raise the road grades were presented and included: using all asphalt; using an aggregate base course and asphalt; using an asphalt overlay only and not raising grades to 6.5 ft. NAVD88; and using an asphalt overlay and raising grades as much as practical and targeting areas to raise grades and alleviate nuisance flooding. Three issues that were discussed and need to be addressed for each alternative were technical feasibility, constructability/traffic control and cost. Two of the alternatives; using all asphalt to attain the 6.5 ft grade (likely too expensive) and using a base course and asphalt (significant traffic control required and traffic disruption) were reviewed. Both were determined to be unattractive alternatives to the Town. The Chairman noted that a meeting with the Engineers was scheduled for 02/08/2022 and would ask them to present their opinions on the four alternatives and include commentary on technical feasibility, construction/traffic control issues and cost. The Committee planned on reviewing the Engineers input next meeting.

ITEMS FOR INFORMATION / DISCUSSION

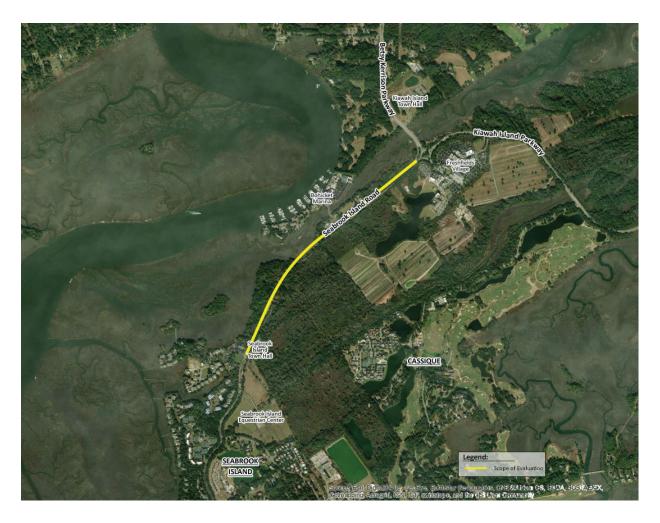
- 1. **Reviewed** Outbound Bike/pedestrian Pathway Upgrade: As part of the Seabrook Island Roadway improvement and Paving, the path would receive improvements such as better crosswalk signalization, possibly some lighting along the path and other conveniences like benches. This will be discussed in more detail as the project progresses forward.
- 2. Reviewed Proposed New Town Hall Garage: The Town hopes to consider constructing a garage adjacent to the Town Hall in the future. The Town has budgeted money for the architectural design of the garage. The Town has requested a proposal for a local architect with experience in garage design and local construction. Once the proposal is received, the Committee will review and provide input into the proposal and design.

There being no further business, the Chairman requested a motion to adjourn the meeting. Mr. Heskamp made a motion to adjourn, and Mr. Hand seconded the motion. The motion was **APPROVED** by a vote of 5 in FAVOR to 0 OPPOSED, and the meeting was adjourned at 1:35 P.M.

Minutes Approved:

Road Improvement Options

Seabrook Island Road



February 2022

Prepared for:

Town of Seabrook Island



Prepared by:



ESP Associates, Inc. 2154 North Center Street, Suite E-503 North Charleston, SC 29406 SC COA# 5839

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1 Introduction

Seabrook Island Road is the only road that provides ingress and egress onto Seabrook Island. The Town of Seabrook Island is responsible for the management and maintenance of storm drainage facilities located within the public right-of-way (ROW) from the traffic circle at Seabrook Island Road and Betsy Kerrison Parkway to the guard house located on Seabrook Island Road prior to entering the portion of Seabrook Island that is owned by the Seabrook Island Homeowners Association. The ROW consists of approximately one mile of two-lane road without a median. The ROW is heavily vegetated and contains a mix-use path that parallels the road on both sides. The Town has experienced flooding and ponding issues along Seabrook Island Road, especially during larger storm events. The road is currently not built to meet the Charleston County minimum road elevation of 6.5' NAVD88. In an effort to improve the road to meeting county minimum requirements and potentially address the existing drainage issues, the Town of Seabrook is undertaking an initiative to evaluate road improvement options and to offer recommendations that could provide relief for these issues. This study will be used to plan and budget the implementation of the roadway improvements.

2 Preliminary Assessment

This report summarizes the technical feasibility, constructability, and financial feasibility of four provided road improvement options to help alleviate the issues with Seabrook Island Road. The goal of this report is to provide insight and a clear comparison of the options to help the Town of Seabrook Island in choosing how to proceed with the improvements of Seabrook Island Road. The current conditions of the road consists of mostly flat conditions with no centerline slopes exceeding 0.50%. The goal of these improvements is to maintain traffic flow during all portions of construction as this is the only ingress and egress road onto Seabrook Island.

2.1 Option 1: Remove, Replace and Raise Roadway Approximately 1'

Summary:

Charleston County roadway standards require the minimum elevation for proposed roadways to be 6.5' NAVD88. To bring Seabrook Island Road within compliance with this standard, it is recommended to raise the entire length, approximately 5,360 LF, of the roadway approximately 1'. The existing roadway would be completely removed, regraded, and full depth replacement. The existing base condition is stable and functioning as intended. The potential unknowns surrounding the removal of the existing roadway could result in an unstable base condition that could present additional constructability challenges should it be removed. The proposed pavement section would consist of a proposed graded aggregate base course (GABC) (depth as needed) plus 4" of asphalt to create a paving section that will bring the roadway within compliance.

Pavement Section:

Approximately 8"-12" GABC with 4" Asphalt course

Constructability:

This option would require 24-hour traffic control measures or automated traffic lighting, which would be costly. This option would create a compacted GABC surface that would be a safety concern for daily traffic for a period of approximately 4-5 months while under construction. This roadway improvement could potentially allow contractor to address the drainage issues of the road and the existing bike path along the road with additional grading on shoulders. Due to the need to keep the road open to vehicular traffic for a period of approximately 4-5 months of restricted access, this option would not be viable.

Opinion of Probable Cost:

Cost Estimate not provided, as shutting down the road for a period of 4-5 months is not an option.



2.2 Option 2: Raising Roadway Approximately 1' (Incremental Lifts of 2" Asphalt)

Summary:

Charleston County roadway standards require the minimum elevation for proposed roadways to be 6.5' NAVD88. To bring Seabrook Island Road within compliance with this standard, it is recommended to raise the entire length, approximately 5,360 LF, of the roadway approximately 1'. In areas where the 1' elevation increase does not meet the county standard of 6.5' additional asphalt overlay will be provided to meet the minimum elevation. For this option, the improvements will be done in incremental asphalt lifts of approximately 2". The asphalt lifts will be overlaid the existing road in incremental course until the final elevation of approximately 6.5' is met.

Pavement Section:

Existing roadway as base course 2" Asphalt Lifts

Constructability:

Traffic control during these improvements will be utilizing sign control and construction flagging. This would be a feasible option as the lane transitions will be easily passable by vehicular traffic. This option would allow for tapering of asphalt lifts and alternating between travel lanes, keeping vehicular traffic flowing. This proposed roadway improvement will not address the drainage issues of the road or the existing bike path along the road, but it may minimize nuisance flooding of the road.

Opinion of Probable Cost:

Total - \$2,650,000.00*

*Notes/Exclusions/Assumptions

- Cross sections will be needed prior to pricing this design
- Need NPDES line clearly defined at causeway STA 20+00 25+50
- With raising the roadway, additional fill to build up shoulder has not been quantified due to NPDES Line
- With raising the roadway, removing, or replacing curb/sidewalk/pedestrian guardrail is not included
- Decorative 2' street print shoulder and crosswalks are not included
- Ornamental wood post street sign replacement is not included
- Arborist, tree pruning, or street tree removal or replacement is not included
- Price is based on daytime work and no restrictions on tri-axle deliveries of material
- Sodding, irrigation, and landscaping is not included. Contractor will stabilize disturbed shoulders with seeding methods for stabilization
- Any new or existing storm drainage improvements are not included
- Erosion control items are not included (i.e., Silt fence, tree protection, etc.)
- All driveways end at the R/W. If additional asphalt is needed price is subject to change
- Due to the volatility in liquid asphalt prices, the job will be indexed at the time of pricing.
 Variation to the index price at the time of asphalt placement will be determined and contractor will adjust the price accordingly.
 - https://www.scdot.org/business/constructionletting-monthlyindex.aspx



2.3 **Option 3: 1.5" Mill & Overlay**

Summary:

Charleston County roadway standards require the minimum elevation for proposed roadways to be 6.5' NAVD88. To bring Seabrook Island Road within compliance with this standard, it is recommended to raise the entire length, approximately 5,360 LF, of the roadway approximately 1'. Improvements consist of milling and overlaying Seabrook Island Road with 1.5" asphalt surface course. This option will not meet the Charleston County elevation requirements.

Pavement Section:

1.5" Asphalt Overlay

Constructability:

This option is constructible and cost efficient. This option would be a step towards a long-term goal of bringing Seabrook Island Road into compliance, however it would require repeating the process over time until the minimum elevation of 6.5'is achieved. At this time, this improvement will provide a cosmetic improvement to the road and will not help with the drainage issues of the road or the existing bike path. This would not bring the road into compliance with Charleston County requirements of minimum elevation of 6.5'.

Opinion of Probable Cost:

Total - \$1,195,000.00*

*Notes/Exclusions/Assumptions

- There are areas that have significant cracking which may reflect. It may be in the best interest to identify areas that need full depth patching prior to mill and overlay.
- Cross sections will be needed prior to pricing this design
- Need NPDES line clearly defined at causeway STA 20+00 25+50
- With raising the roadway, additional fill to build up shoulder has not been quantified due to NPDES Line
- With raising the roadway, removing, or replacing curb/sidewalk/pedestrian guardrail is not included
- Decorative 2' street print shoulder and crosswalks are not included
- Ornamental wood post street sign replacement is not included
- Arborist, tree pruning, or street tree removal or replacement is not included
- Price is based on daytime work and no restrictions on tri-axle deliveries of material
- Sodding, irrigation, and landscaping is not included. Contractor will stabilize disturbed shoulders with seeding methods for stabilization
- Any new or existing storm drainage improvements are not included
- Erosion control items are not included (i.e., Silt fence, tree protection, etc.)
- All driveways end at the R/W. If additional asphalt is needed price is subject to change
- Due to the volatility in liquid asphalt prices, the job will be indexed at the time of pricing.
 Variation to the index price at the time of asphalt placement will be determined and contractor will adjust the price accordingly.
 - https://www.scdot.org/business/constructionletting-monthlyindex.aspx



2.4 Option 4: Raising Roadway to Elevation 6.5' (Varied Paving Section)

Summary:

Charleston County roadway standards require the minimum elevation for proposed roadways to be 6.5' NAVD88. To bring Seabrook Island Road within compliance with this standard, it is recommended to raise the entire length, approximately 5,360 LF, of the roadway approximately 1'. This will be accomplished by raising the road in asphalt lifts of 2" until existing elevations along the roadway are all brought to a minimum elevation of 6.5' NAVD88. The existing roadway elevations that are currently meeting county minimum roadway elevation requirements will remain, the areas outside of compliance will be raised in incremental lifts of asphalt which will vary along Seabrook Island Road.

Pavement Section:

2" – 12" Variety of asphalt lifts depending on existing elevations

Constructability:

This option will require less asphalt and fewer incremental lifts to be completed. This option will not address the drainage issues of the road but may help with minimizing the nuisance flooding of the road. This will result in bringing Seabrook Island Road into compliance with Charleston County minimum roadway requirements. This option is feasible to construct and will not have an excessively negative impact on traffic flow.

Opinion of Probable Cost:

Total - \$2,500,000.00*

*Notes/Exclusions/Assumptions

- Cross sections will be needed prior to pricing this design
- Need NPDES line clearly defined at causeway STA 20+00 25+50
- With raising the roadway, additional fill to build up shoulder has not been quantified due to NPDES Line
- With raising the roadway, removing, or replacing curb/sidewalk/pedestrian guardrail is not included
- Decorative 2' street print shoulder and crosswalks are not included
- Ornamental wood post street sign replacement is not included
- Arborist, tree pruning, or street tree removal or replacement is not included
- Price is based on daytime work and no restrictions on tri-axle deliveries of material
- Sodding, irrigation, and landscaping is not included. Contractor will stabilize disturbed shoulders with seeding methods for stabilization
- Any new or existing storm drainage improvements are not included
- Erosion control items are not included (i.e., Silt fence, tree protection, etc.)
- All driveways end at the R/W. If additional asphalt is needed price is subject to change
- Due to the volatility in liquid asphalt prices, the job will be indexed at the time of pricing.
 Variation to the index price at the time of asphalt placement will be determined and contractor will adjust the price accordingly.
 - https://www.scdot.org/business/constructionletting-monthlyindex.aspx



REFERENCES

- 1. PLAN AND PROFILE OF STATE HIGHWAY RD-S-20(BETSY KERRISON PARKWAY) ROUNDABOUT AT KIAWAH ISLAND DATED 06/13/2008
- 2. PLAN AND PROFILE OF STATE HIGHWAY S-1875 FROM RD-S-20 DATED 1-5-73.
- PLAT OF A WARMELE WOTH PATH EASEMENT TO BE ACQUIRED BY THE TOWN OF SEMBROOK ISLAND BY HIGBD SURVEYORS, LLC, DATED SEPTEMBER 29, 2008, RECORDED IN CHARLESTON COUNTY RMC BOOK LOR PINES 0222.
- 5. SUBDINSION PLAT OF TRACTS I-G, I-D, AND A PORTION OF THE KIAWAH ISLAND PARKWAY, BY SOUTHEASTERN SURVEYING INC., DATED 01/28/04, RECORDED IN CHARLESTON COUNTY RMC BOOK EG PAGE
- 8. SUBDINSION PLAT OF TRACTS I-A, I-B, I-C, II, III, III-A, IV THRU X, C, D AND A PUNP STATION, BY SOUTHEASTERN SURVEYING INC., DATED 01/02/98, RECORDED IN CHARLESTON COUNTY RMC BOOK EC
- 8. PLAT OF TRACTS I THRU X, BY SOUTHEASTERN SURVEYING, INC., DATED 11/09/88, RECORDED IN CHARLESTON COUNTY RMC BOOK BU PAGE 093.

- 11. A RESUBDIVISION PLAT OF PARCELS 1 THRU 3 ON BETSY KERRISON PARKWAY, BY SOUTHEASTERN SURVEYING INC., DATED 01/21/97, RECORDED IN CHARLESTON COUNTY RMC BOOK EB PAGE 828.
- 12 PLAT OF A 28/219 ACRE PORTION OF THE ANDELL TRACT, BY EM SEARROOK, JR. INC. DATED JANUARY 24, 1978. RECORDED IN CHARLESTON COUNTY RMC ROOK AL PAGE 093.
- 13. PLAT OF ANDELL BLUFF BOLLEVARD, BY A.H. SCHWACKE & ASSOCIATES INC., DATED MARCH 31, 2005, RECORDED IN CHARLESTON COUNTY RMC BOOK FLI PAGE 002.
- 14. SUBDIVISION PLAT OF FRESHFIELD VILLAGE TRACT 1-D, BY SOUTHEASTERN SURVEYING INC., DATED 09/22/08, RECORDED IN CHARLESTON COUNTY RMC BOOK LOB PAGE 0157.
- 15. PLAT OF TRACT C AND TRACT D, BY EM SEABROOK, JR. INC., DATED SEPTEMBER 2, 1981, RECORDED IN CHARLESTON COUNTY RMC BOOK AT PAGE 163.
- 16. PLAT OF 6.724 ACRE PORTION OF THE ANDELL TRACT, BY WILLIAMS & ASSOCIATES, DATED JANUARY 23, 1981, RECORDED IN CHARLESTON COUNTY RMC BOOK AS PAGE 012.
- 17. BERKELEY ELECTRIC COOPERATIVE GIS DRAWINGS DATED 11/15/16
- 18. AT&T GIS DRAWING DATED 11/01/16
- 19. SEABROOK ISLAND UTILITY COMMISSION GIS DRAWING DATED 11/15/16.
- 20. SEABROOK ISLAND 20" WATERMAIN PHASE II WATERMAIN AS-BUILT, BY PATRICK D. O'NEILL, RLS, DATED 1/30/06.
- 21. HOPE PLANTATION PHASE I 8" EFFLUENT FORCE MAIN, BY HUSSEY, GAY, BELL & DEYOUNG CONSULTING ENGINEERINGS, DATED 07/89.
- 22. 10" TRANSMISSION LINE SEABROOK ISLAND, BY EM SEABROOK, JR. INC., DATED 4/15/82.
- 23. SITE PLAN BOOSTER PUMP ADDITION, BY EM SEABROOK, JR. INC., DATED 02/25/97.
- 24. PLAT OF TWO TRACTS OF LAND SITUATE ON SEABROOK, BY EM SEABROOK, JR. INC., DATED MARCH 16, 1981, RECORDED IN CHARLESTON COUNTY RMC BOOK AS PAGE 072.
- 25. QUITCLAM DEED OF S-1875 (SEARROOK ISLAND RD.) FROM SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION TO TOWN OF SEABROOK ISLAND. DATED FEBRUARY 02/1990. RECORDED IN CHARLESTON COLUMNY RIVE BOOK 2190 PAGE 880.

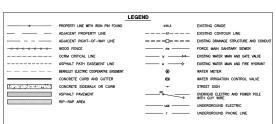


SEABROOK ISLAND ROADWAY PLAN AND PROFILE

TOWN OF SEABROOK ISLAND CHARLESTON COUNTY, SC DATED OCTOBER 19, 2021

UPDATED FEBRUARY 07. 2022 FOR SENIOR CENTER LANE SHIFT

SHEET NUMBER	SHEET DESCRIPTION
COVER	COVER
1	PLAN AND PROFILE STA. (-5+00) TO STA. 0+00
2	PLAN AND PROFILE STA. 0+00 TO STA. 4+89.66
3	PLAN AND PROFILE STA, 4+89,66 TO STA, 11+07,71
4	PLAN AND PROFILE STA. 11+07.71 TO STA. 17+04.57
5	PLAN AND PROFILE STA, 17+04.57 TO STA, 22+94.90
6	PLAN AND PROFILE STA, 22+94.90 TO STA, 29+13.25
7	PLAN AND PROFILE STA. 29+13.25 TO STA. 35+31.29
8	PLAN AND PROFILE STA, 35+31,29 TO STA, 41+49,34
9	PLAN AND PROFILE STA. 41+49.34 TO STA. 47+67.39
10	PLAN AND PROFILE STA, 47+67,39 TO STA, 53+85,44
11	PLAN AND PROFILE STA. 53+85.44 TO STA. 60+00.00



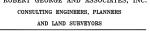
TREE LEGEND

RENCH MARK REFERENCE

VERTICAL CONTROL

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(843) 556-4261 CHARLESTON, SOUTH CAROLINA 29417-2158



