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EXECUTIVE SUMMARY

In November of 2004, the citizens of Charleston County voted to enact a half-cent sales tax to be used for the purposes of transportation improvements, greenbelt facilities, and mass transit. Collection of the tax began in May 2005 and continues for 25 years or until \$1.3 billion is collected. \$221.5 million (17%) is earmarked for greenspace acquisition and \$1.08 billion (83%) for transportation funding including mass transit.

On the same ballot with the approval of the transportation sales tax, Charleston County voters authorized the County to issue \$113 million in bonds with \$77 million allocated for the following transportation projects:

- Johnnie Dodds Boulevard (US17) improvements from the Arthur Ravenel Jr. Bridge to the I-526 Overpass
- Glenn McConnell Parkway at Bees Ferry Road intersection improvements
- Folly Road at Maybank Highway intersection improvements
- Harborview Road improvements
- New off-ramp/loop from the James Island Connector onto Folly Road
- New access ramp from US 17 onto the SC Rte 61 Connector near Wesley Drive
- New road connecting Palmetto Commerce Parkway to Ashley Phosphate Road (S-75)

As part of a second bond referendum in November 2006 the voters of Charleston County authorized the county to issue an additional \$205 million in bonds with the entire amount allocated for the following transportation improvement projects:

- Glenn McConnell / I-526 Loop
- Bees Ferry Road Widening from Savannah Hwy (Hwy 17) to Ashley River Road (Hwy 61)
- Folly / Camp Road Intersection
- Future Drive Loop to Ladson Road and Northside Drive Extension
- Maybank Highway Improvement (John's Island I-526 to Main Rd.)
- Medical University Roadway Infrastructure Improvement Project (Phase I)

The Charleston County ROADWISE program was created to implement the transportation improvements and is staffed by Charleston County personnel and employees of THE LPA GROUP INCORPORATED, the firm selected to manage to the overall program by the Charleston County Department of Public Works.

The Maybank Highway Improvement project has 30% of the parcels along the corridor located within the city limits of Charleston and is approximately 3.75 miles in length. The project begins at the intersection of Main Rd and Maybank



Highway and will end at the existing Stono River Bridge near the site of the proposed extension of I-526.

The existing roadway will be widened from a two-lane facility to a four-lane / five-lane section with accommodations for bicycles and pedestrians. Provisions will be made in the design phase in order to avoid numerous Grand Oaks and other large trees along the corridor. This is important for John's Island in order to keep the sense of rural space and history that is associated with the current landscape. All "major" intersections will have upgraded traffic signals and stamped crosswalks. There will also be additional landscaping installed at the intersections as well as along the project in order to maintain and enhance existing aesthetics along the corridor while providing gathering places.

The typical section for the majority of the project is a parkway type facility with two lanes in each direction separated by either a planted median or a two-way left turn lane. Raised planted medians will be constructed where access requirements permit. The planted medians would form an edge of pavement with a sloping face curb and gutter and the roadway edge of pavement is comprised of 2' curb and gutter. The north side of the project will contain a five foot sidewalk separated from the traveled way by a buffer strip. Typically, this sidewalk will meander in certain places in order to miss existing amenities and reduce impacts to trees. The south side of the project will have a 10-foot meandering multi-use path for access to both pedestrians and cyclists. If the need for access outweighs the desire for landscaped medians then a two-way left turn lane would be provided.

East of the intersection with River Road the project encounters multiple historically and environmentally significant trees. Various roadway alignments have been evaluated in order to best preserve the existing trees and canopy.

The anticipated cost in current 2007 Dollars is \$31,232,200 for the proposed Maybank Highway Improvements.



1.0 INTRODUCTION

1.1 Project Concept Report Approach and Objectives

This concept report focuses on the identification of engineering, environmental, and community considerations for the improvement and widening of the existing Maybank Highway in western Charleston County from Main Road to the Stono River Bridge. See Exhibit 1 for a project location display.

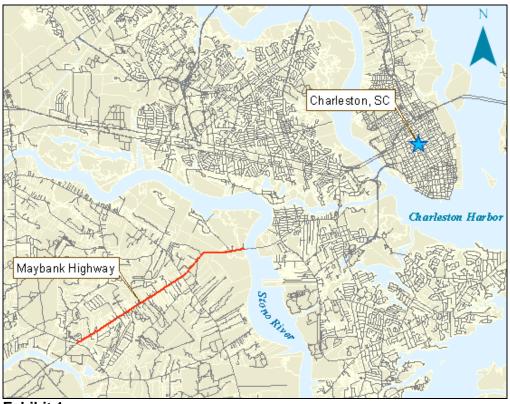


Exhibit 1

1.2 Project Description

The proposed project consists of improvements and widening from two lanes to four lanes with a planted "tree lined" median along an existing 3.75 mile stretch of Maybank Highway from Main Rd to the Stono River. Maybank Highway currently is an Urban Minor Arterial that serves as the main travel artery for John's Island. As well as widening in order to alleviate traffic related issues, the project also has a significant focus on providing bicycle and pedestrian facilities in the form of sidewalks and multi-use paths along the corridor.

In general, widening will be centered off of the existing alignment, shifting to the south near the River Road intersection and Fenwick Hall Allee. There will be a five-foot sidewalk on the north side of Maybank Highway and a 10' meandering multi-use path on the south side of the project. Both sides of the roadway will



have two-foot curb and gutter as well as a buffer strip between the traveled way and the pedestrian and cyclist facilities.

The roadway east of the River Road intersection encounters multiple historically and environmentally significant trees. Various roadway alignments have been evaluated in order to best preserve the existing trees and canopy.

The proposed design allows two lanes of traffic traveling east to be shifted to the south, creating a large natural median. This natural area will contain many of the largest and most significant trees along the corridor, while preserving the rich canopy that is unique to this area of John's Island and the Charleston Area. For the total project length a survey was done to determine the number of existing Grand Trees (24" in diameter or greater). Once the survey was completed we were able to determine the amount of impact due to various alternatives. The total number of trees surveyed at 24" or greater was 394 trees. The number of impacted trees was 44; approximately 11% of the surveyed trees were impacted by our design.

John's Island has a unique rural character as well as a unique environmental setting which the proposed conceptual plan hopes to address by making significant design considerations. The proposed improvements will meet the needs of significant growth on John's Island while also allowing for the unique character of the area to continue to exist.

1.3 Project Location

Maybank Highway is located in the western part of Charleston County with approximately 30% of the corridor being within in the city limits of the City of Charleston. The other portion of the corridor is in the unincorporated area of Charleston County. Maybank Highway is classified as an Urban Minor Arterial. The project begins at the intersection of Maybank Highway and Main Rd and terminates at the Stono River bridge.

1.4 Study Purpose/Traffic Conditions

The primary purpose of the proposed project is to improve traffic flow, access, safety, and aesthetics; while also providing improvements and new amenities for pedestrians and cyclists.

1.4.1 Current Traffic

Maybank Highway (SC 700) is an Urban Minor Arterial that has a posted 45 mile per hour speed limit. Maybank Highway begins at its intersection with Folly Road (SC 171) on James Island, and continues southwest until its terminus in Rockville. Residential subdivisions and business development are scattered along Maybank Highway within the study area. Large, established trees line both



sides of Maybank Highway in many sections of the corridor. Currently, there are no sidewalks or bike lanes along Maybank Highway within the study area. Maybank Highway is free flowing between River Road and Main Road/Bohicket Road,

with stop signs controlling the side street approaches. Within the study area, Maybank Highway is a two lane road with separate left turn lanes provided at several intersections. As it enters the study area from the west, Maybank Highway crosses Bohicket Creek on a two lane bridge. The intersection of Maybank Highway and Main Road/Bohicket Road is located approximately 3,500 feet east of the Bohicket Creek. At this signalized intersection, Maybank Highway provides a separate left turn lane and a shared through-right turn lane in both directions. A protected and permitted left turn phase is provided for the eastbound Maybank Highway and the southbound Main Road left turn traffic.

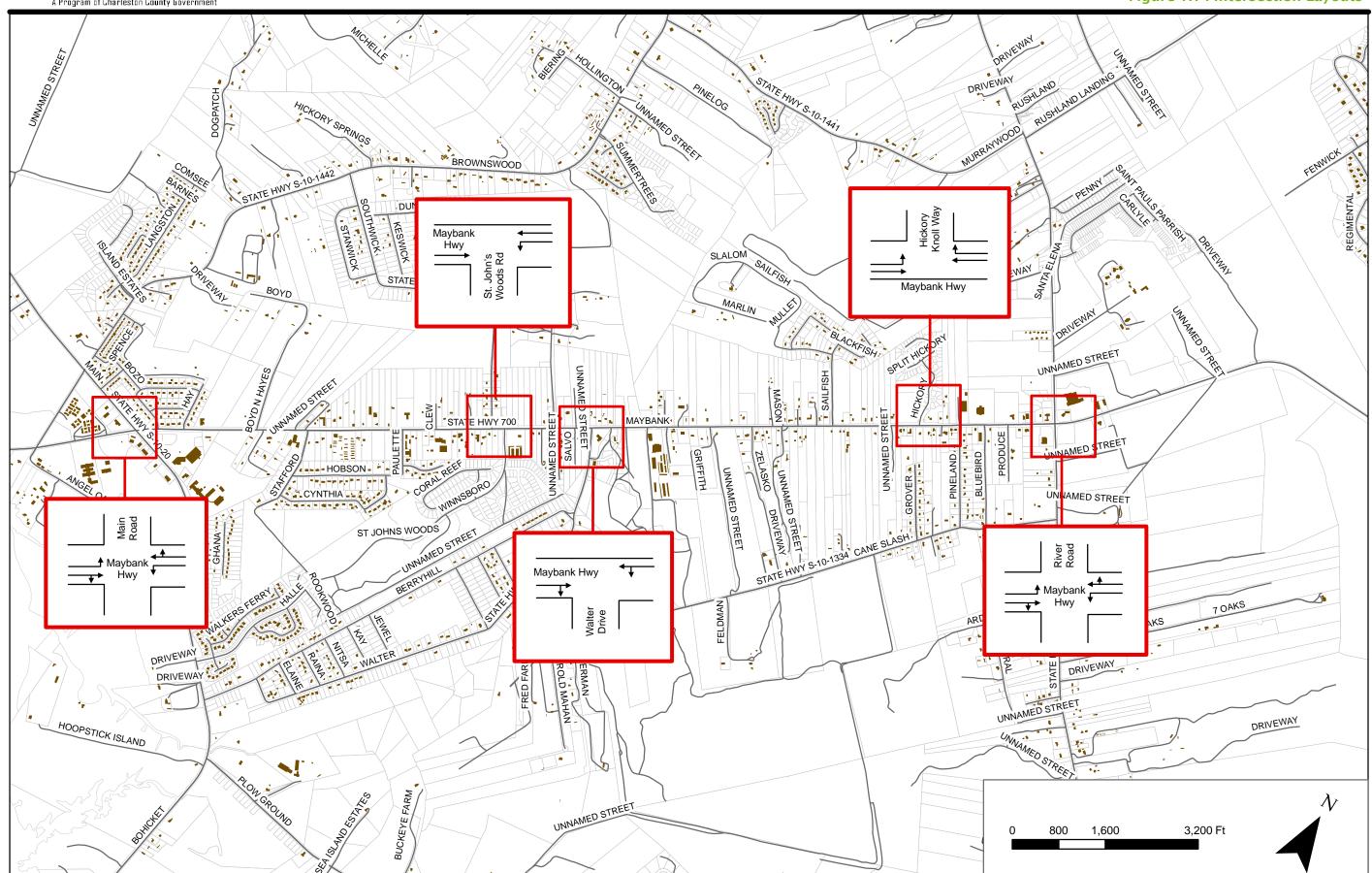
The intersection of Maybank Highway and St. John Woods Parkway (formerly Winnsboro Drive) is located approximately 1.2 miles east of Main Road/Bohicket Road. At this intersection, westbound Maybank Highway provides a separate left turn lane and a through lane, and eastbound Maybank Highway provides a shared through-right turn lane. At approximately 1,450 feet east of St. John Woods Parkway, Maybank Highway intersects Walter Drive. At this intersection, westbound Maybank Highway provides a shared left turn/through lane, and eastbound Maybank Highway provides a shared through-right turn lane.

The intersection of Maybank Highway and Hickory Knoll Way is located approximately 1.1 miles east of St. John Woods Parkway. At this intersection, westbound Maybank Highway provides a through lane and a separate right turn lane, and eastbound Maybank Highway provides a separate left turn lane and a through lane.

At approximately 2,300 feet east of Hickory Knoll Way, Maybank Highway intersects River Road. At this signalized intersection, Maybank Highway provides a separate left turn lane and a shared through-right turn lane in both directions. Protected-permitted left turn phases are provided for the eastbound Maybank Highway and the southbound River Road approaches. If constructed, the I-526 extension would intersect Maybank Highway at approximately 4,000 feet east of the intersection of Maybank Highway and River Road.

See Figure 1.1 for a detail of existing intersection layouts.







Main Road/Bohicket Road (S 20) is a two lane Rural Minor Arterial that has a posted 45 mile per hour speed limit. Main Road begins at its intersection with Bees Ferry Road (S-57) then runs south to its intersection with Maybank Highway (SC 700). Across from Main Road, Bohicket Road extends from Maybank Highway and winds southeast to its intersection with River Road (S 54). Commercial and residential development is present at the intersection of Maybank Highway and Main Road/Bohicket Road.

North Corner:

- Panda Garden Restaurant
- Sessions Chiropractic Clinic
- Dunmovin Subdivision

South Corner:

- Amoco Gas Station
- Dayton Tire Store
- Beauty Supply Store

East Corner:

- McDonald's
- Kerr Drugstore
- El Mercadito Restaurant
- Wachovia Bank
- Piggly Wiggly Grocery Store
- Haut Gap Middle School approximately 1,200 feet southeast

West Corner:

- Shell Gas Station
- Melcer Tile and Paint Store
- Billy Dee's Premium Chicken Restaurant

St. John Woods Parkway (formerly Winnsboro Drive) is a short, local two lane street extending south from Maybank Highway with a posted speed limit of 35 miles per hour. A Safe Storage site is located at the southeast corner of the intersection of Maybank Highway and St. John Woods Parkway. Most of the developments adjacent to St. John Woods Parkway are residential subdivisions. Sidewalks are provided along the east side of St. John Woods Parkway. At its intersection with Maybank Highway, St. John Woods Parkway provides a separate left turn lane and a separate right turn lane.

Walter Drive is a two lane local road winding between Maybank Highway and Berryhill Road. Walter Drive has a posted speed limit of 35 miles per hour. Southern Methodist Church is located at the southeast corner of the intersection



of Maybank Highway and Walter Drive. Walter Drive provides access to single family houses scattered along the road. At its intersection with Maybank Highway, St. John Woods Parkway provides a shared left turn-right turn lane.

Hickory Knoll Way is a two lane local road extending north from Maybank Highway with a posted speed limit of 25 miles per hour. Hickory Knoll Way provides access to the Barberry Woods subdivision with 72 single family houses. At its intersection with Maybank Highway, Hickory Knoll Way provides a shared left turn-right turn lane.

River Road (S-54) is a two lane Rural Minor Arterial winding between Main Road and Bohicket Road. River Road runs parallel to the Stono River. River Road has a posted speed limit of 45 miles per hour. The intersection of Maybank Highway and River Road is located at approximately 1.7 miles west of the Paul J Gelegotis Bridge (Stono Bridge) over the Stono River. An Amoco Gas station is located at the northwest corner of the intersection of Maybank Highway and River Road, a Hess Gas station and Food Lion grocery at the northeast corner, and a Kerr drugstore at the northeast corner. At its intersection with Maybank Highway, River Road provides a separate left turn lane and a shared throughright turn lane in both directions.

1.4.2 Future Traffic

Without any improvement to the existing no-build condition, delays would increase at all approaches by 2030 (with and without the I-526 extension). Without the I-526 extension, all signalized and stop sign controlled side streets would operate above capacity under the projected 2030 no-build traffic volumes. Stop sign controlled side streets would experience substantial delay due to high through traffic volumes along Maybank Highway in both directions. The overall delay time would be over eight minutes during morning peak hour at the intersection of Maybank Highway and River Road due to heavy through traffic along Maybank Highway as well as high southbound and westbound left turn traffic volumes.

With the I-526 extension, all signalized and stop sign controlled side streets would operate above capacity during all peak hours with the exception of the intersection of Maybank Highway with I-526 southbound ramps, which would operate at an overall LOS D. All stop sign controlled side streets would experience substantial delay due to high through traffic volumes along Maybank Highway in both directions. At the intersection of Maybank Highway and River Road, the overall delay time would be over ten minutes during weekday peak hours.

The potential extension of I-526 between US 17 and Folly Road could have a significant impact on the traffic patterns in the area. If constructed, I-526 would



be extended south and connected with James Island Expressway (SC 30). Future traffic analyses are performed based on the 2030 Long Range Transportation Plan (LRTP) developed by the BCDCOG. Growth factors were not applied to traffic entering/exiting St. John Woods Parkway, Walter Drive, and Hickory Knoll Way since it is assumed these areas have been fully developed. and the traffic generated within these developments will not generally change over time. With the I-526 extension, the traffic annual growth rates are higher than without the I-526 extension along Maybank Highway, River Road south of Maybank Highway, and Bohicket Road. With the I-526 extension, the projected 2030 traffic along Main Road would decrease approximately 45% compared to the existing 2003 traffic volume. The projected 2030 Main Road traffic volume with I-526 extension is about 45% of the projected 2030 traffic without I-526 extension. According to the assignments obtained from the CHATS model, the extension of I-526 is expected to divert traffic that is spread across the regional roadway network via I-526 to the portion of Maybank Highway that makes up the study area.

Without the extension of I-526, the projected 2030 traffic volume along Maybank Highway is about ninety percent higher. With the extension of I-526, the projected 2030 traffic volumes are about three times higher than the existing traffic volumes.

1.4.3 Analyses of Arterial Levels of Service

Analysis of Maybank and Arterial Levels of Service are based on four studied alternatives and a no-build scenario, all with and without the I-526 extension.

Alternative A:

Alternative A consists of providing a two-way left turn lane (TWLTL) along Maybank Highway corridor within the study area. Alternative A also includes implementing a protected/permitted left turn phase for westbound Maybank Highway at River Road and at Main Road/Bohicket Road.

A two-way left turn lane (TWLTL) is provided to remove left turning vehicles from the through lanes and store those vehicles in the median area until an acceptable gap in opposing traffic is available. Accidents may be reduced when a TWLTL is added to a two lane street. This reduction is possible as stopped or slow left turning vehicles are removed from the through lanes. Delay to through vehicles will also be reduced because left turning vehicles will not block the through lanes. In addition to Hickory Knoll Way, Walter Drive, and St. John Woods Parkway, there are nineteen stop sign controlled side streets along Maybank Highway within the study area. By providing a TWLTL, through traffic along Maybank Highway would flow more smoothly.



Alternative B:

Alternative B consists of providing a second through lane in each direction along Maybank Highway within the study area. At the intersection of Maybank Highway with Main Road/Bohicket Road, Alternative B includes implementing a protected/permitted left turn phase and providing a separate left turn lane, one through lane, and a shared through-right turn lane in both directions along Maybank Highway.

At the intersection of Maybank Highway with River Road, Alternative B includes implementing a protected/permitted left turn phase for westbound Maybank Highway and southbound River Road and providing a separate left turn lane, one through lane, and a shared through-right turn lane in both directions along Maybank Highway.

Alternative C:

Alternative C is based upon the Maybank Highway recommendation from the Johns Island Community Planning Workshop. In Alternative C, Maybank Highway is generally a two lane road between River Road and Main Road/Bohicket Road. A TWLTL will be provided along several segments throughout Maybank Highway, including between Main Road/Bohicket Road along the shopping center frontage, between St. John Woods Parkway and Walter Drive, as well as between Hickory Knoll Way and River Road. The intersection of Maybank Highway and Main Road/Bohicket Road would have the same intersection configuration as the existing intersection. Alternative C would provide two two-lane frontage roads parallel to Maybank Highway. Both frontage roads are located approximately 900 feet from Maybank Highway.

Alternative D:

Alternative D consists of providing a second through lane in each direction and a TWLTL along Maybank Highway within the study area. At the intersection of Maybank Highway with Main Road and Bohicket Road, Alternative D includes providing dual left turn lanes and a separate right turn lane for westbound Maybank Highway, and a channelized right turn lane for northbound Bohicket Road. At the intersection of Maybank Highway with River Road, Alternative D includes providing dual left turn lanes for southbound River Road and westbound Maybank Highway, and a separate channelized right turn lane for northbound River Road and westbound Maybank Highway.

Arterial Levels of Service

The 2030 peak hour through traffic (without the I-526 extension) on Maybank Highway is projected to be over 1,300 vehicles in each direction. With the I-526 extension, through traffic on Maybank Highway is projected to be over 2,000 vehicles in each direction during the 2030 peak hours.



Table 1.1 shows the arterial level of service analysis results for all alternatives based on the existing traffic volumes as well as the projected 2030 traffic volumes (with and without the I-526 extension).

With the existing traffic volumes, all alternatives would provide satisfactory arterial levels of services in both directions along Maybank Highway during peak hours. Alternatives B and D provide slightly higher average speed along Maybank Highway comparing to Alternative A and C due to the additional through lane.





Table 1.1: Maybank Highway Arterial Levels of Service

Alternative Time Direction	Table 1.1: Maybank Highway Arterial Levels of Service					
No-Build Time Direction 2007 with without I-526 I-526			Time Direction Service/Average Spectrum 2007 with			
No-Build Saturday B Saturday B Saturday Saturday B Saturday Saturday B Saturday Satu	Alternative	Time				
No-Build B B/34.2 F/9.7 D/18.9					20	30
No-Build B B/34.2 F/9.7 D/18.9				without		
No-Build EB B/34.2 F/9.7 D/18.9 WB A/36.5 F/9.3 D/19.8 EB B/34.4 E/13.4 B/28.9 WB B/34.3 F/9.5 D/17.7 Saturday EB A/37.1 D/21.0 B/32.7 WB A/37.4 E/15.9 C/26.4 EB B/30.0 F/8.0 E/13.6 WB A/37.2 F/11.2 D/20.9 EB B/32.3 F/11.2 D/18.6 WB A/36.0 F/9.4 D/17.1 EB B/31.9 E/14.6 C/24.8 WB A/38.1 E/16.3 B/28.4 EB B/34.5 D/18.6 D/21.8 EB B/34.5 D/18.6 D/21.8 EB B/34.9 C/25.2 A/35.4 EB B/34.9 C/25.2 B/28.5 A/39.2 D/21.9 C/25.8 EB B/34.9 C/25.2 B/28.5 EB B/34.0 EB B/33.4 A/36.2 EB B/33.0 F/11.2 C/23.8 EB B/32.8 F/7.5 E/13.9 EB B/32.8 F/7.5 E/13.9 EB B/32.8 F/7.5 E/13.9 EB B/32.8 F/7.5 E/13.9 EB B/33.0 F/11.3 C/22.1 EB B/33.0 F/11.3 C/22.1 EB B/34.6 C/22.6 B/28.6 EB B/34.6 C/22.6 B/28.6 EB B/34.6 C/22.6 B/28.6 EB B/34.6 C/22.6 B/28.6 EB A/35.5 C/26.9 B/29.3 EB A/35.5 C/26.9 B/29.3 EB A/37.2 B/33.3 B/33.5 EB A/37.2 B						
No-Build Afternoon		 	775	7/2/2		
No-Build Afternoon		Morning				
No-Build Afternoon WB B/34.3 F/9.5 D/17.7						
Baturday Saturday EB	No-Build	Afternoon				
Morning	1,0 20110					
Morning EB B/30.0 F/8.0 E/13.6 WB A/37.2 F/11.2 D/20.9 Afternoon EB B/32.3 F/11.2 D/18.6 WB A/36.0 F/9.4 D/17.1 Saturday EB B/31.9 E/14.6 C/24.8 WB A/38.1 E/16.3 B/28.4 WB A/39.8 C/25.2 A/35.4 WB A/39.8 C/25.2 A/35.4 B B/34.9 C/25.2 B/28.5 WB A/39.2 D/21.9 C/25.8 Saturday EB B/34.9 C/25.2 B/28.5 WB A/39.2 D/21.9 C/25.8 Saturday EB B/34.9 C/25.2 B/28.5 WB A/30.2 F/5.5 E/13.9 WB A/36.3 F/11.2 C/23.8 B/30.7 B/30.7 B/30.7 B/30.7 WB A/36.3 F/11.2 C/23.8 WB <td></td> <td>Saturday</td> <td>EB</td> <td>A/37.1</td> <td>D/21.0</td> <td>B/32.7</td>		Saturday	EB	A/37.1	D/21.0	B/32.7
Afternoon		Buturday	WB	A/37.4	E/15.9	C/26.4
Afternoon EB B/32.3 F/11.2 D/20.9		Morning	EB	B/30.0	F/8.0	E/13.6
Afternoon Saturday BB A/36.0 EB B/31.9 E/14.6 C/24.8 WB A/38.1 E/16.3 B/28.4 Morning BB A/39.8 C/25.2 A/35.4 BB A/39.2 BB A/37.0 BB A/30.0 BB A/30.7 B/30.7 B/34.4 WB A/39.2 D/21.9 C/25.8 BB A/37.0 BB/30.7 BB/34.4 A/36.2 BB B/32.8 F/7.5 E/13.9 WB A/36.3 F/11.2 C/23.8 Afternoon WB B/30.2 BB A/36.1 BB A/36.1 BB A/36.2 BB A/36.2 BB A/36.2 BB A/36.3 BB/30.8 BB A/36.3 BB/30.8 BB A/36.1 BB B/30.8 BB A/36.1 BB A/36.2 BB A/36.1 BB A/36.3 BB/30.8 BB A/36.3 BB/30.8 BB A/36.6 BB/30.8 BB A/36.7 BB BB/34.6 C/22.6 BB/28.6 BB/28.6 BB/29.0 A/35.5 BB/29.3 BB/29.3 BB/29.3 BB/29.3 BB/33.5 BB/33.5		Wildining	WB	A/37.2	F/11.2	D/20.9
Baturday Baturd	Δ	Afternoon	EB	B/32.3	F/11.2	D/18.6
Saturday WB A/38.1 E/16.3 B/28.4 Morning EB B/34.5 D/18.6 D/21.8 WB A/39.8 C/25.2 A/35.4 B B B/39.8 C/25.2 B/28.5 Afternoon EB B/34.9 C/25.2 B/28.5 B D/21.9 C/25.8 C/25.8 B/28.5 B B/37.0 B/30.7 B/34.4 A/36.2 WB A/40.1 B/33.4 A/36.2 E/13.9 WB A/36.3 F/11.2 C/23.8 B B/33.0 F/11.2 C/23.8 B B/30.2 F/8.9 E/16.3 WB B/36.2 D/19.4 B/30.8 B B/36.2 D/19.4 B/28.8 Morning EB B/34.6 C/22.6 B/28.6 WB A/38.8 B/29.0 A/35.5 Afternoon EB A/35.5 C/26.9 B/29.3	A	Atternoon	WB	A/36.0	F/9.4	D/17.1
B A/38.1 E/16.3 B/28.4 Morning EB B/34.5 D/18.6 D/21.8 WB A/39.8 C/25.2 A/35.4 B B B/34.9 C/25.2 B/28.5 WB A/39.2 D/21.9 C/25.8 B B/30.7 B/34.4 B/30.7 B/34.4 WB A/40.1 B/33.4 A/36.2 Morning EB B/32.8 F/7.5 E/13.9 WB A/36.3 F/11.2 C/23.8 B B/33.0 F/11.3 C/22.1 WB B/30.2 F/8.9 E/16.3 Saturday EB A/36.1 E/16.4 B/30.8 WB A/36.2 D/19.4 B/28.8 Morning EB B/34.6 C/22.6 B/28.6 WB A/38.8 B/29.0 A/35.5 Afternoon EB A/35.5 C/26.9 B/29.3 Afternoon WB A/38.6 B/29.2		Saturday	EB	B/31.9	E/14.6	C/24.8
B Morning WB A/39.8 C/25.2 A/35.4 Afternoon EB B/34.9 C/25.2 B/28.5 WB A/39.2 D/21.9 C/25.8 B EB A/37.0 B/30.7 B/34.4 WB A/40.1 B/33.4 A/36.2 WB A/36.3 F/7.5 E/13.9 WB A/36.3 F/11.2 C/23.8 C/22.1 WB B/30.0 F/11.3 C/22.1 WB B/30.2 F/8.9 E/16.3 Saturday EB A/36.1 E/16.4 B/30.8 WB A/36.2 D/19.4 B/28.8 Morning EB B/34.6 C/22.6 B/28.6 WB A/38.8 B/29.0 A/35.5 Afternoon EB A/35.5 C/26.9 B/29.3 WB A/38.6 B/29.2 A/34.5 Saturday EB A/37.2 B/33.3 B/33.5		Saturday	WB	A/38.1	E/16.3	B/28.4
B Afternoon		Morning	EB	B/34.5	D/18.6	D/21.8
Afternoon WB A/39.2 D/21.9 C/25.8 Saturday EB A/37.0 B/30.7 B/34.4 WB A/40.1 B/33.4 A/36.2 Morning EB B/32.8 F/7.5 E/13.9 WB A/36.3 F/11.2 C/23.8 EB B/33.0 F/11.3 C/22.1 WB B/30.2 F/8.9 E/16.3 Saturday EB A/36.1 E/16.4 B/30.8 WB A/36.2 D/19.4 B/28.8 Morning EB B/34.6 C/22.6 B/28.6 WB A/38.8 B/29.0 A/35.5 Afternoon EB A/35.5 C/26.9 B/29.3 WB A/38.6 B/29.2 A/34.5 Saturday EB A/37.2 B/33.3 B/33.5		Willing	WB	A/39.8	C/25.2	D/21.8 A/35.4
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Saturday			WB	A/38.6		
WB A/39.7 B/33.6 A/37.8		Saturday	EB	A/37.2	B/33.3	B/33.5
			WB	A/39.7	B/33.6	A/37.8

Without the I-526 extension, eastbound Maybank Highway would operate at LOS E during morning peak hour under Alternatives A and C during 2030 peak hours. With the I-526 extension, one through lane for each direction on Maybank Highway (no-build, Alternative A, and Alternative C) could not accommodate the projected 2030 traffic volumes. By 2030, Alternative B and Alternative D would provide acceptable arterial levels of service in both directions with four through



lanes on Maybank Highway (with and without the I-526 extension). Of all the alternatives, Alternative D provides the highest arterial operating speeds.

1.5 Program Cost/Funding Source

The source of funding currently identified for this project is the second bonded portion of the half-cent sales tax currently being levied by Charleston County. In November 2006, the voters of Charleston County authorized the county to issue an additional \$205 million in bonds with the entire amount allocated for the following transportation improvement projects:

- Glenn McConnell / I-526 Loop
- Bees Ferry Road Widening from Savannah Hwy (Hwy 17) to Ashley River Road (Hwy 61)
- Folly / Camp Road Intersection
- Future Drive Loop to Ladson Road and Northside Drive Extension
- Maybank Highway Improvement (John's Island I-526 to Main Rd)
- Medical University Roadway Infrastructure Improvement Project (Phase I)

2.0 BACKGROUND INFORMATION

2.1 Existing Facilities

2.1.1 Roadway

The existing Maybank Highway is a two-lane facility classified as an Urban Minor Arterial and serving as a main travel way on John's Island. This portion of Maybank Highway has two main intersections one at the beginning of the project at Main Road and one at River Road. Photos of the existing study area are included in Appendix E at the end of this report. The roadway has 12-ft lanes and the existing right-of-way varies from 70' to 85' between Main Road and River Road. The existing right-of-way between River Road and the Stono River Bridge is varies from 60' to 150'. There are limited lengths of unconnected sidewalks and no other provisions for pedestrians or bicyclists.

2.1.2 Bridges

There are no bridges on the existing portion of Maybank Highway.



2.1.3 Drainage

Existing drainage facilities consist of shoulder ditches and swales and crossdrains in circular pipe culverts or box culverts where necessary.

2.1.4 Utilities

The following is a description of the utility facilities in the immediate area of the proposed project:

<u>WATER</u> –Charleston Water Systems (CWS) owns and operates a ten inch water line along Maybank Highway which ties into a water vault then ties into another water vault owned by St.Johns Water Company. A copy of As-built plans is available for review by the engineer when needed. CWS may eligible for reimbursement costs from Charleston County to relocate and/or adjust existing facilities in the area based upon documentation of prior rights.

St.Johns Water Company owns and operates a ten inch waterline along River Road which ties into a water vault at the intersection of River Road and Maybank Highway. St.Johns Water Company also operates a twenty four inch along Maybank Hightway to Main Road. St.Johns Water Company may not be eligible for reimbursement costs from Charleston County to relocate and/or adjust existing facilities in the area based upon little or no documentation of prior rights.

PHONE – Bellsouth Telephone owns and operates a buried copper cables and fiber optic line conduit along Maybank Highway to the intersection of Maybank Highway and Main Road. A copy of As-built plans is available for review by the engineer when needed. The facilities are within the South Carolina Department of Transportation right of way by permission of an encroachment permit. The relocation and/or adjustments to the line will be at no cost to Charleston County.

ELECTRIC – Berkeley Electric Cooperative owns and operates a 115Kv transmission line which crosses Maybank Highway. The existing towers are outside existing South Carolina Department of Transportation right of way and possibly outside of the construction limits. Berkeley Electric Cooperative will be eligible for reimbursement costs from Charleston County to relocate and/or adjust existing facilities in the area.

South Carolina Electric and Gas (SCE&G) owns and operates a distribution line along Maybank Highway. The existing poles are outside existing South Carolina Department of Transportation right of way. SCE&G may be eligible for reimbursement costs related to relocation and/or adjustments of these facilities.



<u>SANITARY SEWAGE</u> - The Charleston Water Systems (CWS) owns and operates gravity and force main sewer lines throughout the area to serve residential development in the area. A copy of As-built plans is available for review by the engineer when needed. CWS may eligible for reimbursement costs from Charleston County to relocate and/or adjust existing facilities in the area based upon documentation of prior rights.

NATURAL GAS - South Carolina Electric and Gas (SCE&G) owns and operates a six inch high pressure steel gas along Maybank Highway. A copy of As-built plans is available for review by the engineer when needed. The existing gas lines are outside of the South Carolina Department of Transportation existing right of way within an easement. SCE&G may not be eligible for reimbursement costs related to relocation and/or adjustments of these facilities.

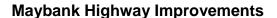
<u>CABLE TV</u> – Comcast Cable Company owns and operates facilities along Maybank Highway. The cable facilities are inside the South Carolina Department of Transportation existing right of way. Comcast Cable Company may be eligible for reimbursement costs from Charleston County to relocate and/or adjust existing facilities in the area.

3.0 PROPOSED PROJECT CONCEPT

3.1 Typical Section (Town and Country Section)

The proposed typical sections to be utilized for this project are a Town Section and Country section as characterized by the John's Island Community Workshop Plan. The Country Section is a 4-lane divided parkway/boulevard section. Two (2) twelve-foot lanes in each direction will be separated by a 15' wide landscaped median where access requirements permit, two-way left turn lane, or dedicated left turn lane. Left turn lanes will be provided at appropriate locations along the roadway. The north side of Maybank Highway will have a five-foot sidewalk separated from the traveled way by a two-foot curb and gutter and a four-foot buffer. The south side of the roadway will have a 10' multi-use path. See Exhibits 2 and 3 for a depiction of these typical sections.

The Town Section is a five-lane section with a dedicated two way left turn lane. This typical section will be utilized approaching existing intersections at Main Road and River Road. These intersections are designated as Gathering Places along Maybank Highway where future development should be concentrated in order to keep the rural feel in the rest of the corridor. The Town Section typical also allows for wider sidewalks next to the traveled way as well as development closer in to the traveled way.



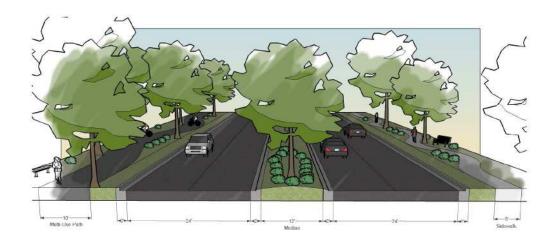


In keeping with the desires of the John's Island community the proposed concept will allow for future larger scale gathering places to be developed at the key intersections of Main Road and River Road, while providing landscaped areas that create the small scale gathering spots for the immediate future. These areas may include native vegetation, community signage, seating for the public, and possible water features.

A key component to the improvements of Maybank Highway is the walk-ability of the corridor. Having a five-foot sidewalk on the north side of the roadway and a 10' multi-use path on the south side accommodates both pedestrians and bicyclist and encourages their use as both recreational and an alternate mode of transportation. Connections throughout the community will be strengthened by the ability to connect bike routes with existing and future bike routes, as well as connecting sidewalks with nearby schools.

Transit is another key component of the improvements along Maybank Highway as CARTA bus service is currently not in place. As Maybank Highway continues to develop housing and businesses, transit will be an essential component to connecting John's Island with its surrounding community. Some beneficial transit design elements along the corridor are bus turnouts on the 'thru' sides of intersections as well as providing covered seating and landscaped areas at the bus stops.

Country Section



The LPA Group, Inc

Exhibit 2: Country Section

Urban Town Section



The LPA Group Inc

Exhibit 3: Urban Town Section

3.2 Conceptual Plan Development

The Charleston County Sales Tax Program and the CHATS Long Range Plan have identified the Maybank Highway Improvement Project as a project to be funded and constructed. Several factors should be recognized as the development of design plans begins for this project. There is significant public input and desire for mitigation on existing tree canopy and large trees as well as on the area's culture, history, and current appeal. The balance of enhancements; be that sidewalks and bicycle paths or widening of roadway, with protection of the area's natural and cultural history will be crucial.

4.0 MAJOR DEVELOPMENT REQUIREMENTS

4.1 Design Criteria





Table 4.1
Maybank Highway Design Criteria: 5-Lane Section

	Design I	Element	Criteria	Source	
	Functional Classification		Urban Minor Arterial	SCDOT	
Design Controls	Design Year		2030	1. Chapter 9	
	Design Speed		45	1. Chapter	
පී පී	Access Control		by regulation	1. Figure	
	Desired LOS		С	1. Figure	
	Travel Lane Width		12'	1. Figure	
	Right Shoulder Width	Total	c&g	1. Figure	
		Paved	-	-	
	Left Shoulder Width	Total	c&g	1. Figure	
		Paved	-	-	
٠ .	Auxiliary Lane Width		12'	1. Figure	
nts	Bike Lane Width		10' multiuse	1. Figure	
Cross Section Elements	Sidewalk Width		5'	1. Figure	
SS Elei	Curb & Gutter	Туре	Vertical	1. Chapter	
S		Width	2'	1. Figure	
	Median	Туре	TWLTL	1. Chapter	
		Width	15'	1. Figure	
	Cross Slope	Travel Lane	2.08%	1. Figure	
		Auxiliary Lane	2.08%	1. Figure	
	Superelevation	e _{max}	6%	1. Figure	
	Cut Section Side Slopes	Fore Slope	6H:1V	1. Figure	
		Ditch Type	-	-	
		Back Slope	-	-	
	Fill Section Side Slopes	< 5'	6H:1V	1. Figure	
_ ,		5'-10'	4H:1V	1. Figure	
vay nts		>10'	2H:1V	1. Figure	
Roadway Elements	State Stat		2.08%	1. Figure	
<u> </u>	Clear Zone	Fore Slopes 6:1 or flatter	20-22	1. Figure	
		Fore Slopes 5:1 to 4:1	24-28	1. Figure	
		Back Slopes 6:1 or flatter	18-20	1. Figure	
		Back Slopes 5:1 to 4:1	18-20	1. Figure	
	Back Slopes 3:1		14-16	1. Figure	
	Right of Way		120'	-	
	Structural Capacity	New or Reconstructed	HL-93	1. Figure	
Bridges		Existing to Remain	HL-15	1. Figure	
<u> </u>	Vertical Clearance	Roads	17'	1. Figure	
Ā		Railroads	23'	1. Figure	
Stream Crossing 2' abv 10-year el 2. Section 1					
Source 1. SCDOT HIGHWAY DESIGN MANUAL 2003					
SCDOT REQURIEMENTS FOR HYDRAULIC DESIGN STUDIES 2000					



4.2 Right-of-Way

ROW acquisition will depend on factors associated with the alignment to be chosen.

4.3 Drainage and Stormwater Permits

The existing drainage system employs open ditches parallel to the roadway to convey surface runoff to outlet locations. Retention ponds are located at the Maybank Highway and Main Road intersection as well as the Maybank Highway and River Road intersection. There is curb and gutter located at the entrance to Fenwick Hall Allee, though it does not appear to be functional due to excessive debris.

A proposed curb and gutter section would employ a closed drainage system and utilize and improve upon existing outfalls.

In addition to any environmental permits that are discussed in the following section, a National Pollutant Discharge Elimination System (NPDES) permit will need to be obtained prior to construction of the project. This permit covers sedimentation and erosion control on the project and ensures that the erosion control design and guidelines are adhered to during construction. NPDES requirements must be coordinated with SCDOT and incorporated into the intergovernmental agreement.

A South Carolina Department of Health and Environmental Control – Office of Ocean and Coastal Resource Management (SCDEC – OCRM) Land Disturbance Permit will also be obtained prior to any land disturbing activities taking place on the project.

4.4 Environmental

An Environmental Overview was conducted as part of the overall environmental and design process for the Maybank Highway Project. The purpose of this Environmental Overview was to identify potential environmental concerns that may affect the design of the project. Many of these environmental features are protected by state and/or federal law. By identifying these features at this early state in the project's development, they can be addressed during design, and many of the potential environmental impacts can be either avoided or minimized.

4.4.1 Environmental Constraints

Socioeconomics and Environmental Justice - Executive Order 11298, Federal Actions to Address Environmental Justice in Minority Populations and Lowincome Populations, directs federal agencies to analyze "the environmental



effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities" when doing a NEPA analysis. The 2000 U.S. Census Data from the project area was gathered to identify communities that were either minority or low-income. The project area is located in two different U.S. Census Bureau Tracts and three different Block Groups for Charleston County, South Carolina (refer to Table 4.2).

	Table 4.2 Select Economic and Demographic Information for Project Area Maybank Highway Widening				
Percent Minority in 1999	Median Household Income in 1999	Percent Below Poverty Level in 1999			
40%	\$32,778	16%			
39%	\$34,188	13%			
41%	\$45,329	13%			
	Percent Minority in 1999 40% 39%	Percent Minority in 1999 Median Household Income in 1999 40% \$32,778 39% \$34,188 41% \$45,329			

Source: 2000 U.S. Census Data CT = Census Tract, BG = Block Group

Based on the U.S. Census Data, most of the project area is composed of 39 to 41 percent minority populations, and the percentage of those living below the poverty level ranges from 13 to 16 percent. Low-income populations may exist in the project area based on this information, and further consideration of these identified populations may be warranted in subsequent project phases.

<u>Land Use</u> - Land use consists of a mix of residential and business uses throughout the project area. The intersections of River Road and Maybank Highway, and Bohicket Road and Maybank Highway are mainly composed of service-oriented businesses, such as gas stations, restaurants, pharmacies, and grocery stores. Residential areas and subdivisions are interspersed throughout Maybank Highway between these two intersections. Five churches are located along Maybank Highway, mostly set back away from the roadway itself.

<u>Cultural Resources</u> - Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to consider the effects that proposed actions may have on properties listed on, or eligible for listing on, the National Register of Historic Places (NRHP). A records search was conducted to determine the presence of architectural/historic sites and known archaeological sites listed, or with the potential to be listed, on the NRHP, so they could be avoided. Potential historic resources within the project area were identified using the South Carolina



Department of Archives and History's database along with records maintained by the South Carolina Institute of Archaeology and Anthropology.

There is one architectural/historic resource within the project area that has been recorded. Site CH817 consists of prehistoric ceramic scatter and is not eligible for the NRHP. During the subsequent phases of the project, a detailed cultural resources survey will be completed for the project area to determine if any new sites exist.

While SCIAA and SCDAH lists no known recorded sites directly adjacent to Maybank Highway between Main Road and the Stono River, the following sites are within the immediate vicinity: 38CH317, 38CH3291, 38CH3292, 38CH3293, 38CH3716, 38CH3717, 38CH364, 38CH365, and 38CH366. During the next phase, a detailed cultural resources survey will be done within the project limits to determine the eligibility of any of the aforementioned sites that may be impacted by the proposed project. Additionally, any new resources found will be recorded and eligibility determination will take place. During this time, proper consultation will occur with the South Carolina State Historic Preservation Office.

Section 4(f) and 6(f) Properties -Section 4(f) of the Department of Transportation Act of 1966 protects public parks, recreational areas, wildlife/waterfowl refuges, and historic sites from being used for transportation projects unless no feasible and prudent alternative exists. In addition, Section 6(f) of the Land and Water Conservation Fund Act of 1965 protects properties purchased through funds under this Act from being converted to anything other than public outdoor recreational use. Based on aerial photography and field verification, one baseball park exists in the project area north-east of Faith Lutheran Church. The ownership of the baseball park is unknown at this time. While the park would more than likely be considered a Section 4(f) resource if it is used by the public, it is currently unknown if Section 6(f) funding was used to purchase or maintain the facility. The ownership, funding, and use of the park would be further investigated during subsequent project phases.

Wetlands And Other Waters of the United States - Pursuant to Executive Order 11990, Protection of Wetlands, and Section 404 of the Clean Water Act (1977, as amended), the potential presence of U.S. Army Corps of Engineers (USACE) jurisdictional wetlands and other Waters of the United States were investigated during a wetland assessment that was conducted on March 27, 2007. Wetlands were identified on the basis of soils, hydrology, and vegetation as set forth by the 1987 Corps of Engineers Wetlands Delineation Manual. The National Wetlands Inventory Maps were used to evaluate the potential for impacts to jurisdictional areas. Corrections to the NWI maps were based on the observations made during the site visit for the wetland assessment. The resulting corrected wetland map was utilized to quantify potential impacts to wetlands that practicably could not be avoided. Wetlands and other Waters of the United States under the



jurisdiction of the USACE that were identified within the construction limits during the assessment, consisted entirely of forested wetlands. Several surface water areas (namely man-made ditches, ponds, and canals) were also present within the project area.

Potential impacts associated with the proposed project would consist of 0.14 acre of clearing impacts and 0.27 acre of fill within forested wetlands. The total potential impacts would be 0.41 acre, between Main Road and River Road. The total impact including River Road to the Stono River will consist of approximately 4.2 acres of wetland impacts (1.64 ac to non-forested wetlands and 2.56 ac to forested wetlands). Because jurisdictional wetlands are located in such close proximity on both sides of the existing roadway, total avoidance would not be possible. In an effort to minimize impacts, the improvements will utilize 2 to1 side slopes to the extent practicable. Mitigation would be required due to fill of the wetland area.

See Figure 4.4 – Wetlands (Next Page)

<u>Floodplains</u> - Executive Order 11988, Floodplain Management, requires each federal agency to avoid long and short-term adverse impacts resulting from modification of floodplains. To comply with this Executive Order, the floodplains within the project area were identified, and potential impacts estimated.

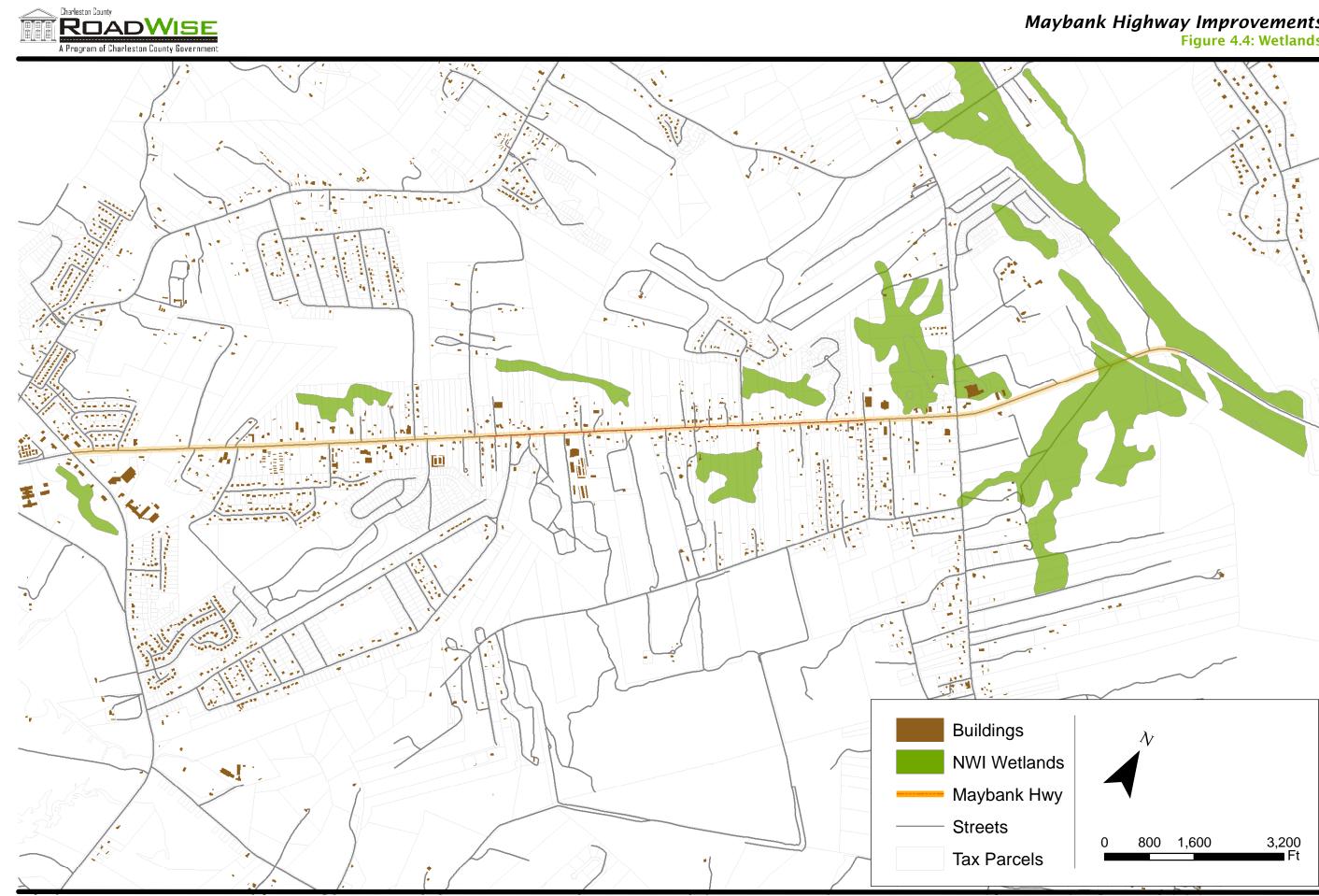
Federal regulations permit development in the 100-year floodplain if it is demonstrated through a hydraulic analysis that the development would meet the requirements set forth by the Federal Emergency Management Agency (FEMA). These requirements allow encroachment in the floodplain as long as the base flood elevation does not increase by more than one foot. Fill in the floodplain is discouraged because it removes floodwater storage capacity.

Based on data from the FEMA Flood Insurance Rate Maps (FIRM),¹ the project area is located in Zone X, Flood Zone AE and Flood Zone VE.

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¹ FEMA FIRM number 45019C0660J, dated November 17, 2004.







<u>Threatened and Endangered Species</u> - Pursuant to Section 7 of the *Endangered Species Act*, a field survey for federally listed threatened and endangered species was conducted within the project area. The following is a list of endangered and threatened species known to occur in Charleston County. The list, dated July 2005, was obtained from the U.S. Fish and Wildlife Service (USFWS) and can be found in Table 4.3.²

Table 4.3 FEDERALLY LISTED SPECIES KNOWN TO OCCUR IN CHARLESTON COUNTY, SOUTH CAROLINA Maybank Highway Widening			
Scientific Name	Common Name	Status	
Plants			
Amaranthus pumilus	Seabeach amaranth†	Threatened	
Lindera melissifolia	Pondberry	Endangered	
Oxypolis canbyi	Canby's dropwort	Endangered	
Schwalbea americana	American chaffseed	Endangered	
Animals			
Acipenser brevirostrum	Shortnose sturgeon	Endangered	
Ambystoma cingulatum	Flatwoods salamander	Threatened	
Caretta caretta	Loggerhead sea turtle*	Threatened	
Charadrius melodus	Piping plover†	Threatened	
Chelonia mydas	Green sea turtle*	Threatened	
Dendroica kirtlandii	Kirtland's warbler	Endangered	
Dermochelys coriacea	Leatherback sea turtle*	Endangered	
Lepidochelys kempii Kemp's ridley sea turtle* Endangered			
Mycteria americana Wood stork Endangered			
Picoides borealis Red-cockaded woodpecker Endangered			
Trichechus manatus	Manatee*	Endangered	
Vermivora bachmanii Bachman's warbler Endangered			

According to the SCDNR Natural Heritage Program species occurrence database, no federally protected species have been documented to occur within the project area. Based on the information provided in the database, the nearest documented occurrence of a federally protected species is a bald eagle occurrence documented from a location over three miles southeast of the project area.

² USFWS (2005), South Carolina Distribution Records of Endangered, Threatened, Candidate, and Species of Concern.



A field survey was conducted in the project area on March 7, 2007. The results of this survey are summarized below. Those species marked by "*" in the list above require marine or estuarine aquatic habitats. These species are eliminated from further consideration because there is no marine or estuarine aquatic habitat in the project area. Species that require beachfront dune or saltmarsh habitat are indicated by "†" in the list above. These species are also eliminated from further consideration due to the fact that there is no beachfront dune habitat in the project area. The remaining nine species are discussed below.

The project would potentially impact the forested wetland areas. Typical species found in the wetland areas included sweet gum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), dwarf palmetto (*Sabal minor*), Southern magnolia (*Magnolia grandiflora*), ironwood (*Carpinus caroliniana*), Christmas fern (*Polystichum acrostichoides*), soft rush (*Juncus effusus*), netted chain fern (*Woodwardia areolata*), loblolly pine (*Pinus taeda*), Chinese privet (*Ligustrum sinense*), American beech (*Fagus grandifolia*), and flowering dogwood (*Cornus florida*). There was also a mixed pine and hardwood forest on the north and west sides of the project. Species in this area were similar to the wetland areas but with a greater percentage of pine to hardwood species. In addition, the project area contained disturbed areas such as maintained utility rights-of-way, paved roads, private residences with mowed lawns, and a commercial development.

Pondberry

Pondberry (*Lindera melissifolia*) is a deciduous shrub with an alternate drooping leaf arrangement that reaches up to six feet in height. Pondberry grows along the edges of sandy lime sinks, ponds, swamp forests, open bogs, and in wet depressions in pine flatwoods.³ This plant prefers shaded areas but is sometimes found in areas of full sun.

Potentially suitable habitat for pondberry was not found within the project area. There were no sandy lime sinks, ponds, swamp forests, open bogs, or wet depressions in pine flatwoods present in the project area. The forested wetland found in the project area was densely vegetated with a closed canopy. It is not the open type of forested swamp habitat preferred by pondberry. The species was not observed during the field work and is not documented to occur in the vicinity of the project area. According to the SCDNR database, the closest documented occurrence is in an area more than 16 miles from the project area. Based on these findings, it is anticipated that there would be no effect to pondberry as a result of the proposed project.

Canby's dropwort

Canby's dropwort (Oxypolis canbyi) is a perennial herbaceous plant that grows to approximately four feet tall. Canby's dropwort favors the high water table, open

³ Porcher, Richard D. and Douglas A. Rayner. 2001. *A Guide to the Wildflowers of South Carolina*. Columbia, SC: University of South Carolina Press.



canopy, and medium- to highly-organic soils found in cypress-pine ponds, sloughs, drainage ditches, wet meadows, and wet pine savannas.

Potentially suitable habitat for Canby's dropwort was found within the project area in the form of drainage ditches/canals. However, most of these ditches were either mowed or densely vegetated with woody shrubs and trees. Therefore, the ditches were not the preferred open habitat of Canby's dropwort. The species was not observed during the field work and is not documented to occur in the vicinity of the project area. According to the SCDNR database, the closest documented occurrence is in an area more than 32 miles from the project area. Based on these findings, it is anticipated that there would be no effect to Canby's dropwort as a result of the proposed project.

American chaffseed

American chaffseed (*Schwalbea americana*) is an upright, perennial herb with a stem that is unbranched or only branches at the base of the plant growing to a height of one to two feet. American chaffseed is restricted to longleaf pine flatwoods and savannas, ecotonal areas between peaty wetlands and xeric sandy soils (in the uphill portions), mesic loamy-soil slopes or swales in longleaf pine sandhill woodlands, and other open, grass-sedge systems.^{4,5} This species prefers areas with an open or partially open overstory.

Potentially suitable habitat for American chaffseed was not found within the project area. There were no longleaf pine flatwoods and savannas, ecotonal areas between peaty wetlands and xeric sandy soils (in the uphill portions), mesic loamy-soil slopes or swales in longleaf pine sandhill woodlands, or other open, grass-sedge systems with evidence of ever having been burned. There was a mixed pine-hardwood forested area to the north and west of the project area but it was densely vegetated with a closed canopy. There was no evidence of it ever having been burned. The species was not observed during the field work and is not documented to occur in the vicinity of the project area. According to the SCDNR database, the closest documented occurrence is in an area more than eight miles from the project area. However, further investigation along the project area would be recommended during the plant's flowering time in June to rule out the presence of this species. Based on these findings, it is anticipated that there would be no effect to American chaffseed as a result of the proposed project.

Flatwoods salamander

Flatwoods salamander (Ambystoma cingulatum) is small, 3.5 to 5 inches long, slender, and has a relatively small head and a dark body with grayish

⁴ Porcher, Richard D. and Douglas A. Rayner. 2001. *A Guide to the Wildflowers of South Carolina*. Columbia, SC: University of South Carolina Press.

⁵ Weakley, Alan S. 2006+ (draft). *Flora of the Carolinas, Virginia, Georgia, and Surrounding Areas.* Chapel Hill, NC: University of North Carolina.



reticulations. The chief habitat for flatwoods salamander is open, mesic flatwoods dominated by longleaf/slash pines and wire grass maintained by frequent fires. Breeding sites are isolated, open, seasonal pools with a fringe of pond cypress and blackgum.

Potentially suitable habitat for flatwoods salamander was not found in the project area. The area does not contain any open, mesic flatwoods maintained by frequent fires, nor a sandhill community. The mixed pine-hardwood forested area to the north and west of the project area was densely vegetated with a closed canopy. There was no evidence of it ever having been burned. According to the SCDNR database, the closest documented occurrence is in an area more than 15 miles from the project area. Based on these findings, it is anticipated that there would be no effect to flatwoods salamander as a result of the proposed project.

Red-cockaded woodpecker

The red-cockaded woodpecker (*Picoides borealis*) is a small woodpecker with a wingspan up to 15 inches. Males have small red spots or "cockades" on each side of the cap just behind the eye, 6 which are not easily discernible in the field. Preferred nesting habitat of the red-cockaded woodpecker is old-growth pine forest (stems \geq 60 years old) that is relatively free of hardwood undergrowth. Suitable foraging habitat includes pine and pine hardwood stands with pine stems \geq 30 years of age.

Potentially suitable habitat for red-cockaded woodpecker is not present within the project area. The project area did include mixed pine hardwood forest with a closed canopy and dense midstory which is not the open pine forest preferred by the red-cockaded woodpecker. In addition, single, individual older pine trees were present in residential lawns in the project area but these would not likely be sufficient to support a colony of woodpeckers. No evidence of cavities or "candling" was observed in any of these trees. According to the SCDNR database, the closest documented occurrence is in an area more than 10 miles from the project area. Based on these findings, it is anticipated that there would be no effect to the red-cockaded woodpecker as a result of the proposed project.

Wood stork

The wood stork (*Mycteria americana*) is a large wading bird that reaches four feet in height and has a wingspan of up to five feet. The wood stork's plumage is white except for the black feathers on its tail, primary feathers, and the trailing edge of its wings. Its head and neck are featherless, and its long bill is black in color. Wood storks typically nest in the upper branches of black gum (*Nyssa biflora*) or cypress (*Taxodium distichum*) trees that are in standing water of swamps along rivers and streams or adjacent to shallow lakes. In South

⁶ USFWS, The Red Book. 1993.

⁷ USFWS. The Red Book. 1996.



Carolina, colony sites are surrounded by extensive wetlands, in particular palustrine forested wetlands.

Suitable habitat for the wood stork was not found in the project area. The area does not contain extensive bottomland swamps or other wet forested areas. The forested wetland area present in the project area was a secondary-growth wetland area which has been partially drained by ditches. It also did not appear to support prey species for wood storks. According to the SCDNR database, the closest documented occurrence is in an area more than eight miles from the project area. Based on these findings, it is anticipated that there would be no effect to the wood stork as a result of the proposed project.

Bachman's warbler

Bachman's warbler (*Vermivora bachmanii*) is a tiny (4 ½- to 4 ½-inch) wood warbler with a pointed bill. The adult male has a yellow head and breast with a black bib.

Bachman's warbler frequents canebrakes and thickets both within and along the borders of mature hardwood swamp forests. They begin arriving in Charleston County in early March, and are gone no later than July 19. The bird nests in scrub palmetto, clumps of cane, low bushes, and vines.⁸

Potentially suitable habitat for Bachman's warbler is not present within the project area. There was no mature hardwood swamp forest in the project area and therefore no borders of such forests. The forested wetlands present in the project area were a secondary-growth wetland area which has been partially drained by ditches and a nearby canal. Suitable habitat is common in South Carolina for transient migrants of this species and is therefore not a limiting factor for this species. According to the SCDNR database, the closest documented occurrence is in an area more than 23 miles from the project area. Based on these findings, it is anticipated that there would be no effect to Bachman's warbler as a result of the proposed project.

Kirtland's warbler

Kirtland's warbler (*Dendroica kirtlandii*) is a small (approximately six inches in length) wood warbler with a finely pointed bill. The plumage is bluish-gray above with black streaks on the back. The male has a black mask. The underparts are yellow with distinct dark streaks on the sides of the breast. It constantly bobs its tail. Kirtland's warbler is a very rare transient in South Carolina. Its migration takes it across South Carolina in late April to early May, and early September to October. The bird frequents thickets and woodland edges on high ground just beyond the wet margins of lakes and swamps, often in association with flocks of other songbirds.

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⁸ Potter, Eloise F., et. al. 1980. *Birds of the Carolinas*. Chapel Hill, NC: University of North Carolina Press.



Potentially suitable habitat for Kirtland's warbler is present within the project area. The forested wetlands present in the project area were a secondary-growth wetland area which has been partially drained by ditches and a nearby canal. Much of the area around the forested wetlands is mixed pine hardwood forest although commercial and residential development is threatening these areas. Suitable habitat is common in South Carolina for transient migrants of this species and is therefore not a limiting factor for this species. Based on these findings, it is anticipated that there would be no effect to Kirtland's warbler as a result of the proposed project.

Shortnose sturgeon

The shortnose sturgeon (*Acipenser brevirostrum*) is a primitive fish that reaches a maximum length of around four feet. The snout of shortnose sturgeon is shorter and blunter than that of the Atlantic sturgeon.

The shortnose sturgeon is found in riverine, estuarine, and occasionally nearshore marine environments of eastern North America and the Atlantic Ocean.

Potentially suitable habitat for shortnose sturgeon was not found in the project area. The project area did not include any riverine, estuarine, and near-shore marine environments. According to the SCDNR database, the closest documented occurrence is within Charleston Harbor, which is over 11 miles from the project area. Based on these findings, it is anticipated that there would be no effect to the shortnose sturgeon as a result of the proposed project.

4.4.2 Environmental Permitting

Environmental permits and/or certifications from city, county, state, and federal regulatory agencies may be needed for the construction of the proposed project.

Permits are required under the *Clean Water Act of 1972* for activities that are located in or affect Waters of the United States, which includes jurisdictional wetlands, from the USACE and the United States Coast Guard (USCG). In addition, the SCDHEC-Office of Coastal Resource (OCRM) must also review any discharges into wetlands or Waters of the U.S. and certify that the proposed project is in accordance with state water quality standards. As previously mentioned in the wetlands section (refer to Section 2.7), wetlands were present within the project area. As a result of unavoidable wetland impacts and the potential presence of "grand trees" within the proposed rights-of-way (ROW), the following permits and certifications may be necessary.

Section 10 of the *Rivers and Harbors Act of 1899* authorizes the Secretary of the Army, acting through the Chief of Engineers and administered by the USACE, to issue permits for activities which affect the navigable Waters of the United States. The construction of any structure in or over any navigable Water of the



United States; the excavation from, or deposition of material in, such Waters; or the accomplishment of any other work affecting the course, location, condition, or capacity of such Waters, is unlawful unless permitted by the USACE. Placing permanent fill material into navigable Waters to construct the proposed improvements to Maybank Highway would require a USACE Section 10 permit.

The USACE is authorized under Section 404 of the *Clean Water Act of 1972* to issue permits for the placement of dredged or fill material in Waters of the United States, including jurisdictional wetlands. Impacts to Waters of the United States and jurisdictional wetlands would require Section 404 authorization by the USACE.

Section 402 of the *Clean Water Act of 1972* authorizes the USEPA to regulate stormwater discharge. This regulatory authority in Charleston County was given to the South Carolina Department of Health and Environmental Control, Office of Coastal Resource Management (SCDHEC-OCRM) through the Stormwater Management and Sediment Reduction Act of 1991. Stormwater discharges are regulated through the issuance of National Pollutant Discharge Elimination System permits. Section 402 compliance must be completed prior to construction of the project.

Projects requiring state or federal permits that would result in a discharge to wetlands and Waters of the United States must also obtain a Section 401 Water Quality Certification from SCDHEC-OCRM. Under Section 401 of the Clean Water Act, SCDHEC-OCRM reviews the proposed project and analyzes its potential impact to water quality to ensure that any discharge into jurisdictional areas is in accordance with State water quality standards.

Since the project occurs in Charleston County, it is within the coastal zone, and falls under the jurisdiction of the *Coastal Zone Management Act of 1972*. SCDHEC-OCRM has the authority to review and certify all state and federal permit applications and activities within the county, and has direct permitting authority for development in the critical areas of the coastal zone, which includes coastal waters, tidelands, beaches, and the oceanfront beach/dune system. The proposed project is likely to need certification or a permit from SCDHEC prior to construction.

Charleston County has ordinances in place protecting trees within the confines of their jurisdictions. In general, these ordinances are intended to prevent the excess removal of trees for development. These ordinances protect "grand trees", those in excess of 24 inches diameter breast height, from removal without variances and mitigation. Under the Charleston County Ordinance, he SCDOT and Charleston County Public Works Department are exempt from most tree removal protections except for the following:

⁹ County of Charleston Zoning and Land Development Regulations. July 18, 2006. Chapter 9: Development Standards, Section 9.4.1.B.3.b.



- Grand Tree Live Oak species that are in present and future ROW, which require variances from the Charleston County Board of Zoning Appeals and mitigation prior to removal; and
- All Grand Trees other than Live Oak species which require a permit and mitigation for removal.

Based on preliminary fieldwork, numerous large oaks were identified in the project area, some very close to the existing roadway. A tree survey was conducted during the initial data collection phase of the project, and all Grand Trees were identified at this time. The total number of surveyed trees 24" or greater in diameter along the corridor was 394. The number of impacted trees was 44, approximately 11% of the total surveyed Grand Trees.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) mandates that the South Atlantic Fisheries Management Council (SAFMC) and the National Marine Fisheries Service (NMFS) identify and protect Essential Fish Habitat (EFH) of important marine and anadromous fish. The MSFCMA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The MSFCMA also mandates that federal action agencies that fund or permit projects that impact EFH must coordinate with the NMFS and SAFMC. Per the MSFCMA, NMFS also comments on state agency activities that impact EFH. The Stono River, located northeast of the proposed project, and its associated salt marsh that is situated immediately adjacent to the proposed project may have EFH by the NMFS. During future project phases, coordination with the NMFS and MSFCMA would occur if impacts occur to salt marsh habitat.

4.5 Utilities

The existing utility facilities were discussed in a previous section of this report.

4.6 Maintenance of Traffic

Two-lane two-way traffic will be maintained during construction, as well as driveways for businesses and residences.

Traffic control plans will be prepared in accordance with SCDOT Standard Drawings for Traffic Control and with the Manual on Uniform Traffic Control Devices (MUTCD).

Charleston County ROADWISE A Program of Charleston County Government

Maybank Highway Improvements

It will be crucial that the safety of the traveling public and construction crews is protected at all times during construction including any night-time operations that may be necessary.

4.7 Signing and Pavement Markings

Stamped and colored concrete crosswalks are proposed at major intersections along Maybank Highway.

The signing and pavement marking plans for the project will be prepared in accordance with the latest MUTCD, FHWA Standard Highway Signs, and SCDOT Standard Drawings.

4.8 Lighting

If lighting is included as part of the final design of the project, all lighting design will conform to FHWA and SCDOT standards for roadway lighting.

4.9 Public Involvement

The public involvement process is currently underway for this project and the other projects included in the Initial Bond Program. A Public Information Meeting addressing the Maybank Highway Improvements was held at September 26th, 2007. The meeting addressed Maybank Highway specifically and served as an opportunity for the public to comment on the project. These comments have been cataloged. See Appendix A for comments.

As plan development takes place for this project, further public meetings may be conducted to further address the Maybank Highway Improvements. A preferred alternative will be presented to the public for comment at a public hearing prior to Right-of-Way acquisition.

4.10 Bikeway and Pedestrian Facility Connections

Currently, the study area is predominantly a residential and commercial area that will be enhanced with the addition of opportunities for bicycle and pedestrian facilities. A 10' wide multi-purpose path will be included along with a 5' sidewalk. Pedestrians and Bicyclist will have multiple possibilities for traveling along the corridor.

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5.0 PROJECT SCHEDULE

5.1 Tentative Schedule

The tentative schedule for the Maybank Highway Improvements is shown below in Table 5.1. The below schedule assumes all funding is in place.

Table 5.1

ACTIVITY	BEGIN	END
Preliminary Engineering and Environmental	01 Aug 07	01 May 08
Right-of-Way Plans	13 Jun 08	02 Sep 08
Right-of-Way Acquisition	09 Oct 08	02 Sep 09
Final Plans Signed & Sealed	21 Oct 08	23 Sep 09
Letting	08 Oct 09	04 Nov 09
Construction	04 Dec 09	09 May 12
Open to Traffic	09 May 12	

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6.0 COST ESTIMATE

6.1 Preliminary Cost Estimate

A preliminary cost estimate for the Maybank Highway Widening is shown below in Table 6.1. The estimated costs are projected to FY 2012 at which time the project will be in the construction phase.

Table 6.1

PROJECT PHASE	ESTIMATED COST (\$)
Engineering	1,759,000
Right-of-Way Acquisition	6,900,000
Utility Relocations	1,600,000
Permitting & Mitigation	700,000
Construction	14,654,200
Construction Engineering & Inspection (CEI)	2,198,000
Administration & Contingencies	3,421,000
PROJECT TOTAL (2007)	31,232,200
PROJECT TOTAL (2012)	39,861,000

Appendix A

Comment summary resulting from a public information meeting regarding the widening of Maybank Highway held on September 26, 2007 at the Berkeley Electric Cooperative Community Center. A total of 143 citizens attended the meeting and comments were accepted through October 10, 2007. 49 written comments and 50 website comments were received.

How do you use Maybank Highway? (check all that apply)

<u>24</u>	Workplace is on or in the vicinity of Maybank Highway.
<u>46</u>	Commute through Maybank Highway to and from work.
<u>66</u>	Live on or in the vicinity of Maybank Highway.
<u>28</u>	Walk or ride bikes along Maybank Highway.
9	Other

- Commercial property on Maybank owner Island Storage, Builders First Source
- Go to and from because live on Johns Island
- Church, grocery store, drug store, visit friends
- Frequently shop along Maybank
- Regularly commute to James Island/Charleston
- Use Maybank Highway to reach local business and Charleston from Main Road
- Live on Seabrook Island. Use Maybank to frequent businesses on Maybank and to pass through to Charleston and Folly Road areas.
- Use it to go into James Island, West Ashley and Charleston everyday
- Cross Maybank to volunteer at Habitat for Humanity

What would you like to see the improvements accomplish? (check all that apply)

<u>72</u>	Provide bicycle and pedestrian facilities.
<u>66</u>	Provide landscaping.
<u>73</u>	Protect Grand Trees.
78 72 76	Reduce traffic congestion.
72	Increase safety.
76	Plan for future traffic and growth.
<u>24</u>	Other

- Access management, cluster development with nodes
- Public transit on Maybank locally
- Create better traffic flow without commercializing the island
- I would like to see the County work with the City of Charleston to incorporate the ideas the City has come up with during the EXTENSIVE public input process they did this spring. If you do not do so you will very likely ruin this once in a lifetime chance to truly plan for the areas growth.



- As an avid cyclist I prefer to see the bike lane straight, not meandering. This would be more commuter friendly as opposed to leisurely biking.
- The River Road/Maybank Highway intersection needs to be improved immediately. Please relieve the bottleneck coming onto Johns Island from James Island. This is a horrible situation.
- With regard to safety, the bikes and pedestrians need to be separated. One way
 is to divide the pathway with a line (like on the new Cooper River Bridge).
 Another way is to have peds on one side and bikes on the other side (like the
 Golden Gate Bridge). We don't want to solve one problem and create another. I
 suspect that the heavy use will come from bikes, not peds. Thanks.
- I look forward to riding my bike to work and this proposal will definitely allow that. I will be using the full extent of this project, in that I live on James Is. and work on the other side of Main Rd on Maybank.
- Encourage walking and bicycling as practical transportation; otherwise no amount of road-widening will help congestion in the long run.
- Why don't they put 4 turn signals at the corner of River and Maybank? It seems that it was an obvious oversight to make traffic appear heavier than it is.
- miles of uninterrupted bike paths
- PLEASE make sure the improvements provide safe and sufficient bicycle and pedestrian facilities!
- Protection of trees and rural flavor of the island
- I would like to see an effort made to extend the pedestrian and bicycle improvements into the neighborhoods along Maybank Hwy, or at least have those improvements ties into existing pathways/sidewalks.
- Improved access through Johns Island via a cross island parkway connecting to Betsy Kerrison Parkway via a roadway that would improve safety for drivers, bicycles and pedestrians and protect a majority of the grand trees on Johns Island.
- Replace existing intersection stop lights with lights that have turn signals for all directions.
- Complete 526 and tie Maybank highway into it
- A median separating the new lanes is a must if the community is to prosper. We do NOT need a Savannah Highway on Johns Island.
- Roads widened to get off Johns Island at the Limehouse Bridge. A new road or Betsy Kerrison widened to get to Kiawah and Seabrook Islands.
- Limit road connections for businesses to side streets
- Turn signals at both River Road and Main Road to allow traffic to turn right or left at both intersections with a turn arrow, to get on to Maybank
- I would like to see the improvements retain the RURAL character of the island. This CANNOT be done with a five lane thorofare!
- I want to protect the trees. These are special roads that do not need to be widen. One of the reasons we bought at Kiawah was the charming ride in. It seems that we will be losing the charm. I do not want more traffic.
- We need to limit growth on Johns Island to prevent need for further road widening in the future.

What intersection(s) do you most commonly travel through? (check all that apply)

<u>62</u>	Maybank Highway at Main Road.
<u>83</u>	Maybank Highway at River Road.
3	Other

- Brownwood & Main Road
- Southwick & Maybank Highway

Comments specific to widening Maybank Highway to two lanes in each direction:

- I question whether your traffic projections are based on straight-line growth projections based on recent growth rates or whether they take into account planned growth management measures put in place by the city. 5 lanes seems bizarrely over-scale.
- How? What about the ground oaks or replace with smaller oaks that will be big in 30 years.
- Good! We badly need it. We support the proposed plan.
- Good Idea
- No 5 lanes. Yes to landscape median. Add more trees.
- Need 5 lane section with offset bike path.
- Provide bicycle lane and/or shoulder.
- I prefer 2 lanes and turn lane.
- Protect tree canopy when you first enter Johns Island at the curve of Maybank.
- Some serious decrease in private property.
- Good! About time.
- 1. Save the existing trees
 - 2. Line the widened highway with live oaks on both sides!
- We need this very badly.
- Divided highway with planting; multiuse oath.
- Most important: Maybank need to be widened from the bridge to River Road. Two lanes going into one in the afternoon causes major traffic backup.
- Great idea can you do before 2009?
- I love the 10-foot multiuse bike/ped path! Please keep it!
- I don't want to see Johns Island's rural mature changed. I oppose widening Maybank Highway.
- It will destroy that area along Maybank. Additional roads to move traffic across the island would be better.
- The population of the island will double in the next 3-4 years. Traffic jams up now at River/Maybank in the morning/afternoon. Work needs to start soon on 4 lane Maybank.
- We need to be able to get off Johns Island to James Island and on to Johns Island without a big delay!
- My main concern is the effect on businesses and residents currently adjacent to the highway.
- This will be great then is will stop all the hundreds of people cutting me off. I am referring to the end of Stono Bridge where everyone cuts you off. There is gong to be major road rage someday if we don't do anything about this! It does need widening.
- I am concerned to how this will effect the safety of my firefighters entering Maybank from Station 1. Also concerned about losing my ramp space due to new right-of-ways.
- Drastically needed to relieve existing traffic congestion road is unsafe.
- So needed do it! Sounds like you have considered everything. Don't let nay sayers have their way.
- Vital to handle future growth. Would prefer starting earlier than 2009.
- Good idea landscape median is a must as is 25-35 mph to decrease cut through.
- Great idea. Love the presentation and video of how the island will remain preserved. We need the 2 lane turn median.
- 4 lanes driving 1 lane turning.
- Prefer the "green" median concept aesthetically. I do not think it would be a problem for cars turning left, would simply require regular cut throughs for turning like Betsy Kerrison Parkway. If that means a wider area and loss of more trees, that would be a negative. Limited cut through turn passes would be a positive. Keeping traffic flowing, rather than pile up for left turns all along the way.
- I would prefer NOT to have two lanes in each direction. To do so will require too much land condemnation and create capacity that will only draw more development than would otherwise occur along this corridor. However, if this destructive approach is used PLEASE, PLEASE use ALTERATIVE 4, with a raised landscaped median. DO NOT turn Maybank Highway into another very, very ugly and dysfunctional five lane asphalt racetrack as has been done all over the region: Johnnie Dodds Blvd, Savannah Highway, Folly Rd St Andrews Blvd, etc.
- Main Road needs widening before we even consider Maybank.



- I very much approve of having a multi use path as part of this project. I also think that the plan should accommodate a shoulder on each side of the road of say 3 feet, so that cyclists can use that road as well.
- I hope the project can continue on the schedule as shown.
- I don't see how that will relieve much traffic as so much of the commercial traffic travels Main Road rush hour mornings and afternoons.
- Two lanes in each direction is great. Please do not make a five lane wide road though. Keep the center lane landscaped whenever possible. We do not want a freeway through Johns Island.
- I am very concerned with the 5 lane section between River and Main roads. This does not seem in keeping with the character of the island.
- I would like to see a shoulder with bike traffic in the roadway/ shoulder. Mixed pedestrian/ bike traffic on narrow multi-use lanes do not work. EX: Arthur Ravenel Bridge. Pedestrians do not honor bike traffic/ lanes. There are too many driveways to require bikes to ride on a bike lane.
- This will definitely keep traffic flowing during times when someone is trying to make a left, merge in with traffic or when there is an accident or vehicle breakdown. At present it is a nightmare.
- It will only help temporarily. We have to find ways to avoid using cars, not just keep building bigger roads.
- I like the concept provided. IF you are going to widen it to 2 lanes each way a landscaped median is extremely important. Please don't let the loud voices of a few keep you from building the proper road for the future
- Huge blow to the Island
- Every effort must be made not to destroy a single Grand Tree. Something clearly needs to be done about the highway between the Stono River Bridge and River Rd, but why does Maybank need to be widened from River Rd to Main Rd? Maybe this part of the project should be reconsidered (?).
- Only with bike paths and sidewalks
- It is absolutely necessary for the widening to two lanes in each direction to occur. There is massive amount of growth allowed in the City's Urban Growth Corridor, the traffic from which must be accommodated. Some City planners are pushing to keep the highway as it is, one lane in each direction. This will simply lead to gridlock or overloading of the small two lane roads like River Road and Brownswood Road.
- I think that the Alternative 4 proposed at the recent meeting is a wise and workable plan.
- I don't like the four and five lane options. On the surface, the four lane with raised median sounds good; however, the amount of maintenance required to maintain the landscaping and the limited access points are big drawbacks. If so many driveways weren't already on Maybank, the four lane might work. That leaves us with a five lane option, which would look much like Maybank highway on James Island past the golf course. This option is too large in scale to maintain the rural nature of Johns Island and is in direct opposition to what so many residents want. Yes, it probably would solve the long-term traffic challenges but at the cost of livability, aesthetic and safety (high-speed travel) concerns.
- Adding an additional lane in both directions is absolutely needed ASAP. The daily backup of afternoon traffic all the way up to the top of the "hump" on the Gelegotis Bridge is beyond ridiculous. The backup of traffic each morning at the River Rd intersection is primarily because the timing on the traffic light is outdated for the amount of traffic. Currently it takes me about 3 5 minutes to get out of my neighborhood, Barberry Woods, onto Maybank anytime between 7am 7pm particularly on weekdays.
- Good plan.
- I prefer a center median and prefer saving as many trees as possible.
- It is essential, but only if divided
- Most definitely needed. Two lanes in each direction is the only way to do it. A wide median is also needed.
- Limit turns
- Do it!
- Two lanes each direction are fine. A center, landscaped median would provide "character" and would minimize the number of places cars could turn. There's a reason the center lane in a 5 lane roadway is called the "suicide" lane...
- 40 trees is too much to impact. I do not want 2 lanes in each direction.
- Take special care with the median. We don't want a Highway 17, Mt. Pleasant situation. A row of oaks down the median center would be more esthetically pleasing or red maples for fast growth.
- I agree that Maybank needs to be widened. WE like alternate #4 the best (the landscape center median).



- A very temporary fix. Traffic will expand to exceed the space available. Look at a 6 and 8 lane highways anywhere.
- I think this is necessary but am not sure about a center turn lane. If we make Mabank more pedestrian friendly road, can we decrease vehicle traffic?
- Will there be a way to cross it?
- Stick to Alternative 4, it fits the character of the island more with the landscaping separating the lanes.
- It will make easy traffic flow.
- While the picture in the packet looks charming and quiet, I am concerned about the 2-lane with center turn lane proposal as that is the design of Savannah Hwy in West Ashley and parts of Folly Road. I have yet to speak to any residents of Johns or Wadmalaw that wants anything like that.

Comments specific to intersections along Maybank Highway:

- Maybank and River has oodles of traffic congestion in morning and after work.
- Need turn signals in all directions for safety sake. Too many opportunities exist for "taking chances."
- Have turn arrows at Maybank and River and Maybank and Main for all turns.
- Make pedestrian crossing easier.
- Put in turn arrow at Maybank turning onto River Road.
- How will I get in and out of the Villages?
- Left turn light at Maybank and River Road for people turning left onto River from Maybank leaving the island.
- If the road is 5 laned or at least one more light in the center will be needed, maybe at Southwick.
- Southwick Drive is the only connecting route between Maybank Highway and Brownswood Road and will demand a traffic light and possible realignment due to congestion around the Habitat Store.
- I agree with Tom and I feel that we only need to expand where Stono Bridge end and have less people cut you off when they know they are not right.
- I am concerned about the congestion at Maybank and Main Road.
- Intersection at Maybank dangerous, too congested.
- Who wants to sit around a fountain at intersection of River Road breathing all those fumes would be unhealthy.
- Early turn lanes to decrease congestion at intersection.
- Long time in coming.
- You need to look closely at the River Rd/ Maybank Hwy intersection. Give serious consideration to the design developed by the City of Charleston for this location
- In order to truly address safety in the vicinity of the intersection with Main Rd., there must be a raised concrete median separating the traffic and directing an orderly flow of traffic for vehicles wishing to make a left turn onto Main Rd./Bohicket Rd. The fifth lane is not safe in that vicinity without some type of barrier. In fact, if there were money available, the safety through the entire corridor would be enhanced with a wider median barrier from River to Main Road.
- The River Road/Maybank Highway intersection needs a dedicated right turn lane turning North onto River from Maybank Highway heading Southwest. This will help the bottlenecking along Maybank Highway coming from the bridge.
- I would like to see safe bicycle/pedestrian crossings at intersections.
- Turn-abouts might be a consideration. I know the ones along Rifle Range are not only great for the flow of traffic but also majestic. River Rd and Main Rd of course need lights, but turn lights from all directions may need to be considered.
- The traffic lights need to have right-turn arrows, which can be turned to red by people crossing the intersection.
- Intersections should have a left turn lane. PLEASE keep the gathering of trees in front of the Hess gas station at Maybank and River Rd. This area adds to the charm of the island.
- More bike paths in every direction
- Make sure cyclists and pedestrians can cross safely.
- At the Maybank/River Road intersection the AM peak often demands a double left turn from River Road headed to James Island. Careful review of the driveways from the gas stations should be made as there are a lot of vehicles exiting the stations attempting to enter the traffic stream. I have noticed many "cut-thru" trips from River Road through the Food Lion shopping center to Maybank. In the PM I have experienced the backup of traffic going to John's Island from James Island on Maybank to the point of being stopped before reaching the highest elevation on the bridge. I'm sure it has been backed up all the way to James Island. Traffic eases up during the summer when the schools are closed.
- As a home owner in this area, I would like to see additional lights established at the major intersections
 along Maybank Hwy as part of these improvements to help traffic flow from the neighborhoods onto the
 main routes. Additionally, the neighborhoods that border Maybank Hwy would benefit from reduced speed
 limits and speed bumps/barriers that would discourage the increased traffic from this project from spilling
 over into the residential neighborhoods particularly once construction begins on the section between River
 Road and Main Road.
- In the short term, much could be done to alleviate problems by correcting the lane deficiencies at the River/Maybank intersection. However, long term solutions, those that will handle projected traffic



increases, need to be put in place. That being said, the connection from the Stono Bridge to the River/Maybank intersection is ready now for those improvements.

- As I stated above, the traffic signals at both the River Rd and Main Rd intersections need to be replaced with signal lights that include turn signals for all directions. The also need to be timed specifically for the traffic peaks. Additionally, the project needs to include not just right and left turn lanes at for all directions at both intersections, but the turn lanes need to be long enough to accommodate projected increases in traffic. Certain intersections along Maybank Hwy that currently do not have traffic signals need to be looked at closely for future traffic increases and how not having a traffic signal would impact those intersections. For example the intersections of the streets coming out of St Johns Woods and by the Habitat Resale Store currently are not aligned, but both areas are scheduled for many more homes in the next 5 years. It would seem that the Road Wise Program would be more proactive by looking at realigning those two streets into one intersection with a traffic light. By the county GIS they are only approximately 230' apart. Being that close together as the traffic increases, without a traffic light, getting out of either street will become a nightmare.
- Traffic circles might be preferable to lights at some intersections. It should be limited access with parallel roads if necessary.
- There needs to be right turn lanes at the River and Main Road intersections to Maybank Hwy. Many times traffic backs up at these lights and half the traffic immediately takes a right turn when the light changes.
- Add turn lanes in both directions
- Have turn lights at both River and Main so traffic at both intersections can turn on/off Maybank with a turn light/arrow.
- One or more additional lights will be needed.
- I do not see how intersections will be improved with these proposals, especially the River Road intersection. This needs an extra turn lane.
- They need to be safe for pedestrian crossing or there's not much point to having the walkways.
- Currently, the River Road intersection causes excessive congestion at 7:15 an, headed towards the Stono River. How can this be reduced, quickly?
- Needs more sidewalks.
- Could adding turn lane (rather than widening the whole darn thing) be a viable solution?

Comments specific to traffic along Maybank Highway:

- Need traffic light at Presever and Twelve Oaks subdivision.
- If drivers would use directional signals it'd be easier and safer to navigate. It's a SC "disease!"
- Intersection of River Road main bottleneck.
- Back up during evening rush hour needs to be relieved.
- Bumper to bumper.
- It's getting heavier each day.
- Turn lanes added to current intersections now would relieve congestion.
- Maybank Highway for the most part is good but once you get near River Road coming from Bohicket, traffic gets very backed up during school hours. Should it be this congested?
- Early morning and afternoons heavily congested.
- Definitely need 4 lane with 5th for center turn lane.
- Heavy and growing. A potential serious problem.
- Horrible traffic merging from 2 lanes to 1 is not working. Road rage very evident.
- It's congested.
- If there were a road or roads cut through from Maybank to River Road this would allow cars to disperse rather than travel the entire length of Maybank to get to business at either end.
- Traffic is only bad along Maybank Highway at certain locations most prominately at Maybank @ River Road and the Stono River Bridge. Most of the issues of Maybank Highway will be resolved if you correct the problems at that intersection. Putting in five lane highway will cause higher rates of speed (and illegal speeding) and greater traffic accidents. DO NOT FIVE-LANE MAYBANK HIGHWAY.
- The transit plans are good because traffic will only continue to increase when I-526 is completed.
- Traffic moves too slow.
- I would like to see a reasonable speed limit- not too fast so that bicyclists and pedestrians still feel safe, even if on a multi-use path.
- At present it is not only dangerous to motorized traffic, but a death wish for peds and cyclists.
- Turning left out of a driveway, across only one lane of traffic, can be difficult to impossible. Turning across two lanes, as on Savannah Highway, would be horrible. It would be faster, more efficient, and a lot less stressful, if everyone turned right, and turned around in the median cut-throughs.
- I can't understand the money being poured in to this project when there are huge t5raffic problems all over the county...why the rural areas are getting such attention is baffling..
- plan for more vehicles in the future
- Police speed, especially of trucks that tend to tailgate have had to go past my turn to avoid collision from the rear quite a few times (and I do use my turn signal) I'd hate the new road to become a raceway.
- I think the vast stretch of Maybank could handle traffic sufficiently if it were built as a three lane model with occasional right turn lanes for larger intersections. I would like to see many elements of the City's plan incorporated into this stretch (town & country concept).
- As I stated above, the traffic along Maybank Hwy currently is terrible at most any time of the day, particularly on the weekdays. The traffic backup from River Rd onto the Gelegotis Bridge though is the worse, though.
- It will increase. I shudder to think about evacuating Johns Island in the event of a Hurricane
- I would not use traffic lights at every intersection. Side roads can work to channel traffic to a few major intersections
- I was stopped by the light at River Road 1.2 away from it in the morning. Getting off and onto Johns Island is the most difficult part of my drive to and from work. Keep in mind, the houses along Maybank Hwy. are no show places. Moving the traffic is the most important thing.
- Increase traffic /speed enforcement.
- Reducing the speed, and enforcing the reduced speed, would help.
- Gets heavy during rush hour and lunch time. Simply adding lanes to Maybank won't fix that. (Name the road where it has)
- The main traffic issue is from River to the Stono, otherwise traffic isn't an issue.
- Needs more sidewalks.
- Again limit growth of incoming neighborhoods and it will keep traffic from worsening.



Comments specific to landscaping and aesthetics along Maybank Highway:

- There are no planned median-cuts to allow direct access to the largest retail and industrial center along Maybank The retail center that contains Island Storage and Builders First Source.
- Please put overhead utility/power line underground.
- Make it like an alley of oaks ped/bike on side with street lamps.
- Max the beauty, but provide the safety and traffic mobility along Maybank.
- More oaks, etc.
- Canopy at entrance to Johns Island must be preserved at all costs. Great effort must be put forth to save grand trees.
- I appreciate the fact that the plans include landscaping the entire highway and keeping as many trees as possible between the bridge and River Road.
- Protecting trees in extremely important. Planting new small trees will not replace the canopy that existing and is a special part of Johns Island.
- Landscaped medians should not be at the expense of adjacent property owners. Functional medians are all that is necessary.
- Needs to be an island low country look.
- Need additional traffic lanes should not be delayed for cost of landscaping.
- Trees are not as important as building the road. Development should have been curtailed if trees are more important than a safe highway. Let us no obsess over trees!
- Keep the charm of the area preserve and add trees/bushes.
- The video showed they would be preserved.
- Please try to keep as many grand trees as possible.
- Preserve large oaks. Plant new oaks. Landscape heavily. Keep Johns Island looking like areas of Folly Road and Mt. Pleasant and North Charleston and West Ashley.
- See comments above. DO NOT USE the five lane option exhibited at the meeting (Alternative #5). It is ugly and dangerous. Go with three lanes with a central landscaped median.
- Agree with the need for native landscaping, hiker/biker trails, bus pullouts, lighting and sidewalks.
- Maybank Highway needs a landscaped center median.
- I agree that the grand oaks should be preserved, and would choose to do so over having a bike lane on the roadway, as long as intersection and driveway accommodations are made for cyclists and pedestrians. My first choice would be to have both the trees, and a bike lane on the roadway, with separate sidewalks that could meander through the trees.
- Save the grand live oaks!!!
- Pedestrians need as much shade as possible, as quickly as possible. Alternate fast-growing, shorter-lived trees with live oaks, which will eventually shade the whole road.
- A treed median is needed
- Middle landscaped lane is the way to go.
- Maintain a vista of eye entertainment
- Plan looks good, but how do businesses fit in to the picture?
- I prefer to see more divided highway with landscape median. I realize that the plan proposed allows for the least disturbance and R/W acquisition; however from the stand point of aesthetics landscaped medians are the most appealing.
- While important, probably the lowest priority on my list. Minimal landscaping should be done for two reasons maintain the existing look and to keep future costs low.
- If the county is serious about trying to do this project right the first time and truly preserving the beauty of Johns Island while solving the problems of traffic congestion then including as much landscaping and preserving of the grand and almost grand trees as possible will be required. The inclusion of as many landscaped center island as possible should also be included so that Maybank doesn't turn into another Savannah Hwy. By using landscaped center islands with trees, you ensure that the road maintain its canopy look.
- Gorgeous trees but canopy need not continue. These limbs could be dangerous when decaying to drivers.
- Preserve as many trees as possible.
- Please be sure to have a landscaped median between lanes -- as for Betsy Kerrison
- If makes the good old boys happy, I would do it. I really do not think Maybank Hwy. housing is condusive to making the median and landscaping a real big deal.



- Protect trees that have crossed the center line of the road
- New landscaping would be an improvement.
- Landscaping and aesthetics are critical to maintaining the rural character of the route. We're planning this from the ground up. Let's do it right!
- A line of live oaks would be nice as well as native trees and shrubs (visibility taken into account). This would be for superior to the prissy little crape myrtle and oleanders in the medians of Mt. Pleasant multilane roads. A median on Maybank is essential not 5 lane of concrete.
- Please, please, please have a landscape median wherever possible. Yes to alternate #4.
- Plant the median with oaks, not crape myrtles or other dinky little trees. We may not live to see the full-grown canopy but our kids will. And have the median the entire length of Maybank with cut-throughs for cars to turn around. Five lanes is hideous and dangerous to cross.
- Don't harm the beautiful tree lined road leading into Johns Island!
- Don't make it look like Mt. Pleasant with little bushes. Johns Island needs big trees.
- I would like to see more flowers and green grass.
- Protect trees. Limit amount of signage, lights, etc to keep it beautiful (i.e. Hilton Head vs. Myrtle beach)

Comments specific to bike and pedestrian access along Maybank Highway:

- 1. There must be dedicated bike lanes on the roadway in order to facilitate usage by bike commuters or enthusiasts. Mixing bikes and pedestrians on the same path will just discourage both.
 - 2. A wide-open 5 lane road will scare any potential pedestrians.
- Please! Those folks that live near Pig in homes love to walk almost on road.
- Good plan need both.
- Good idea.
- This is needed for safety.
- Must be continuous to Stono Bridge.
- Too dangerous currently, would make area safer. Keep bike path separated from roadway.
- Bike lane should be in highway. Dangerous to combine bike and pedestrians.
- Would like to see this on at least one side of the road.
- Having bike and pedestrian access is a wonderful idea.
- Please provide wither the multiuse path (as shown) or bicycle lanes in both directions.
- Pedestrian walkways are missing now but many people walk along busy roads on the island.
- People take large risks at present when they walk along Maybank. We really, really need walking/bike paths.
- It sounds like a safe idea to have sidewalks and not have bikers on the road with their bicycles. That always makes me nervous.
- A must for safety.
- Much needed. As it exists today it is extremely dangerous.
- Great idea. Lots of bikers use Maybank, great to have their own lane. Safer.
- They should use the bike path not roadways that holds up traffic.
- Both are important as we consider future build out of Johns Island.
- Very necessary here, as well as throughout the Charleston area. Achieve connectivity in all these projects so each path (access) is not isolated. The value of the paths is in affording people the opportunity to travel long distances on foot or by bicycle. Short isolated paths will not reduce automobile use; connectivity WILL.
- Agree with plans for bike/ped access.
- Look at biking lanes in Europe and Oregon. They are a perfect example. As an avid cyclist I prefer to see the bike lane straight, not meandering. This would be more commuter friendly as opposed to leisurely biking.
- I love your multi-use lanes and sidewalk proposal.
- It's an important detail to have a clean path (free of glass and other debris. It will be outstanding to have a safe place to walk and ride bikes. It a great first step in offering the public healthier lifestyles.
- THANK YOU FOR TAKING CYCLISTS AND PEDESTRIANS INTO CONSIDERATION FOR THIS PROJECT!! I THINK THE MULTI-USE PATH WILL BE GREAT.
- Bicycle lanes need to be striped onto the roadway so that cyclists can cross intersections with the lights. If a separate path is to be constructed, how will cyclists manage to cross driveways and intersections, and have access/egress from the Stono bridge?
- My understanding is there is a proposed bike path that meanders through the Grand Trees. My proposal would be to keep that a smaller path for pedestrian and Children access but have the Bike path part of the enlargement right on Maybank Highway with the flow of traffic of which most of us cyclists do anyway in this state instead of using the pedestrian pathway and leave that for pedestrians and let that me a more enjoyable walk through the Grand Trees.
- With regard to safety, the bikes and pedestrians need to be separated. One way is to divide the pathway with a line (like on the new Cooper River Bridge). Another way is to have peds on one side and bikes on the other side (like the Golden Gate Bridge). We don't want to solve one problem and create another. I suspect that the heavy use will come from bikes, not peds. Thanks.
- I sent an earlier comment saying I thought the plan was okay, but after some research I realize that the bike lane actually needs to be a bike lane one lane in each direction next to the right car travel lane. This gives bikes the advantage of traffic lights at intersections, and it is much safer for bikes at driveways and parking lots. Also, a cyclist arriving at the improved area on the non-bike-lane side would have to cross all 5 lanes to get to the bike path. This isn't what you should do this improvement needs two bicycle lanes that are part of the roadway, one in each direction next to the travel lanes for cars. Please make this improvement to the improvement! thanks!



- For years I have wanted a choice to how I travel to and from work. I live only 8 miles from work. It only takes 27minutes by bike, but at present I can only travel it on weekends or holidays, because it is unsafe during a regular workday with the congestion and rage that is presently found along this roadway. As to the proposed plans I am confused about how I am to get over to the multipurpose lane, since I normally ride with traffic on the roadway... Why not have both sides of the road with a multipurpose lane so that one can easily merge to and from the Stono Bridge.
- I like your proposed pedestrian lanes but do not believe they are appropriate for road bikes (in fact, my understanding is that it is illegal for me to ride my road bike on such a lane.) The problem is to accommodate pedestrians (I think your proposed path will do that), people who ride bikes at 5 10 MPH (maybe the path will do that) and people who ride at 20-28 MPH (path probably won't work for that.) Have you seen the way Ladson Road is setup? A bit less attractive but a lot more functional.
- If walkers and cyclists can't safely cross the road, the bike paths will mainly be used for exercise rather than transportation, and won't help cut down auto traffic. I can cross the street from my office to the Habitat store, but to cross at the light would be a 4-mile round trip. I'm not going to walk or bicycle across 5 lanes of uncontrolled traffic, so instead I would drive my car across the street, which is ridiculous. At the very least we need a raised median (with shade trees) so people only have to cross two lanes at a time. What would be better is a blinking yellow light at every intersection, which pedestrians could change to red in order to cross. People won't quit driving, even for short distances, unless it's safe and convenient.
- Without a bike path and sidewalks there is no way to really enjoy the island
- Having a multi-use path is a nice start and will hopefully be made from blacktop as opposed to cement. The
 cracks in the cement can be really annoying as a cyclist. But how about an actual shoulder for cyclists?
 Since cyclists are technically considered vehicles, just give us the space we deserve especially in places
 where the multi-use path start/ends!
- Bicycle traffic should be accounted for and bicyclists travel in packs.
- Don't limit bike and pedestrian paths to new highway improvements
- There was a time when I could have checked YES on the question regarding bicycling regularly down Maybank Highway, but that is not possible currently because of the increased traffic and narrow roadway, so I am delighted to see bike/pedestrian accommodations as part of the project. I understand that they are not ideal because of the trees, which I agree must be preserved. However, I am concerned about what happens to cyclists and pedestrians at the intersections of River and Main Roads, and the other minor roads that intersect Maybank. Will cyclists be able to cross and/or turn safely?
- The proposed "meandering" bike path is okay as long as it is PAVED and wide enough for two bikes to pass each other without moving a nearby pedestrian off the path.
- Good idea for safety and to reduce use of local traffic, a s well as encourage fitness-make a good place to walk & exercise
- These are heartily endorsed.
- Very important, many cyclist use John's island are for rides. Cyclist enjoy John's island scenery and low traffic.
- Vital. I currently live on the Maybank corridor and am forced to use my vehicle to make trips to the grocery store, library, ATM, drug store, etc because there is no safe alternative. The South gives us 12 months a year which walking/biking are possible and I would love to be able to do so. Plus, the only safe way currently to enjoy the rural beauty of the island is from an automobile, which seems a bit ironic.
- The 10' bike path and 5' pedestrian path as shown on the plans are great. I particularly like that they are separated from the highway by landscaping. My hope is that when this project is completed that people like myself who currently would never attempt to walk or bike along Maybank will feel safe walking and biking on the new paths. I personally would love to be able to ride a bike to the library instead of driving for example.
- This is a real need for many so not have car or bus transportation.
- Always desirable. The bikers sharing the road along Bohicket and River must have a Death Wish, the situation is so dangerous.
- They are a great idea & could lead to reduced traffic & obesity!
- Not an issue to me.
- Smooth pavement
- A bike path and pedestrian lane would be desirable and improve safety.
- I travel this route a great deal and rarely see bikes. Bike paths may be nice for recreational bikers, but serious bikers will want to share the road.



- Having a bike and pedestrian path would be great but I am definitely not for the widening of Maybank Highway and I think you are doing these hand in hand.
- Crossing point on such a wide road could be a problem. A median would give pedestrian/bikers a midway respite as they negotiate their crossings. A median would more effectively invite a crossing (important to business owners if pedestrian/bike access is to be more than an outside gym).
- Lots of people have to walk or bike on the existing road shoulder which in uncomfortable and not safe. I love the proposed bike path and sidewalks.
- That will be the long term key to traffic reduction along with public transportation.
- Would the proposed 10' multiuse path include golf cart usage? If yes, I would buy a golf cart so as not to have to drive to grocery stores, restaurants along Maybank. More doing this could decrease congestion/pollution.
- It needs to be safer for everyone who walks.
- Widening the walkway and bike paths.
- Paths or sidewalks are already long over due. Please include them in the plan.



Comments specific to the overall approach to the Maybank Highway Widening Project:

- Improvements to Maybank Highway have to come out of a more holistic approach to community planning. You cannot solve the traffic issue by simply building a bigger road.
- Please we all know Maybank is basically going to be commercial avoid letting it look like Folly Road.
- Good! It'd be wonderful to have an attractive, well-planned continuation onto Johns Island from the Stono Bridge that's great, except for the narrowing at the Johns Island end.
- Consider peak traffic times with scheduling of work what can be done at night when traffic is less?
- Make sure median is big enough for larger trees.
- Need badly.
- The proposed improvements look good to me. Maybank definitely needs to be widened. Start as soon as you can. I think 5-lane project is best. We need turn lanes.
- Not needed. Adding another road going to Kiawah and Seabrook would help.
- Logical approach the 4 lane with median is more is keeping with the maintaining rural presentation/appearance of the island.
- I like this idea and think it will be a lot less stress for everyone. I live on Bohicket and it doesn't sound like we will loose to many trees on this road. I would hate to see many trees lost.
- Need widening of River Road all directions we have an average of a death a week due to River Road both having adequate shoulder.
- This highway is dangerous. Emergency vehicles are not able to get through because there is no shoulder. A stalled car cannot get off the road.
- Wonderful can you start sooner than 2009?
- Start sooner than 2 years.
- Preserve or create as much green as possible. Be sure to allow for future traffic projection and density projections.
- Work closely with the City of Charleston planners before going any further with this plan. They have gone to great lengths to solicit public input on this project. Do not ignore what has been done.
- Would like to see more of a concrete barrier or some type of wide median separating traffic. This would provide a protected area for pedestrian crossings and help with an orderly flow of vehicles making left and right turns.
- Please do not create a 5-lane highway.
- Speed up the project. This is long overdue. Traffic on Johns Island is terrible. Connect 526 to Johns Island!
- I am so very excited that this project is finally underway. I'm speechless.
- Complete roads require bike paths and pedestrian walkways
- Public involvement seems to be good
- I think that the plan to both improve traffic and retain a majority of the grand trees is the best approach to the Maybank project.
- Thank you for starting the process early enough to get community input. I know that whatever is built will not satisfy everyone. But, I am hopeful it will satisfy many.
- I think it is pretty good. I would recommend that you look at the state highway dept statistics on head-on collisions on continuous turn lanes vs. landscaped medians and u-turn areas. The main highway through Hilton Head and Bluffton are areas where there are numerous driveways and road cuts onto the highway however they still used landscaped medians rather than a continuous turn lane. It looks better and I think would be safer.
- It will never be cheaper to widen Maybank than it is today. Those who think that by limiting infrastructure we can somehow stay in the past are dreaming!
- The plan is excellent but I oppose 5 lanes or road without median. Is there adequate planning for juncture with new I -226?
- The traffic on Johns Island is horrible. There has to be something do. Anybody who thinks things should remain the same is really not thinking. The proposal to save the oaks as you come onto the island and the five lane proposal from River to Main Roads is a very good one.
- Promote through lanes, limit intersections.
- Long overdue, but we must appease the NIMBY's
- While the approach the City used in developing its Community Plan last spring was time consuming, it created buy-in from the community and a sense of investment in the plan. It was clear to me at the 9/26



meeting that Johns Island folks felt the county "knew best" what was good for them and was going to move forward regardless of what the locals wanted.

- 5 Lanes sounds awful and will impact the charm of John's Island and real estate. I am against it.
- Please try and keep the rural character.
- Let's not turn it into Savannah Highway: ugly, sunblasted, impossible to cross. And after making it so ugly, the traffic still doesn't move.
- I appreciate being included in the process.
- I think it's wonderful.
- Thank you for including our thoughts and opinions. I keep hearing people say how "inevitable" growth is but I feel that we still have the time and resources to SLOW and LIMIT growth on Johns Island. Could RoadWise work with developers to convince them that less density in the new neighborhoods would benefit everyone (traffic, school crowding, environment, etc.) Thanks!

General comments about the Maybank Highway Widening Project:

- Plan will be a great improvement and much needed. However, placing utility/power line underground would make the improvements 1st class.
- Hope happens soon without a lot of nay.
- I wasn't able to stay for the whole program but was very impressed with the thorough planning and professional presentation that went into the project. I hope that it will become reality!
- People have been killed and injured by the uncared for grand trees. Limbs fall trucks hit them overhead. Trim trees and make safe to remain on Maybank!
- 1. Not sure 3 lanes would not work
 - 2. Divided 4 lane
 - 3. Do not build 5 lanes
- No 5th lane!
- What would 526 interchange look like?
- Program is about 10 years late.
- Implement land use plan 1st. Evaluate intersection and operational improvement first including grid streets at major intersections.
- Bike and pedestrian facilities please!
- Not necessary but more roads are. We have so few roads on the island now and we need more.
- 4 lanes with median is the right approach from my point of view.
- It would be very good and can't happen soon enough.
- This would be only the beginning of what's needed on road improvements for Johns Island. When is bridge on Bohicket to be replaced. Excess traffic on River Road due to detour is dangerous. Why is Johns Island last for improvements? Work with electrical utilities to use their right-of-ways for bicycle and pedestrians paths this could be done on Johns Island and all other areas in the county.
- Sounds good to me. Need to get started right now! This is much better than using neighborhoods to access. Neighborhoods don't want through traffic. They all want our neighborhoods to remain quiet and safe.
- What are the plans to add vital access/egress for Seabrook, Kiawah and locations along Main/Bohicket Road? Lack of adequate road capacity is a very serious safety hazard, especially in an event of required evacuation.
- On the Johns Island Growth Management Committee we talked about having a local public transport between River and Main/Bohicket electric light rail one going in each direction so that the public can park at either end on the middle (library) and not need to get back in their cars.
- You have researched greatly in presenting this. Stay true to your word.
- Sacrifice some efficiency for more green, more rural, less commercial feeling. Impact wildlife as little as possible. Low level, downward focused lighting of walkways no lines of street lights. Preserve neighborhood feeling.
- Please try to come up with a plan that has LESS THAN two lanes in each direction.
- The project is needed. Would like to see further safety enhancements added, e.g. concrete or wide median extending through the intersection with Main Rd.
- Consider a roundabout at the intersection of Main, Bohicket & Maybank. Getting out of the businesses on those corners is seriously dangerous, and the pedestrians and citizens in wheelchairs from the assisting living center cross the road all the time they need to be safer.
- I applaud the foresight in seeing that Maybank Highway needs to be widened.
- If you build it, they will come
- THANK YOU!!!
- The highway NEEDS a bicycle lane!
- Please try to limit the number of driveways per property.
- I think this will eliminate the beauty of John's Island just as the widening of Folly Road destroyed James Island...such a shame to see our council members cut this island up. Hopefully the residents of John's Island will fight back hard!!
- I feel that the typical 5-lane highway with a center two-way left turning lane will not fit with the overall atmosphere of Johns Island. Should this project proceed, then a landscaped middle lane is a MUST. Special care needs to occur in order to ensure that the integrity of the island is maintained.
- It should be exemplary for all the state roads to emulate.
- As a resident of Folly Beach from 1990 2005, I observed that the traffic benefit of the James Island connector lasted about 3 years. As development on James Island increased, bringing increased traffic, the



conditions on Folly Road became as bad or worse than they were before the connector opened. I daresay it will not take till 2030 for this to happen on Maybank Highway.

- Please be careful to protect the trees!
- Please keep this project on time and on budget. Keep up the good work.
- I still think the projections of 25000 additional vehicles has to take into account that many of those vehicles will be inside the Urban Growth Boundary. Unless a network of roads on both sides of Maybank is built, a three lane Maybank will never work and a five lane Maybank will still become congested. So, the City and County have to be adamant about developing that network.
- I wish it were starting in 2008 rather than waiting until 2009. No doubt, by the time it is started in 2009, the traffic will be much worse than it is now. I moved onto Johns Island 3 years ago and have noticed a substantial increase in traffic in just those 3 years. With all the development scheduled to start within the next year along Maybank and along River Rd, no doubt things are only going to get a lot worse before 2009.
- After you finish, do Main Road, and consider a third road in the center of the island paralleling Bohicket and River Road.
- It is absolutely necessary
- Tie this into the Mark Clark extension.
- Make the traffic flow without stops or un-necessary slow downs.
- With the projected growth, some major improvements must happen before we are in gridlock.
- The City invested a lot of time and effort in developing its Community Plan last spring. While the City's plans for Maybank might not accommodate projected traffic in 2030, I think they have a good idea of what the local people want and what kind of changes they would embrace. I suggest you work closely with the CHS City Planning Dept. to incorporate as much of their plan as is possible.
- If its not safe and easy for bicycles and pedestrians along Maybank, they will not use it. I would love to be able to bike to the pig.
- I hate the 5 paved lane proposal. I like the landscaped median proposal. Please study the River / Maybank intersection and the extreme bottleneck problem at the Stono Bridge. Thank you for taking our comments.
- What happened to Walter's ideas (I've forgotten his last name) about a grid of narrow streets instead of one big wide one?

Other Comments

- We understand the need to widen Maybank Highway. We support those who want business signs to be unobtrusive, who want to preserve or replace trees and who want to limit the number of driveways or at least provide a center lane for turns in and out of driveways.
- I hope you will be able to create something other than the 5-lane option. Thank you.
- Thank you and all others at RoadWise, for the public meeting of 9/26/07. I look forward to the future meetings. Can you encourage others form the County and City to be present as there are many issues to be discussed that are touched by this possible change to Maybank Highway?

I have considered the issues raised and spoken with many on Johns Island. The following are my thoughts and comments regarding this potential road expansion. I would appreciate if you would review them, consider them, and share them with others on your team.

- 1. Despite the comments that the voters approved this expansion, the approval was not overwhelming. Further, in the referendum there was no clarity as the extent of the work or the impact upon the residences of the island. I, and others, believe we were asking for help with congestion but not a major structure change.
- 2. Johns Island is a unique place. If you will read the history of this area you will note that as recently as the late 1980's this area was considered very remote. Many of the people that have lived here and were drawn here are here due to that fact. Johns Island does not need this road expansion to prosper in the manner the citizens of this island want. We really enjoy a quality of life here that is hard to find. Peaceful and quiet. Stars visible at night. Birds of prey that are nocturnal. Please do not be a part in causing this to disappear. Again, a few changes at some select intersections would be enough.
- 3. Not to sound rude, but if the push for this expansion is to satisfy the wishes of those at Kiawah and Seabrook, extend Highway 30 from James Island direct to the intersection of Bohicket and River. The very public statements made by the more affluent residences of these two "towns" underscore their contempt for the fact that they have to be bothered with driving our roads. I am sure I speak for many when I say then let them have their own road and let them pay for the cost. We, non pass holders for Seabrook and Kiawah are not allowed to enter there place of sanctuary, yet they treat Johns Island with little or no regard. They disobey traffic laws and use quiet residential streets as short cuts.
- 4. Please limit the work to the intersections that need attention. There is room at these intersections to add turn lanes which will reduce traffic congestion for many years to come. These are:
 - a. River and Maybank (Including an added lane from River to the Stone Bridge) This could be a lane that is open to the north traffic for morning driving (06:00 to 09:00) and to the southbound traffic from 3:00 PM to 7:00 PM. This has been done successfully in other cities.
 - b. Maybank and Bohicket.
- 5. Consider helping business with subsidizing the cost to make pull over and turn lanes from Maybank into their places of business. This will prevent the County from having to buy the property and place maintenance costs with the business. Surely these two savings alone would justify the cost. I am sure you would find most business owners open to this as it does not impact their property rights and ownership and adds value to their property and makes their property more accessible to clients.
- 6. No traffic lights to be added.
- 7. Stop the flow of traffic from Bohicket to Maybank via the "Kiawah Short Cut" of Berry Hill and Walter Drive. The blatant lack of regard by those speeding through these two roads to save themselves a few seconds has become dangerous to the residences of these streets as well as those inconsiderate persons taking this short cut.
- The road widening should include a bicycle lane.
- We urge the use of raised landscape medina for the widening of Maybank Highway. Please do NOT make this road have 5 paved lanes, but rather make the median space a raised landscape bed of trees, shrubs and flowers to offer less hard-top for Stormwater Management encouraged by the Urbanization and Southeastern Estuarine System (USES) Project of 7/07, greater serenity of peacefulness to the region so beloved by all who revere this Johns Island gift to the Lowcountry.



- Widening Maybank Highway will not please everyone. Of the two best options, the 4-lanes with a raised median is far better aesthetically than the 5-lane including center turn median. Residents deeply care about the beauty of the place, and the 5-lane with center turn median is about as ugly as it gets. Do us proud and choose an alternative that you'd be proud to call home if you lived on Johns Island. Unlike campaign promises, this issue is for real. Show us that Charleston County cares.
- I can see well enough to walk just fine, but I don't drive. Walking along Maybank is dreadful, so it would be wonderful to have walking paths, but how can we cross the street if it's so wide? I like to go to the library to get audio books, but I cross where the road is narrow and I can wait for it to be clear. I'm afraid to cross at the intersection because people are always turning, and they don't watch out for people who might be walking. I hope you will think of some way to accommodate the people who can't drive.