



BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD  
AGENDA

Wednesday, October 1, 2014  
2:00 p.m.

Beaufort Industrial Village, Building 3 Conference Room  
104 Industrial Village Road, Beaufort  
843.255.2805

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

1. CALL TO ORDER – 2:00 p.m.
  - A. Approval of Agenda
  - B. Approval of Minutes – September 3, 2014 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
  - A. Special Presentation – Draft MS4 Permit Application – Eric Larson, P.E.
  - B. Utility Update – Eric Larson, P.E. ([backup](#))
  - C. MS4 Update - Eric Larson, P.E. ([backup](#))
  - D. Monitoring Update – Eric Larson, P.E. ([backup](#))
  - E. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
  - F. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
  - G. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
  - H. Regional Coordination – Eric Larson, P.E. ([backup](#))
  - I. Financial Report – ([backup](#))
  - J. Maintenance Projects Report – Eddie Bellamy ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
  - A. Shadow Moss Phase 4 Easement Release– Eric Larson, P.E. ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
  - A. November 5, 2014 ([backup](#))
9. ADJOURNMENT



**Beaufort County Stormwater Management Utility Board (SWMU Board)**  
*Meeting Minutes*

September 3, 2014 at 2:00 p.m. in Beaufort Industrial Village Building #3 Conference Room  
Draft as of September 18, 2014

**Board Members**

<b>Present</b>	<b>Absent</b>
Don Smith	James Fargher
Allyn Schneider	
William Bruggeman	
Patrick Mitchell	

**Ex-Officio Members**

<b>Present</b>	<b>Absent</b>
Andy Kinghorn	Van Willis
Kimberly Jones	
Scott Liggett	

**Beaufort County Staff**

Eric Larson  
Eddie Bellamy  
Danny Polk  
Carolyn Wallace  
Alan Eisenman

**Visitors**

Lamar Taylor, City of Beaufort  
Denise Parsick, Bft Soil & Water Conservation Dist

**1. Meeting called to order** – Don Smith

- A. Agenda – Approved.
- B. June 4, 2014, July 2, 2014 and August 6, 2014 Minutes – Approved.

**2. Introductions** – Completed.

**3. Public Comment(s)** – None.

**4. Reports** – (Mr. Larson submitted his written report in advance. [Please see attachment.](#))

- A. **Special Presentation** – Mr. Eric Larson provided a presentation on two current projects; Highway 278 retrofit project and the Administration Building Parking Lot Retrofit Project. ([please see attachment](#)).
- B. **Utility Update** – Eric Larson  
*Annual Tax Run* – The TY 2014 tax run preparations have begun. Mrs. Carolyn Wallace is coordinating with our stormwater staff to review the parcel information changes since last year.  
*Annual Reports* – Per our IGA with the Towns and City, an annual report of fiscal year revenue projections and their rates was due August 15<sup>th</sup>. ToHHI and ToB submitted. A second report was due September 1 which summarizes revenue and expenses from the last fiscal year. Mr. Lamar Taylor mentioned that a key person in the City of Beaufort’s Finance Department was on vacation but the report would be provided soon.
- C. **MS4 Update** – Eric Larson  
*MS4 Update* – The contract for professional consulting services was approved by the County Council on August 18<sup>th</sup>. ATM is the consulting firm and Mr. Tony Maglione will be the Project Manager from the firm. Mr. Larson will be having a day long work session with the consultants tomorrow and he has several meetings set up with different county departments.  
*Stormwater Public Education and Outreach* – The county has received one proposal from a team put together by the Beaufort Water and Soil Conservation District. The Stormwater Implementation

Committee reviewed the proposal at their last meeting. The committee has a list of questions to discuss with the proposer.

**D. Monitoring Update** – Eric Larson

*University of South Carolina, Beaufort (USCB) Laboratory* – Certification processes are on schedule.

**E. Stormwater Implementation Committee (SWIC) Report** – Eric Larson

*SWIC Meeting* – The committee met in August. They went over the Notice of Intent (NOI) template provided by SC Department of Health and Environmental Control (DHEC). They discussed what items of the application they could share in the preparation of. Because of scheduling conflicts, the next meeting will be in November and they will reviewing each other's NOI.

**F. Stormwater Related Projects** – Eric Larson

*Policy for Acquisition of Stormwater Drainage Easements* – The County Council approved the drainage easement acquisition protocol.

*Stormwater Related Complaints* – There seem to be a rise in complaints this month, probably due to more rainfall and more publicity of stormwater related issues. All complaints have been addressed.

**G. Professional Contracts Report** – Eric Larson

*SC 170 Widening and Stormwater* – The conceptual design study is due this week. Ward Edwards presented the draft document and they will be finalizing the draft document in written form. Mr. Larson will then be sharing the report with the County Administrator and the engineering report will probably be issued by the following week after that.

**H. Regional Coordination** - Eric Larson

*Battery Creek Pond* – Mr. Larson has been working with Mr. Taylor to draft and negotiate an easement with the property owner.

*May River Watershed Action Plan* – The Town of Bluffton has started the baseline study on their second 319 project which is the Pineridge Subdivision's retrofit of their ponds and reuse for irrigation. Ms. Kim Jones said this project is related to stormwater volume reduction. She also mentioned the May River Watershed Sewer Master Plan was developed, and they are currently investigating a mandatory sewer hookup policy and program. They are working with BJWSA on the mandatory hookup and expanding sewer services.

*Salinity Study* – The Watershed Action Plan Committee is meeting next week to review the work over the last year. Committee members received the draft document last week.

*Sea Level Rise and Future Planning* – Two public meetings were held last week. Mr. Larson attended both meetings and he said it was well attended by the public.

**I. Financial Report** – Alan Eisenman

Mr. Eisenman provided the timeline for the auditing process since the county has reached the end of the fiscal year. The auditors should be here next month and he hopes to present on the end of the fiscal year financials the next time he is scheduled to appear at the board meeting.

Mr. Eisenman provided a presentation on the stormwater July financials ([please see attachment](#)). There was not a lot to show this early in the budget cycle.

Mr. Don Smith said he would try to move Mr. Eisenman up on the agenda the next time he presents.

**J. Maintenance Projects Report** – Mr. Eddie Bellamy submitted his written report in advance ([please see attachment](#)) on five major and five minor projects.

**5. Unfinished Business**

*Vacant SWMU Board Member Seats* – Mr. Smith mentioned that he knows Mr. Larson has made several inquiries soliciting candidates for the vacant board seats. Mr. Larson said he has not received any responses for a candidate. Mr. Bellamy suggested that anyone who is interested enough to watch the board meeting on TV, would perhaps be interested in being a member of the board.

**6. New Business – None.**

**7. Public Comment(s) –**

*No Wake Zone on the May River* – Mr. Larson provided a copy of the Town of Bluffton staff's recommendation to their town council on their recommendation to SCDNR on a "no wake zone" on the May River advance ([please see attachment](#)). Of the three options, the town recommended option one and they are waiting on a response from DNR. A group of citizens have expressed concerns because they think the no wake zone should be option two or three. They have contacted the county because some of the parcels area in the unincorporated county. Mr. Larson suggested the board wait until SCDNR responds before weighing in, if needed.

**8. Next Meeting Agenda** – Mr. Larson said he anticipates having the Shadow Moss Subdivision Phase 7 Easement Release under New Business at the next board meeting and he is also anticipating the Town of Port Royal to be the presenters for the Special Presentation during the November board meeting.

**9. Meeting Adjourned.**



**BEAUFORT COUNTY STORMWATER UTILITY**  
**120 Shanklin Road**  
**Beaufort, South Carolina 29906**  
**Voice (843) 255-2801 Facsimile (843) 255-9478**



September 3, 2014

**Stormwater Manager's Report for the Stormwater Utility Board Meeting**

Utility Update

1. I am working on a mid-year update to the 5 year plan submitted with the budget for FY 2015. This work is in preparation for a series of presentations to the Utility Board, County Council, and the public in upcoming months.
2. The TY 2014 tax run preparations have begun. Carolyn Wallace is coordinating with our stormwater staff to review the parcel information changes since last year.
3. Board Vacancies – I have made several inquiries to County Council, Administration, and several POA organizations to solicit member nominations. I have not received any feedback at this time.
4. Per our IGA with the Towns and City, an annual report of fiscal year revenue projections and their rates was due August 15<sup>th</sup>. ToHHI and ToB submitted. A second report was due September 1 which summarizes revenue and expenses from the last fiscal year.

MS4 Update

1. The contract for professional consulting services was approved by the County Council on August 18<sup>th</sup>. The contract has been signed. The first task order for \$6,767 has been issued. Work will consist of evaluating our current program and creating a work plan for the next 12-24 months to accomplish the other scope tasks.
2. Stormwater Public Education and Outreach – We received only one proposal for this RFP. The selection committee, made up of the SWIC members, met on August 28, 2014. Selection is pending and a recommendation for an award is expected for the September 3, 2014 Utility Board meeting.

Monitoring Update

1. USCB Lab – Nothing new to report this month. The lab continues to conduct field work with Danny Polk and GEL Engineering and continues to analyze our samples. Certification processes are on schedule. Danielle Mickel, lab manager, reports that “currently, the Water Quality Laboratory is working on proficiency testing. SCDHEC certification requires a proficiency test to be purchased from an approved supplier, and performed on each parameter that is requested for certification. Proficiency tests are scheduled tests in which results for submitted tests are supplied once the study has closed. These results, in our case, are not only supplied to the proficiency supplier, but also SCDHEC. Hard copy results are supplied to us within the time frame of approximately two weeks, once a study has closed. We have scheduled our proficiency testing to incorporate both Total Coliform/E.coli and Enterococci. Our study closes 8/28.

Proficiency testing is the first step towards certification and is the required start-up documentation for certification. We are also working on other documentation required for and included in the SCDHEC certification application; Quality Assurance Manual, Analysis Records, Training Records, QC Records (media, temperatures, sterility checks, QT sealer checks, autoclave checks), Resumes, Laboratory Director Designation letter, Standard Operating Procedures, and Qualifications for each employee and their responsibilities.”

#### Stormwater Implementation Committee (SWIC) Report

1. The SWIC met in August. The topic of discussion was the Notice of Intent submittal. We reviewed the DHEC template and discuss opportunities to partner on various items. [Minutes are attached.](#)
2. The next meeting is scheduled for November. The SWIC will be reviewing draft NOI applications for the MS4 permits.

#### Stormwater Related Projects

1. I have dealt with an unusual amount of stormwater related complaints this month. I am assuming the recent amount of wet weather and the press related to flooding in the County has prompted renewed interest in these isolated problems. I have been reviewing these problems individually with Eddie Bellamy and Ezekial Miller and we have addressed them as appropriate.
2. The County Council approved the drainage easement acquisition protocol. We now have a tool to use to obtain easements on projects staff determines are needed to protect public health, safety, welfare. Each request will go back through the Utility Board and County Council for approval. [See attached policy memo.](#)

#### Professional Contracts Report

1. US 278 retrofit ponds (\$356,000 budget) – The project is moving forward. We are soliciting bids for hauling and clearing. Engineering is preparing a site plan for the stockpile area. Construction is currently scheduled to start in November.
2. County Admin. Complex Retrofit Project (\$327,768 budget) – Bids were due Aug 7, 2014. We received 5 bids. JS Construction was selected and awarded the contract for \$299,653 by County Council on August 25. We are now working to get a signed contract and schedule for construction.
3. SC 170 widening and stormwater (\$14,000 budget) – The conceptual design study for the road corridor to determine methods, needs, and cost was due September 1, 2014. It will be reviewed and finalized in the first week or two in September.

#### Regional Coordination

1. Battery Creek Pond funded by an EPA 319 grant (\$132,609 budget – county portion) – On going. Preliminary design is complete. County and City staff are working with the property owner to negotiate an easement. (Lamar Taylor may also report)

2. May River Watershed Action Plan – On going. Town staff has begun base line monitoring at the second 319 grant site, Pine Ridge Subdivision. (Kim Jones may also report)
3. Salinity Study (\$25,000 budget – county portion) - On going. Nothing new to report.
4. Sea Level Rise and Future Planning – On going. Two public meetings were held on August 25 and 26 to review the work done and seek input.
5. Drainage issue on H.E. McCracken Circle in Bluffton – On going. The Town of Bluffton staff is performing additional field work to verify the feasibility of a conceptual solution.
6. Stormwater PSAs – The Town of Bluffton staff and County staff are preparing a series of stormwater public service announcements to be aired on the County Channel. Topic range from septic tank maintenance, pet waste, lawn care / fertilizer use, and a general topic segment.

Draft Minutes

August 13, 2014, 1:30pm at the BJWSA Community Room, 6 Snake Road, Okatie, SC

Attendees:	Eric Larson, Kim Jones, Jeremy Ritchie, Bryan McIlwee, Lamar Taylor, & Tony Maglione
------------	--

1. Approval of July minutes - Approved by common consent.
2. Status and Discussion of Public Education, Outreach, Involvement proposal solicitation and MOU - Proposals are due August 15th. The committee will meet to review the proposal Aug. 28, 2014 at 11am at **The Town of Bluffton Stormwater Office, 1261 May River Road**. The group briefly discussed other options for public education in the event the proposal process does not successfully yield a educational partner to work with.
3. Review and discussion of the DHEC NOI template - The group reviewed a template provided by DHEC staff for the completion of the Notice of Intent. It is called "Appendix C" from an early draft of the general permit issued in January. It was noted that this template is different from the adopted permit and has content not required in the permit, so caution is needed when using the template.

The first topic of discussion was the needed formation of citizen advisory groups. The SWIC members discussed various options ranging from expanding the SWIC with Ad Hoc members, adding MS4 progress and citizen input process as part of the regular SWU Board meetings, and establishing new Ad Hoc committees, either as one countywide group or individual committees formed by each MS4. It was suggested that we contact DHEC and ask if the concept of shared citizen input committees would be acceptable and if it would require a MOU between the various MS4s.

The next topic discussed in detail was related to developing a means for citizen input to report problems, etc. Everyone summarized their current process. Eric Larson discussed a proposed service called 311GIS that the County is evaluating. Eric encouraged everyone to discuss this with their respective IT staff and evaluate it for themselves.

Third, the SWIC discussed the development of a construction runoff program. Currently DHEC's program requires construction sites 1 acre or larger and smaller sites part of a common plan of development that is greater than 1 acres to be permitted. OCRM requirements drop that threshold to 1/2 acre under certain circumstances. It was discussed whether or not a local permitting program needed to go down to a lower threshold in order to be able to permit and inspect smaller sites such as single family lots not part of a common plan. Options were discussed but no decisions were made.

General consensus about the NOI development process was to submit a program that meets the intent of the permit without adding additional program elements that are higher standard than the permit. Once approved by DHEC, the MS4s would have the option of developing higher standards and reporting on those but would not be bound by them should those elements not get developed. It was also felt that submitting a "minimum requirements" permit application would speed up DHEC approval.



4. Additional discussion on Data Mgt., if needed - Not discussed.
5. August 15<sup>th</sup> FY 14 fee report - Larson reminded the group of the upcoming deadline.
6. September 1<sup>st</sup> financial report - Larson reminded the group of the upcoming deadline. He will email the submittal template again to the SWIC members.
7. Due to the proposal meeting on August 28 and schedule conflicts in September and October, the next meeting of the SWIC was moved to November 12, 2014 at 1:30pm at the Community room at BJWSA.



BEAUFORT COUNTY STORMWATER UTILITY  
120 Shanklin Road  
Beaufort, South Carolina 29906  
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Gerald Dawson, Chairman, Public Facilities Committee

FROM: Robert McFee, PE, Division Director for Engineering and Infrastructure  
Eric W. Larson, Beaufort County Stormwater Utility

SUBJECT: Discussion of a Policy for Acquisition of Storm Water Drainage Easements.

Date: August 6, 2014

*JRM/Free*  
*Eric W. Larson*

**BACKGROUND:** The following Standard Operating Procedure is recommended for all drainage easement acquisitions:

- 1) Stormwater Engineer, assisted by Easement Manager, determines easement needs; the easement acquisition process is initiated
  - a) identification of adjacent property owners (names and mailing addresses)
  - b) preparation of easement request letters
  - c) drafting of easement deeds or easement agreements
  - d) initial request letter is mailed
  - e) second request letter, if necessary, is mailed
  - f) if all the easement requests are granted, Easement manager records the documents and the drainage project proceeds
  - g) if the requested easement is not granted, County Staff attorney reports the same to Public Facilities Committee/County Council and recommends one of two courses of action
    - 1) Council designates the drainage as private and removes it from the drainage maintenance inventory; property owners are notified of this action by mail
    - 2) Council agrees to provide funding for the condemnation of the easement; drainage project proceeds when County takes title to the condemned easement
- 2) Stormwater department conducts/oversees the contract letting process
- 3) Contract is awarded
- 4) Construction phase commences

**FOR ACTION:** Public Facilities Committee meeting occurring on August 18, 2014.

**RECOMMENDATION:** Staff recommends the above process to be endorsed by the Public Facilities Committee of County Council for the acquisition of drainage easements and maintenance of the stormwater system.

CC: Gary Kubic, County Administrator  
Bryan Hill, Deputy Administrator

/ewl

*gh*  
*ybw*

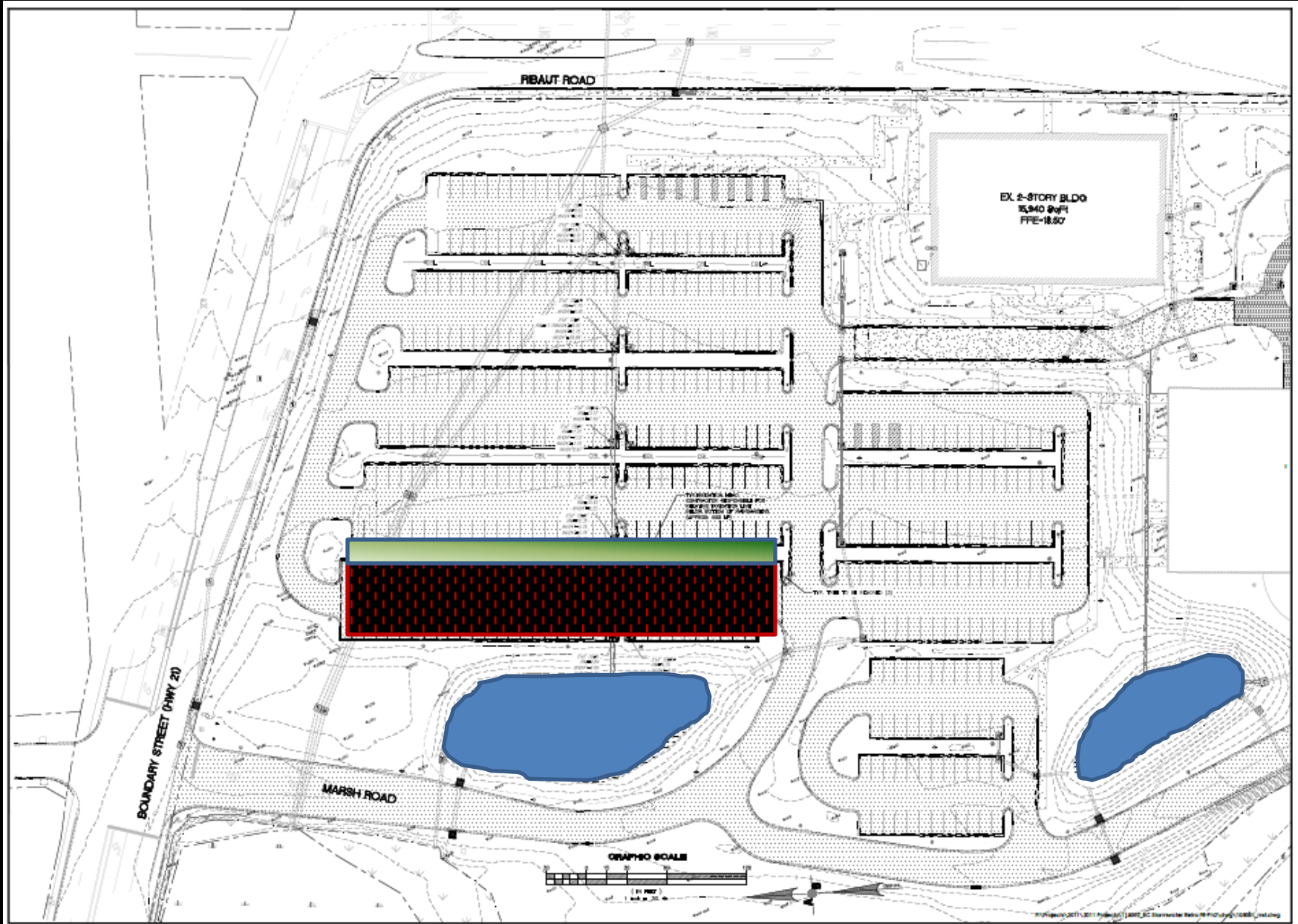
# Government Complex Parking Lot Stormwater Retrofit Project

A Report to Beaufort County  
Stormwater Utility Board

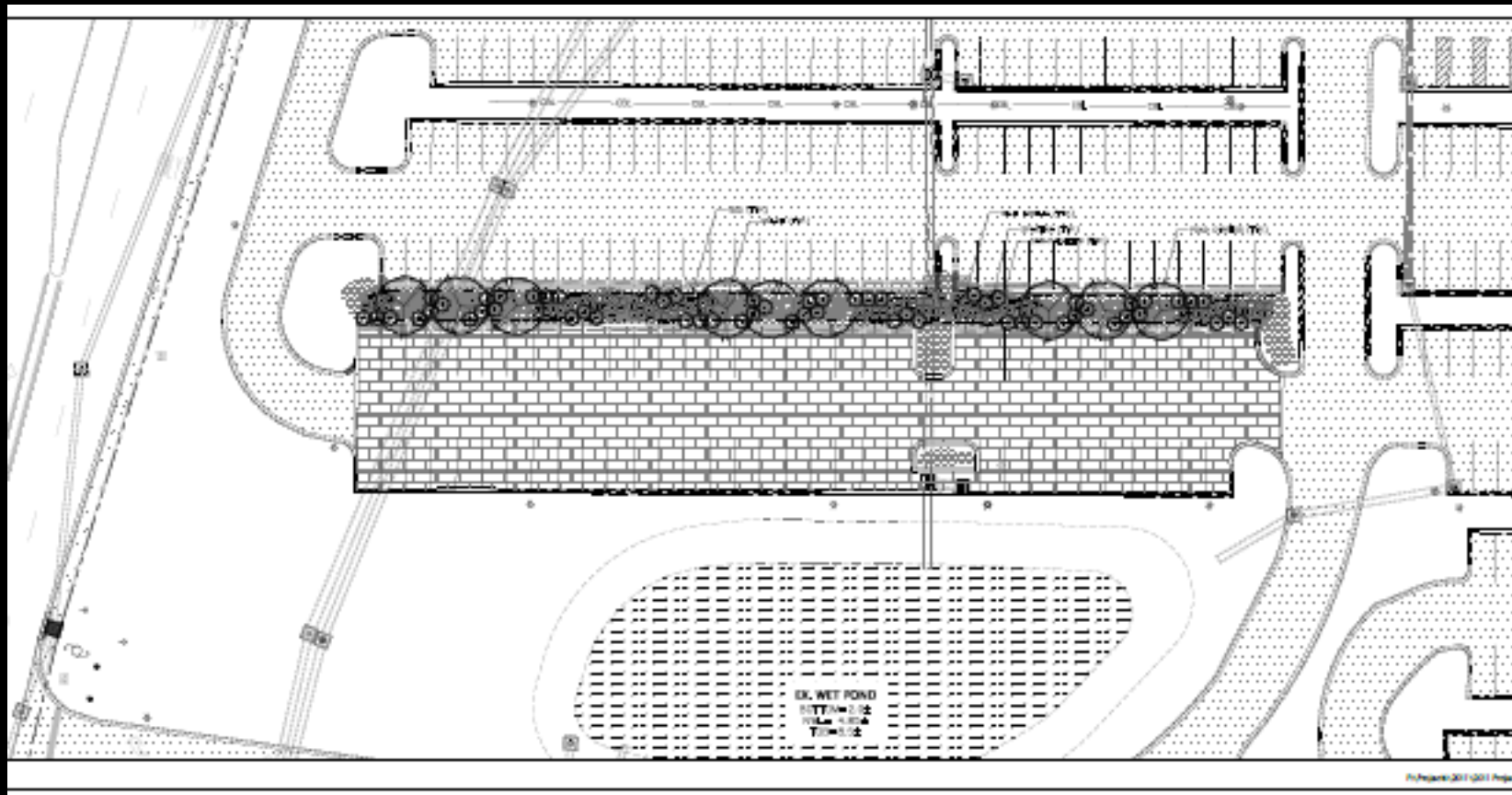
September 3, 2014



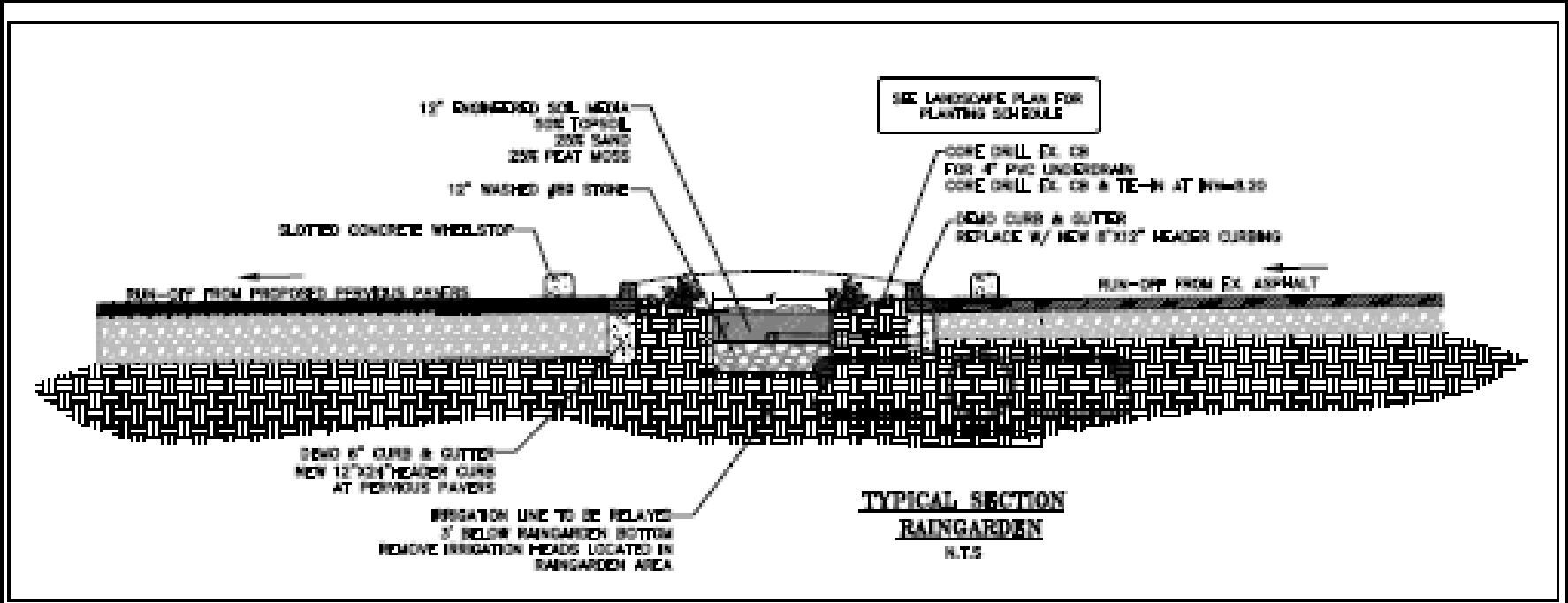
# Site Plan



# Plan View



# Pavement Detail



# Example of Completed Project



# Project cost / schedule

- Construction Budget = \$327,768
- Contractor Bid = \$299,653
- Break ground on or about mid September





# Pond Maintenance



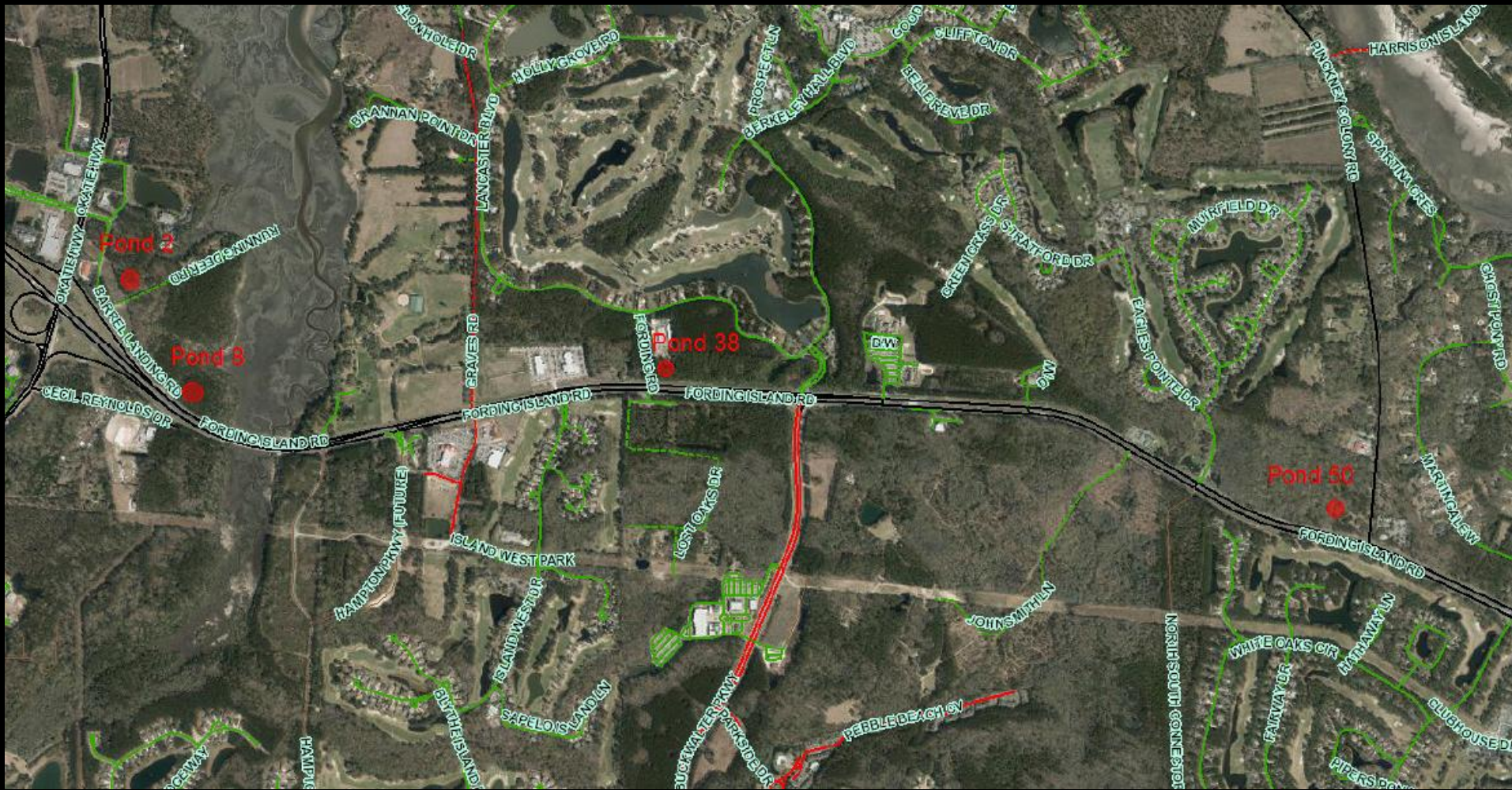
# US 278 Widening Stormwater Retrofit Project

A Report to Beaufort County  
Stormwater Utility Board

September 3, 2014



# Overview

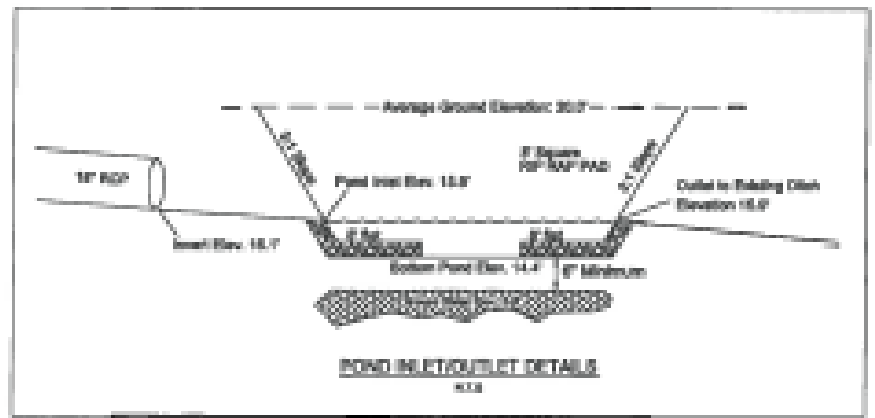
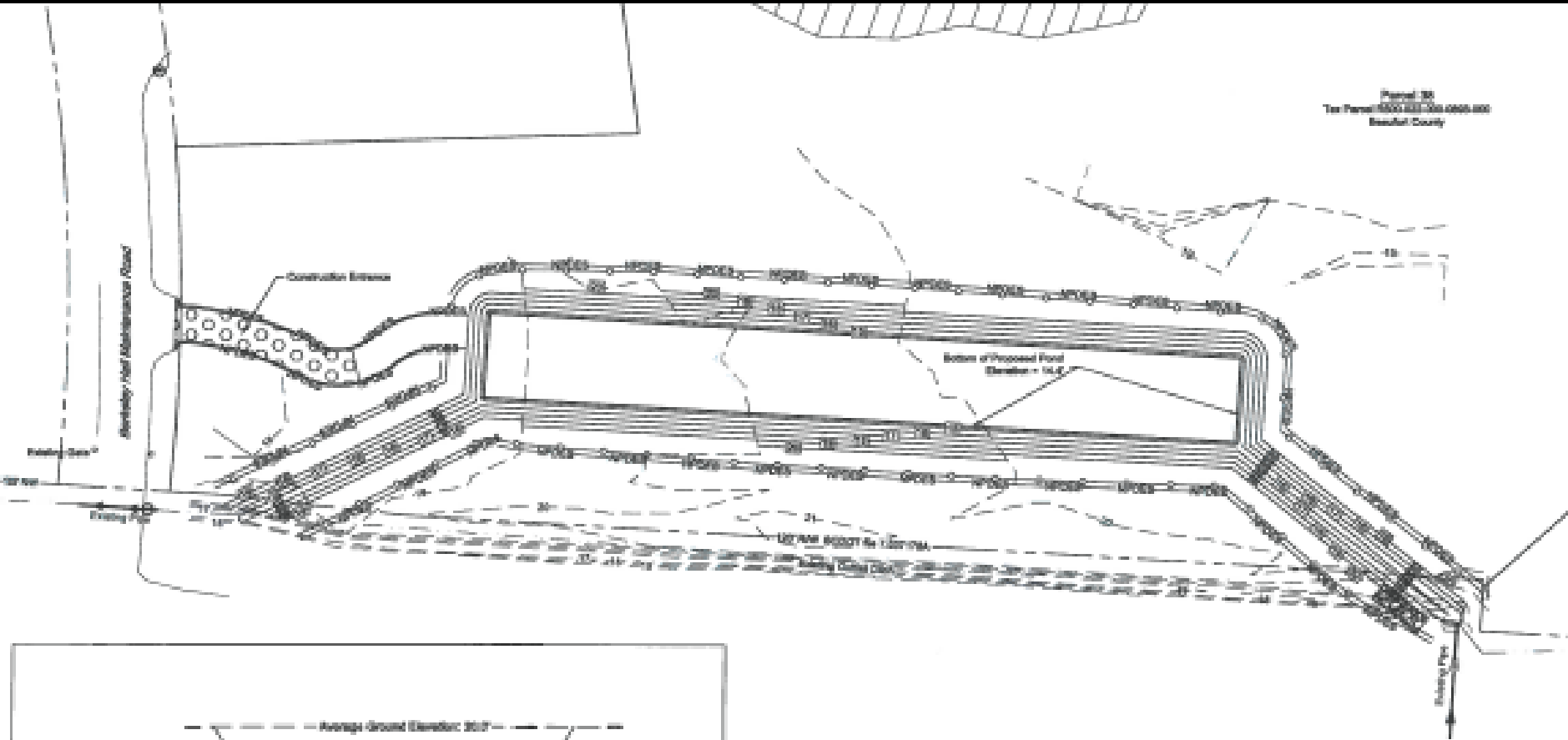






# Pond 38

Project 38  
The Pond at 1000 1/2 S.W. 200th Ave  
Beaufort County

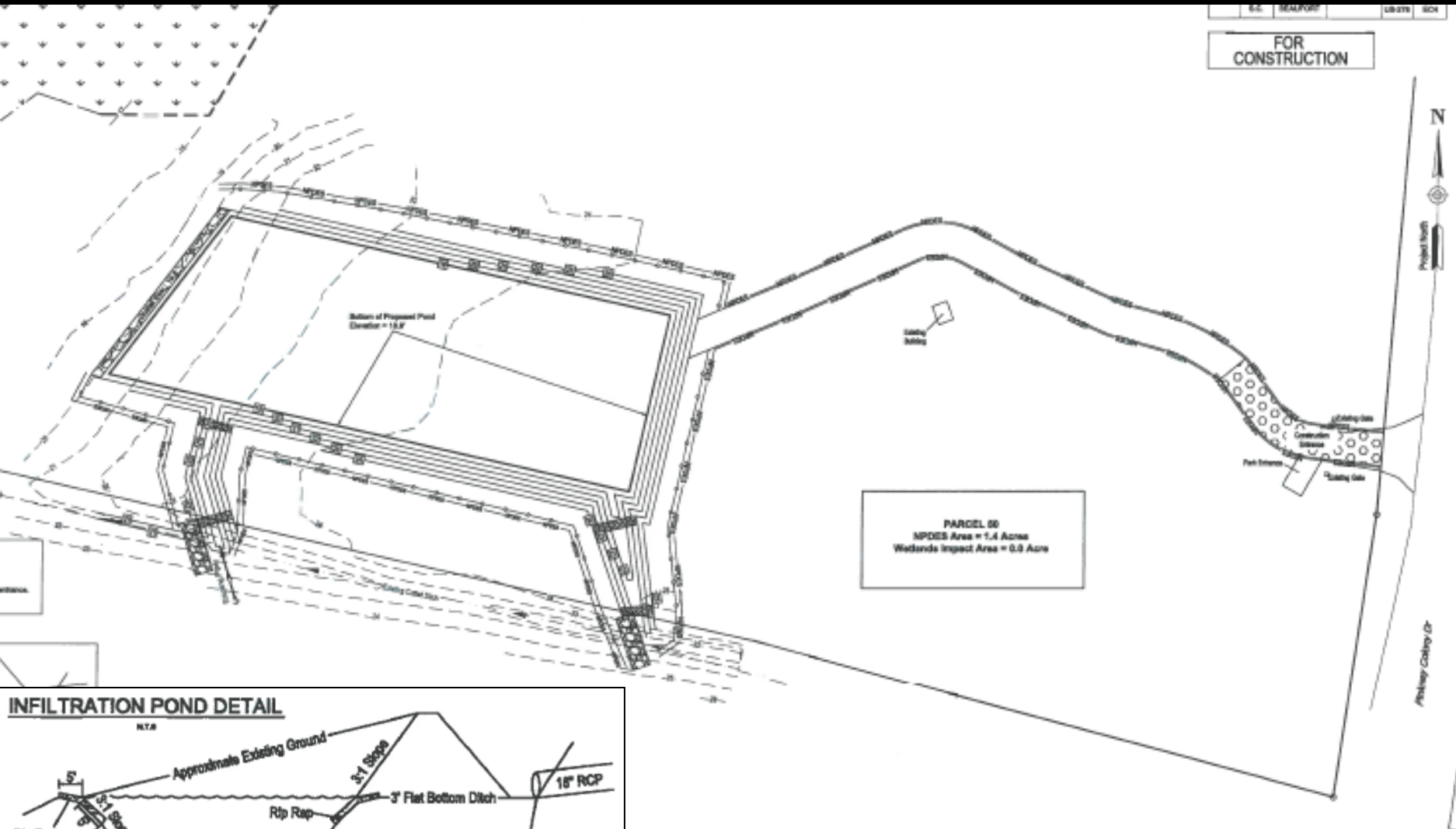


# Gate Details



# Pond 50

E.C. SCAFFOLD    LB-278    BCH  
**FOR CONSTRUCTION**



## INFILTRATION POND DETAIL





# Win-Win Project Coordination

## Buckwalter Community Park

Town of Bluffton, South Carolina

Conceptual Master Plan

July 10th, 2001

rev. July 14th, 2009

Prepared by:

Wood-Partners Inc. 



# Stockpile site



# Project cost / schedule

- Construction Budget = \$359,400
- In-House Estimate of Direct Costs = \$256,592
- Estimated savings to the County = \$137,620
  
- Break ground on or about Nov. 1, 2014

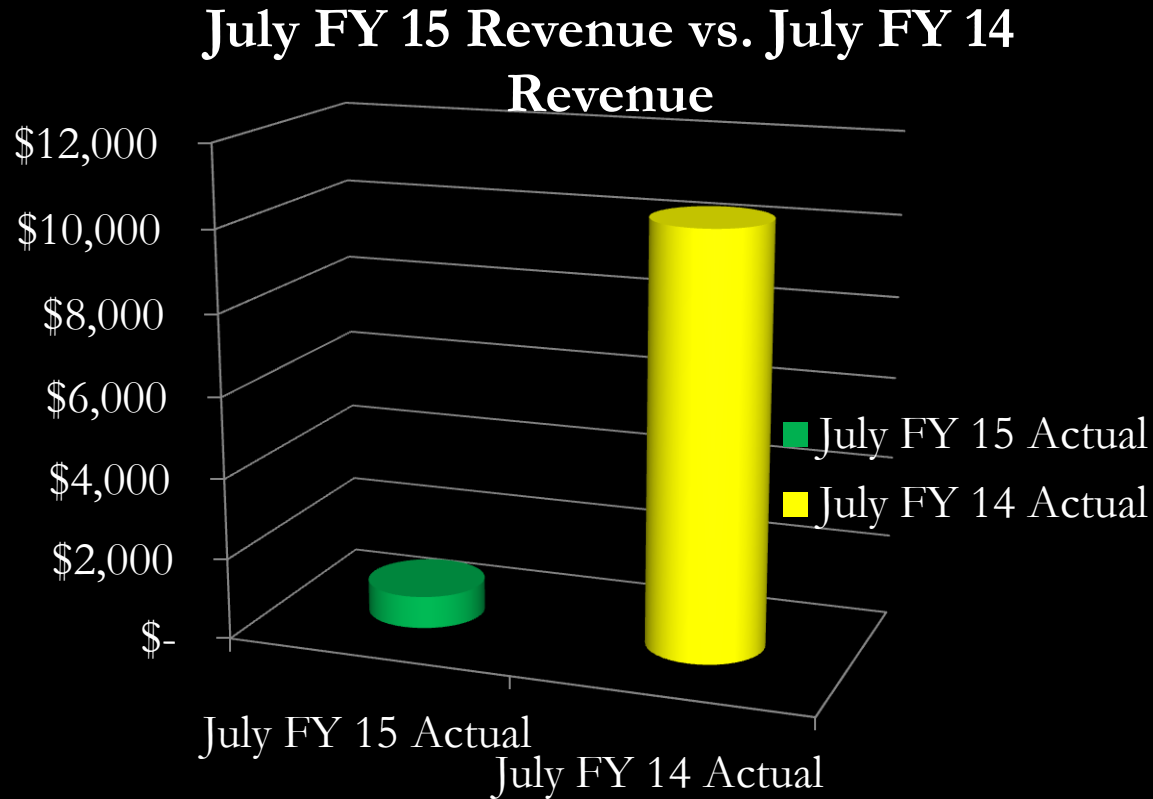




# Stormwater Management Utility Meeting Board

# STORMWATER FINANCIALS

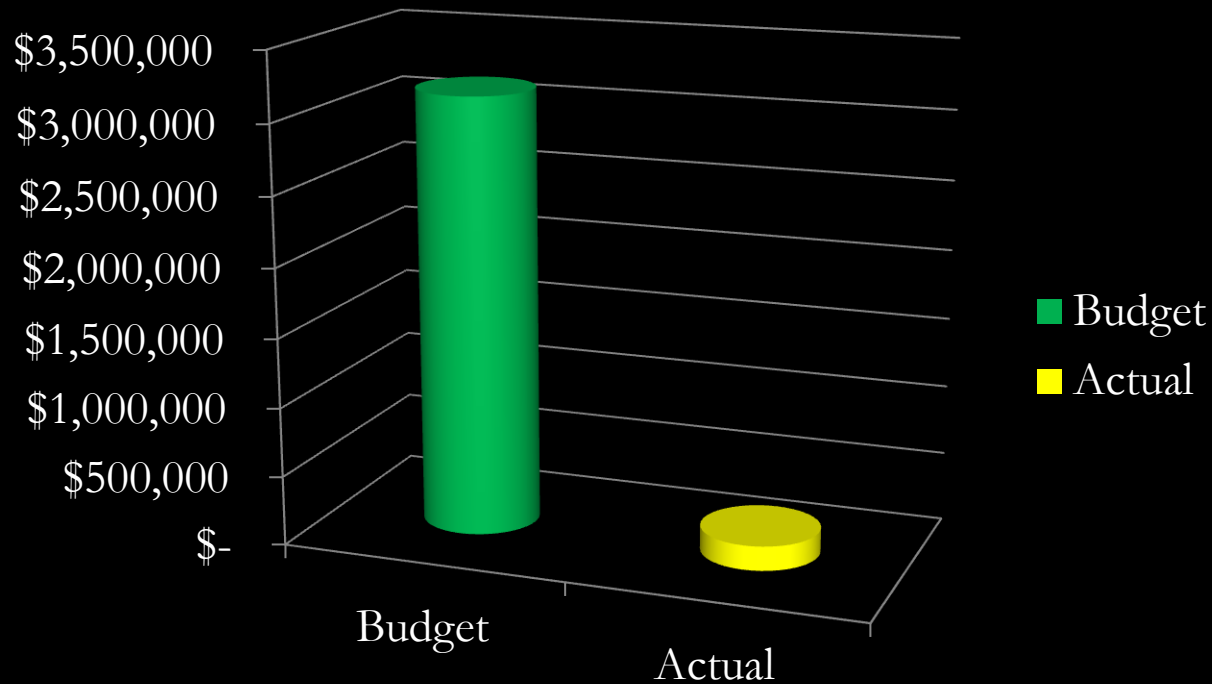
# July Unaudited Financials



Actual FY15 revenues are \$9,500 less or 92% than actual FY 14 revenues

# July Unaudited Financials

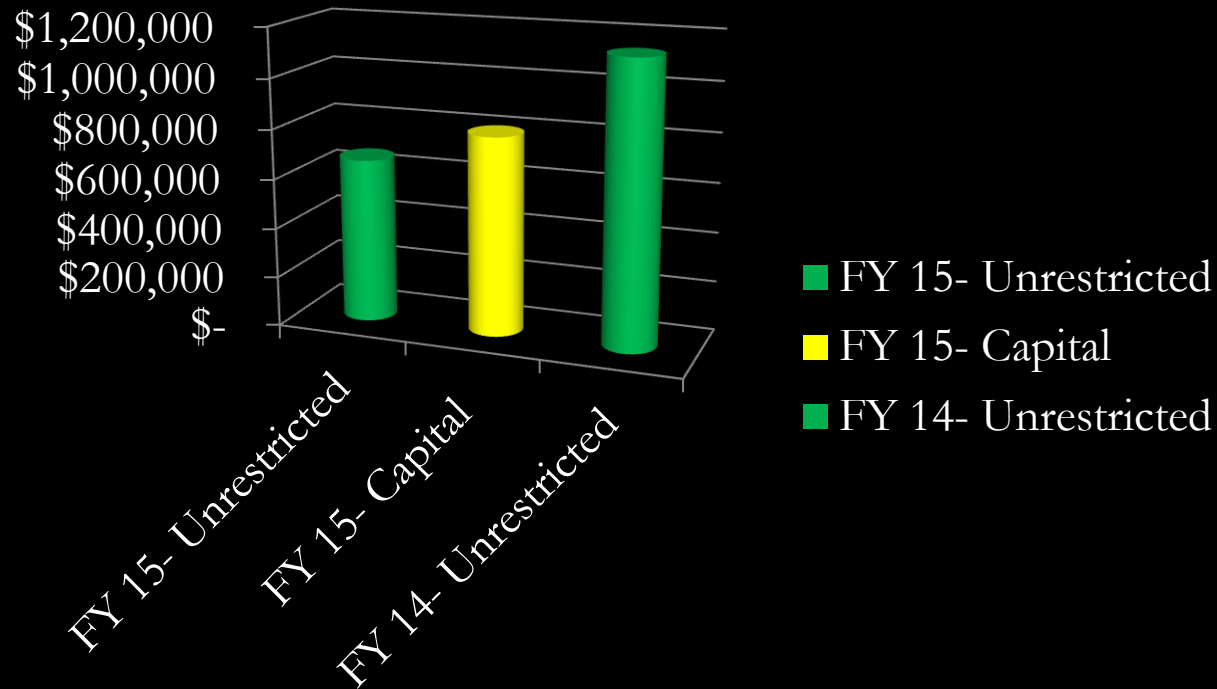
## July FY 15 Expenses vs. FY 15 Budget



Actual July FY15 expenses are at 6% of budget for FY 15

# July Unaudited Financials

## Fund Balance from Balance Sheet

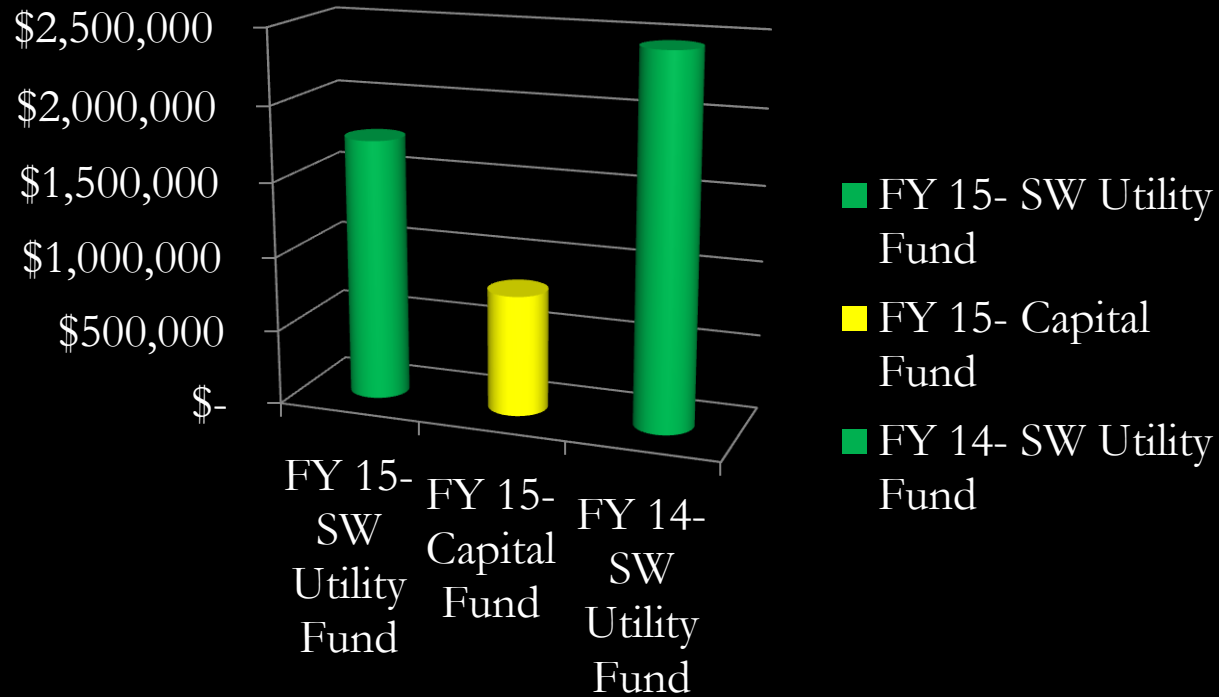


FY15 Fund Balances increased by \$114,000 or 10%



# July Unaudited Financials

## Cash from Balance Sheet



FY15 Cash Balances increased by \$111,000 or 4.5%



## MEMORANDUM

Date: September 3, 2014

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

Re: **Maintenance Project Report for September 2014**

1. This report will cover five major and five minor or routine projects. The Project Summary Reports are attached.

2. Major Projects:

- A. **Town of Hilton Head Island Bush Hog and Clean-out (Reimbursement)**, completed in March within the Town of Hilton Head Island, District 3; we bush hogged 19,428 feet of channel and the perimeter of a pond for a total of 19,782 feet. We also cleaned out three catch basins and jetted out three crossline pipes, five driveway pipes, 140 feet of channel pipe, and 214 feet of roadside pipe. Total cost of the project was **\$23,523**.
- B. **Confederate Avenue**, completed in May in the Alljoy area of Bluffton Township, District 9; we cleaned out 2,314 feet of roadside ditch, repaired a separated joint in a crossline pipe, and jetted out three crossline pipes, 15 driveway pipes, and 90 feet of roadside pipe. Total cost of the project was **\$28,844**.
- C. **Kitties Landing Road and Drive**, completed in June in Bluffton Township, District 9; we cleaned out 671 feet of roadside ditch and three catch basins and jetted out two access pipes, two crossline pipes, and seven driveway pipes. Total cost of the project was **\$18,021**.
- D. **Pinckney Colony Road**, completed in July in Bluffton Township, District 9; we bush hogged 3,530 feet of channel, cleaned out 5,205 feet of channel, and installed seven access pipes. We also jetted two crossline pipes and seven access pipes. Total cost of the project was **\$28,291**.
- E. **Hewlett Road**, completed in July on Lady's Island, District 7; we bush hogged 1,583 feet of workshelf and cleaned out three catch basins, 3,891 feet of roadside ditch, and 830 feet of channel. We also jetted one access pipe, nine crossline pipes, and 35 driveway pipes. Total cost of the project was **\$40,385**.

3. Minor or Routine Projects:

- A. **Town Of Hilton Head Island Tree Removal (Reimbursement)**, completed in February within the Town of Hilton Head Island, District 3; we removed fallen trees and debris from channels in three different areas.

- B. Hilton Head Airport Main Outfall Channel**, completed in July within the Town of Hilton Head Island, District 3; we bush hogged 3,772 feet of channel.
- C. Hilton Head Airport Secondary Channels and Ponds**, completed in July within The Town of Hilton Head Island, District 3; we bush hogged 4,402 feet of channel, the perimeter of three ponds, and 1,080 feet of fence line. We also removed one tree.
- D. Boundary Street (Reimbursement)**, completed in July within the City of Beaufort, District 1; we cleaned out two catch basins, jetted out 184 feet of channel pipe and 220 feet of roadside pipe, and used the pole camera to view the extent of blockage in the system.
- E. Keans Neck Road Channel #4**, completed in May in the Dale area, District 5; we bush hogged 1,683 feet of channel, cleaned out 2,666 feet of channel, and jetted one crossline pipe and three access pipes.



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** ToHHI Bush Hog (Reimbursement)

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Mar-14

Project improved 19,782 L.F. of drainage system. Bush hogged 19,428 L.F. of channel and perimeter of pond. This project consisted of the following areas: Mathews Drive (8,095 L.F.), Muddy Creek Road (1,637 L.F.), Oakview Road (1,292 L.F.), Nazarene Road (650 L.F.), Wildhorse Road (200 L.F.), Gum Tree Road (3,409 L.F.), Island Drive (819 L.F.), Marshland Road (855 L.F.), Miller Road (1,500 L.F.) and Benjamin Drive (971 L.F.). Cleaned out (3) catch basins. Jetted (3) crossline pipes, (5) driveway pipes, 140 L.F. of channel pipe and 214 L.F. of roadside pipe.

AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
AW / Administrative Work	10.0	\$442.70	\$0.00	\$0.00	\$0.00	\$339.60	\$782.30
CBCO / Catch basin - clean out	20.0	\$432.56	\$221.60	\$155.08	\$0.00	\$286.80	\$1,096.04
CLPJT / Crossline Pipe - Jetted	20.0	\$432.56	\$221.60	\$109.12	\$0.00	\$286.80	\$1,050.08
ODBH / Outfall ditch - bushhogged	327.0	\$7,270.67	\$3,112.12	\$1,229.03	\$0.00	\$4,695.57	\$16,307.38
ONJV / Onsite Job Visit	37.5	\$1,277.52	\$135.75	\$184.59	\$0.00	\$946.10	\$2,543.96
PRRECON / Project Reconnaissance	12.0	\$398.16	\$43.44	\$46.88	\$0.00	\$293.64	\$782.12
WSBH / Workshelf - Bush Hogged	20.0	\$420.88	\$64.80	\$165.62	\$0.00	\$276.50	\$927.80
<b>2014-305A / ToHHI Bush Hog 2014-305A</b>	<b>447.5</b>	<b>\$10,695.50</b>	<b>\$3,799.31</b>	<b>\$1,890.32</b>	<b>\$0.00</b>	<b>\$7,138.23</b>	<b>\$23,523.36</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>447.5</b>	<b>\$10,695.50</b>	<b>\$3,799.31</b>	<b>\$1,890.32</b>	<b>\$0.00</b>	<b>\$7,138.23</b>	<b>\$23,523.36</b>

Before



During



After



**Project: Benjamin Drive Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

Bush hogged 971 LF of channel.

Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe
	sde.SDE.HHRds



1 inch = 125 feet

**Project: Gum Tree Road and Wild Horse Road Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**



1 inch = 337 feet

**Project: Island Drive Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 161 feet**

**Project: Marshland Road Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



1 inch = 167 feet



**Project: Mathews Drive Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

Bush hogged 1,034 LF of channel.

Bush hogged 864 LF of channel.

Bush hogged 819 LF of channel.

Bush hogged 686 LF of channel.

Bush hogged 2,104 LF of channel.

Bush hogged 2,089 LF of channel.

Bush hogged 499 LF of channel.

Bush hogged the ponds perimeter.

**Legend**

TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe



1 inch = 671 feet

**Project: Miller Road Reimbursement**

**Activity: Bush Hog**
















**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe
-  sde.SDE.HHRds



Bush hogged 750 LF of roadside ditch.

Bush hogged 750 LF of roadside ditch.



1 inch = 208 feet

**Project: Muddy Creek Road Reimbursement**

**Activity: Bush Hog**















**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 239 feet

**Project: Nazarene Road Reimbursement**

**Activity: Bush Hog**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

Bush hogged 650 LF of channel.



1 inch = 83 feet

**Project: Oakview Road  
Reimbursement**

**Activity: Bush Hog**

**Project #:  
2014-305A**

**Township: Town of  
Hilton Head Island**

**Completed:  
March 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 202 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 8/20/14

File:C:/sethdata/projects/projectmaps/BH/Oakview Rd 2014-305A

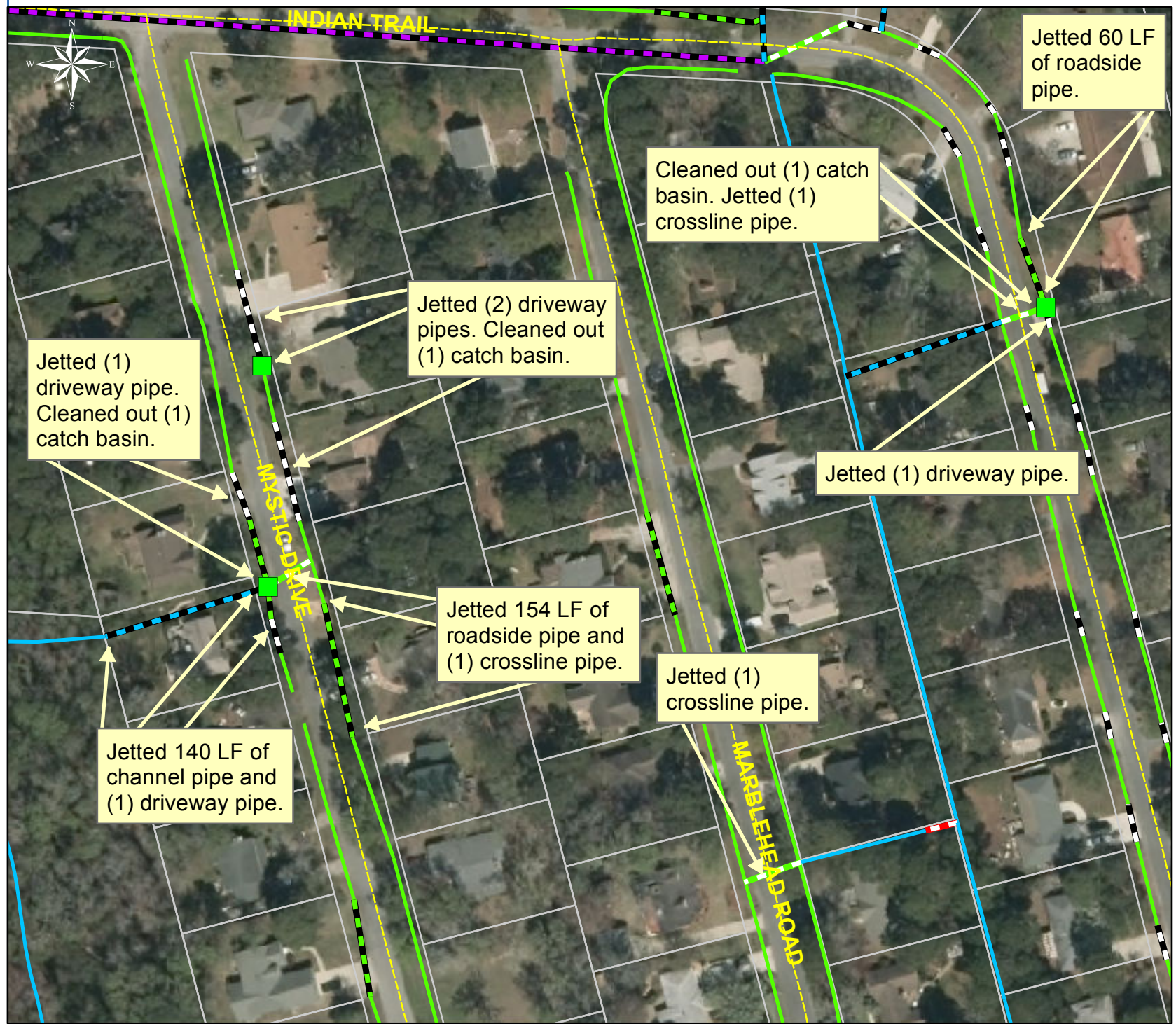
**Project: Old Woodlands S/D Reimbursement**

**Activity: Vacuum Truck**

**Project #: 2014-305A**

**Township: Town of Hilton Head Island**

**Completed: March 2014**



**Legend**

- Catch Basin

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 111 feet**



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Confederate Avenue

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** May-14

Project improved 2,314 L.F. of drainage system. Cleaned out 2,314 L.F. of roadside ditch. Removed 4 L.F. of crossline pipe. Repaired separated joint. Installed rip rap for erosion control. Jetted (3) crossline pipes and (23) driveway pipes.

2014-613 / Confederate Avenue	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CPREP / Crossline Pipe - Repaired	32.0	\$692.24	\$28.96	\$85.40	\$0.00	\$449.28	\$1,255.88
DPJT / Driveway Pipe - Jetted	45.5	\$989.94	\$531.84	\$325.57	\$0.00	\$657.80	\$2,505.15
HAUL / Hauling	167.0	\$3,612.21	\$1,786.90	\$888.06	\$0.00	\$2,277.75	\$8,564.92
ONJV / Onsite Job Visit	22.5	\$750.36	\$81.45	\$90.00	\$0.00	\$535.24	\$1,457.05
PI / Project Inspection	4.0	\$177.08	\$14.48	\$12.00	\$0.00	\$135.84	\$339.40
RSDCL / Roadside Ditch - Cleanout	371.0	\$7,888.67	\$1,120.75	\$627.10	\$0.00	\$5,068.32	\$14,704.84
<b>2014-613 / Confederate Avenue Sub Total</b>	<b>642.5</b>	<b>\$14,120.73</b>	<b>\$3,564.38</b>	<b>\$2,028.13</b>	<b>\$0.00</b>	<b>\$9,130.83</b>	<b>\$28,844.08</b>
<b>Grand Total</b>	<b>642.5</b>	<b>\$14,120.73</b>	<b>\$3,564.38</b>	<b>\$2,028.13</b>	<b>\$0.00</b>	<b>\$9,130.83</b>	<b>\$28,844.08</b>

Before



During



After



**Project: Confederate Avenue Map 1**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-613**

**Township: Bluffton**

**Completed: May 2014**















Removed 4 LF of crossline pipe.  
Repaired separated joint.  
Installed rip rap on both ends for erosion control.

Cleaned out 774 LF of roadside ditch.

Cleaned out 1,540 LF of roadside ditch.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 314 feet**



Project: Confederate Avenue Map 2

Activity: Vacuum Truck

Project #: 2014-613















Township: Bluffton

Completed: May 2014



**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 314 feet

Prepared By: BC Stormwater Management Utility

Date Print: 7/30/14

File: C:/sethdata/projects/projectmaps/Vac/Confederate Ave 2014-613 Map2



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Kitties Landing Road/Kitties Landing Drive

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Project improved 761 L.F. of drainage system. Cleaned out 671 L.F. of roadside ditch and (3) catch basins. Jetted (3) crossline pipes, (15) driveway pipes and 90 L.F. of roadside pipe.

**Completion:** Jun-14

2014-624 / Kitties Landing Rd/Kitties Landing Dr	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBCO / Catch basin - clean out	20.0	\$446.76	\$221.60	\$92.13	\$0.00	\$299.10	\$1,059.59
DPJT / Driveway Pipe - Jetted	6.0	\$134.03	\$66.48	\$50.97	\$0.00	\$89.73	\$341.21
HAUL / Hauling	83.5	\$1,806.11	\$893.45	\$415.29	\$0.00	\$1,092.47	\$4,207.31
OFPJ / Outfall Pipe - Jetted	20.0	\$446.76	\$221.60	\$107.13	\$0.00	\$299.10	\$1,074.59
ONJV / Onsite Job Visit	20.0	\$690.06	\$72.40	\$66.99	\$0.00	\$471.46	\$1,300.91
PL / Project Layout	47.0	\$1,022.59	\$94.12	\$108.78	\$0.00	\$663.93	\$1,889.42
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$109.35	\$0.00	\$109.35
PRRECON / Project Reconnaissance	14.5	\$363.09	\$16.29	\$36.69	\$0.00	\$247.54	\$663.60
RSDCL / Roadside Ditch - Cleanout	160.0	\$3,461.20	\$855.81	\$230.74	\$0.00	\$2,246.40	\$6,794.15
STBY / Stand By	8.0	\$173.04	\$85.60	\$22.89	\$0.00	\$115.36	\$396.89
TRAIN / Training	3.0	\$57.84	\$0.00	\$0.00	\$0.00	\$36.63	\$94.47
UTLOC / Utility locates	1.5	\$42.60	\$0.00	\$0.00	\$0.00	\$30.21	\$72.81
<b>2014-624 / Kitties Landing Rd/Kitties Landing Dr Sub Total</b>	<b>384.0</b>	<b>\$8,654.30</b>	<b>\$2,527.35</b>	<b>\$1,131.60</b>	<b>\$109.35</b>	<b>\$5,598.54</b>	<b>\$18,021.13</b>
<b>Grand Total</b>	<b>384.0</b>	<b>\$8,654.30</b>	<b>\$2,527.35</b>	<b>\$1,131.60</b>	<b>\$109.35</b>	<b>\$5,598.54</b>	<b>\$18,021.13</b>

Before



During



After



**Project: Kitties Landing Road & Kitties Landing Drive Map 1**

**Activity: Routine/ Preventive Maintenance**















**Project #: 2014-624**

**Township: Bluffton**

**Completed: June 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



Cleaned out 77 LF of roadside ditch.

Cleaned out 108 LF of roadside ditch.

Cleaned out 23 LF of roadside ditch.

Cleaned out 79 LF of roadside ditch.

Cleaned out 97 LF of roadside ditch.

Cleaned out 135 LF of roadside ditch.

Cleaned out 128 LF of roadside ditch.

Cleaned out 24 LF of roadside ditch.



1 inch = 148 feet

**Project: Kitties Landing Drive & Kitties Landing Road Map 2**

**Activity: Vacuum Truck**















**Project #: 2014-624**

**Township: Bluffton**

**Completed: June 2014**

**Legend**

**TYPE**

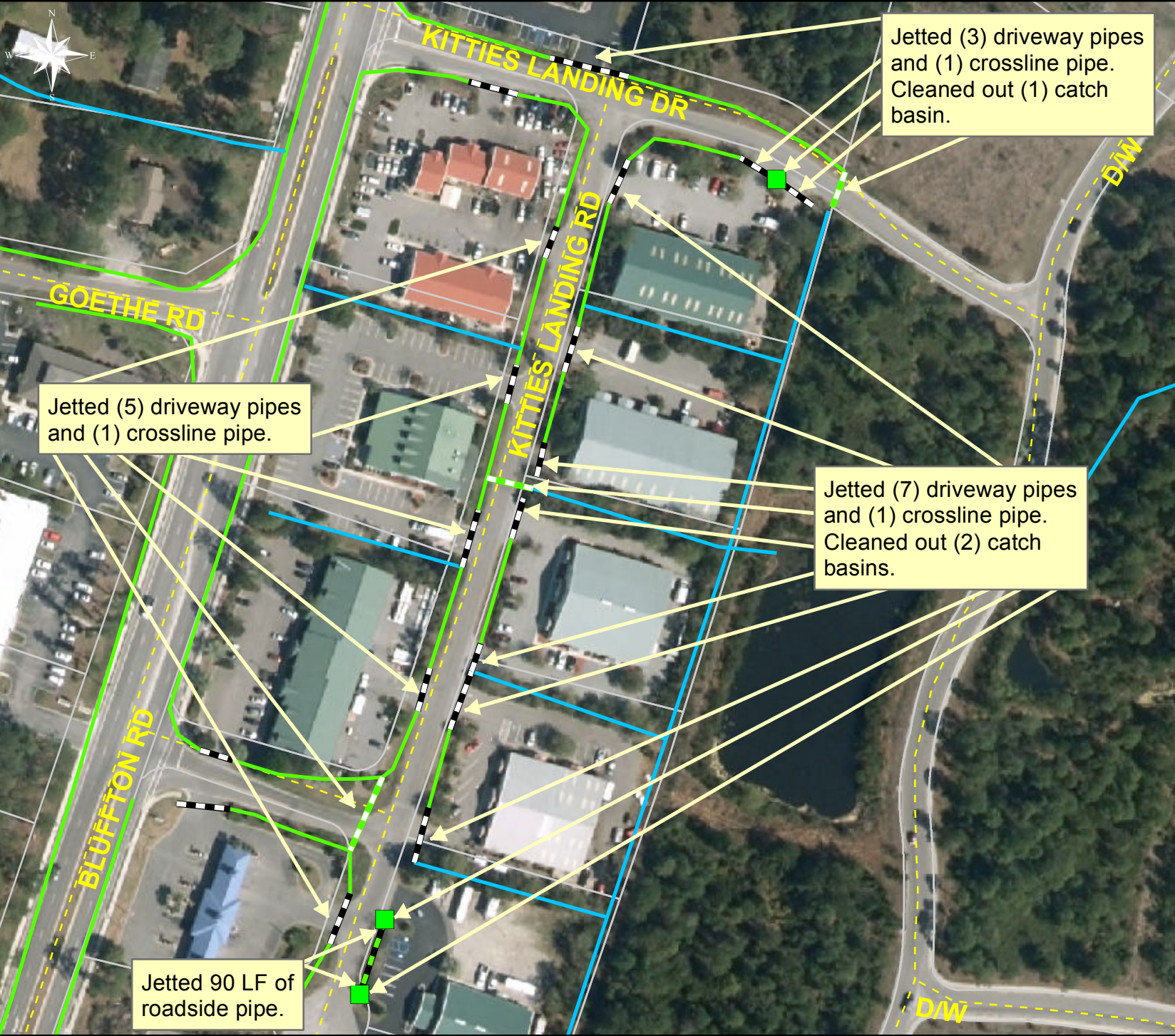
-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Jetted (3) driveway pipes and (1) crossline pipe. Cleaned out (1) catch basin.

Jetted (5) driveway pipes and (1) crossline pipe.

Jetted (7) driveway pipes and (1) crossline pipe. Cleaned out (2) catch basins.

Jetted 90 LF of roadside pipe.



1 inch = 139 feet



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Pinckney Colony Road Channel #1

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Project improved 5,205 L.F. of drainage system. Bush hogged 3,530 L.F. of channel. Cleaned out 5,205 L.F. of channel. Installed (7) access pipes and rip rap for erosion control. Jetted (2) crossline pipes and (7) access pipes.

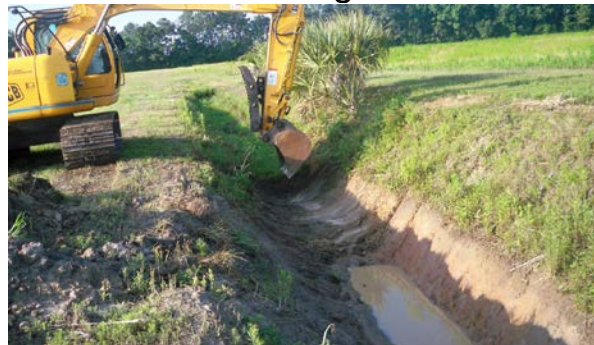
**Completion:** Jul-14

2014-631 / Pinckney Colony Rd Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	59.5	\$1,313.11	\$390.48	\$1,045.78	\$0.00	\$873.84	\$3,623.21
APJT / Access pipe - jetted	10.0	\$223.38	\$110.80	\$47.70	\$0.00	\$149.55	\$531.43
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
DLO / Ditch Layout	15.0	\$331.62	\$18.10	\$27.21	\$0.00	\$220.80	\$597.73
HAUL / Hauling	63.0	\$1,344.78	\$642.00	\$1,025.91	\$0.00	\$875.88	\$3,888.57
LM / Loading Materials	30.0	\$687.90	\$363.82	\$174.95	\$0.00	\$463.95	\$1,690.62
ODBH / Outfall ditch - bushhogged	58.0	\$1,289.73	\$526.18	\$313.92	\$0.00	\$860.76	\$2,990.59
ODCO / Outfall ditch - cleaned out	219.0	\$4,873.13	\$1,942.04	\$991.34	\$0.00	\$3,252.51	\$11,059.01
ONJV / Onsite Job Visit	19.5	\$635.12	\$61.54	\$67.20	\$0.00	\$452.58	\$1,216.44
PP / Project Preparation	3.0	\$132.81	\$10.86	\$12.80	\$0.00	\$101.88	\$258.35
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$109.35	\$0.00	\$109.35
RRI / Rip Rap - Installed	20.0	\$458.60	\$195.24	\$123.15	\$0.00	\$309.30	\$1,086.29
STAGING / Staging Materials	6.0	\$137.58	\$10.86	\$26.16	\$0.00	\$92.79	\$267.39
STBY / Stand By	2.0	\$43.26	\$21.40	\$29.43	\$0.00	\$28.84	\$122.93
TRAIN / Training	2.0	\$38.56	\$0.00	\$0.00	\$0.00	\$24.42	\$62.98
WSGRB / Workshelf - Grubbed	18.0	\$397.92	\$61.48	\$27.70	\$0.00	\$264.96	\$752.06
<b>2014-631 / Pinckney Colony Rd Channel #1 Sub Total</b>	<b>526.0</b>	<b>\$11,927.96</b>	<b>\$4,354.80</b>	<b>\$3,913.23</b>	<b>\$109.35</b>	<b>\$7,985.29</b>	<b>\$28,290.63</b>
<b>Grand Total</b>	<b>526.0</b>	<b>\$11,927.96</b>	<b>\$4,354.80</b>	<b>\$3,913.23</b>	<b>\$109.35</b>	<b>\$7,985.29</b>	<b>\$28,290.63</b>

Before



During



After



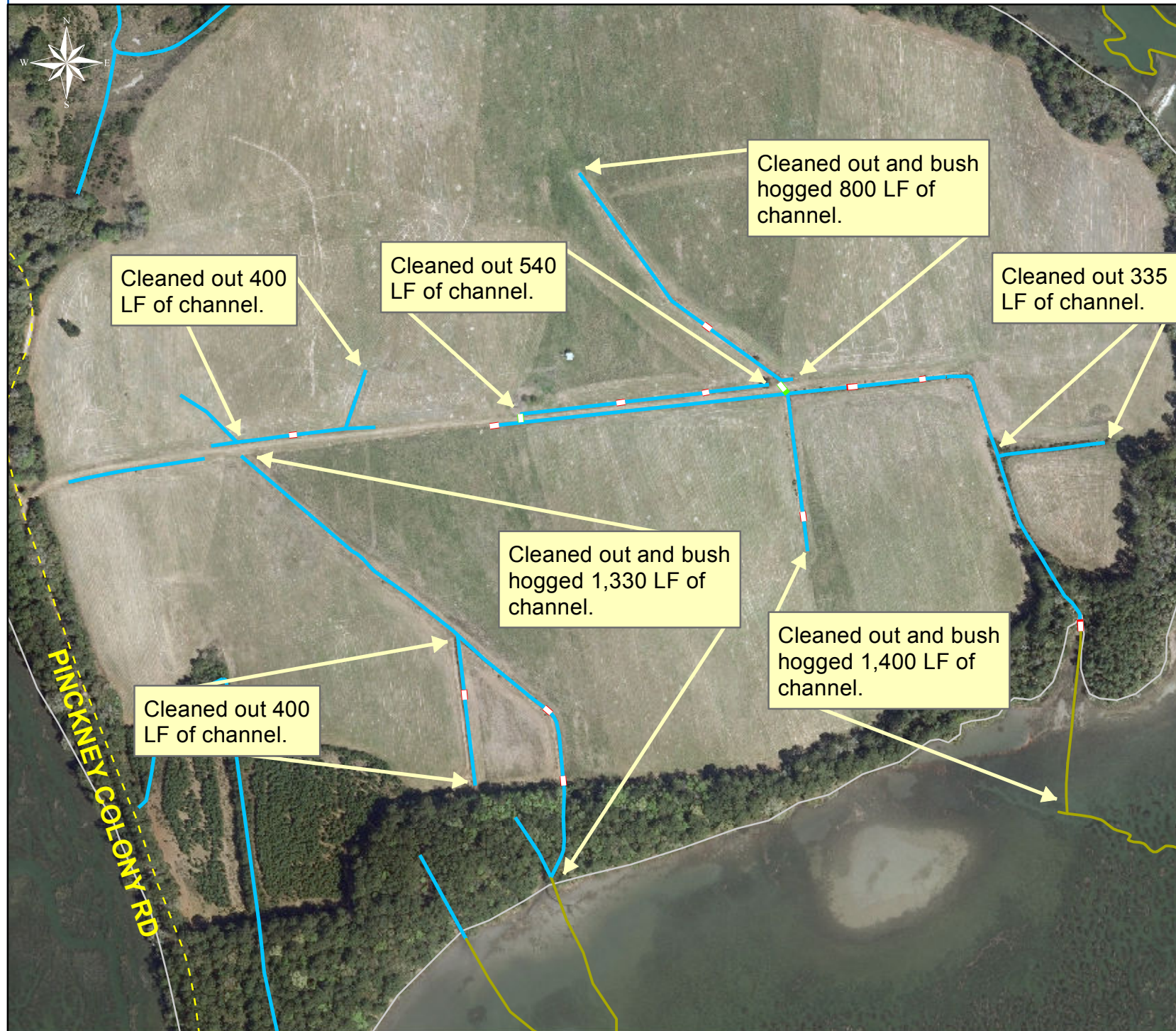
# Project: Pinckney Colony Road Map 1

Activity: Routine/  
Preventive  
Maintenance

Project #:  
2014-631















Township:  
Bluffton

Completed:  
July 2014



### Legend

#### TYPE

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 383 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/25/14

File: C:/sethdata/projects/projectmaps/Pinckney 2014-631 Map1

**Project: Pinckney  
Colony Road Map 2**

**Activity: Vacuum  
Truck**

**Project #:  
2014-631**

**Township:  
Bluffton**

**Completed:  
July 2014**















Jetted (3) access pipes  
and (1) crossline pipe.

Jetted (1) crossline pipe.

Jetted (3)  
access pipes.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 319 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 8/13/14

File:C:/sethdata/projects/projectmaps//Vac/Pinckneyt 2014-631 Map2

**Project: Pinckney  
Colony Road Map 3**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-631**

**Township:  
Bluffton**

**Completed:  
July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



1 inch = 319 feet





# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Hewlett Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 5,794 L.F. of drainage system. Bush hogged 1,583 L.F. of workshelf. Cleaned out (3) catch basins, 3,891 L.F. of roadside ditch and 830 L.F. of channel. Jetted (1) access pipe, (9) crossline pipes and (35) driveway pipes. Hydroseeded for erosion control.

2014-635 / Hewlett Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
CBCO / Catch basin - clean out	12.0	\$268.08	\$132.96	\$73.86	\$0.00	\$179.46	\$654.36
CLPJT / Crossline Pipe - Jetted	26.0	\$580.79	\$288.08	\$140.79	\$0.00	\$388.83	\$1,398.49
DPJT / Driveway Pipe - Jetted	56.0	\$1,255.08	\$664.80	\$253.22	\$0.00	\$831.24	\$3,004.34
HAUL / Hauling	159.0	\$3,403.97	\$1,630.50	\$863.28	\$0.00	\$2,154.91	\$8,052.66
HYDR / Hydroseeding	12.0	\$259.59	\$23.30	\$78.16	\$0.00	\$168.48	\$529.53
ODBH / Outfall ditch - bushhogged	27.0	\$585.25	\$55.75	\$28.54	\$0.00	\$380.91	\$1,050.45
ODCO / Outfall ditch - cleaned out	63.0	\$1,373.40	\$278.03	\$90.21	\$0.00	\$892.83	\$2,634.47
ONJV / Onsite Job Visit	56.0	\$1,871.18	\$202.72	\$208.00	\$0.00	\$1,327.42	\$3,609.32
PI / Project Inspection	1.0	\$44.27	\$3.62	\$3.20	\$0.00	\$33.96	\$85.05
PP / Project Preparation	2.0	\$88.54	\$7.24	\$6.40	\$0.00	\$67.92	\$170.10
RSDCL / Roadside Ditch - Cleanout	427.0	\$9,159.44	\$1,680.49	\$501.18	\$0.00	\$5,964.66	\$17,305.77
TC / Traffic Control - Jobsite	20.0	\$385.60	\$72.40	\$28.80	\$0.00	\$244.20	\$731.00
UC / Utility Coordination	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
UTLOC / Utility locates	2.0	\$88.54	\$7.24	\$9.60	\$0.00	\$67.92	\$173.30
WSBH / Workshelf - Bush Hogged	20.0	\$469.15	\$80.20	\$50.69	\$0.00	\$318.45	\$918.48
<b>2014-635 / Hewlett Road Sub Total</b>	<b>885.0</b>	<b>\$19,873.80</b>	<b>\$5,127.33</b>	<b>\$2,335.92</b>	<b>\$0.00</b>	<b>\$13,047.65</b>	<b>\$40,384.69</b>
<b>Grand Total</b>	<b>885.0</b>	<b>\$19,873.80</b>	<b>\$5,127.33</b>	<b>\$2,335.92</b>	<b>\$0.00</b>	<b>\$13,047.65</b>	<b>\$40,384.69</b>

Before



During



After



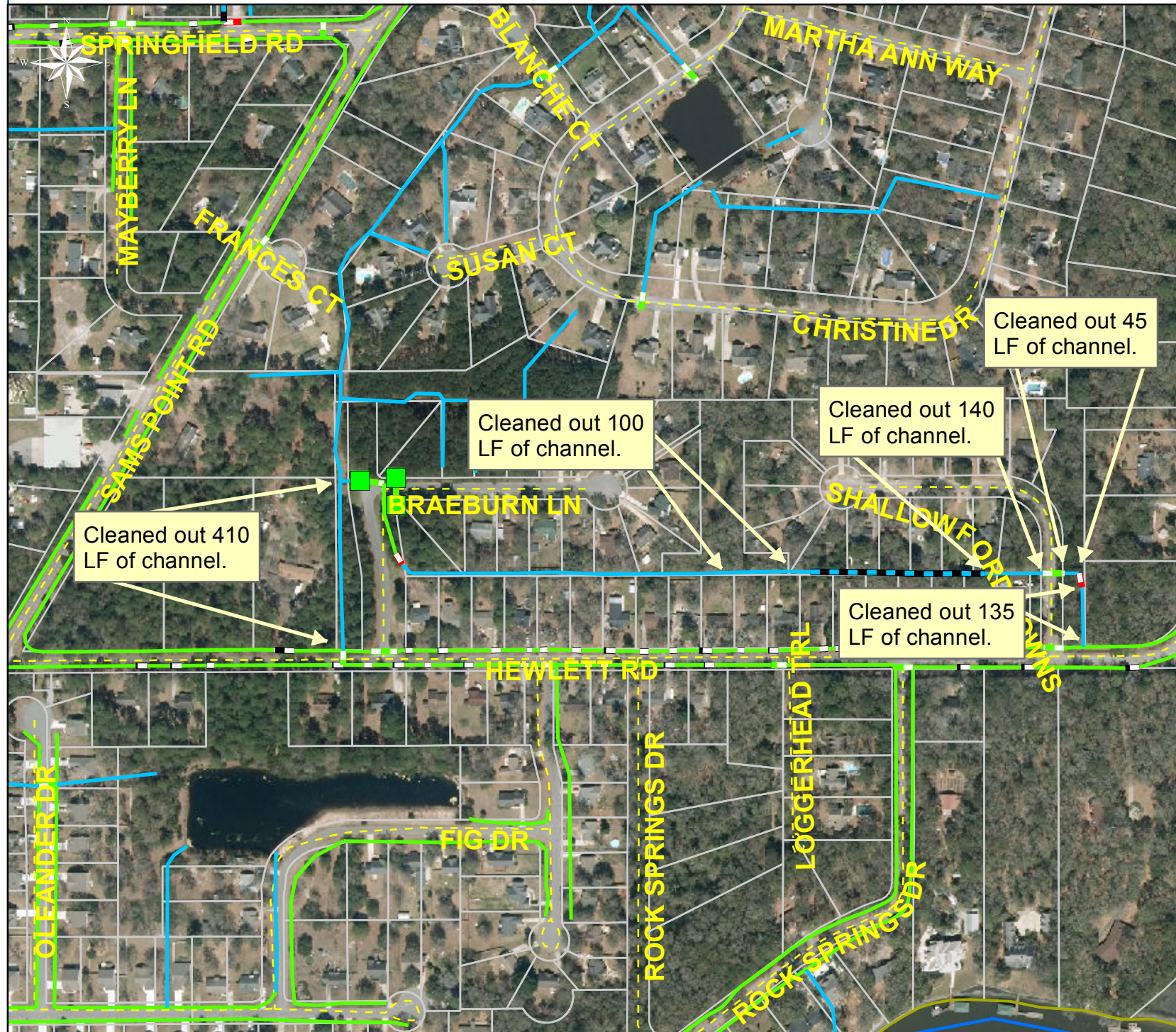
**Project: Hewlett Road Map 1**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-635**

**Township: Lady's Island**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe
- Catch Basin



1 inch = 311 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/6/14

File:C:/sethdata/projects/projectmaps/Hewlett Rd 2014-635 Map1

**Project: Hewlett Road Map 2**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-635**

**Township: Lady's Island**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe
- Catch Basin



**1 inch = 311 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 8/6/14

File:C:/sethdata/projects/projectmaps/Hewlett Rd 2014-635 Map2

**Project: Hewlett Road Map 3**

**Activity: Bush Hog**

**Project #: 2014-635**

**Township: Lady's Island**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe
- Catch Basin



1 inch = 311 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/6/14

File: C:/sethdata/projects/projectmaps/BH/Hewlett Rd 2014-635 Map3

**Project: Hewlett Road Map 4**

**Activity: Vacuum Truck**
















**Project #: 2014-635**

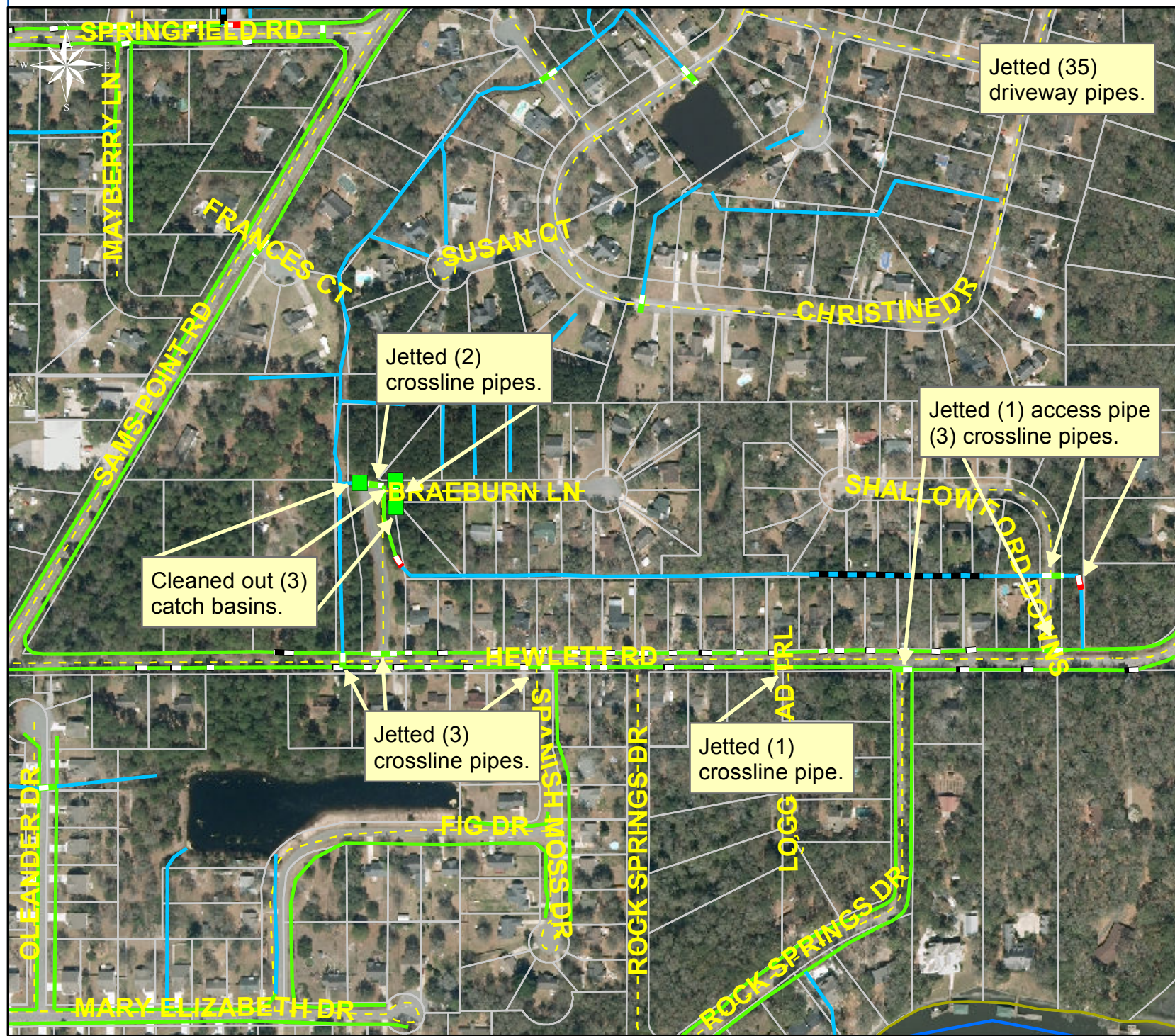
**Township: Lady's Island**

**Completed: July 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe
-  Catch Basin



1 inch = 311 feet



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** ToHHI -Tree Removal (Reimbursement) - Oakview Drive, Matthew Drive,  
and Gum Tree Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Feb-14

Removed fallen trees and debris from workshelf and channel.

2014-572 / ToHHI -Tree Removal	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
AW / Administrative Work	2.0	\$88.54	\$0.00	\$0.00	\$0.00	\$67.92	\$156.46
HAUL / Hauling	79.5	\$1,790.09	\$840.03	\$1,168.37	\$0.00	\$1,164.80	\$4,963.28
ONJV / Onsite Job Visit	20.0	\$640.09	\$72.40	\$91.52	\$0.00	\$411.79	\$1,215.80
RMTRD / Remove trees - Ditch	40.0	\$865.27	\$157.56	\$109.56	\$0.00	\$563.30	\$1,695.69
RMTRW / Remove trees - Workshelf	80.0	\$1,812.67	\$310.17	\$165.00	\$0.00	\$1,164.70	\$3,452.54
<b>2014-572 / ToHHI -Tree Removal Sub Total</b>	<b>222.5</b>	<b>\$5,217.11</b>	<b>\$1,380.16</b>	<b>\$1,534.45</b>	<b>\$0.00</b>	<b>\$3,385.73</b>	<b>\$11,517.46</b>
<b>Grand Total</b>	<b>222.5</b>	<b>\$5,217.11</b>	<b>\$1,380.16</b>	<b>\$1,534.45</b>	<b>\$0.00</b>	<b>\$3,385.73</b>	<b>\$11,517.46</b>

Before



During



After

















**Project: Oakview  
Road Tree Removal  
Reimbursement**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-572**

**Township: Town of  
Hilton Head Island**

**Completed:  
March 2014**

Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe

Removed fallen trees  
and debris.



1 inch = 128 feet

**Project: Gum Tree  
Road Tree Removal  
Reimbursement**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-572**

**Township: Town of  
Hilton Head Island**

**Completed:  
March 2014**

**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

Removed fallen trees  
and debris.



1 inch = 187 feet

Prepared By: BC Stormwater Management Utility

Date Print: 4/17/14

File: C:/sethdata/projects/projectmaps/Gum Tree Rd 2014-572



**Project: Mathews Drive Tree Removal Reimbursement**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-572**

**Township: Town of Hilton Head Island**

**Completed: March 2014**

**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- ▬ Channel Pipe
- Lateral
- ▬ Lateral Pipe
- Roadside
- ▬ Roadside Pipe
- ▬ Road Pipe
- ▬ Crossline Pipe
- ▬ Driveway Pipe
- ▬ Access Pipe
- Bleeder Pipe

Removed fallen trees and debris.



1 inch = 212 feet

Prepared By: BC Stormwater Management Utility

Date Print: 4/17/14

File: C:/sethdata/projects/projectmaps/Mathews Dr Tree Removal 2014-572



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Hilton Head Airport Channel

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 3,772 L.F. of drainage system. Bush hogged 3,772 L.F. of channel.

2015-305 / Hilton Head Airport Channel	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
ODBH / Outfall ditch - bushhogged	31.0	\$677.52	\$309.48	\$211.00	\$0.00	\$450.93	\$1,648.93
ONJV / Onsite Job Visit	9.0	\$298.62	\$32.58	\$22.40	\$0.00	\$220.23	\$573.83
<b>2015-305 / Hilton Head Airport Channel Sub Total</b>	<b>40.5</b>	<b>\$986.37</b>	<b>\$342.06</b>	<b>\$233.40</b>	<b>\$0.00</b>	<b>\$677.78</b>	<b>\$2,239.61</b>
<b>Grand Total</b>	<b>40.5</b>	<b>\$986.37</b>	<b>\$342.06</b>	<b>\$233.40</b>	<b>\$0.00</b>	<b>\$677.78</b>	<b>\$2,239.61</b>

Before



During



After



Project: Hilton Head Airport Channel

Activity: Bush Hog

Project #: 2015-305















Township: Town of Hilton Head Island

Completed: July 2014

Bush hogged 3,772 LF of channel.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

0 205 410 820 1,230 1,640 Feet

1 inch = 778 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/25/14

File: C:/sethdata/projects/projectmaps/BH/ToHHI Airport 2015-305



**Beaufort County  
Public Works  
Stormwater Infrastructure  
Project Summary**

**Project Summary:** Hilton Head Airport Channel

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 5,482 L.F. of drainage system. Bush hogged 4,402 L.F. of channel, perimeter of (3) ponds and 1,080 L.F. of fence line. Removed (1) tree.

<b>2015-305A / Hilton Head Airport Channel</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
ODBH / Outfall ditch - bushhogged	63.0	\$1,369.62	\$620.84	\$288.97	\$0.00	\$909.81	\$3,189.24
PDBH / Ponds - bushhogged	40.0	\$865.16	\$325.84	\$126.08	\$0.00	\$573.60	\$1,890.68
PI / Project Inspection	2.0	\$88.54	\$7.24	\$12.80	\$0.00	\$67.92	\$176.50
<b>2015-305A / Hilton Head Airport Channel Sub Total</b>	<b>105.5</b>	<b>\$2,333.55</b>	<b>\$953.92</b>	<b>\$427.85</b>	<b>\$0.00</b>	<b>\$1,557.95</b>	<b>\$5,273.26</b>
<b>Grand Total</b>	<b>105.5</b>	<b>\$2,333.55</b>	<b>\$953.92</b>	<b>\$427.85</b>	<b>\$0.00</b>	<b>\$1,557.95</b>	<b>\$5,273.26</b>

Before



During



After



**Project: Hilton Head Airport Channel**

**Activity: Bush Hog**

**Project #:  
2015-305A**

**Township: Town  
of Hilton Head  
Island**

**Completed:  
July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 778 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 8/19/14

File: C:/sethdata/projects/projectmaps/BH/ToHHI Airport 2015-305A



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** City of Beaufort - Boundary Street (Reimbursement)

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Project improved 404 L.F. of drainage system. Cleaned out (2) catch basins. Jetted 184 L.F. of channel pipe and 220 L.F. of roadside pipe. Pole Camera used to view extent of blockage in drainage system.

**Completion:** Jul-14

2015-507 / City of Beaufort - Boundary St	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBCO / Catch basin - clean out	28.0	\$619.78	\$310.24	\$167.91	\$0.00	\$413.82	\$1,511.75
ESTP / Estimating Project	2.0	\$88.54	\$0.00	\$0.00	\$0.00	\$67.92	\$156.46
SD / Soft Digging	16.0	\$355.49	\$214.68	\$111.99	\$0.00	\$237.60	\$919.76
<b>2015-507 / City of Beaufort - Boundary Stre</b>	<b>46.5</b>	<b>\$1,074.04</b>	<b>\$524.92</b>	<b>\$279.90</b>	<b>\$0.00</b>	<b>\$725.96</b>	<b>\$2,604.82</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>46.5</b>	<b>\$1,074.04</b>	<b>\$524.92</b>	<b>\$279.90</b>	<b>\$0.00</b>	<b>\$725.96</b>	<b>\$2,604.82</b>

Before



During



After



**Project: Boundary Street Reimbursement**

**Activity: Vacuum Truck**















**Project #: 2015-507**

**Township: City of Beaufort**

**Completed: July 2014**

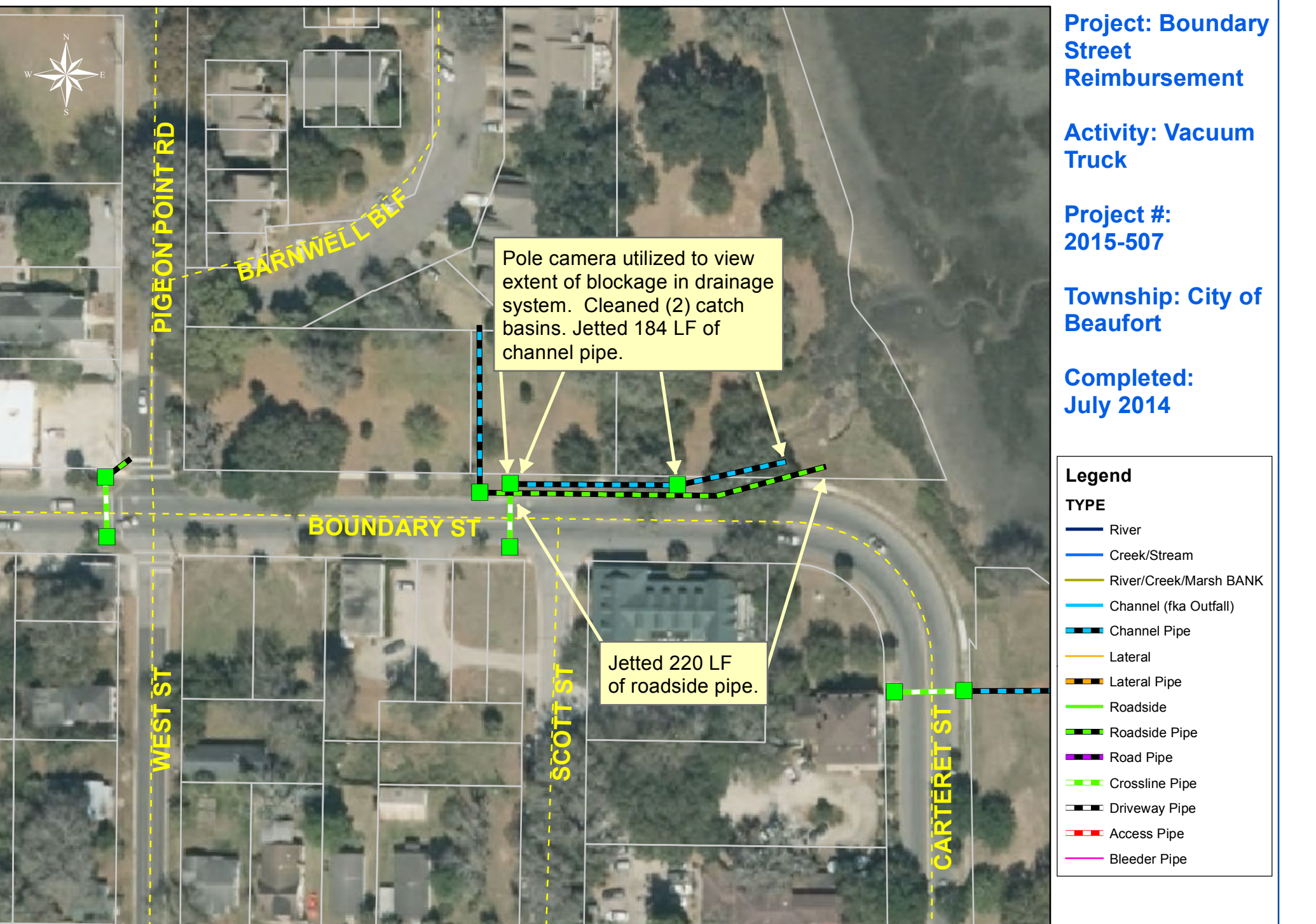
**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Pole camera utilized to view extent of blockage in drainage system. Cleaned (2) catch basins. Jetted 184 LF of channel pipe.

Jetted 220 LF of roadside pipe.



1 inch = 85 feet



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Keans Neck Road Channel #4

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 2,666 L.F. of drainage system. Bush hogged 1,683 L.F. of channel. Cleaned out 2,666 L.F. of channel. Jetted (1) crossline pipe and (3) access pipes.

2015-512 / Keans Neck Road Channel #4	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APJT / Access pipe - jetted	18.0	\$402.08	\$199.44	\$98.98	\$0.00	\$269.19	\$969.69
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	47.0	\$1,074.76	\$502.90	\$298.37	\$0.00	\$662.04	\$2,538.07
ODBH / Outfall ditch - bushhogged	22.0	\$473.53	\$444.49	\$111.09	\$0.00	\$313.52	\$1,342.63
ODCO / Outfall ditch - cleaned out	97.0	\$2,191.34	\$987.18	\$204.38	\$0.00	\$1,267.13	\$4,650.02
ONJV / Onsite Job Visit	17.0	\$572.88	\$61.54	\$67.20	\$0.00	\$410.01	\$1,111.63
PP / Project Preparation	2.0	\$88.54	\$7.24	\$9.60	\$0.00	\$67.92	\$173.30
UTLOC / Utility locates	2.0	\$40.92	\$8.04	\$9.60	\$0.00	\$26.46	\$85.02
<b>2015-512 / Keans Neck Road Channel #4 Sub Total</b>	<b>205.5</b>	<b>\$4,854.28</b>	<b>\$2,210.83</b>	<b>\$799.21</b>	<b>\$0.00</b>	<b>\$3,022.88</b>	<b>\$10,887.21</b>
<b>Grand Total</b>	<b>205.5</b>	<b>\$4,854.28</b>	<b>\$2,210.83</b>	<b>\$799.21</b>	<b>\$0.00</b>	<b>\$3,022.88</b>	<b>\$10,887.21</b>

Before



During



After





**Project: Keans Neck Road Channel #4 Map 1**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2015-512**

**Township: Sheldon**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 247 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 8/18/14

File:C:/sethdata/projects/projectmaps/Keans Neck 2015-512 Map1

**Project: Keans Neck Road Channel #4 Map 2**

**Activity: Vacuum Truck**















**Project #: 2015-512**

**Township: Sheldon**

**Completed: July 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Jetted (1) access pipe and (1) crossline pipe.

Jetted (2) access pipes.

KEANS NECK RD

COKER LN



1 inch = 121 feet

Prepared By: BC Stormwater Management Utility

Date Print: 8/18/14

File: C:/sethdata/projects/projectmaps/Vac/Keans Neck 2015-512 Map2

# TOWN COUNCIL

---



## STAFF REPORT

### Department of Engineering & Public Works Stormwater Management Division

<b>DATE:</b>	August 5, 2014
<b>SUBJECT:</b>	May River Update – No Wake Zone Establishment
<b>STAFF:</b>	Kim Jones, Director, Stormwater Management Division

**Request:** Staff requests Town Council’s guidance in determining the extent of a “No Wake Zone” request for the public landing.

**Background:** In September 2013, at Council’s direction, staff reported the current protocol for how an individual may request a designated “No Wake Zone” from the South Carolina Department of Natural Resources (DNR). The information has been posted on the Town’s website since that time.

As part of the Strategic Planning process, Council stated that establishing a “No Wake Zone” at the Public Landing was a top priority as part of its Policy Agenda for 2014.

**Analysis:** All boaters should be aware that per South Carolina Code of Laws SECTION 50-21-870 Personal watercraft and boating safety,

(B)(6) No Person may operate a personal watercraft, specialty propcraft, or vessel while upon the waters of this State in excess of idle speed within 50 feet of a moored or an anchored vessel, wharf, dock, bulkhead, pier, or a person in the water, or within 100 yards of the Atlantic Ocean coast line. The prohibitions contained in this item (6) do not apply to an unoccupied, moored vessel or watercraft.

However, based upon reading South Carolina Code of Laws SECTION 50-21 Equipment and Operation of Watercraft, as well as staff discussions with the DNR staff responsible for processing “no wake zone” requests, there is no standard “no wake zone” distance around a public landing. Each request is investigated by DNR staff to determine if a “no wake zone” is needed and to what area it may apply.

Based upon previous public comments, there are multiple “no wake zone” options for Council’s consideration.

1. Immediately surrounding the Oyster Factory Park landing (Attachment 1).

2. Extending from the Oyster Factory Park landing to the Calhoun Street dock (Attachment 2).
3. Extending the entire length of the Historic Presevation Overlay District (Attachment 3).
4. Other location as described by Town Council.

**Next Steps:** Following Council’s determination of the extent of the “No Wake Zone” request, staff will prepare and submit a formal request to DNR and await notification of the determination to share with Council.

**Attachments:**

1. Proposed No Wake Zone - Oyster Factory Park landing
2. Proposed No Wake Zone - Oyster Factory Park landing to Calhoun Street dock
3. Proposed No Wake Zone - The Historic Presevation Overlay District

# ATTACHMENT 1



500'

500'

Town of Bluffton  
Beaufort County, SC

## **NO WAKE ZONE** **OPTION - 1**

A Zone beginning  
500' East of Oyster  
Factory Park  
Boat Landing and  
ending 500' West  
of Oyster Factory  
Park Boat Landing



# ATTACHMENT 2



500'

1300'

2300' Total

500'

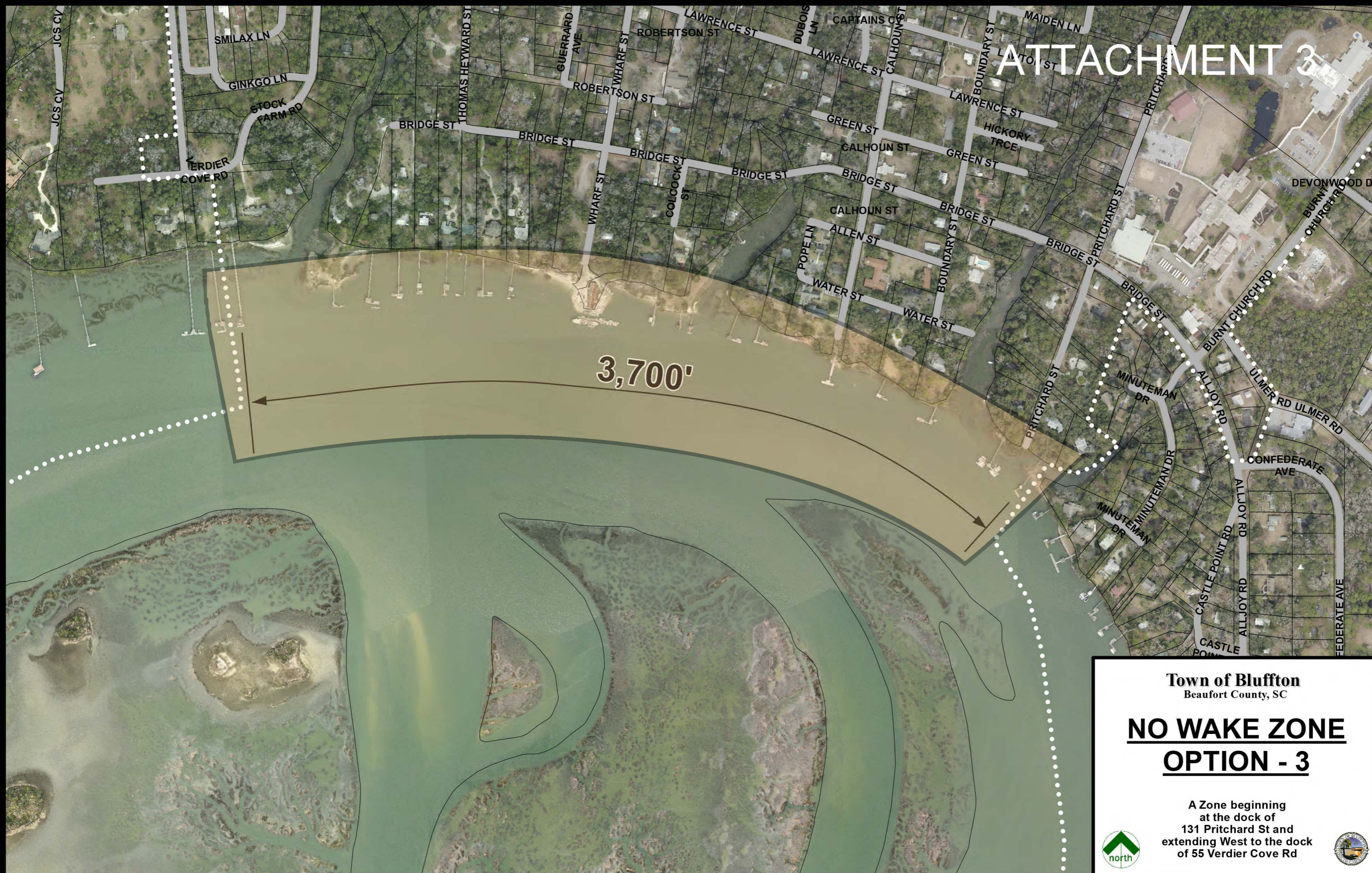
Town of Bluffton  
Beaufort County, SC

## NO WAKE ZONE OPTION - 2

A Zone beginning  
500' East of Calhoun  
Street Dock and ending  
500' West of Oyster  
Factory Park  
Boat Landing



# ATTACHMENT 3



Town of Bluffton  
Beaufort County, SC

## NO WAKE ZONE OPTION - 3

A Zone beginning  
at the dock of  
131 Pritchard St and  
extending West to the dock  
of 55 Verdier Cove Rd



Lisa Sulka  
*Mayor*

---

Oliver Brown  
*Mayor Pro Tempore*

---

Anthony Barrett  
*Town Manager*



*Council Members*

Michael Raymond  
Ted Huffman  
Karen Lavery

---

Sandra Lunceford  
*Town Clerk*

September 16, 2013

RE: Establishing a No Wake Zone

The procedure to request a no wake zone from the SC Department of Natural Resources (DNR) has been stream-lined from the cumbersome process of the past. No petition or resolution from a local municipality, nor support from the state legislature, is required any longer.

Any individual may request the establishment of a no wake zone by submitting a written request (via post or email) containing the following information:

1. An explanation as to why the no wake zone is needed, and
2. A map depicting the area in which the no wake zone is requested. This can be as simple as printing a map from online and highlighting the desired area.

The above materials should be sent to Mr. Donny Pritchard, P.O. Box 12559, Charleston, SC 29422 or via email to [elliss@dnr.sc.gov](mailto:elliss@dnr.sc.gov).

Upon receipt of the request, a DNR investigator familiar with the area will evaluate the situation at various days/times and make a determination on the request.



# The Island Packet

[Previous Story](#)

[Next Story](#)

## Bluffton should help get no-wake zones in place

By IslandPacket

info@islandpacket.com September 13, 2013

[Facebook](#) [Twitter](#) [Google Plus](#) [Reddit](#) [E-mail](#) [Print](#)



Blufftonian Dyane Lee demonstrates how she had to brace herself in order to keep from falling off her dock when the wake from a speeding boat hit it recently. To prevent such incidents in the future, Lee would like to see her area of the May River made into a no wake zone. The zone would run between the Bluffton Oyster Company on Wharf Street and public dock on Calhoun Street.

JAY KARR — Staff photo [Buy Photo](#)

Bluffton officials are correct in pointing out that it doesn't take town action to get a no-wake zone established in the May River.

But that doesn't mean the town shouldn't be involved. Establishing a no-wake zone in the vicinity of All Joy Landing and the Bluffton Oyster Co. landing was one of 11 priorities in the May River Waterbody Management Plan adopted in 2008. The issue goes back much farther than that, and five years seems a long time to wait to address a "priority."

Dock owners along the May River asked for help from the town in August. They complain that boats are regularly creating damaging wakes. They have good reason to complain. Wakes can toss around docks, boats tied to the docks and people standing on them.

And it's not just private property that gets hurt when boats travel too fast in our tidal creeks and rivers. More and more boats traveling our waterways mean more damaging wakes that erode shellfish beds and fragile, but critical, protective shorelines.

In 2007, the state Department of Natural Resources conducted a study on the impact of boat wakes in the New and Cooper rivers. The department found that some banks were eroding as much as 4 feet a year even in areas that didn't see a lot of boat traffic.

Researchers knew small creeks and estuaries changed shape naturally over time, but concerns about the impact of boats raised questions about how much they exacerbate erosion problems.

Mayor Lisa Sulka said of the residents' request for town help, "If each request is looked at the same, then there's no reason to stir the pot. For every 10 people who want a no-wake zone, I've got 10 more who don't."

Sulka and Town Council should be leading the way on appropriate no-wake zones, not avoiding the issue because someone objects.

Why does the town set priorities if only to ignore them?

A more streamlined process to get no-wake zones established is very welcome news. Previously, it took legislative action, a potentially tedious and acrimonious process.

Acrimony certainly was evident in 1998 when the legislature took up no-wake zones in Broad Creek on Hilton Head Island. Then-state Sen. Holly Cork of Hilton Head objected to every House bill that moved to the Senate, stalling more than 40 bills, after the House tabled her version of a no-wake measure that included a ban on boats anchoring within 100 feet of a private dock. Cork removed her objections once the no-wake bill was revived (without the no-anchoring provision).

Today, DNR is responsible for setting no-wake zones. The agency considers criteria that include channel size, boat traffic and water depth. When a request is received, a DNR investigator evaluates the area at high and low tides. A determination could be made within eight weeks. The zones are not automatic; the agency received 44 requests last year, but only granted three.

The town should help determine where no-wake zones would be most effective and help with the process of getting them established, especially since the town's Police Department would help enforce them.

Bluffton officials ought to consider the damage caused by excessive wakes as part of their push to protect the May River from environmental harm.

In the meantime, boaters should know that they are supposed to go no faster than idle speed within 50 feet of a moored or anchored vessel; a wharf, dock, bulkhead or pier; or a person in the water. That's state law, and it's too often ignored.

[Facebook](#)[Twitter](#)[Google Plus](#)[Reddit](#)[E-mail](#)[Print](#)

## Join The Conversation

The Island Packet is pleased to provide this opportunity to share information, experiences and observations about what's in the news. Some of the comments may be reprinted elsewhere in the site or in the newspaper. We encourage lively, open debate on the issues of the day, and ask that you refrain



**BEAUFORT COUNTY STORMWATER UTILITY**  
**120 Shanklin Road**  
**Beaufort, South Carolina 29906**  
**Voice (843) 255-2801 Facsimile (843) 255-9478**



October 1, 2014

**Stormwater Manager's Report for the Stormwater Utility Board Meeting**

Utility Update

1. The Utility has added a new employee. Kevin Pitts started last week. Kevin will serve as a Stormwater Utility Inspector, assisting Danny Polk with duties related to monitoring, project management, and MS4 permit implementation. He is a graduate of Tennessee Tech University with a B.S. in wildlife and fisheries science. Most of Kevin's work at the university was concentrated in fisheries science with water quality being a large component of those studies. Prior to joining Beaufort County's Stormwater Utility staff, he was a Biologist with SC-DNR, spending the past year working collaboratively with researchers and county officials to determine the sensitivity of Beaufort County tidal creeks to freshwater runoff. Part of his responsibilities was to develop protocols for a monitoring program of several waters in Beaufort County. He helped design and implement the program to measure tidal cycle, salinity, dissolved oxygen, and flow rate of several creek systems in the county and was responsible for data collection, management, and logistics of field work in four watersheds simultaneously. One of the first steps to getting the project off the ground was establishing mutually supportive relationships with property owners to allow monitoring equipment on their property.
2. Board Vacancies – Nothing new to report. I did receive one inquiry but no action at this time.
3. Danny Polk and Eric Larson attended the quarterly SCASM meeting in Columbia this past month. The agenda topics were focused on MS4 permit MCM 6 – Municipal facility operations and water pollution prevention. The information was very helpful and will be used to develop our own plan for the MS4 permit.
4. Eric Larson has been appointed to the Planning Department's Development Review Team (DRT) on behalf of the Engineering department to provide review on private projects. This was done to facilitate stormwater review. This has increased workload slightly.
5. Eric Larson met with engineers with SCDOT to discuss ongoing confusion concerning outfall channels (ditches) that drain state right of ways to receiving water bodies. Given that the County's Extent of Service (EOS) plan specifically excludes stormwater infrastructure that does not drain county roads and properties, and that the State's policies seem to exclude these areas as well, it leaves these ditches unmaintained. We are working to reach an understanding with SCDOT and "close the gap" in operational coverage.
6. I spoke to the Marsh Association, a group of private development property managers, on the topic of the Utility's Credit program. The program currently has only 4 participants. As a result of the presentation, we have 4 pre-application meetings pending.

7. The Utility is finalizing a credit application for Belfair Plantation. It will save the POA approx. \$9,500 per year.

#### MS4 Update

1. MS4 permit application – A draft version of the permit application is being distributed at the October 1, 2014 meeting for review and discussion. It will be presented again in a final draft version at the November 5, 2014 meeting.
2. Stormwater Public Education and Outreach – The selection committee, made up of the SWIC members, met with the Beaufort Soil and Water Conservation District on September 25, 2014. A recommendation for an award will be made at the October 1, 2014 Utility Board meeting.

#### Monitoring Update

1. USCB Lab – Lab Manager Danielle Mickel reports that the lab has submitted their application for certification to SCDHEC Lab Certification for analysis of enterococci and total coliform/e.coli following methods Enterolert and SM9223B-2004, respectively. As mentioned previously, there was much documentation required for and included in the SCDHEC certification application; Quality Assurance Manual, Analysis Records, Training Records, QC Records(media, temperatures, sterility checks, QT sealer checks, autoclave checks), Resumes, Laboratory Director Designation letter, Standard Operating Procedures, and Qualifications for each employee and their responsibilities. The application was received by SCDHEC Lab Certification on 9/12/2014, in which SCDHEC has 45 days from receipt to reply and let the lab know what the next step is. A visit to the lab is required, in which SCDHEC has 3 months from the 45 days.

#### Stormwater Implementation Committee (SWIC) report

1. The next meeting is scheduled for November. The SWIC will be reviewing draft NOI applications for the MS4 permits.

#### Stormwater Related Projects

1. Shadow Moss Subdivision / Riley Road easement release – I have attached a [recommendation to the Natural Resources Committee](#) to release an easement serving Riley Road. A new development adjacent to the property, Shadow Moss, is re-routing a drainage pipe via stormsewer through the development. The County's responsibility for maintenance of the ditch will end with this construction. I request the Board recommend the approval of the easement release.

#### Professional Contracts Report

1. US 278 retrofit ponds (\$356,000 budget) – The project is moving forward. The site plan for the stockpile area is slightly behind schedule due to a delay in field surveying. Construction is now scheduled to start in late December or early January.

2. County Admin. Complex Retrofit Project (\$327,768 budget) – The contract and bonds from JS Construction have been received. We will be holding a pre-construction conference within the next month.
3. SC 170 widening and stormwater (\$14,000 budget) – The conceptual design study for the road corridor is complete and a final draft has been submitted to our office. I will be sharing the report with the County Administrator in the upcoming month. I will make the study available to the Board as soon as it is finalized.

#### Regional Coordination

1. Battery Creek Pond funded by an EPA 319 grant (\$132,609 budget – county portion) – On going. County and City staff are continuing to work with the property owner to negotiate an easement. (Lamar Taylor may also report)
2. May River Watershed Action Plan – Kim Jones may report.
3. Salinity Study (\$25,000 budget – county portion) - On going. The advisory group met last month to review the preliminary data and review the trend analysis performed to date. The committee made recommendations to the DNR staff on how to use the data and analysis to support recommendations for policy changes, technical standards, and/or capital projects.
4. Sea Level Rise and future planning – I have attached [the summary report](#) from the public meeting held in August. The Sea Grant staff is continuing work on the final report.
5. Drainage issue on H.E. McCracken Circle in Bluffton – On going. The Town of Bluffton staff has delivered additional field work to support a conceptual solution. I am still reviewing the data.
6. Stormwater / Water Quality segment for The County Channel – I have been working with County staff to develop a TV segment on the topic of water quality. This is at the request of State Representative and former County Council chairman Weston Newton. The project is in conjunction with Water Quality Protection Week to be held in October.



BEAUFORT COUNTY STORMWATER UTILITY  
120 Shanklin Road  
Beaufort, South Carolina 29906  
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Brian Flewelling Chairman, Natural Resources Committee

FROM: Robert McFee, PE, Division Director for Engineering and Infrastructure  
Eric W. Larson, Beaufort County Stormwater Utility *Eric W. Larson*

SUBJECT: Stormwater Drainage Easement Conveyance to Centex Homes - Shadow Moss Phase 4

Date: September 12, 2014

**BACKGROUND:** The Trask Family conveyed a 25' drainage easement to Beaufort County located in the Shadow Moss, Phase 4 Subdivision in May of 2010. An open ditch was then constructed by Stormwater to handle water runoff from Riley Road onto Phase 4 of the Shadow Moss Subdivision as shown on the attached **Exhibit "A"**. Centex Homes, who has subsequently purchased the property from the Trask Family, has now approached the County to request the return of this drainage easement as they are now developing the property and are designing a storm sewer system to re-route runoff that is currently conveyed by the ditch. It is their desire to re-route the drainage across Phase 4 using a buried pipe.

Upon such conveyance, Centex Homes would be responsible for the construction and maintenance of the re-routed drainage easement and Beaufort County would be released from all responsibility.

**FOR ACTION:** Natural Resources Committee meeting occurring on October 13, 2014.

**RECOMMENDATION:** Staff recommends the Natural Resources Committee of County Council endorse the conveyance of the above-referenced drainage easement to Centex Homes with the provision that they are responsible for the construction and ongoing maintenance of same and release Beaufort County for all future responsibility.

CC: Gary Kubic, County Administrator *OK Gary Kubic*

PB  
9  
NC

Prepared by and return to:  
Beaufort County Staff Attorney  
P.O. Drawer 1228  
Beaufort, SC 29901-1228  
(843) 255-2055, (843) 470-5383 FAX

Riley/Fair Road (drainage easement)

STATE OF SOUTH CAROLINA

DRAINAGE EASEMENT

COUNTY OF BEAUFORT

KNOW ALL MEN BY THESE PRESENTS, THAT We William Davis Trask, James Heide Trask, John Donald Trask, Harold E. Trask, Jr., Margaret Scheper Trask, and Robert Edward L. Holt, III, (collectively, the "Grantor") in the State aforesaid, for and in consideration of the sum of ONE AND NO/100 DOLLARS (\$1.00) and improvement of drainage on Grantor's land, the receipt whereof is hereby acknowledged, to us in hand paid at and before the sealing of these presents by Beaufort County, P.O. Drawer 1228, Beaufort, South Carolina 29901-1228, have granted and conveyed unto the said Beaufort County (the "Grantee") its Successors and Assigns, a non-exclusive 25' drainage easement (the "Easement") as set forth on that certain plat entitled "TRACT 1, TRACT 2 & A 25' DRAINAGE EASEMENT BEING A PORTION OF SHADOW MOSS PHASE 4" prepared by Thomas & Hutton Engineering Co., dated September 16, 2009 and recorded in the Beaufort County Register of Deeds Office in Plat Book 130 at Page 37 (the "Easement Map"), said property being situated in the Town of Port Royal, County of Beaufort, State of South Carolina.

For or in connection with the construction of a ditch to improve the drainage on the above described lands, such construction to include excavation, widening, or deepening, etc. for or in connection with the operation, maintenance, and inspection of such a ditch.

1. This easement includes the right of ingress and egress at any time over and upon the above described land, for the purpose of construction, inspection, and maintenance of ditches as referred to above.
2. There is reserved to the Grantee, Beaufort County, the right and privilege to use the above described land of the Grantor for the purposes of maintaining the drainage ditch system.
3. The Grantee is responsible for operating and maintaining the work of improvement herein described, and shall remove and dispose of all excess material, soil, and debris generated by the construction or maintenance of the ditch by Grantee.
4. Special Provisions
  - a. The Grantee shall have the right to clear and remove all brush and trees to a width necessary to excavate and/or improve the above drainage ditches. Provided, however, if the Grantor desires to salvage merchantable timber from the area to be cleared, he will do so prior to the time the contractor begins work. It is understood that the Grantee will advise the Grantor at least 10 days in advance of construction.
  - b. Proposed drainage ditches will be constructed within the boundaries of the Easement location shown on the Easement Map.

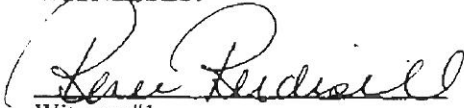
- c. If the Grantor desires to salvage levees, fences, culverts, or bridges that interfere with the construction or maintenance of drainage ditches, he will have the opportunity to do so prior to construction and maintenance work.
- d. The Grantee acknowledges and agrees that the real property owned by Grantor and burdened by the Easement granted herein is shown as "Tract 3" on a plat recorded in Plat Book 129, at Page 13, in the office of the Register of Deeds for Beaufort County, South Carolina ("Grantor's Parcel"). Grantor (or its successors in title to Grantor's Parcel) intends to develop Grantor's Parcel as an additional phase of a residential subdivision, and has the right to apply to Beaufort County for a development permit based upon construction plans which could potentially change the location and design of the drainage facilities to be constructed on Grantor's Parcel for such development from the location and design of the facilities to be constructed by Grantee as shown on the Easement Map.
- e. Upon the later to occur of (i) the date upon which Grantor (or its successors in title) records a final subdivision plat for Grantor's Parcel on which a street right-of-way is shown to connect to Riley Road, or (ii) the completion by Grantor of street and drainage improvements on Grantor's Parcel that are sufficient in design and capacity to accommodate storm water run-off from Riley Road, the location of the Easement herein granted shall be deemed amended and relocated to and within the street right-of-way shown on such final subdivision plat, without the necessity of any further action by either party.
- f. It is agreed that buildings, fences, signs or other obstructions will not be erected by Grantee, its successors, assigns, or administrators within the limits of the easement herein conveyed.


TO HAVE AND TO HOLD the aforesaid easement in, over and upon the above described land of the Grantor, with all the rights, privileges and appurtenances thereto belonging or in any wise appertaining, unto the Grantee, its successors and assigns, forever, subject to the relocation (if applicable) by Grantor as provided in paragraph (e) above.

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 13<sup>th</sup> day of May, 2010.

**Signed, Sealed and Delivered in the Presence of:**

**WITNESSES:**

  
Witness #1

  
Notary Public as Witness #2

**GRANTOR:**

  
William Davis Trask



I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13<sup>th</sup> day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Patricia A. Johnson (L.S.)  
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

~~Notary Public as Witness #2~~

STATE OF SOUTH CAROLINA

ACKNOWLEDGEMENT

COUNTY OF BEAUFORT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 25<sup>th</sup> day of May, 2010, and acknowledged the due execution of the foregoing instrument.

Mary K McForman (L.S.)  
Notary Public for the State of South Carolina

My Commission expires: June 16, 2019

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 25<sup>th</sup> day of May, <sup>2010</sup>~~2009~~.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

[Signature]  
Witness #1

[Signature]  
James Heide Trask

Mary K McForman  
Notary Public as Witness #2

STATE OF South Carolina

~~ACKNOWLEDGEMENT~~

I, ~~the undersigned notary public, do hereby certify that the within named Grantor personally~~ appeared before me this \_\_\_\_\_ day of \_\_\_\_\_, 2009, and acknowledged the due execution of the foregoing instrument.

\_\_\_\_\_  
Notary Public for the State of South Carolina (L.S.)

My Commission expires: \_\_\_\_\_

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this  
26<sup>th</sup> day of MAY, ~~2009~~<sup>2010</sup>.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

GRANTOR:

Jeanette Wagon  
Witness #1

Robert Edward L. Holt III  
Robert Edward L. Holt, III

Bernard L. Buchhaber  
Notary Public as Witness #2

STATE OF South Carolina  
COUNTY OF Charleston

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 26<sup>th</sup> day of MAY, <sup>2010 (BFA)</sup> ~~2009~~, and acknowledged the due execution of the foregoing instrument.

Bernard F. Buchheiser (L.S.)  
Notary Public for the State of South Carolina

My Commission expires: My Commission Expires  
November 19, 2019

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13<sup>th</sup> day of May, 2009, and acknowledged the due execution of the foregoing instrument.

*Patricia A. Jeter* (L.S.)  
Notary Public for the State of South Carolina

My Commission expires: 6-27-2015

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 13<sup>th</sup> day of May, 2009.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

*Eric Lucisall*  
Witness #1

*Patricia A. Jeter*  
Notary Public as Witness #2

GRANTOR:

*Margaret Scheper Trask*  
Margaret Scheper Trask

STATE OF South Carolina  
COUNTY OF Beaufort

ACKNOWLEDGEMENT

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this  
11 day of May, 2009/2010

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

Betty Harvey  
Witness #1

Allyson J. Warriner  
Notary Public as Witness #2

GRANTOR:

John Donald Trask  
John Donald Trask

STATE OF North Carolina

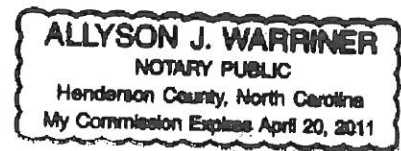
COUNTY OF Brunswick

ACKNOWLEDGEMENT

I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 11 day of May, 2009, and acknowledged the due execution of the foregoing instrument.

Allyson J. Warriner (L.S.)  
Notary Public for the State of ~~South Carolina~~ North Carolina

My Commission expires: April 20, 2010



I, the undersigned notary public, do hereby certify that the within named Grantor personally appeared before me this 13th day of May, ~~2009~~, and 2010 acknowledged the due execution of the foregoing instrument.

Linda E Sanchez (L.S.)  
Notary Public for the State of South Carolina

My Commission expires: 8/14/2016

Approved by County Attorney

[Signature]  
Landon F. Howell

IN WITNESS WHEREOF, I (or we) have hereunto set my (or our) hand and seal this 13th day of May, ~~2009~~, 2010.

Signed, Sealed and Delivered in the Presence of:

WITNESSES:

[Signature]  
Witness #1

Linda E Sanchez  
Notary Public as Witness #2

GRANTOR:

[Signature]  
Harold E. Trask, Jr.

STATE OF South Carolina  
COUNTY OF Charleston

ACKNOWLEDGEMENT





# Beaufort County, SC Public Workshops On Sea Level Rise Adaptation Strategies



## Summary Report

September 2014

### Research Partners

Sean Bath (S.C. Sea Grant Consortium)  
Liz Fly, Ph.D. (S.C. Sea Grant Consortium/CISA)  
April Turner (S.C. Sea Grant Consortium)  
Seth Tuler, Ph.D. (SERI)  
Tom Webler, Ph.D. (SERI)  
Jess Whitehead, Ph.D. (N.C. Sea Grant)

### Beaufort County Partner

Rob Merchant, AICP (Planning Department)

### Additional Facilitators/Note Takers

Amanda Brennan (CISA)  
Samantha Bruce (S.C. Sea Grant Consortium)  
Blaik Keppler (SC DNR, ACE Basin NERR CTP)  
Chris Berg (SD DNR)

[www.sites.google.com/site/beaufortslr](http://www.sites.google.com/site/beaufortslr)



Social and Environmental  
Research Institute



cisa  
carolinas integrated sciences & assessments

## Introduction

### Project Overview

The workshops discussed in this report are part of a larger project titled, “Using Participatory Scenario Building to Encourage Climate-Resilient Planning in the Coastal Carolinas.” The work is a collaboration among the Beaufort County Planning Department, the South Carolina Sea Grant Consortium, the Social and Environmental Research Institute (SERI), North Carolina Sea Grant, and the Carolinas Integrated Sciences & Assessments (CISA) program at the University of South Carolina. It is funded by the Community Climate Change Adaptation Initiative (CCCAI) through the National Oceanic and Atmospheric Administration’s National Sea Grant Office.

Work on this project began in 2013. Scoping interviews were conducted with local members of county government, municipal government, nonprofit groups, and military facilities. Using the Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS) process, the project team facilitated focus group discussions wherein local residents identified a number of county-wide vulnerabilities to sea level rise, consequences of these vulnerabilities, and potential actions to adapt.

### Workshop Overview

The goal of the public workshops was to seek input on the sea level rise adaptation actions developed by the Beaufort County focus group. A press release was distributed to area media and event flyers were distributed on electronic mailing lists.

Session 1: August 25, 2014

Bluffton Branch Library Large Meeting Room  
120 Palmetto Way, Bluffton, SC 29910

Session 2: August 26, 2014

St. Helena Branch Library Large Meeting Room  
6355 Jonathan Francis Sr. Rd., St. Helena, SC 29920

## Workshop Format

<b>Time</b>	<b>Section Title</b>	<b>Description</b>
1:00	Welcome, Introductions, and Overview of Agenda	Presentation 1: Sea Level Rise in Beaufort, SC
1:20	Vulnerability to Sea Level Rise in Beaufort County	Presentation 2: Sea Level Rise Science Presentation 3: Mapping SLR in Beaufort County
1:45	Review of Working Group Findings and Adaptation Strategies	Presentation 4: Potential Options for Adapting to Sea Level Rise in Beaufort County, SC
2:00	Question and Answer	
2:15	Break	
2:25	Small Group Discussions	Facilitated group discussions about adaptation strategies, including a prioritization vote.
3:25	Report-outs and Full Group Discussion	Facilitators share key points of each small group with all participants.
3:50	Next Steps and Wrap-Up	

### Presentations

<b>Number</b>	<b>Title of Presentation</b>	<b>Presenter</b>
1	Sea Level Rise in Beaufort, SC	Dr. Elizabeth Fly, <i>Coastal Climate Extension Specialist</i> (S.C. Sea Grant Consortium/CISA)
2	Sea Level Rise Science	Dr. Elizabeth Fly, <i>Coastal Climate Extension Specialist</i> (S.C. Sea Grant Consortium/CISA)
3	Mapping SLR in Beaufort County	Sean Bath, <i>Graduate Student Intern</i> (S.C. Sea Grant Consortium / College of Charleston)
4	Potential Options for Adapting to Sea Level Rise in Beaufort County, SC	Dr. Jessica Whitehead, <i>Coastal Communities Hazards Adaptation Specialist</i> (N.C. Sea Grant)

## Small Group Discussions

Participants for each workshop were divided into three or four small groups. Each person was handed a printed sheet of adaptation actions and given five minutes to reflect and write down additional ideas. After five minutes, each person introduced themselves and provided one major reflection or addition they had to the list.

Groups then moved to broader discussion that captured answers to the first three questions below:

Questions:

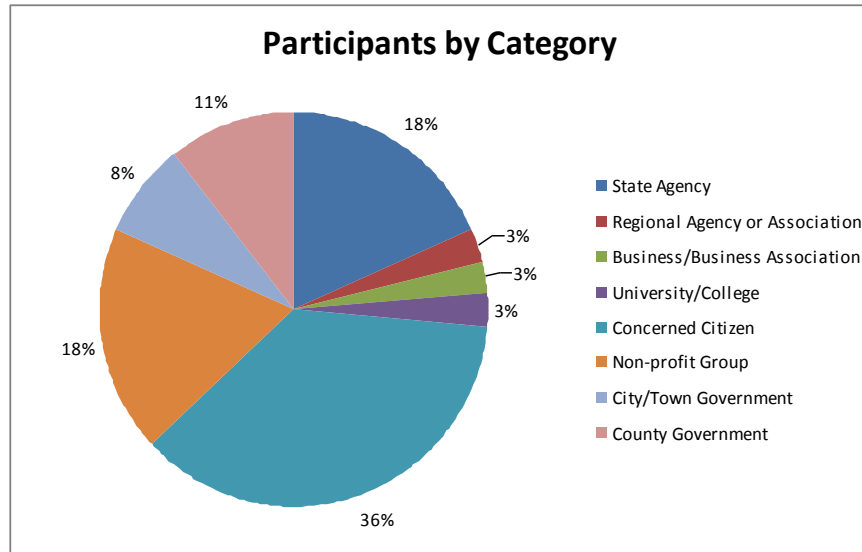
1. Do you have any comments or concerns about the list of suggested adaptation strategies?
2. Would you suggest any alternative strategies?
3. What important trade-offs would you consider with each strategy?

After much discussion on the above questions, participants voted for their top three priority strategies. If priority voting was completed in a timely fashion, group discussion continued emphasizing the following questions:

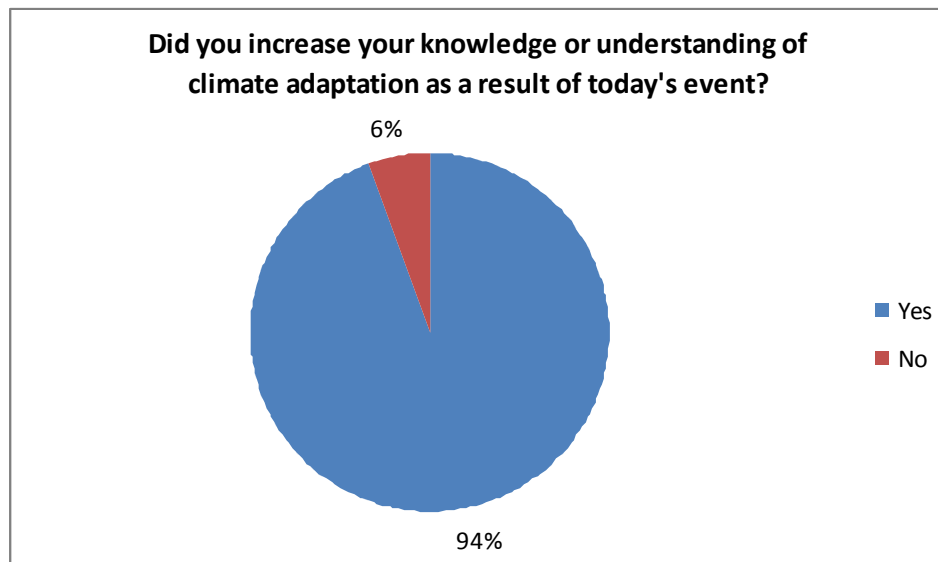
4. What actions do you think can be pursued with currently available resources and political agreement?
5. What additional information would help you make decisions?

At the end of the allotted time, groups decided 3-4 key takeaways from their discussion to share with the larger group.

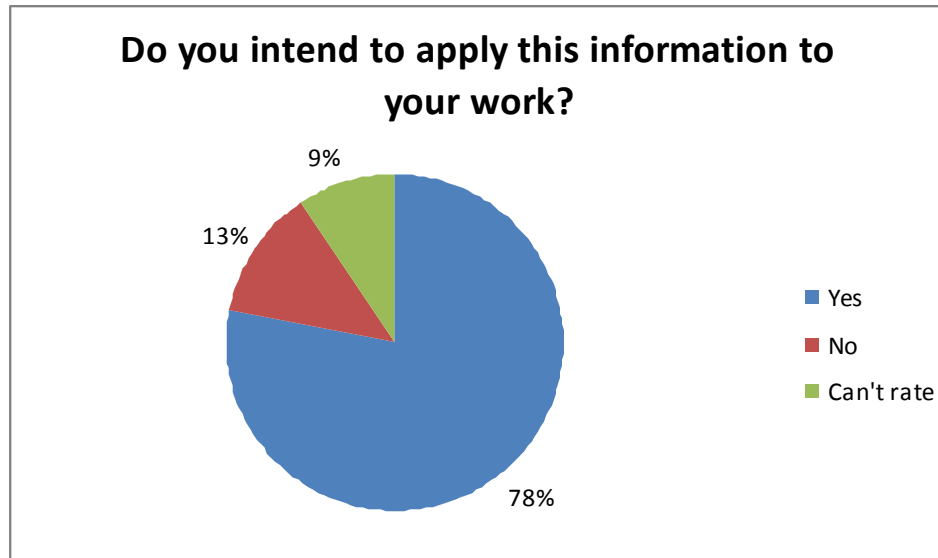
## Evaluation Survey Highlights



Seventy-seven individuals attended the two sessions (33 on Monday and 44 on Tuesday). Participants were given an evaluation survey to return by the end of the session. The response rate was 49%. According to this survey, 72% of participants were concerned citizens, nonprofit members, or state agency employees (the three largest groups).



According to the evaluation survey, 94% of participants stated that they increased their knowledge due to the workshop.



Up to 78% of survey respondents intend to apply this information to their work.

What type of obstacles do you foresee to applying this information?

1. Political will (10 comments)
2. Financial Cost (9 comments)

Participants identified political will and financial cost as the primary obstacles to applying adaptation information in Beaufort County.

What additional training or assistance would help address these obstacles?

1. Public education/outreach (13 comments)

Participants emphasized public education as the best means to address obstacles. Specific ideas ranged from more workshops to community-level outreach that could target diverse segments of the population.

What component of today's meeting was most useful to you and WHY?

1. Breakout sessions (18 comments)
2. Presentations (13 comments)

Participants were particularly happy with the productivity of breakout group sessions. They enjoyed the opportunity to hear different perspectives and appreciated the way they could prioritize actions. Participants also complimented the quality of presentations introducing the topic.

The top priorities identified among the breakout groups were:

- Collect more information
- Public education\*
- Maintain or strengthen setback policy on growing shorelines
- Elevate existing roads and change future elevation requirements.
- Coordination with key players.

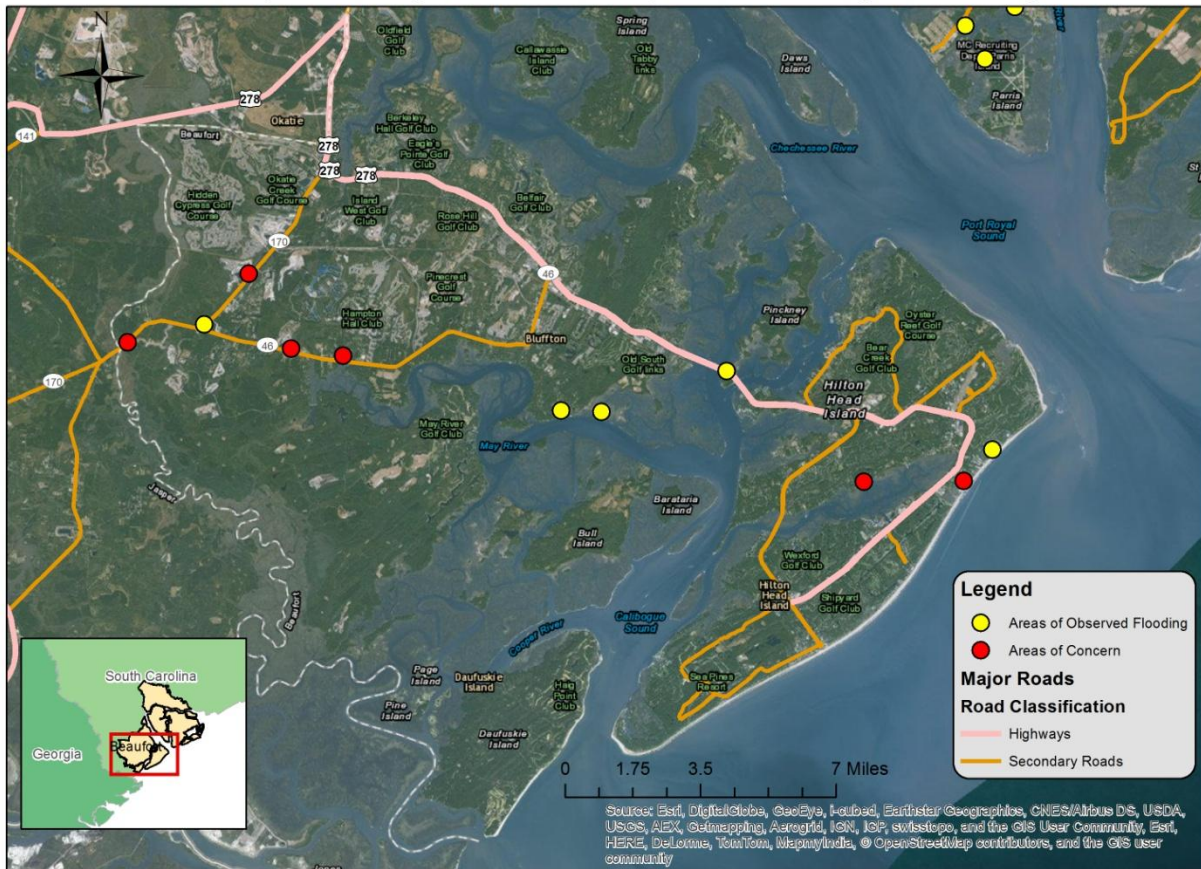
\*This was a new strategy not specifically identified in the focus group.

Breakout groups discussed the adaptation strategies identified by the original focus group. They proposed key edits to action items such as combining similar items (i.e. creating one category of increasing collaboration with key players) and expanding items (i.e. making setback policies more stringent.) Participants also proposed new comprehensive items like living shorelines and low impact development. In many cases, participants used their unique local knowledge to contribute important contextual information. For example, participants noted that homeowners associations (HOAs), planned unit developments (PUDs), and churches were ideal vehicles for community education efforts and important players themselves in determining how the landscape might be affected by sea level rise.

# Participatory Mapping

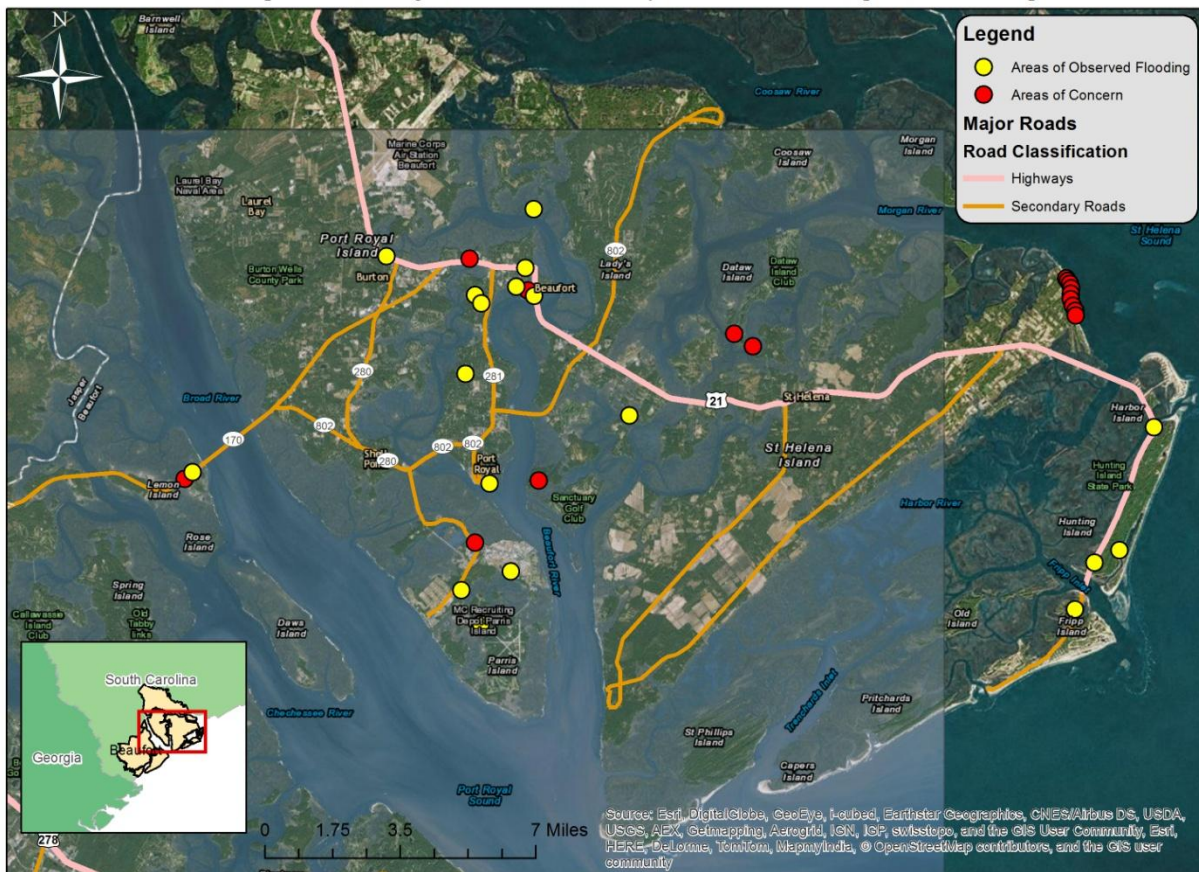
Maps of Beaufort County were displayed during the workshops. Yellow sticker dots were available for participants to mark areas where they had observed flooding. Red sticker dots were available for participants to mark areas of concern. These maps have been digitized and are displayed below.

Public Input on Flooding at the Beaufort County Sea Level Rise Adaptation Workshop





## Public Input on Flooding at the Beaufort County Sea Level Rise Adaptation Workshop



## Next Steps

The project team will use participant input to write a report on adaptation options for Beaufort County. The document will review the study methodology, highlight findings, and provide a series of recommendations derived from Beaufort County participants.

## Relevant Links

NOAA Coastal Services Center Sea Level Rise and Coastal Flooding Impacts Viewer

<http://www.csc.noaa.gov/digitalcoast/tools/slrviewer>

DHEC SC King Tides Initiative

<http://mycoast.org/sc/king-tides>

Climate Central Surging Seas Tool

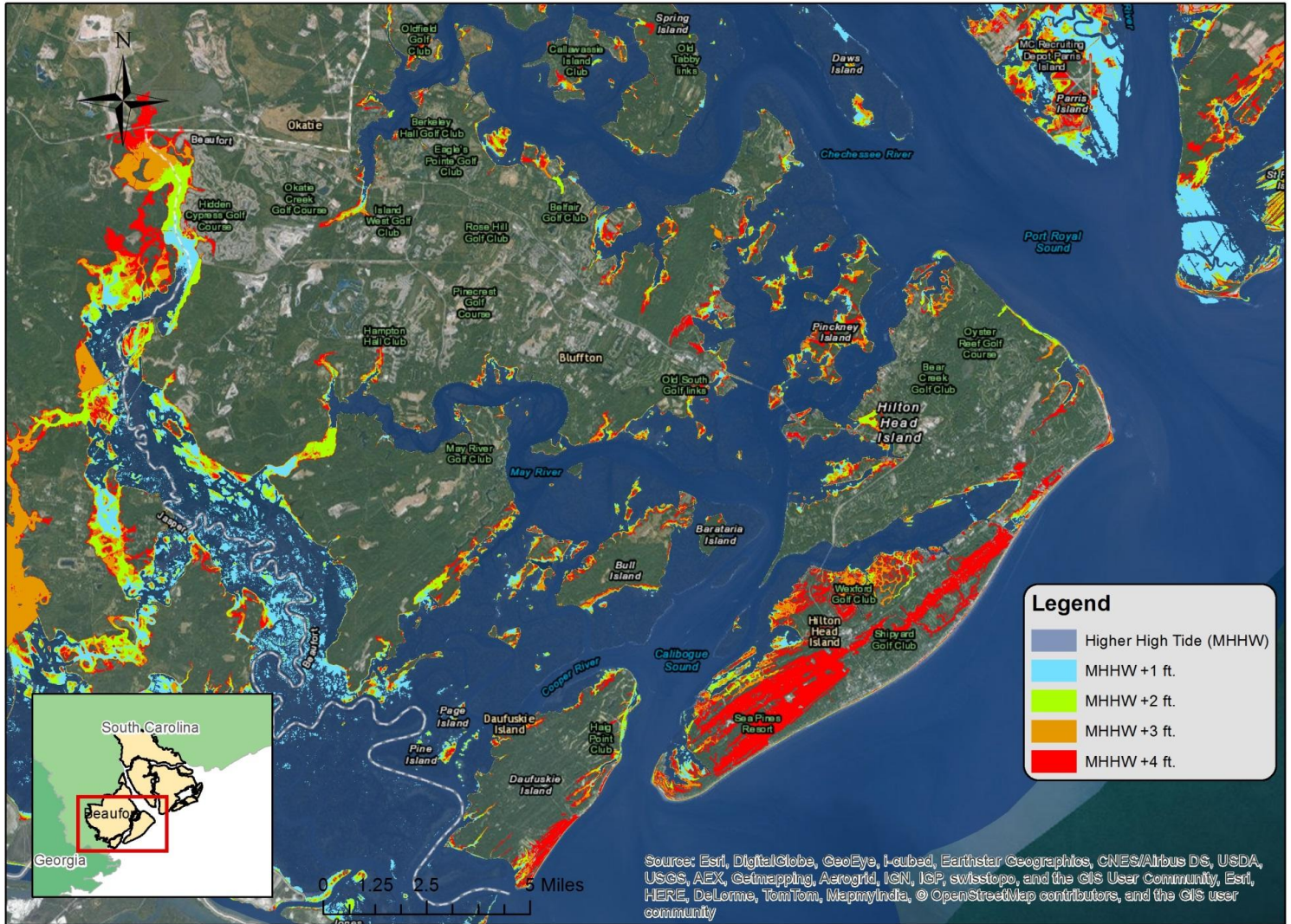
<http://sealevel.climatecentral.org/>

# APPENDIX A

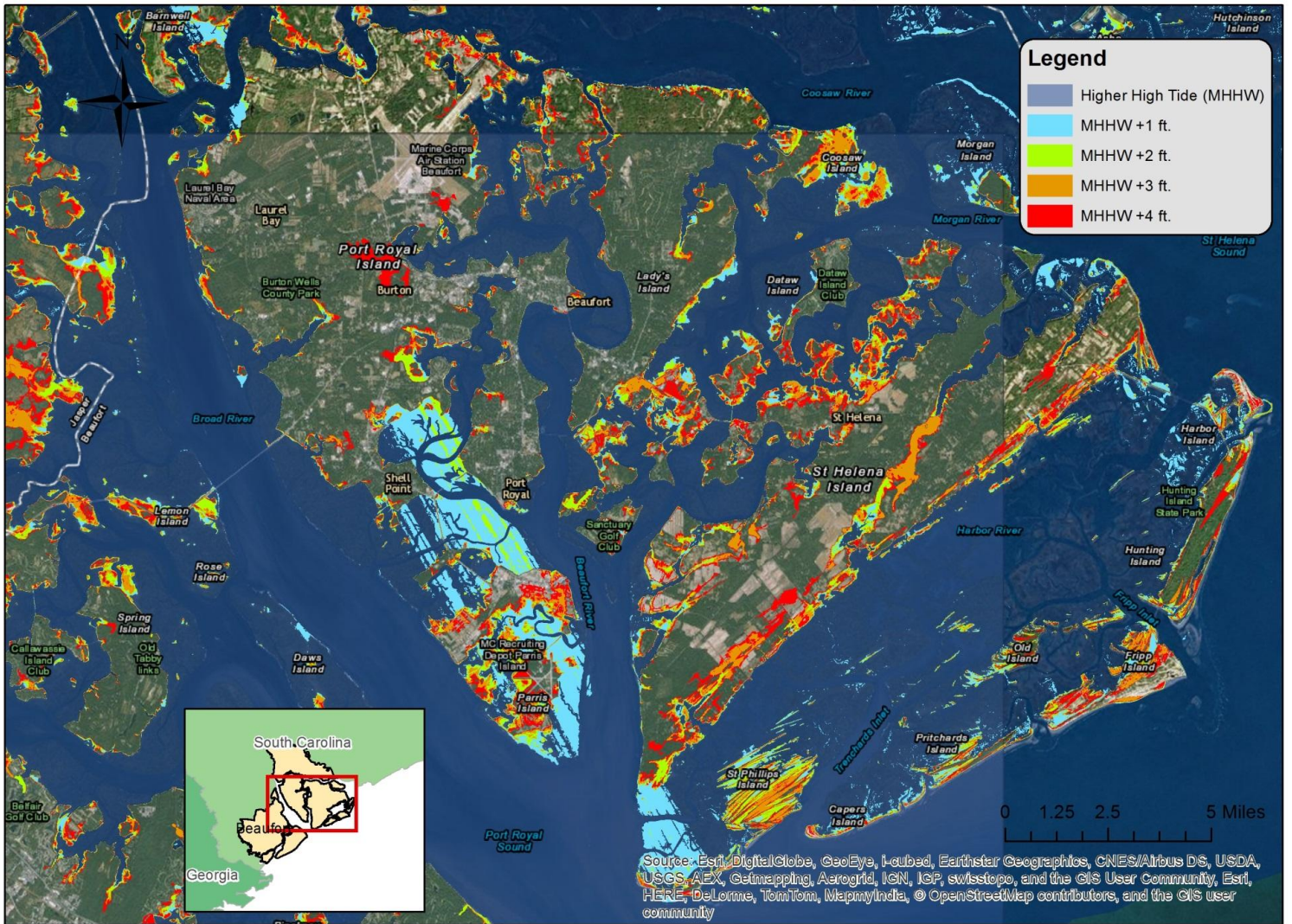
## Sea Level Rise Model of Beaufort County

Mean Higher High Water is the average of the higher of the two daily tides over a ~20 year period. Extreme high tides frequently peak at 1-2 ft. above MHHW. When base sea level rises 1-2 ft., regular extreme tides may peak 3-4 ft. above MHHW.

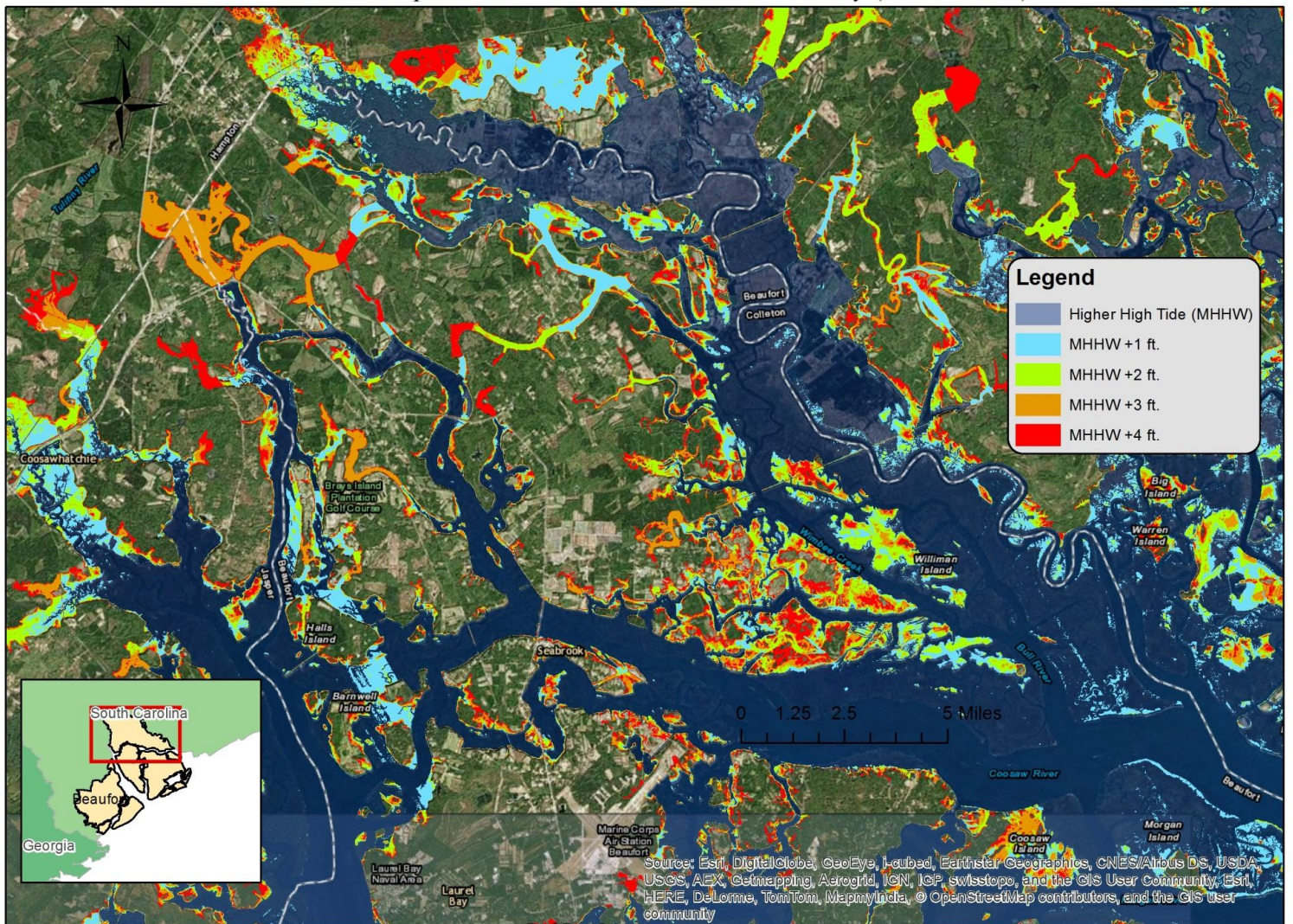
Potential Impact of Sea Level Rise in Beaufort County (south section)



Potential Impact of Sea Level Rise in Beaufort County (middle section)



Potential Impact of Sea Level Rise in Beaufort County (north section)



APPENDIX B  
 Beaufort County Sea Level Rise Adaptation Strategies  
 Identified and Ranked by Working Group  
 WORKING DOCUMENT

Rank	Action	Notes
	Maintain setback policy on shorelines	
2	Improve coordination with relevant state agencies (DHEC, DOT, etc.)	
3	Provide disclosure notice that the county will not be held liable for damages to high risk properties or from not maintaining services	
4	Use sea level rise information to inform disaster recovery plan	
5	Elevate existing roads and causeways	
6	Begin a dialogue on how to balance public & private interests	
7	Coordinate efforts with municipalities	
8	Identify planning thresholds (i.e. determine when sea level rise should be addressed by policy)	
9	Change road elevation requirements	
10	Provide sea level rise information on county website to inform & educate	
11	Collect more information (on flooding locations, sea level trends, erosion patterns, infrastructure vulnerabilities, etc.)	
12	Improve regional planning efforts	
13	Revise building codes to higher quality standards & use incentives	
14	Consider social & cultural vulnerability & resilience	
15	Establish new regulations for septic systems	
16	Monitor the health of salt marshes	
17	Require lagoon / storm water pond maintenance	

APPENDIX B  
 Beaufort County Sea Level Rise Adaptation Strategies  
 Identified and Ranked by Working Group  
 WORKING DOCUMENT

Rank	Action	Notes
18	Establish funding structures and/or tax districts to help property owners	
19	Develop affordable housing in safer areas	
20	Control water access points through low-lying ditches	
21	Restore ferry services to isolated communities	
22	Develop a transfer of development rights program for low elevation properties	
23	Increase awareness of the Open Lands Trust fund	
24	Install tidal gates	
25	Purchase lower elevation lands	
26	Assist with beach renourishment	
27	Purchase higher elevation lands	
<b>Additional Strategies; choose rank you feel most appropriate</b>		



COUNTY COUNCIL OF BEAUFORT COUNTY  
**FINANCE DEPARTMENT**  
Post Office Drawer 1228  
Beaufort, South Carolina 29901-1228

Alicia Holland, CPA  
Chief Financial Officer  
843.255.2296  
aholland@bcgov.net

September 23, 2014

Alan R. Eisenman, CPA  
Financial Supervisor  
843.255.2295  
aeisenman@bcgov.net

**August 2014 Stormwater Financials Narrative and Analysis**

Janet Andrews  
Accounting Supervisor  
843.255.2290  
jandrews@bcgov.net

According to Governmental Accounting Standards, Stormwater tax revenues that are received during July and August 2014 will be recorded as revenue in fiscal year 2014. This standard is referred to as the 60 day revenue accrual, therefore Stormwater utility fees revenue is zero.

Cristine Hendrick  
Accounts Payable  
A thru K  
843.255.2293  
cryshe@bcgov.net

Since August is the 2nd month of the fiscal year, one might expect expenses to be at 16% of budget based on consistent and recurring expenses and Stormwater is currently at this budget level.

Frances Collins  
Accounts Payable  
L thru Z  
843.255.2294  
fcollins@bcgov.net

With the recent addition of the Capital Improvement Fund, some Stormwater Utility Funds have been transferred for larger retrofit projects that might take several years to fund and to finish. Therefore, the Stormwater cash balance is now comprised of two cash balances. The Stormwater cash balance has increased by about \$76,000 compared to last year, along with an increase in fund balance by about \$73,000.

Melissa (Missy) Easler  
Fiscal Tech  
843.255.4010  
melissae@bcgov.net

Please note that these August numbers will change as the Finance Department gets closer to closing out the 2014 fiscal year, which will impact the beginning fund balance for FY15.

Lori Sexton  
Fiscal Tech  
843.255.2801  
loris@bcgov.net

Respectively submitted,

Alan Eisenman, CPA

Michael Dunn  
Fiscal Tech  
843.255.2951  
mdunn@bcgov.net

102 Industrial Village Road, Building 2, Beaufort, SC 29906

*"Professionally we serve; Personally we care!"*

**UNAUDITED AND PRELIMINARY**  
**BEAUFORT COUNTY, SOUTH CAROLINA**  
**STATEMENT OF NET ASSETS**  
Stormwater Utility and Capital Improvement Funds  
August 31, 2014 & August 31, 2013

	Stormwater Utility Fund August 31, 2014	Capital Improvements Fund August 31, 2014	Stormwater Utility Fund August 31, 2013
<b><u>ASSETS</u></b>			
<b>Current Assets</b>			
Cash and Investments with Trustee	\$ 1,488,036	\$ 808,205	\$ 2,219,713
Receivables, Net	3,876	-	53,065
Inventories	113,850	-	92,511
Prepayments	-	-	-
Total Current Assets	<u>1,605,762</u>	<u>808,205</u>	<u>2,365,289</u>
Capital Assets	2,930,034	-	2,800,950
Accumulated Depreciation	<u>(2,147,016)</u>	<u>-</u>	<u>(1,981,378)</u>
	783,018	-	819,572
Total Assets	\$ 2,388,780	\$ 808,205	\$ 3,184,861
<b><u>LIABILITIES</u></b>			
<b>Liabilities</b>			
Account Payable	23,365	672.00	174,966
Accrued Payroll	40,098	-	60,482
Accrued Compensated Absences	6,247	-	4,470
Total Current Liabilities	<u>69,710</u>	<u>672</u>	<u>239,918</u>
<b>Long Term Liabilities</b>			
Accrued Compensated Absences	67,554	-	57,156
Net Other Postemployment Benefits Obligation	857,616	-	760,123
Total Long Term Liabilities	<u>925,170</u>	<u>-</u>	<u>817,279</u>
Total Liabilities	994,880	672	1,057,197
<b><u>NET ASSETS</u></b>			
Invested in Capital Assets, Net of Related Debt	783,018	-	819,572
Reserved for Encumbrances	251,714	21,830	363,865
Reserved for Capital Improvements	-	785,703	-
Unrestricted	<u>359,168</u>	<u>-</u>	<u>944,227</u>
Total Net Assets	<u>\$ 1,393,900</u>	<u>\$ 807,533</u>	<u>\$ 2,127,664</u>



**Unaudited and Preliminary**  
 BEAUFORT COUNTY, SOUTH CAROLINA  
 STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS  
 Stormwater Utility Fund  
 For the Period Ended August 31, 2014

	Budget FY 2015	August 31, 2014	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,132,205	\$ - *	(3,132,205)	0%
Stormwater Utility Project Billings	44,189	799	(43,390)	2%
Total Operating Revenues	<u>3,176,394</u>	<u>799</u>	<u>(3,175,595)</u>	<u>0%</u>
Operating Expenses				
Personnel	1,883,440	243,254	(1,640,186)	13%
Purchased Services	684,864	189,791	(495,073)	28%
Supplies	350,509	22,458	(328,051)	6%
Depreciation	182,523	30,422	(152,101)	17%
Total Operating Expenses	<u>3,101,336</u>	<u>485,925</u>	<u>(2,615,411)</u>	<u>16%</u>
Operating Income (Loss)	75,058	(485,126)	(560,184)	-646%
Non-Operating Revenues (Expenses)				
Gain (Loss) on Sale of Capital Assets	-	-	-	0%
Interest Earned	2,955	-	(2,955)	0%
Total Non-Operating Revenues (Expenses)	<u>2,955</u>	<u>-</u>	<u>(2,955)</u>	<u>0%</u>
Transfers Out To Capital Improvement Fund	-	-	-	100%
Change in Net Assets	78,013	(485,126)	(563,139)	-622%
Net Assets, Beginning	<u>1,879,026</u>	<u>1,879,026</u>		
Net Assets, Ending	<u>\$ 1,957,039</u>	<u>\$ 1,393,900</u>	(563,139)	71%

**\* NOTE: According to Government Accounting Standards, Stormwater tax revenues received during July and August 2014 will be recorded as revenue in fiscal year 2014.**

**Unaudited and Preliminary**  
**BEAUFORT COUNTY, SOUTH CAROLINA**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS**  
**Stormwater Capital Improvements Fund**  
**For the Period Ended August 31, 2014**

	Budget FY 2015	August 31, 2014	Budget to Actual	Percent of Budget
<b>Transfers In from Stormwater Utility Fund</b>				
Administration Complex Parking Lot Retrofit	\$ -	\$ -	-	0%
Okatie East Retrofit	-	-	-	0%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	-	-	0%
Upper Battery Creek Retrofit	-	-	-	0%
<b>Total Transfers In</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>100%</u>
<b>Capital Improvement Expenses</b>				
Administration Complex Parking Lot Retrofit	-	360	360	100%
Okatie East Retrofit	-	500	500	0%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	-	-	0%
Upper Battery Creek Retrofit	-	-	-	0%
<b>Total Operating Expenses</b>	<u>-</u>	<u>860</u>	<u>860</u>	<u>100%</u>
<b>Change in Net Assets by Project</b>				
Administration Complex Parking Lot Retrofit		(360)	(360)	
Okatie East Retrofit		(500)	(500)	
Highway 278 Retrofit		-	-	
Okatie West Retrofit		-	-	
Upper Battery Creek Retrofit		-	-	
<b>Total Change in Net Assets by Project</b>		<u>(860)</u>	<u>(860)</u>	
<b>Net Assets, Beginning</b>				
Administration Complex Parking Lot Retrofit		327,169		
Okatie East Retrofit		40,892		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		100,000		
Upper Battery Creek Retrofit		132,610		
<b>Total Net Assets, Beginning</b>		<u>808,393</u>		
<b>Net Assets, Ending</b>				
Administration Complex Parking Lot Retrofit		326,809		
Okatie East Retrofit		40,392		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		100,000		
Upper Battery Creek Retrofit		132,610		
<b>Total Net Assets, Ending</b>	<u>\$ -</u>	<u>\$ 807,533</u>		

**Unaudited and Preliminary**  
**BEAUFORT COUNTY, SOUTH CAROLINA**  
**STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS**  
**Stormwater Utility Fund**  
**For the Period Ended August 31, 2013**

	Budget FY 2014	August 31, 2013	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,475,000	\$ - *	(3,475,000)	0%
Stormwater Utility Project Billings	60,023	10,738	(49,285)	18%
Total Operating Revenues	<u>3,535,023</u>	<u>10,738</u>	<u>(3,524,285)</u>	0%
Operating Expenses				
Personnel	2,160,475	311,175	(1,849,300)	14%
Purchased Services	961,864	84,851	(877,013)	9%
Supplies	381,446	58,241	(323,205)	15%
Depreciation	242,119	40,354	(201,765)	17%
Total Operating Expenses	<u>3,745,904</u>	<u>494,621</u>	<u>(3,251,283)</u>	13%
Operating Income (Loss)	(210,881)	(483,883)	(273,002)	229%
Non-Operating Revenues (Expenses)				
Gain (Loss) on Sale of Capital Assets	-	(31,113)	(31,113)	-100%
Interest Earned	6,922	-	(6,922)	0%
Total Non-Operating Revenues (Expenses)	<u>6,922</u>	<u>(31,113)</u>	<u>(38,035)</u>	0%
Change in Net Assets	(203,959)	(514,996)	(311,037)	252%
Net Assets, Beginning	<u>2,642,660</u>	<u>2,642,660</u>		
Net Assets, Ending	<u>\$ 2,438,701</u>	<u>\$ 2,127,664</u>	(311,037)	87%

\* **NOTE: According to Government Accounting Standards, Stormwater tax revenues received during July and August 2013 will be recorded as revenue in fiscal year 2013.**



## MEMORANDUM

Date: October 1, 2014

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

Re: **Maintenance Project Report for October 2014**

1. This report will cover six major and fifteen minor or routine projects. The Project Summary Reports are attached.

2. Major Projects:

- A. **Basil Green Complex**, completed in May in the City of Beaufort, District 1; we corrected a long standing flooding issue in the sports complex by installing a catch basin and an underground detention vault. Total cost of the project was **\$38,396**.
- B. **Bonaire Circle**, completed in July in the Burton area of Port Royal Island, District 6; we bush hogged and cleaned out 495 feet of channel and installed 149 feet of channel pipe. Total cost of the project was **\$28,150**.
- C. **Rhumblin Road**, completed in July on Lady's Island, District 7; we grubbed, cleared, and constructed 180 feet of workshelf, reconstructed 320 feet of channel, upsized one driveway pipe, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$18,658**.
- D. **Burton Wells Lake Repair**, completed in August in the Burton area of Port Royal Island, District 6; we installed one drainage basin, six inline grates, and 300 feet of pipe. We then constructed 100 feet of swale, repaired the washouts, installed reinforcement matting and straw matting, and hydroseeded for erosion control. Total cost of the project was **\$23,441**.
- E. **Burton Wells Sports Complex Pond Maintenance**, completed in August in the Burton area of Port Royal Island, District 6; cleaned out the detention pond and 385 feet of channel, trimmed the perimeter of the pond, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$31,527**.
- F. **Administration Building Detention Ponds**, completed in September in the City of Beaufort, District 1; we grubbed, cleared, and reconstructed two existing ponds, extended an inlet pipe 24 feet, and installed straw mat, rip-rap and hydroseeded for erosion control. Total cost of the project was **\$64,863**.

3. Minor or Routine Projects:

- A. **Sheldon Washout Repairs –Backache Acres**, completed in March in the Lobeco area of Sheldon Township, District 5; we repaired three washouts.

- B. **Port Royal Island Washout Repairs**, completed in June in the Burton area of Port Royal Island, District 6; we repaired three washouts on two channels.
- C. **Ardmore Avenue**, completed in June on Lady's Island, District 7; we cleaned out and repaired a catch basin and sinkhole.
- D. **Airport Circle**, completed in June on Lady's Island, District 7; we bush hogged 467 feet of channel and cleaned out 220 feet of channel.
- E. **Persimmon Street**, completed in June in Bluffton Township, District 9; we replaced a missing catch basin lid.
- F. **Eustis Landing Road**, completed in June on Lady's Island, District 7; we repaired a sinkhole.
- G. **Old Dawson Acres**, completed in June in the Gardens Corner area of Sheldon Township, District 5; we removed a bleeder pipe that was no longer needed.
- H. **St. Helena Tree Removal**, completed in June on St. Helena Island, District 8; we removed two fallen trees from two different channels/workshelves.
- I. **Sheldon Bush Hogging**, completed in July in Sheldon Township, District 5; we bush hogged 79,883 feet of channel and the associated workshelves and the perimeter of one pond. Total cost of the effort was **\$38,491**, or **\$.48/foot**.
- J. **Parkside Drive**, completed in July in Bluffton Township, District 9; we repaired a catch basin lid and a washout.
- K. **Irongate Subdivision**, completed in July in the Burton Area of Port Royal Island, district 6; we cleaned out 130 feet of channel.
- L. **Pin Oak Street/Able Street**, completed in July in Bluffton Township, District 9; we repaired a curb inlet and two sinkholes.
- M. **Red Cedar Street**, completed in August in Bluffton Township, District 9; we repaired two sinkholes.
- N. **Hanna Avenue**, completed in August in the Grays Hill area of Port Royal Island, District 6; we cleaned out 437 feet of roadside ditch.
- O. **Holly Hall Road**, completed in August on Lady's Island, District 7; we repaired a washout and installed rip-rap for erosion control.



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Basil Green Complex

**Activity:** Drainage Improvement

**Narrative Description of Project:**

Project improved 63 L.F. of drainage system. Installed (1) catch basin, underground detention vault and sod for erosion control.

**Completion:** May-14

2014-002 / Basil Green Complex	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
BKFILL / Back Fill	3.0	\$64.89	\$61.46	\$27.63	\$0.00	\$43.26	\$197.24
CBINS / Catch basin - installed	40.0	\$865.30	\$392.71	\$9,177.26	\$0.00	\$573.90	\$11,009.17
CLJS / Cleaned up jobsite	40.0	\$841.77	\$218.26	\$110.93	\$0.00	\$542.80	\$1,713.76
EDO / Equipment Drop Off	6.0	\$161.46	\$80.14	\$43.44	\$0.00	\$104.10	\$389.14
HAUL / Hauling	88.0	\$1,999.69	\$870.80	\$7,519.60	\$0.00	\$1,327.44	\$11,717.53
ONJV / Onsite Job Visit	57.0	\$1,868.20	\$248.82	\$135.75	\$0.00	\$1,286.13	\$3,538.90
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.00	\$0.00	\$67.92	\$169.70
PP / Project Preparation	16.0	\$573.50	\$23.87	\$6.37	\$0.00	\$426.30	\$1,030.04
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$750.00	\$0.00	\$750.00
PRRECON / Project Reconnaissance	7.0	\$254.44	\$25.34	\$24.00	\$0.00	\$190.27	\$494.05
SC / Sediment Control	36.0	\$755.28	\$341.78	\$150.50	\$0.00	\$550.56	\$1,798.12
SI / Sod - Installation	91.0	\$1,839.23	\$164.02	\$817.94	\$0.00	\$1,149.94	\$3,971.13
SODW / Sod - Watered	10.0	\$225.69	\$155.12	\$62.44	\$0.00	\$151.92	\$595.17
STAGING / Staging Materials	12.0	\$265.28	\$14.48	\$6.74	\$0.00	\$176.64	\$463.14
UC / Utility Coordination	0.0	\$0.00	\$0.00	\$0.00	\$525.00	\$0.00	\$525.00
<b>2014-002 / Basil Green Complex Sub Total</b>	<b>409.0</b>	<b>\$9,823.73</b>	<b>\$2,604.04</b>	<b>\$18,088.60</b>	<b>\$1,275.00</b>	<b>\$6,604.41</b>	<b>\$38,395.78</b>
<b>Grand Total</b>	<b>409.0</b>	<b>\$9,823.73</b>	<b>\$2,604.04</b>	<b>\$18,088.60</b>	<b>\$1,275.00</b>	<b>\$6,604.41</b>	<b>\$38,395.78</b>

Before



During



After



**Project: Basil Green Complex**

**Activity: Drainage Improvement**















**Project #:  
2014-002**

**Township: City  
of Beaufort**

**Completed:  
May 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 103 feet**



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Bonaire Circle South

**Activity:** Drainage Improvement

**Narrative Description of Project:**

**Completion:** Jun-14

Project improved 644 L.F. of drainage system. Bush hogged and cleaned out 495 L.F. of channel. Installed 149 L.F. of channel pipe and sod for erosion control.

2014-623 / Bonaire Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
HAUL / Hauling	94.0	\$2,033.22	\$1,005.80	\$1,970.62	\$0.00	\$1,320.12	\$6,329.76
ODBH / Outfall ditch - bushhogged	40.0	\$923.76	\$119.75	\$57.51	\$0.00	\$592.56	\$1,693.58
ODCO / Outfall ditch - cleaned out	103.0	\$2,372.98	\$624.40	\$176.72	\$0.00	\$1,510.32	\$4,684.42
OFPI / Outfall Pipe - Installation	110.0	\$2,607.56	\$470.98	\$2,324.78	\$0.00	\$1,631.90	\$7,035.23
ONJV / Onsite Job Visit	45.0	\$1,525.98	\$152.04	\$89.60	\$0.00	\$1,027.83	\$2,795.45
PI / Project Inspection	1.0	\$44.27	\$3.62	\$6.40	\$0.00	\$33.96	\$88.25
PL / Project Layout	4.0	\$101.14	\$7.24	\$10.02	\$0.00	\$70.38	\$188.78
PRRECON / Project Reconnaissance	5.0	\$155.88	\$18.10	\$22.40	\$0.00	\$103.63	\$300.01
SCR / Sediment Control - Removed	15.0	\$301.00	\$18.10	\$6.40	\$0.00	\$194.20	\$519.70
SI / Sod - Installation	90.0	\$2,003.78	\$271.83	\$87.99	\$0.00	\$1,258.59	\$3,622.19
STAGING / Staging Materials	19.0	\$439.32	\$10.86	\$16.00	\$0.00	\$288.66	\$754.84
TRAIN / Training	1.0	\$19.28	\$0.00	\$0.00	\$0.00	\$12.21	\$31.49
UTLOC / Utility locates	1.5	\$42.60	\$0.00	\$0.00	\$0.00	\$30.21	\$72.81
<b>2014-623 / Bonaire Circle Sub Total</b>	<b>529.5</b>	<b>\$12,591.23</b>	<b>\$2,702.72</b>	<b>\$4,768.44</b>	<b>\$0.00</b>	<b>\$8,087.80</b>	<b>\$28,150.19</b>
<b>Grand Total</b>	<b>529.5</b>	<b>\$12,591.23</b>	<b>\$2,702.72</b>	<b>\$4,768.44</b>	<b>\$0.00</b>	<b>\$8,087.80</b>	<b>\$28,150.19</b>

Before



During



After





**Project: Bonaire Circle South**

**Activity: Drainage Improvement**

**Project #: 2014-623**

**Township: Port Royal Island**

**Completed: July 2014**



Installed 149 LF of channel pipe and sod for erosion control.

Bush hogged and cleaned out 495 LF of channel.

**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 35 70 140 210 280 Feet

1 inch = 141 feet



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Rhumbline Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 320 L.F. of drainage system. Grubbed, cleared and constructed 180 L.F. of workshelf. Reconstructed 320 L.F. of channel. Upsized (1) driveway pipe. Installed rip rap and hydroseeded for erosion control. Jetted (2) driveway pipes. Rework - Repaired washout.

2014-006 / Rhumbline Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ADS / Administrative Support	2.0	\$66.36	\$7.24	\$9.60	\$0.00	\$48.94	\$132.14
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
DPINS / Driveway Pipe - Installed	40.0	\$903.10	\$274.76	\$410.23	\$0.00	\$567.50	\$2,155.59
DPJT / Driveway Pipe - Jetted	10.0	\$223.38	\$110.80	\$46.07	\$0.00	\$149.55	\$529.80
ESTP / Estimating Project	2.0	\$88.54	\$0.00	\$0.00	\$0.00	\$67.92	\$156.46
HAUL / Hauling	67.0	\$1,449.21	\$716.90	\$2,046.23	\$0.00	\$921.94	\$5,134.28
HYDR / Hydroseeding	46.0	\$1,037.74	\$141.90	\$246.88	\$0.00	\$651.57	\$2,078.09
LM / Loading Materials	46.0	\$1,082.14	\$256.72	\$53.21	\$0.00	\$676.88	\$2,068.95
ODCO / Outfall ditch - cleaned out	30.0	\$686.80	\$235.00	\$57.26	\$0.00	\$423.30	\$1,402.36
ODGRB / Outfall ditch - grubbed	53.0	\$1,238.27	\$300.16	\$105.29	\$0.00	\$773.54	\$2,417.26
ONJV / Onsite Job Visit	19.0	\$605.84	\$68.78	\$38.40	\$0.00	\$396.55	\$1,109.57
PI / Project Inspection	2.0	\$88.54	\$7.24	\$9.60	\$0.00	\$67.92	\$173.30
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$300.00	\$0.00	\$300.00
PRRECON / Project Reconnaissance	5.0	\$155.88	\$7.24	\$9.60	\$0.00	\$103.63	\$276.35
RR / Rip Rap - Installed	12.0	\$250.20	\$36.48	\$20.10	\$0.00	\$159.44	\$466.22
UTLOC / Utility locates	6.0	\$122.76	\$12.06	\$9.60	\$0.00	\$79.38	\$223.80
<b>2014-006 / Rhumbline Road Sub Total</b>	<b>341.0</b>	<b>\$8,019.22</b>	<b>\$2,175.28</b>	<b>\$3,062.07</b>	<b>\$300.00</b>	<b>\$5,101.29</b>	<b>\$18,657.86</b>
<b>Grand Total</b>	<b>341.0</b>	<b>\$8,019.22</b>	<b>\$2,175.28</b>	<b>\$3,062.07</b>	<b>\$300.00</b>	<b>\$5,101.29</b>	<b>\$18,657.86</b>

Before



During



After



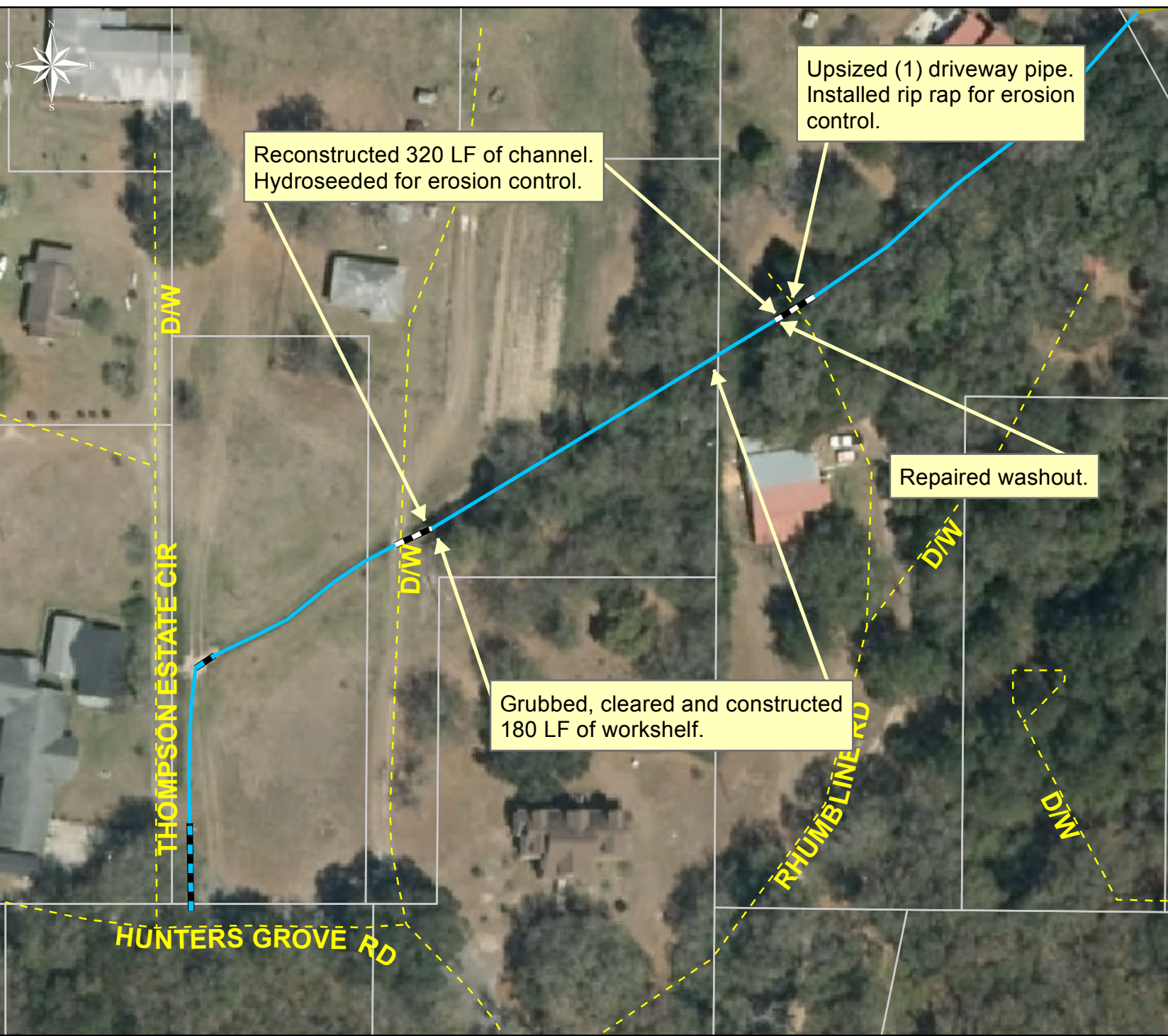
**Project: Rhumbline Road Map 1**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-006**

**Township: St. Helena Island**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 83 feet**

**Project: Rhumbline Road Map 2**

**Activity: Vacuum Truck**

**Project #: 2014-006**

**Township: St. Helena Island**

**Completed: July 2014**



Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe



1 inch = 83 feet



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Burton Wells Lake Repair

**Activity:** Drainage Improvement

**Narrative Description of Project:**

**Completion:** Aug-14

Project improved 400 L.F. drainage system. Installed (1) drain basin, (6) inline grates 300 L.F. of channel pipe, reinforcement mat, strawmat and hydroseeded for erosion prevention. Constructed 100 L.F. of swale. Repaired washouts.

2014-004 / Burton Wells Lake Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
CLJS / Cleaned up jobsite	88.0	\$2,035.44	\$308.16	\$137.97	\$0.00	\$1,307.86	\$3,789.43
HAUL / Hauling	40.0	\$907.96	\$428.00	\$460.38	\$0.00	\$613.75	\$2,410.09
HYDR / Hydroseeding	48.0	\$1,107.63	\$130.25	\$258.00	\$0.00	\$713.46	\$2,209.34
OFPI / Outfall Pipe - Installation	90.0	\$2,017.40	\$359.16	\$5,895.30	\$0.00	\$1,301.80	\$9,573.66
ONJV / Onsite Job Visit	41.0	\$1,325.65	\$148.82	\$54.54	\$0.00	\$882.24	\$2,411.25
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.06	\$0.00	\$67.92	\$169.76
PL / Project Layout	9.0	\$398.43	\$32.58	\$21.21	\$0.00	\$305.64	\$757.86
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$607.47	\$0.00	\$607.47
UTLOC / Utility locates	27.0	\$629.34	\$25.34	\$18.18	\$0.00	\$426.77	\$1,099.63
WEED / Weedeating	10.0	\$210.45	\$18.10	\$12.12	\$0.00	\$138.25	\$378.92
<b>2014-004 / Burton Wells Lake Repair Sub Total</b>	<b>356.0</b>	<b>\$8,741.30</b>	<b>\$1,457.65</b>	<b>\$6,863.75</b>	<b>\$607.47</b>	<b>\$5,770.92</b>	<b>\$23,441.10</b>
<b>Grand Total</b>	<b>356.0</b>	<b>\$8,741.30</b>	<b>\$1,457.65</b>	<b>\$6,863.75</b>	<b>\$607.47</b>	<b>\$5,770.92</b>	<b>\$23,441.10</b>

Before



During



After



**Project: Burton Wells Complex  
Lake Repair**

**Activity: Drainage  
Improvement**

**Project #:  
2014-004**

**Township: Port  
Royal Island**

**Completed:  
August 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 30 60 120 180 240 Feet

1 inch = 116 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/15/14

File:C:/sethdata/projects/projectmaps/



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Burton Wells Sports Complex Pond Maintenance

**Activity:** Pond Maintenance

**Narrative Description of Project:**

Project improved 385 L.F. of drainage system. Cleaned out pond and 385 L.F. of channel. Weedeat perimeter of pond. Installed rip rap and hydroseeded for erosion control.

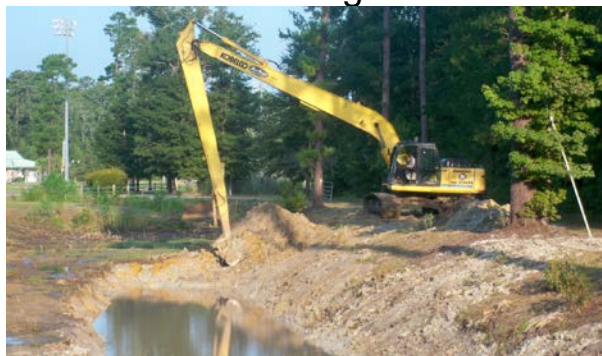
**Completion:** Aug-14

2015-320 / Burton Wells Sports Complex Pond	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
HAUL / Hauling	200.5	\$4,550.67	\$2,314.87	\$1,864.39	\$0.00	\$2,802.23	\$11,532.15
HYDR / Hydroseeding	30.0	\$698.40	\$129.30	\$266.65	\$0.00	\$474.00	\$1,568.35
LM / Loading Materials	4.0	\$86.52	\$83.67	\$16.40	\$0.00	\$57.68	\$244.27
ODCO / Outfall ditch - cleaned out	45.5	\$1,020.19	\$113.50	\$136.76	\$0.00	\$672.62	\$1,943.07
ONJV / Onsite Job Visit	46.0	\$1,567.04	\$173.76	\$112.11	\$0.00	\$1,089.48	\$2,942.39
PM / Ponds - Maintenance	172.0	\$3,790.36	\$229.38	\$550.04	\$0.00	\$2,277.12	\$6,846.90
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$5,474.32	\$0.00	\$5,474.32
RR1 / Rip Rap - Installed	20.0	\$451.50	\$93.41	\$81.82	\$0.00	\$298.05	\$924.78
<b>2015-320 / Burton Wells Sports Complex Pond Sub Total</b>	<b>519.5</b>	<b>\$12,195.37</b>	<b>\$3,137.89</b>	<b>\$3,028.17</b>	<b>\$5,474.32</b>	<b>\$7,691.02</b>	<b>\$31,526.77</b>
<b>Grand Total</b>	<b>519.5</b>	<b>\$12,195.37</b>	<b>\$3,137.89</b>	<b>\$3,028.17</b>	<b>\$5,474.32</b>	<b>\$7,691.02</b>	<b>\$31,526.77</b>

Before



During



After



**Project: Burton Wells Sports Complex Pond**

**Activity: Pond Maintenance**

**Project #: 2015-320**

**Township: Port Royal Island**

**Completed: August 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 111 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/Burton Wells Complex Pond 2015-320





# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Beaufort County Administration Building Pond

**Activity:** Pond Maintenance

**Narrative Description of Project:**

Grubbed, cleared and reconstructed (2) existing ponds. Extended 24 L.F. of channel pipe. Installed strawmat, rip rap and hydroseeded for erosion control.

**Completion:** Sep-14

2014-321 / Beaufort County Admin Building Pond	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
HAUL / Hauling	311.3	\$7,099.20	\$3,537.87	\$4,038.46	\$0.00	\$4,696.28	\$19,371.81
HYDR / Hydroseeding	160.0	\$3,585.90	\$714.34	\$1,218.05	\$0.00	\$2,186.10	\$7,704.39
LM / Loading Materials	89.0	\$2,224.07	\$468.65	\$391.46	\$0.00	\$1,166.94	\$4,251.12
OFPI / Outfall Pipe - Installation	85.5	\$2,016.24	\$653.09	\$557.86	\$0.00	\$1,178.81	\$4,406.00
ONJV / Onsite Job Visit	40.0	\$1,596.57	\$144.80	\$94.43	\$0.00	\$1,178.87	\$3,014.67
PGC / Pond - Grubb and Clear	160.0	\$3,675.86	\$575.93	\$244.73	\$0.00	\$2,066.55	\$6,563.08
PI / Project Inspection	2.0	\$88.54	\$7.24	\$6.06	\$0.00	\$67.92	\$169.76
PL / Project Layout	14.0	\$619.78	\$50.68	\$24.24	\$0.00	\$475.44	\$1,170.14
PM / Ponds - Maintenance	56.0	\$1,324.20	\$246.56	\$181.43	\$0.00	\$821.52	\$2,573.71
PP / Project Preparation	15.0	\$458.90	\$21.72	\$18.18	\$0.00	\$312.14	\$810.94
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$6,136.82	\$0.00	\$6,136.82
RRI / Rip Rap - Installed	84.0	\$1,875.34	\$495.45	\$328.41	\$0.00	\$1,141.98	\$3,841.18
SC / Sediment Control	52.0	\$1,188.42	\$57.92	\$141.91	\$0.00	\$728.04	\$2,116.29
UTLOC / Utility locates	2.0	\$40.92	\$0.00	\$0.00	\$0.00	\$26.46	\$67.38
WSL / Workshel - Level	60.0	\$1,394.30	\$277.04	\$194.97	\$0.00	\$749.00	\$2,615.31
<b>2014-321 / Beaufort County Admin Building Pond Sub Total</b>	<b>1,132.3</b>	<b>\$27,218.93</b>	<b>\$7,251.29</b>	<b>\$7,440.19</b>	<b>\$6,136.82</b>	<b>\$16,815.90</b>	<b>\$64,863.13</b>
<b>Grand Total</b>	<b>1,132.3</b>	<b>\$27,218.93</b>	<b>\$7,251.29</b>	<b>\$7,440.19</b>	<b>\$6,136.82</b>	<b>\$16,815.90</b>	<b>\$64,863.13</b>

Before



During



After



**Project: Beaufort County Administration Building Pond**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-321**

**Township: Port Royal Island**

**Completed: September 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



1 inch = 120 feet



**Beaufort County  
Public Works  
Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Sheldon Washout Repair - Backache Acres

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Mar-14

Repaired washouts.

<b>2014-516A / Sheldon Washout Repair</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	9.0	\$206.42	\$96.30	\$31.82	\$0.00	\$140.03	\$474.57
RPWO / Repaired Washout	10.0	\$210.44	\$40.10	\$0.00	\$0.00	\$132.30	\$382.84
<b>2014-516A / Sheldon Washout Repair Sub Total</b>	<b>19.5</b>	<b>\$427.09</b>	<b>\$136.40</b>	<b>\$31.82</b>	<b>\$0.00</b>	<b>\$278.94</b>	<b>\$874.25</b>
<b>Grand Total</b>	<b>19.5</b>	<b>\$427.09</b>	<b>\$136.40</b>	<b>\$31.82</b>	<b>\$0.00</b>	<b>\$278.94</b>	<b>\$874.25</b>

(Pictures Not Available)

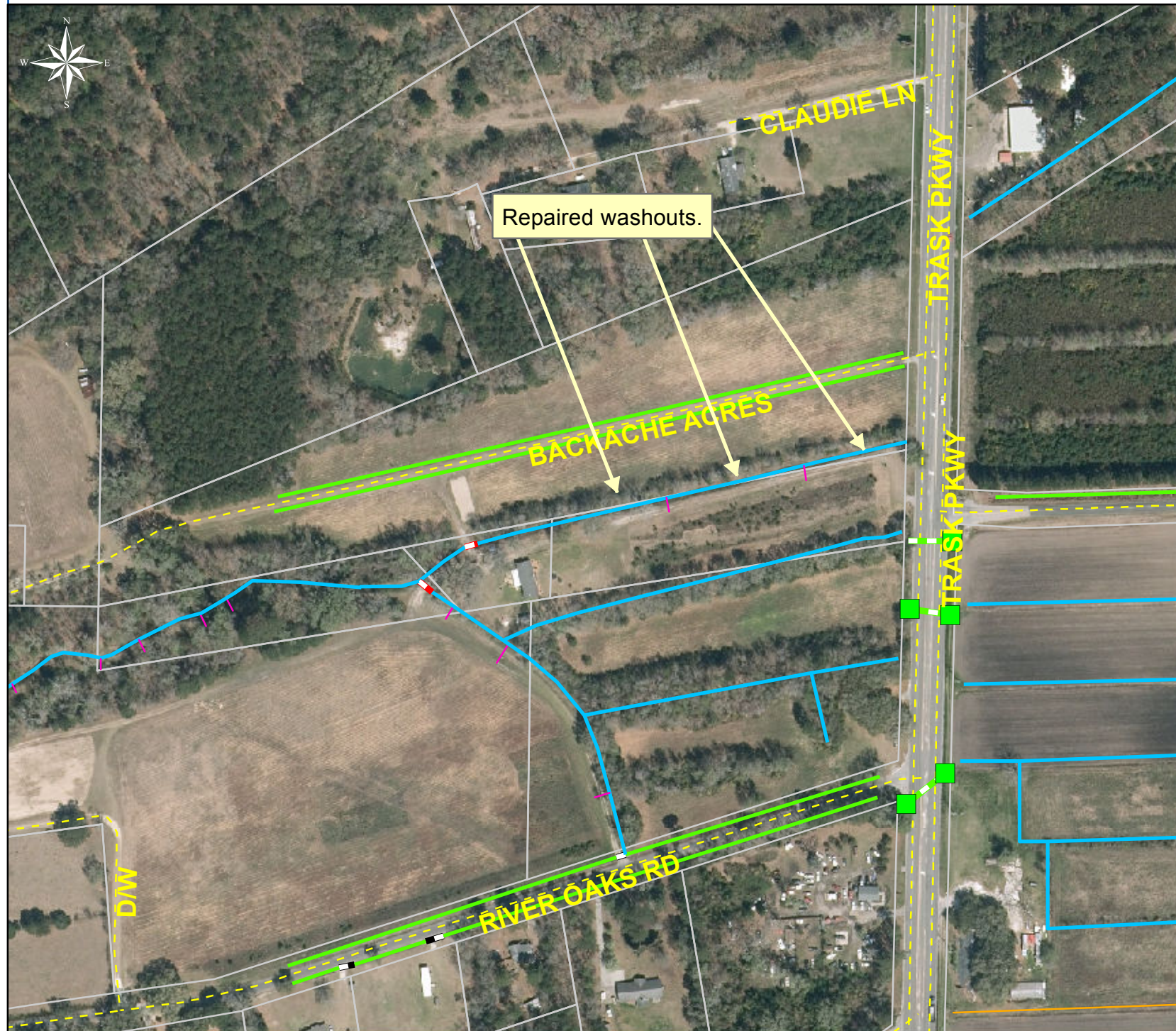
**Project: Backache Acres**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-516A**

**Township: Port  
Royal Island**

**Completed:  
March 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe

0 65 130 260 390 520  
Feet

1 inch = 256 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:\sethdata\projects\projectmaps\Backache Acres 2014-516A



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Port Royal Island Washout Repairs - Powell Drive and Salem Drive West

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Repaired washouts.

**Completion:** Jun-14

<b>2014-524 / Port Royal Island Washout Repairs</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	5.0	\$104.64	\$53.50	\$32.27	\$0.00	\$72.10	\$262.51
RPWO / Repaired Washout	16.0	\$336.71	\$66.36	\$44.44	\$0.00	\$221.20	\$668.70
<b>2014-524 / Port Royal Island Washout Repairs Sub Total</b>	<b>21.5</b>	<b>\$451.58</b>	<b>\$119.86</b>	<b>\$76.71</b>	<b>\$0.00</b>	<b>\$299.92</b>	<b>\$948.06</b>
<b>Grand Total</b>	<b>21.5</b>	<b>\$451.58</b>	<b>\$119.86</b>	<b>\$76.71</b>	<b>\$0.00</b>	<b>\$299.92</b>	<b>\$948.06</b>

(Pictures Not Available)

**Project: Powell Drive**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-524**















**Township: Port Royal Island**

**Completed: June 2014**

Repaired washouts.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 122 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File:C:/sethdata/projects/projectmaps/Powell Dr 2014-524

**Project: Salem Drive West**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-524**















**Township: Port Royal Island**

**Completed: June 2014**



**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 183 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File:C:/sethdata/projects/projectmaps/Salam Dr W 2014-524



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Ardmore Avenue - Rework

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Cleaned out (1) catch basin. Repaired catch basin and sinkhole.

**Completion:** Jun-14

2014-620R / Ardmore Avenue - Rework	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBCO / Catch basin - clean out	13.0	\$292.92	\$199.44	\$52.82	\$0.00	\$197.07	\$742.25
CBREP / Catch basin - repaired	34.0	\$790.54	\$136.28	\$174.39	\$0.00	\$522.12	\$1,623.33
ONJV / Onsite Job Visit	6.0	\$185.72	\$21.72	\$12.80	\$0.00	\$121.86	\$342.10
TRAIN / Training	1.0	\$19.28	\$0.00	\$0.00	\$0.00	\$12.21	\$31.49
<b>2014-620R / Ardmore Avenue - Rework Sub Total</b>	<b>54.5</b>	<b>\$1,298.69</b>	<b>\$357.44</b>	<b>\$240.01</b>	<b>\$0.00</b>	<b>\$859.88</b>	<b>\$2,756.01</b>
<b>Grand Total</b>	<b>54.5</b>	<b>\$1,298.69</b>	<b>\$357.44</b>	<b>\$240.01</b>	<b>\$0.00</b>	<b>\$859.88</b>	<b>\$2,756.01</b>

Before



During



After





**Project: Ardmore Avenue**

**Activity: Routine/  
Preventive  
Maintenance**















**Project #:  
2014-620R**

**Township: Lady's  
Island**

**Completed:  
June 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 175 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File: C:/sethdata/projects/projectmaps/Ardmore 2014-620R



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Airport Circle

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** June-14

Project improved 467 L.F. of drainage system. Bush hogged 467 L.F. of channel. Cleaned out 220 L.F. of channel.

2014-633 / Airport Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
DLO / Ditch Layout	6.0	\$143.88	\$7.24	\$10.13	\$0.00	\$92.74	\$253.99
HAUL / Hauling	11.5	\$248.75	\$123.05	\$52.32	\$0.00	\$165.83	\$589.95
ODBH / Outfall ditch - bushhogged	6.0	\$134.10	\$40.10	\$22.49	\$0.00	\$86.67	\$283.36
ODCO / Outfall ditch - cleaned out	30.0	\$719.40	\$152.61	\$55.09	\$0.00	\$463.70	\$1,390.80
ONJV / Onsite Job Visit	3.0	\$89.52	\$10.86	\$15.95	\$0.00	\$54.69	\$171.02
PRRECON / Project Reconnaissance	2.0	\$88.54	\$7.24	\$6.38	\$0.00	\$67.92	\$170.08
<b>2014-633 / Airport Circle</b>	<b>59.0</b>	<b>\$1,434.42</b>	<b>\$341.10</b>	<b>\$162.36</b>	<b>\$0.00</b>	<b>\$938.17</b>	<b>\$2,876.04</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>59.0</b>	<b>\$1,434.42</b>	<b>\$341.10</b>	<b>\$162.36</b>	<b>\$0.00</b>	<b>\$938.17</b>	<b>\$2,876.04</b>

Before



During



After



**Project: Airport Circle**

**Activity: Routine/  
Preventive  
Maintenance**















**Project #:  
2014-663**

**Township: Lady's  
Island**

**Completed:  
June 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



Bush hogged 327  
LF of channel.

Cleaned out and bush  
hogged 140 LF of channel.

Cleaned out 80  
LF of channel.

AIRPORT CIR

D/W



1 inch = 109 feet



**Beaufort County  
Public Works  
Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Persimmon Street

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jun-14

Replaced (1) catch basin lid.

<b>2014-636 / Persimmon Street</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBLI / Catch Basin Lid - Installed	12.0	\$268.20	\$21.72	\$290.38	\$0.00	\$173.34	\$753.64
<b>2014-636 / Persimmon Street Sub Total</b>	<b>12.5</b>	<b>\$278.43</b>	<b>\$21.72</b>	<b>\$290.38</b>	<b>\$0.00</b>	<b>\$179.96</b>	<b>\$770.49</b>
<b>Grand Total</b>	<b>12.5</b>	<b>\$278.43</b>	<b>\$21.72</b>	<b>\$290.38</b>	<b>\$0.00</b>	<b>\$179.96</b>	<b>\$770.49</b>

(Pictures Not Available)

**Project: Persimmon Street**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-636**















**Township:  
Bluffton**

**Completed:  
June 2014**

Replaced (1) catch basin lid.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 500 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File:C:/sethdata/projects/projectmaps/Persimmon St 2014-636



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Eustis Landing Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jun-14

Repaired sinkhole.

<b>2014-637 / Eustis Landing Road</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	2.0	\$43.26	\$21.40	\$2.66	\$0.00	\$28.84	\$96.16
SR / Sinkhole repair	4.0	\$89.40	\$7.24	\$12.00	\$0.00	\$57.78	\$166.42
<b>2014-637 / Eustis Landing Road Sub Total</b>	<b>6.5</b>	<b>\$142.89</b>	<b>\$28.64</b>	<b>\$14.66</b>	<b>\$0.00</b>	<b>\$93.24</b>	<b>\$279.43</b>
<b>Grand Total</b>	<b>6.5</b>	<b>\$142.89</b>	<b>\$28.64</b>	<b>\$14.66</b>	<b>\$0.00</b>	<b>\$93.24</b>	<b>\$279.43</b>

(Pictures Not Available)

**Project: Eustis Landing Road**

**Activity: Routine/  
Preventive  
Maintenance**















**Project #:  
2014-637**

**Township: Lady's  
Island**

**Completed:  
June 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 139 feet



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Old Dawson Acres

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Removed (1) bleeder pipe.

**Completion:** Jun-14

2014-638 / Old Dawson Acres	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BPR / Bleeder Pipe - Removed	16.0	\$380.04	\$31.11	\$13.48	\$0.00	\$243.36	\$667.99
HAUL / Hauling	4.0	\$86.52	\$42.80	\$28.82	\$0.00	\$57.68	\$215.82
ONJV / Onsite Job Visit	3.0	\$89.52	\$10.86	\$9.57	\$0.00	\$54.69	\$164.64
<b>2014-638 / Old Dawson Acres Sub Total</b>	<b>23.5</b>	<b>\$566.31</b>	<b>\$84.77</b>	<b>\$51.87</b>	<b>\$0.00</b>	<b>\$362.35</b>	<b>\$1,065.29</b>
<b>Grand Total</b>	<b>23.5</b>	<b>\$566.31</b>	<b>\$84.77</b>	<b>\$51.87</b>	<b>\$0.00</b>	<b>\$362.35</b>	<b>\$1,065.29</b>

Before



After





**Project: Old Dawson Acres**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-638**

**Township: Sheldon**

**Completed: June 2014**



Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe



**1 inch = 117 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 7/24/14

File:C:/sethdata/projects/projectmaps/Old Dawson Acres 2014-638



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** St. Helena Island Tree Removal - Tombee Road and No Man Land Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Removed fallen trees from workshelf and channel.

**Completion:** Jun-14

<b>2014-555A / St. Helena Island Tree Removal</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	4.0	\$86.52	\$42.80	\$22.89	\$0.00	\$57.68	\$209.89
RMTRD / Remove trees - Ditch	15.0	\$346.41	\$43.72	\$38.96	\$0.00	\$222.21	\$651.30
RMTRW / Remove trees - Workshelf	12.0	\$298.20	\$31.11	\$12.80	\$0.00	\$194.52	\$536.63
<b>2014-555A / St. Helena Island Tree Removal Sub Total</b>	<b>31.5</b>	<b>\$741.36</b>	<b>\$117.63</b>	<b>\$74.65</b>	<b>\$0.00</b>	<b>\$481.03</b>	<b>\$1,414.67</b>
<b>Grand Total</b>	<b>31.5</b>	<b>\$741.36</b>	<b>\$117.63</b>	<b>\$74.65</b>	<b>\$0.00</b>	<b>\$481.03</b>	<b>\$1,414.67</b>

Before



After





**Project: No Man Land Road Tree Removal**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2014-555A**

**Township: St. Helena Island**

**Completed: June 2014**



Removed fallen tree from channel.

**Legend**

- TYPE**
- River
  - Creek/Stream
  - River/Creek/Marsh BANK
  - Channel (fka Outfall)
  - Channel Pipe
  - Lateral
  - Lateral Pipe
  - Roadside
  - Roadside Pipe
  - Road Pipe
  - Crossline Pipe
  - Driveway Pipe
  - Access Pipe
  - Bleeder Pipe



1 inch = 83 feet

**Project: Tombee  
Road Tree Removal**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2014-555A**















**Township: St.  
Helena Island**

**Completed:  
June 2014**

Removed fallen tree  
from workshlelf.

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



**1 inch = 125 feet**



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Sheldon Bush Hog

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

First Rotation from May 2014 to July 2014. Project improved 79,883 L.F. of drainage system. Bush hogged 79,883 L.F. of channel and perimeter of pond. This project consisted of the following areas: Mitchell Road (4,958 L.F.), Paige Point Bluff (577 L.F.), Robinson Hill Road (1,820 L.F.), Rail Bed (1,470 L.F.), Johnson Road (3,737 L.F.), Archie Sumpter Road (1,720 L.F.), Cuthbert Farm Road (890 L.F.), George Williams Lane (3,403 L.F.), William Campbell Road (1,596 L.F.), Fire Station Lane (907 L.F.), Huspah Drive (665 L.F.), Huspah Circle South (2,291 L.F.), Huspah Circle North (784 L.F.), Bailey Road (2,700 L.F.), Nix Road (1,155 L.F.), Bailey Circle (1,300 L.F.), Prescott Road (1,689 L.F.), Albertha Fields Circle (2,102 L.F.) Horse Tail Road (1,536 L.F.), African Baptist Church Road (2,634 L.F.), Big Estate Road (2,022 L.F.), Joseph Lane (1,459 L.F.), Swallowtail Lane (2,265 L.F.), Newberry Circle (1,050 L.F.), Twickenham Road (7,541 L.F.), Gray Road (3,252 L.F.), Big Estate Circle (2,042 L.F.), Jenkins Road (635 L.F.), Stroban Road (2,774 L.F.), Horace Dawson Lane (8,931 L.F.), Dean Hall Road (348 L.F.), Pap-Kee Lane (1,394 L.F.), River Oak Road (2,707 L.F.) and Jasmine Hall Road (5,529 L.F.).

2015-303 / Sheldon Bush Hog	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$40.92	\$0.00	\$0.00	\$0.00	\$26.46	\$67.38
ODBH / Outfall ditch - bushhogged	748.0	\$15,303.94	\$14,437.22	\$2,812.00	\$0.00	\$5,470.08	\$38,023.24
ONJV / Onsite Job Visit	1.0	\$33.18	\$3.62	\$9.60	\$0.00	\$24.47	\$70.87
PDBH / Ponds - bushhogged	6.0	\$134.10	\$54.86	\$53.61	\$0.00	\$86.67	\$329.24
<b>2015-303 / Sheldon Bush Hog Sub Total</b>	<b>757.0</b>	<b>\$15,512.14</b>	<b>\$14,495.70</b>	<b>\$2,875.20</b>	<b>\$0.00</b>	<b>\$5,607.68</b>	<b>\$38,490.73</b>
<b>Grand Total</b>	<b>757.0</b>	<b>\$15,512.14</b>	<b>\$14,495.70</b>	<b>\$2,875.20</b>	<b>\$0.00</b>	<b>\$5,607.68</b>	<b>\$38,490.73</b>

Before



During



After





# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Parkside Drive

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Repaired (1) catch basin lid and washout.

**Completion:** Jul-14

2015-501 / Parkside Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBLREP / Catch Basin Lid - Repaired	22.0	\$496.71	\$19.91	\$26.05	\$0.00	\$312.13	\$854.79
ONJV / Onsite Job Visit	8.0	\$238.72	\$28.96	\$16.00	\$0.00	\$145.84	\$429.52
RPWO / Repaired Washout	12.0	\$274.72	\$14.48	\$28.80	\$0.00	\$169.32	\$487.32
<b>2015-501 / Parkside Drive Sub Total</b>	<b>42.5</b>	<b>\$1,020.38</b>	<b>\$63.35</b>	<b>\$70.85</b>	<b>\$0.00</b>	<b>\$633.90</b>	<b>\$1,788.48</b>
<b>Grand Total</b>	<b>42.5</b>	<b>\$1,020.38</b>	<b>\$63.35</b>	<b>\$70.85</b>	<b>\$0.00</b>	<b>\$633.90</b>	<b>\$1,788.48</b>

Before



During



After



**Project: Parkside Drive**

**Activity: Routine/  
Preventive  
Maintenance**















**Project #:  
2015-501**

**Township:  
Bluffton**

**Completed:  
July 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Repaired (1) catch basin lid and washout.



1 inch = 77 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/8/14

File:C:/sethdata/projects/projectmaps/Parkside Dr 2015-501



# Beaufort County Public Works Stormwater Infrastructure Project Summary

**Project Summary:** Iron Gate Subdivision

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Completion:** Jul-14

Project improved 130 L.F. of drainage system. Cleaned out 130 L.F. of channel.

2015-509 / Iron Gate Subdivision	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	4.0	\$86.52	\$42.80	\$3.27	\$0.00	\$48.84	\$181.43
ODCO / Outfall ditch - cleaned out	9.0	\$184.10	\$50.62	\$13.08	\$0.00	\$82.95	\$330.75
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$3.20	\$0.00	\$36.46	\$106.58
<b>2015-509 / Iron Gate Subdivision Sub Total</b>	<b>15.5</b>	<b>\$340.53</b>	<b>\$100.66</b>	<b>\$19.55</b>	<b>\$0.00</b>	<b>\$174.87</b>	<b>\$635.61</b>
<b>Grand Total</b>	<b>15.5</b>	<b>\$340.53</b>	<b>\$100.66</b>	<b>\$19.55</b>	<b>\$0.00</b>	<b>\$174.87</b>	<b>\$635.61</b>

Before



During



After





**Project: Iron Gate Drive**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2015-509**

**Township: Port Royal Island**

**Completed: July 2014**



**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



**1 inch = 74 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 9/3/14

File: C:/sethdata/projects/projectmaps/Iron Gate Dr 2015-509



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Pin Oak Street/Able Street

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Repaired curb inlet and sinkholes.

**Completion:** Jul-14

2015-510 / Pin Oak Street/Able Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	19.0	\$410.97	\$203.30	\$166.96	\$0.00	\$260.72	\$1,041.95
ONJV / Onsite Job Visit	14.0	\$432.19	\$50.68	\$48.00	\$0.00	\$270.95	\$801.82
RCI / Repaired Curb Inlet	42.0	\$945.98	\$63.69	\$132.73	\$0.00	\$598.45	\$1,740.85
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
<b>2015-510 / Pin Oak Street/Able Street Sub Total</b>	<b>76.0</b>	<b>\$1,809.60</b>	<b>\$317.67</b>	<b>\$347.69</b>	<b>\$0.00</b>	<b>\$1,143.35</b>	<b>\$3,618.30</b>
<b>Grand Total</b>	<b>76.0</b>	<b>\$1,809.60</b>	<b>\$317.67</b>	<b>\$347.69</b>	<b>\$0.00</b>	<b>\$1,143.35</b>	<b>\$3,618.30</b>

Before



During



After



**Project: Pin Oak Street and Able Street**

**Activity: Routine/ Preventive Maintenance**















**Project #: 2015-510**

**Township: Bluffton**

**Completed: July 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe

Repaired curb inlet and sinkhole.

Repaired sinkhole.



1 inch = 142 feet

Prepared By: BC Stormwater Management Utility

Date Print: 9/18/14

File:C:/sethdata/projects/projectmaps/Pin Oak St 2015-510



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Red Cedar Street

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**  
Repaired (2) sinkholes.

**Completion:** Aug-14

2015-514 / Red Cedar Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
PRRECON / Project Reconnaissance	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
RPWO / Repaired Washout	21.0	\$437.85	\$54.54	\$86.88	\$0.00	\$279.02	\$858.29
SD / Soft Digging	10.0	\$223.38	\$110.80	\$33.80	\$0.00	\$149.55	\$517.53
<b>2015-514 / Red Cedar Street Sub Total</b>	<b>33.5</b>	<b>\$737.82</b>	<b>\$172.58</b>	<b>\$129.77</b>	<b>\$0.00</b>	<b>\$484.13</b>	<b>\$1,524.29</b>
<b>Grand Total</b>	<b>33.5</b>	<b>\$737.82</b>	<b>\$172.58</b>	<b>\$129.77</b>	<b>\$0.00</b>	<b>\$484.13</b>	<b>\$1,524.29</b>

Before



After

















**Project: Red Cedar Street**

**Activity: Routine/  
Preventive  
Maintenance**

**Project #:  
2015-514**

**Township:  
Bluffton**

**Completed:  
August 2014**

Legend	
TYPE	
	River
	Creek/Stream
	River/Creek/Marsh BANK
	Channel (fka Outfall)
	Channel Pipe
	Lateral
	Lateral Pipe
	Roadside
	Roadside Pipe
	Road Pipe
	Crossline Pipe
	Driveway Pipe
	Access Pipe
	Bleeder Pipe



Repaired (2) washouts.



1 inch = 120 feet



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Hanna Avenue

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Project improved 437 L.F. of drainage system. Cleaned out 437 L.F. of roadside ditch.

**Completion:** Aug-14

2015-517 / Hanna Avenue	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
HAUL / Hauling	10.0	\$239.80	\$107.00	\$52.48	\$0.00	\$164.70	\$563.98
ONJV / Onsite Job Visit	5.0	\$165.90	\$18.10	\$18.18	\$0.00	\$122.35	\$324.53
PRRECON / Project Reconnaissance	3.0	\$99.54	\$10.86	\$9.09	\$0.00	\$73.41	\$192.90
RSDCL / Roadside Ditch - Cleanout	24.0	\$537.92	\$120.19	\$58.65	\$0.00	\$263.44	\$980.20
<b>2015-517 / Hanna Avenue</b>	<b>42.5</b>	<b>\$1,053.39</b>	<b>\$256.15</b>	<b>\$138.40</b>	<b>\$0.00</b>	<b>\$630.52</b>	<b>\$2,078.45</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>42.5</b>	<b>\$1,053.39</b>	<b>\$256.15</b>	<b>\$138.40</b>	<b>\$0.00</b>	<b>\$630.52</b>	<b>\$2,078.45</b>

Before



During



After





**Project: Hanna Avenue**

**Activity: Routine/ Preventive Maintenance**

**Project #: 2015-517**

**Township: Port Royal Island**

**Completed: August 2014**

Cleaned out 437 LF of roadside ditch.

**Legend**

**TYPE**

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel (fka Outfall)
- Channel Pipe
- Lateral
- Lateral Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Access Pipe
- Bleeder Pipe



1 inch = 136 feet



# Beaufort County Public Works

## Stormwater Infrastructure

### Project Summary

**Project Summary:** Holly Hall Road

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Repaired washout. Installed rip rap for erosion control.

**Completion:** Aug-14

2015-521 / Holly Hall Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	5.0	\$102.30	\$0.00	\$0.00	\$0.00	\$66.15	\$168.45
HAUL / Hauling	4.0	\$86.52	\$42.80	\$434.97	\$0.00	\$57.68	\$621.97
ONJV / Onsite Job Visit	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
RPWO / Repaired Washout	24.0	\$502.70	\$58.20	\$44.44	\$0.00	\$328.09	\$933.43
<b>2015-521 / Holly Hall Road Sub Total</b>	<b>35.0</b>	<b>\$757.88</b>	<b>\$108.24</b>	<b>\$488.49</b>	<b>\$0.00</b>	<b>\$500.86</b>	<b>\$1,855.47</b>
<b>Grand Total</b>	<b>35.0</b>	<b>\$757.88</b>	<b>\$108.24</b>	<b>\$488.49</b>	<b>\$0.00</b>	<b>\$500.86</b>	<b>\$1,855.47</b>

During



After





**Project: Holly Hall Road**

**Activity: Routine/ Preventive Maintenance**















**Project #: 2015-521**

**Township: Lady's Island**

**Completed: August 2014**

**Legend**

**TYPE**

-  River
-  Creek/Stream
-  River/Creek/Marsh BANK
-  Channel (fka Outfall)
-  Channel Pipe
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 279 feet



BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD  
AGENDA

Wednesday, November 5, 2014  
2:00 p.m.

Beaufort Industrial Village, Building 3 Conference Room  
104 Industrial Village Road, Beaufort  
843.255.2805

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

1. CALL TO ORDER – 2:00 p.m.
  - A. Approval of Agenda
  - B. Approval of Minutes – October 1, 2014 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
  - A. Special Presentation – Final MS4 Permit Application – Eric Larson, P.E. ([backup](#))
  - B. Utility Update – Eric Larson, P.E. ([backup](#))
  - C. MS4 Update - Eric Larson, P.E. ([backup](#))
  - D. Monitoring Update – Eric Larson, P.E. ([backup](#))
  - E. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
  - F. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
  - G. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
  - H. Regional Coordination – Eric Larson, P.E. ([backup](#))
  - I. Financial Report – ([backup](#))
  - J. Maintenance Projects Report – Eddie Bellamy ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
  - A. December 3, 2014 ([backup](#))
9. ADJOURNMENT

