



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD
AGENDA

Wednesday, January 7, 2015
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 – November 5, 2014 ([backup](#)) and December 3, 2014 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. MS4 Update - Eric Larson, P.E. ([backup](#))
 - C. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - E. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - F. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - G. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - H. Financial Report – ([backup](#))
 - I. Maintenance Projects Report – Eddie Bellamy ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - Financials
 - A. Fiscal Year 2014 Actuals – Carolyn Wallace ([backup](#))
 - B. Preview of January 22nd Workshop - Eric Larson, P.E. and Tony Maglione P.E. ([backup](#))
 - C. Status of 2014 Goals ([backup](#)) and Review of 2015 Goals – Eric Larson, P.E. ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. February 4, 2015 ([backup](#))
9. ADJOURNMENT



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

December 3, 2014 at 2:00 p.m. in Beaufort Industrial Village Building #3 Conference Room
Draft as of December 15, 2014

Board Members

Present	Absent
Allyn Schneider	Don Smith
Patrick Mitchell	William Bruggeman
James Fargher	

Ex-Officio Members

Present	Absent
Andy Kinghorn	Van Willis
Kimberly Jones	
Scott Liggett	

Beaufort County Staff

Eric Larson
Eddie Bellamy
Carolyn Wallace
Kevin Pitts
Alan Eisenman

Visitors

Cynthia Bensch, Beaufort County Council
Tony Maglione, ATM
Denise Parsick, Bft Soil & Water Conservation Dist
Reed Armstrong, Coastal Conservation League
Jeremy Ritchie, Town of Bluffton
Marc Feinberg, Citizen

1. Meeting called to order – Allyn Schneider

- A. Agenda – No quorum to approve the agenda.
- B. November 5, 2014 Minutes – No quorum to approve the minutes.

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. Tony Maglione provided a presentation on the Town of Port Royal’s stormwater program, their most recent capital improvements, and “what’s next” for the town’s stormwater program ([please see attachment](#)).
- B. **Financial Report** – Alan Eisenman
Mr. Eisenman provided a presentation on the stormwater October financials ([please see attachment](#)). Revenue is lower compared to last year. He thinks this is because the Treasurer’s Office had fewer properties up for tax sale this year, indicating property owners’ are paying their taxes in a more timely manner.
He also mentioned that the Finance Department anticipates the audit of the FY 2014 financials to be finalized by the end of the month.
- C. **Utility Update** – Eric Larson
County’s Reorganization - The County recently went through a staff reorganization ([please see attachment](#)). Engineering has been reorganized into Engineering, Infrastructure, and Land Development. Stormwater has been placed in the Environmental Engineering Division along with Public Works, Planning, and Zoning. Mr. Larson has been promoted to Director of Environmental Engineering. His duties as Stormwater Manager will not change.
Board Vacancies – The County Council had first reading for appointments to the two vacant seats in District 6 and District 9. Second reading is expected at the December 8th County Council meeting. Mr. Larson introduced Mr. Marc Feinberg, the candidate for District 9.

Certification – Congratulations to Mr. Kevin Pitts in becoming a Certified Erosion Prevention and Sediment Control Inspector (CEPSCI).

Training Opportunity - The US EPA training on Post Construction Best Management Practices is scheduled for December 12th at the Sonesta Resort on Hilton Head Island ([please see attachment](#)).

D. MS4 Update – Eric Larson

MS4 Permit Application – The County submitted its MS4 Permit application on November 19th.

Stormwater Workshop for County Council – The half day workshop for the County Council will be held January 22, 2015 from 12:30pm to 5:00pm at the County Council Chambers in the Administration Building on Ribaut Road. The board members and public are invited to attend. The county has hired a consultant to help prepare for the half-day intensive workshop. The board will get a preview of the presentation at the January board meeting.

E. Monitoring Update – Eric Larson

USCB Lab – In his report, Mr. Larson provided a copy of the detail update from Dr. Warren and staff on the status of the lab certification. Mr. Larson recently met with MCAS staff on their monitoring needs for their Hazardous Waste Permits and the USCB lab staff provided what the differences are in testing requirements between the Clean Water Act Methodology and the Hazardous Waste Methodology.

F. Stormwater Implementation Committee (SWIC) Report – Eric Larson

Public Education – The SWIC is beginning discussions with SC Sea Grant to host a Stormwater Pond Conference in Beaufort County. They have helped Charleston do a pond conference every two years. Ms. Denise Parsick said they are applying for a grant to possibly help with the funding.

G. Stormwater Related Projects – Eric Larson

US 278 Retrofit Ponds – Bids were received and contractors selected by staff for the hauling and clearing/grubbing contracts. Recommendations for the bid award will go to County Council's Natural Resources Committee on December 8th ([please see attachment](#)).

County Administration Complex Parking Lot Retrofit – Progress has been swift and the project has had no major issues.

H. Professional Contracts Report – Eric Larson

Financial Analysis of the Stormwater Utility – The board will be provided a preview of the findings at the January board meeting and deliverables due at the January 22nd workshop.

I. Regional Coordination - Eric Larson

During this last month, Mr. Larson has had separate meetings with SCDOT, MCAS, and USCB, discussing their stormwater needs and how they can coordinate their efforts.

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

5. Unfinished Business

6. New Business

7. Public Comment(s) – Ms. Kim Jones said neither she nor Mr. Jeremy Ritchie will be able to attend the January meeting.

8. Next Meeting Agenda – No quorum to approve the agenda.

9. Meeting Adjourned.



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



December 3, 2014

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. On November 17, 2014, Mr. Gary Kubic, County Administrator, announced a county staff reorganization. [The new chart is attached.](#) Engineering, Infrastructure, and Planning Divisions have been consolidated into an Engineering, Infrastructure, and Land Development "Group" with three Divisions. Stormwater has been placed in the Environmental Engineering Division along with Public Works, Planning, and Zoning. Eric W Larson has been promoted to Director of Environmental Engineering. His duties as Stormwater Manager do not change.
2. Board Vacancies – The County Council had first reading for appointments to the two vacant seats in District 6 and District 9. Larry Meisner was selected for District 6 and Marc Feinberg was selected for District 9. Final action is expected at the December 8th County Council meeting.
3. Eric Larson, Danny Polk, and Kevin Pitts attended the quarterly SCASM meeting in Columbia. The meeting's training topic was TMDL monitoring.
4. Kevin Pitts received his Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) certification this month.
5. The Utility sponsored the monthly luncheon of the Beaufort Jasper Utility Coordinator Committee on December 2nd. The department's involvement in this group is beneficial in building relationships and preventing costly utility damage during maintenance activities.
6. The US EPA training on Post Construction Best Management Practices is scheduled for December 12, 2014 at the Sonesta Resort on Hilton Head Island. [The attached flyer](#) can be used to register. There is no cost.
7. Carolyn Wallace and Eric Larson will be conducting audits of utility fee credit applicants and on-lot volume control exemption applicants in December. These are routine and will assure the required stormwater measures in place are still applicable to the credits and exemptions.
8. Eric Larson held a pre-application meeting with Moss Creek Development for a Utility Fee Credit.

MS4 Update

1. MS4 Permit Application – The County Council approved the permit application at the November 10, 2014 meeting. The permit was submitted on November 19, 2014. DHEC should respond within 90 days. The application has been posted to the Stormwater webpage at the following link:
[http://www.bcgov.net/departments/Engineering-and-Infrastructure/stormwater-management/documents/Whats%20New/FINAL%20Beaufort%20County%20SMS4%20NOI Nov 19 14.pdf](http://www.bcgov.net/departments/Engineering-and-Infrastructure/stormwater-management/documents/Whats%20New/FINAL%20Beaufort%20County%20SMS4%20NOI%20Nov%2019%2014.pdf)

2. Stormwater Workshop for County Council – The half day workshop for the County Council will be held January 22, 2015 from 12:30pm to 5pm at the County Council Chambers in the Administration Building on Ribaut Road. The Board and public are invited to attend. The agenda will include a summary of the background of the MS4 program regulations, a presentation of the current planning activities the Utility is performing, a look at needs in future years, and a review of the stormwater department's funding needs. At the end of the workshop, the staff hopes to receive feedback from the Council so that the program can implement the recommendations from the meeting.

Monitoring Update

1. USCB Lab – Dr. Warren and staff have provided us with the following update:
The certifications the lab applied for fall under the Clean Water Act Methodology since they are testing surface waters for us. I asked them about the needs of MCAS. Hazardous waste falls under the Hazardous Waste Methodology which has different methods than the Clean Water Act, therefore a different certification for those required methods. Currently, the lab has applications in for Clean Water Act Methodology for:
Temperature SM 2550 B-2010 (required for Enterolert)
Enterococci (MPN) Enterolert
***E.Coli* (MPN) SM 9223B-2004**
During review of the application, Bennie Cockerel, SCDHEC certification officer, has asked the lab to also submit for “in-situ” parameter certifications. These include the following:
Dissolved Oxygen (DO) SM 4500-O G-2011
Hydrogen-Ion Concentration (pH) SM 4500-H+ B-2011
Specific Conductance SM 2510 B-2011
Turbidity SM 2130 B-2011
The initial certification application was submitted to SCDHEC Lab Certification on 9/11/2014, in which SCDHEC has 45 days to respond to applicants. Benny Cockerel responded to the lab on 10/24/2014 asking us to submit for the “in-situ” parameters. This process requires the same criteria as the initial certification; PT's, initial start-up data, SOP's, QAM. Since 10/24/2014, the lab has sent their instrument for an upgrade to analyze for turbidity “in-situ”. They also have been working on field logbooks, SOP's and have ordered the PT's for the “in-situ” parameters. Since the start-up data requires PT results, the application for “in-situ” parameters can only be submitted after the PT study closes, which is 12/29/14. Also, please understand that certification is also being sought for all of the analytes of interest to the County (I think the County has an interest in approximately 25). It is a long process, but one the lab has initiated and is committed to.
2. Monitoring data – Kevin Pitts is in the process of building a Microsoft Access database of our past data. This will help with trend analysis as well as organize the data so that we can access it quickly.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC met November 12th and reviewed the draft NOI applications for the MS4 permits for the County and the Town of Hilton Head Island. In general, the NOIs are similar and meet minimum permit requirements.

2. The SWIC hosted a webinar on Stormwater Pond retrofits being presented by the Center for Watershed Protection. It was held November 12th at the Bluffton Town Hall. It was well attended by over 30 professionals in the development community.
3. Public Involvement – The SWIC is working with a local Boy Scout on a potential Eagle Scout project to perform storm drain markings. We will provide more information in the future.
4. Public Education – The SWIC is beginning discussions with SC Sea Grant to host a Stormwater Pond Conference in Beaufort County in 2015. These have been successfully done in the Charleston area for several years.

Stormwater Related Projects

1. US 278 Retrofit Ponds (\$356,000 budget) – The project is moving forward. Bids were solicited for hauling and clearing/grubbing and were due Nov. 14th. Recommendations for the bid award will go to County Council on December 8th. Clearing should begin late December or early January.
2. County Admin. Complex Retrofit Project (\$327,768 budget) – Construction on the project began November 5th. Progress has been swift and the project will likely be completed ahead of schedule.
3. Turtle Lane Paving on Lady's Island – Engineering has begun a project to pave Turtle Lane. There is an existing localized flooding problem in the area we are hoping to correct as part of the project. We are currently seeking a proposal from the design-build consultant to address the design.
4. Bluffton Parkway Flyover Project – Eric Larson is advising the design consultant and contractor on means to address adjacent localized drainage problems as part of the roadway storm sewer system construction.

Professional Contracts Report

1. Financial Analysis of the Stormwater Utility (\$28,791 budget) – ATM has been provided a task order to begin a review of the fee structure for the Utility. A draft report is scheduled for the January Board meeting. Findings will be presented to the County Council in January workshop.

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 – Nothing new to report. (Kim Jones may also report).
3. Salinity Study (\$25,000 budget – county portion) - On going. A final report is expected in the upcoming months.
4. Sea Level Rise and Future Planning – On going. The Sea Grant staff is continuing work on the final report. The report will likely be presented to the Planning Commission and Natural Resources Committee at a future date.
5. Drainage Issue on H.E. McCracken Circle in Bluffton – On going. Stormwater staff is evaluating the field data and defining possible actions.

6. SCDOT Stormwater Maintenance – Beaufort County staff has engaged the SCDOT staff in a conversation to discuss maintenance responsibility for the public infrastructure. In the past, there has been some confusion and disagreement on who is required to maintain “outfall” ditches that drain State Right-of-Way. The SCDOT is covered by a MS4 permit and with the pending MS4 permit for the County, this issue needs resolution. There will be future updates as needed.
7. Rob McFee and Eric Larson attended a meeting with DHEC and MCAS staff to discuss the pending renewal of the MCAS hazardous waste handling permit. While not directly related to stormwater quality, the same staff from both DHEC and MCAS also have involvement with other environmental programs that could potentially effect surface and groundwater. The meeting was for information only, but did open discussion on a variety of on-going topics related to our stormwater program.
8. Eric Larson met with facilities staff from USCB to discuss a potential update to their stormwater master plan to address volume control.

Citizens of Beaufort County, South Carolina

Clerk to Council
S. Rainey

Boards & Commissions with Staff Liaisons

- Accommodations Tax (2% State) Board • Airports Board
- Alcohol & Drug Abuse Board
- Construction Adjustments & Appeals Board
- Design Review Board
- Disabilities & Special Needs Board
- Historic Preservation Review Board • Library Board *
- Parks & Leisure Services Board • Planning Commission
- Rural & Critical Lands Preservation Board
- Solid Waste & Recycling Board
- Southern Beaufort Co. Corridor Beautification Board
- Stormwater Management Utility Board
- Tax Equalization Board • Zoning Board of Appeals

* Libraries

Beaufort County Council

Beaufort County Administrator
G. Kubic, JD

Deputy County Administrator
J. Gruber, JD, MPA
"Operations"

County Attorney
Legal Services
FOIA Services

Employee Services
Benefits Services
Employee Time Mgmt.
Human Resources
Recruiting Services

Auditor
Clerk of Court
Coroner
Probate Judge
Sheriff
Solicitor
Treasurer

Legislative Delegation

Board of Elections & Voter Registration
Magistrates
Master-in-Equity
Veterans Affairs Officer

Assistant County Administrator
M. Spells, MPA
"Civic Engagement & Outreach"

Broadcast Services

Communications & Accountability
Compliance
Website Design & Content

Records Management

Community Services
Alcohol & Drug Abuse
COSY/Human Services Alliance
Disabilities & Special Needs

Information Technology

Mapping & Applications
Applications Support
Geographical Info. Systems

Systems Management
Help Desk Support
Info Services
Systems Support

Assistant County Administrator
A. Holland, CPA
"Finance"

Assessor

Business License

Fiscal Operations & Payroll

Purchasing

Register of Deeds

Risk Management

Assistant County Administrator
P. Foot, CJM
"Public Safety"

Animal Services

Building Inspections

Code Enforcement

Detention Center

Emergency Medical Services

Mosquito Control

Parks & Leisure Services

Engineering, Infrastructure & Land Development

Environmental Engineering
E. Larson, P.E., AICP, CFM, CPSWQ

Planning

Public Works
Disaster Recovery
General Support
Roads & Drainage
Solid Waste & Recycling
Stormwater

Zoning

Facilities & Construction Engineering
J.R. McFee, P.E.

Engineering
Construction Management
Capital Improvements Projects
Right of Way Management

Facility Management
Facilities Maintenance
Grounds Maintenance

Transportation Engineering
C. Kinton, P.E.

Airports

Traffic Engineering



November 2014

- Elected Officials
- Appointed Officials
- Operations Staff
- Administrative Staff
- County Divisions
- County Departments
- State Oversight
- Indirect Authority
- Direct Authority

EPA | Post-Construction Region 4 | Workshop South Carolina



Hilton Head Island

Date: December 12, 2014

Time: 8:30 am to 4:00 pm

Location: Sonesta Resort Hilton Head Island
Shipyard Plantation
130 Shipyard Drive
Hilton Head Island, SC 29928
www.sonesta.com/hiltonhead
(843) 842-2400

EPA Region 4 is hosting a one-day workshop in Hilton Head on December 12, 2014 to discuss the use of green infrastructure and low impact development controls to manage post-construction stormwater runoff to maintain pre-development runoff conditions. The workshop will explain site design procedures, present examples and case studies, and discuss the costs and benefits of green infrastructure.

The workshop is open to municipalities, State representatives, developers, and other stormwater practitioners involved in the municipal stormwater program. The workshop will be at no cost, but attendees need to register using the following website:

<http://water.epa.gov/polwaste/npdes/NPDES-Training-Courses-and-Workshops.cfm>

Hotel Rooms: Rooms are available for \$99/night plus taxes. The hotel has waived the resort facilities fee for workshop attendees.

MUNICIPAL STORMWATER PROGRAM



For more information, please contact
Mike Mitchell, U.S. EPA Region 4
at 404-562-9303 or via e-mail at Mitchell.michael@epa.gov



Stormwater Program Update

Most Recent Capital Improvements

Cypress Wetlands Stormwater Management System

History

- Contained three heavily impacted freshwater wetland system used for the discharge of stormwater
- No outlet to release or control water levels
- Overtopped and flooded streets on a number of occasions
- Contained a non-functioning rookery and some public access
- Heavily overgrown with invasive species

Project Goals

- Control flooding
- Create Regional BMP
- Reconnect wetland systems
- Restore wetlands
- Restore rookery
- Provide public access and amenities



Cypress Wetlands Stormwater Management System

Six Year Program to Create a Integrated Stormwater Management System

- Modeled the entire watershed and designed flooding control system
- Undertook program to restore wetland vegetation, open water areas, remove invasive species and restore rookery
- Designed, permitted and constructed loop trail system, amphitheater, over 800 feet of elevated walkways and overlooks
- Developed walking maps and public education materials on Wetlands and Stormwater
- Funded from SW Fund & TIF



Police Station Parking Lot Improvements

Demonstration Project to expand building, reduce volume and provide SW capture and treatment

- Reconstruction of existing asphalt parking lot
- Conversion to pervious paver system
- Capture, storage and treatment of existing and expanded building footprint run off
- Sub system of the larger adjacent Cypress Wetlands SW Management System



On Going Maintenance

- Stormwater System Cleaning – Paris Ave. System, Battery Creek Condos, Hillside Drive and Ribaut Road (SCDOT system)
- Stormwater System Repairs – Hillside Drive drainage system improvements, 11th Ave. Stormwater System Repairs, Marina Drive outfall (joint project with County), 13th street repairs and rerouting
- Outfalls - Cleaned, Repaired all outfalls as needed
- Stormwater System Mapping – All outfalls and continuation of field location of existing drainage systems
- Street Sweeping – two week schedule – Bell Bridge, Ribaut Road, Paris Ave. (weekly)

Codes & Review

- Recently adopted Form Based Code that includes new stormwater BMP requirements
- Town uses Beaufort County Volume Control Ordinance as its own for all new development and redevelopment per IGA
- Cypress Wetlands “Stormwater Allocation” program
- Town reviews and approves all stormwater projects for new development within Port Royal
- Town does periodic site visits during stormwater system construction to check compliance
- Town participates in final review and engineer’s acceptance process
- Town will hold CO or development permits as necessary to insure compliance to stormwater regulations

Financial Status & Fees

SW Fund Balance (Nov. 2013)	\$511,739.00
Nov. 2013 to 2014 Expenditures	\$414,069.25
Current SW Fund Balance (as of Nov. 2014)	\$97,670.00
Current Fees	\$50/year per ERU

What is Next?

- Prepare for MS4
 - Expand current Stormwater Regulations
 - Modify Current Stormwater Ordinance
 - Continued cooperation with County on MCM #1 & #2
 - Continue system mapping program
- Possible new capital project to increase the watershed of the Cypress Wetland Stormwater Management System
- Integration of SCSPA property into current Stormwater Program



Question and Answers



Stormwater Management Utility Meeting Board

STORMWATER FINANCIALS

ITEM 04D [BACKUP](#)

October Unaudited Financials



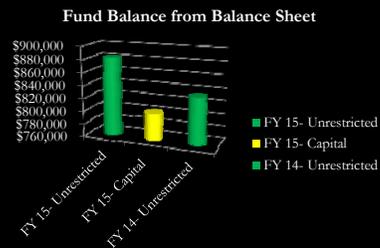
Actual FY15 revenues are \$144,000 less or 65% than actual FY 14 revenues

October Unaudited Financials



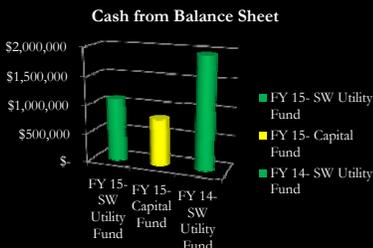
Actual October FY15 expenses are at 35% of budget for FY 15

October Unaudited Financials



FY15 Fund Balances decreased by \$52,000 or 3%

October Unaudited Financials



FY15 Cash Balances decreased by \$37,000 or 2%



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

November 25, 2014

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

October 2014 Stormwater Financials Narrative and Analysis

Janet Andrews
Accounting Supervisor
843.255.2290
jandrews@bcgov.net

Since October is the 4th month of the fiscal year, one might expect expenses to be at 33% of budget based on consistent and recurring expenses and Stormwater is currently slightly over this budget level at 35%. However, Stormwater expenses have decreased by about \$23,000 and this can be mostly attributed to fewer supplies expenses compared to last year.

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

Stormwater revenues are about \$144,000 lower than October 2013, but this is probably due to more taxpayers paying their property taxes on time and therefore fewer properties available for bidding during the Treasurer's Office October tax sale. Since Stormwater's main source of revenues is from Stormwater Utility fees in property taxes, it should have a better idea of revenue when most of the 2014 tax bills have been paid by the middle of January 2015.

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 decreased by about \$37,000 compared to last year, along with a decrease in fund balance by about \$52,000.

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

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
October 31, 2014 & October 31, 2013

	Stormwater Utility Fund October 31, 2014	Capital Improvements Fund October 31, 2014	Stormwater Utility Fund October 31, 2013
<u>ASSETS</u>			
Current Assets			
Cash and Investments with Trustee	\$ 1,093,602	\$ 801,368	\$ 1,932,391
Receivables, Net	9,049	-	38,099
Inventories	113,850	-	92,511
Total Current Assets	<u>1,216,501</u>	<u>801,368</u>	<u>2,063,001</u>
Capital Assets	2,894,839	-	2,800,950
Accumulated Depreciation	<u>(2,109,674)</u>	<u>-</u>	<u>(2,021,732)</u>
	785,165	-	779,218
Total Assets	<u>\$ 2,001,666</u>	<u>\$ 801,368</u>	<u>\$ 2,842,219</u>
<u>LIABILITIES</u>			
Liabilities			
Account Payable	72,086	-	189,095
Accrued Payroll	53,315	-	77,839
Accrued Compensated Absences	6,247	-	4,470
Total Current Liabilities	<u>131,648</u>	<u>-</u>	<u>271,404</u>
Long Term Liabilities			
Accrued Compensated Absences	67,554	-	57,156
Net Other Postemployment Benefits Obligation	<u>920,444</u>	<u>-</u>	<u>777,849</u>
Total Long Term Liabilities	<u>987,998</u>	<u>-</u>	<u>835,005</u>
Total Liabilities	1,119,646	-	1,106,409
<u>NET ASSETS</u>			
Invested in Capital Assets, Net of Related Debt	785,165	-	779,218
Reserved for Encumbrances	217,156	307,587	123,979
Reserved for Capital Improvements	-	493,781	-
Unrestricted	<u>(120,301)</u>	<u>-</u>	<u>832,613</u>
Total Net Assets	<u>\$ 882,020</u>	<u>\$ 801,368</u>	<u>\$ 1,735,810</u>

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

	Budget FY 2015	October 31, 2014	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,132,205	\$ 77,405	(3,054,800)	2%
Stormwater Utility Project Billings	44,189	798	(43,391)	2%
Total Operating Revenues	<u>3,176,394</u>	<u>78,203</u>	<u>(3,098,191)</u>	<u>2%</u>
Operating Expenses				
Personnel	1,883,440	717,473	(1,165,967)	38%
Purchased Services	684,864	244,757	(440,107)	36%
Supplies	350,509	51,841	(298,668)	15%
Depreciation	182,523	60,844	(121,679)	33%
Total Operating Expenses	<u>3,101,336</u>	<u>1,074,915</u>	<u>(2,026,421)</u>	<u>35%</u>
Operating Income (Loss)	75,058	(996,712)	(1,071,770)	-1328%
Non-Operating Revenues (Expenses)				
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	-	12,365	12,365	100%
Change in Net Assets	78,013	(1,009,077)	(1,087,090)	-1293%
Net Assets, Beginning	<u>1,891,097</u>	<u>1,891,097</u>		
Net Assets, Ending	<u>\$ 1,969,110</u>	<u>\$ 882,020</u>	(1,087,090)	45%

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

	Budget FY 2015	October 31, 2014	Budget to Actual	Percent of Budget
Transfers In from Stormwater Utility Fund				
Administration Complex Parking Lot Retrofit	\$ -	\$ -	-	0%
Okatie East Retrofit	-	-	-	0%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	-	-	0%
Buckingham Plantation Retrofit	-	12,365	12,365	100%
Upper Battery Creek Retrofit	-	-	-	0%
Total Transfers In	<u>-</u>	<u>12,365</u>	<u>12,365</u>	<u>0%</u>
Capital Improvement Expenses				
Administration Complex Parking Lot Retrofit	-	360	360	100%
Okatie East Retrofit	-	1,458	1,458	100%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	12,938	12,938	100%
Buckingham Plantation Retrofit	-	-	-	0%
Upper Battery Creek Retrofit	-	4,634	4,634	100%
Total Operating Expenses	<u>-</u>	<u>19,390</u>	<u>19,390</u>	<u>100%</u>
Change in Net Assets by Project				
Administration Complex Parking Lot Retrofit		(360)	(360)	
Okatie East Retrofit		(1,458)	(1,458)	
Highway 278 Retrofit		-	-	
Okatie West Retrofit		(12,938)	(12,938)	
Buckingham Plantation Retrofit		12,365	12,365	
Upper Battery Creek Retrofit		(4,634)	(4,634)	
Total Change in Net Assets by Project		<u>(7,025)</u>	<u>(7,025)</u>	
Net Assets, Beginning				
Administration Complex Parking Lot Retrofit		327,169		
Okatie East Retrofit		40,892		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		100,000		
Buckingham Plantation Retrofit		-		
Upper Battery Creek Retrofit		132,610		
Total Net Assets, Beginning		<u>808,393</u>		
Net Assets, Ending				
Administration Complex Parking Lot Retrofit		326,809		
Okatie East Retrofit		39,434		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		87,062		
Buckingham Plantation Retrofit		12,365		
Upper Battery Creek Retrofit		127,976		
Total Net Assets, Ending	<u>\$ -</u>	<u>\$ 801,368</u>		

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

	Budget FY 2014	October 31, 2013	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,475,000	\$ 211,395	(3,263,605)	6%
Stormwater Utility Project Billings	60,023	11,534	(48,489)	19%
Total Operating Revenues	<u>3,535,023</u>	<u>222,929</u>	<u>(3,312,094)</u>	6%
Operating Expenses				
Personnel	2,160,475	612,392	(1,548,083)	28%
Purchased Services	961,864	272,794	(689,070)	28%
Supplies	381,446	132,773	(248,673)	35%
Depreciation	242,119	80,708	(161,411)	33%
Total Operating Expenses	<u>3,745,904</u>	<u>1,098,667</u>	<u>(2,647,237)</u>	29%
Operating Income (Loss)	(210,881)	(875,738)	(664,857)	415%
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)	(906,851)	(702,892)	445%
Net Assets, Beginning	<u>2,642,661</u>	<u>2,642,661</u>		
Net Assets, Ending	<u>\$ 2,438,702</u>	<u>\$ 1,735,810</u>	(702,892)	71%



COUNTY COUNCIL OF BEAUFORT COUNTY
PURCHASING DEPARTMENT
106 Industrial Village Road, Building 2
Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

TO: Councilman Brian Flewelling, Chairman, Natural Resources Committee
FROM: Dave Thomas, CPPO, Purchasing Director
SUBJ: CONTRACT AWARD RECOMMENDATION FOR THE US 278 STORMWATER POND RETROFIT PROJECT – DIRT HAULING SERVICES
DATE: December 8, 2014

BACKGROUND: The project is part of a larger project to construct four (4) stormwater detention ponds along US 278 to capture and treat runoff from the roadway widening that occurred in 2013 – 2014. The ponds are to be constructed by the Beaufort County Stormwater Utility Infrastructure crews. In conjunction with this project, the excavated soil from the pond sites is being hauled and stockpiled at the Buckwalter Park soccer complex for a future project to construct additional soccer fields. **The scope of this contract is to provide hauling services only.**

Beaufort County advertised for bid submittals on this project on October 24, 2014. On November 14, 2014, Beaufort County received the following quotes for the referenced project.

BIDDERS:	<u>Total Quote</u>
The Lane Construction Corporation, Beaufort, SC	\$ 82.00 / truck / hour
Cleland Site Prep, Inc., Bluffton, SC	\$ 82.50 / truck / hour

Based on the contract specifications, the contractors quoted the hourly rate based on a minimum of six (6) trucks, each operating eight (8) hours per day for sixty (60) working days. Based on the low bidder, the contract amount would be an amount not to exceed \$236,160.

Funding for the four (4) ponds is cost shared among the Stormwater Utility Capital Fund and the US 278 widening project. The US 278 widening project has \$29,693 remaining in the fund and is prorated between this project and the associated Clearing and Grubbing project. The Buckwalter soccer field expansion project is funding 50% of the hauling costs to the soccer field site for stockpiling.

FUNDING:
50260013-51160, Stormwater Capital Improvement Fund - \$95,180
33402-54503, US 278 2012 STP Fund (1 cent tax fund) - \$22,270
26520011, Buckwalter Soccer Field Expansion (PALS Impact Fees) - \$118,080

FOR ACTION: Natural Resources Committee meeting December 8, 2014.

RECOMMENDATION: The Natural Resources Committee approve and recommend to County Council to award the project to The Lane Construction Company, Beaufort, SC in the amount not to exceed \$236,160 for the US 278 Stormwater Pond Retrofit project.

CC: Gary Kubic, County Administrator
Joshua Gruber, Deputy County Administrator
Alicia Holland, Chief Financial Officer
Eric Larson, Director of Environmental Engineering
Robert McFee, Director of Facilities and Construction Engineering
Scott Marshall, Parks and Leisure Services



COUNTY COUNCIL OF BEAUFORT COUNTY
PURCHASING DEPARTMENT
106 Industrial Village Road, Building 2
Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

TO: Councilman Brian Flewelling, Chairman, Natural Resources Committee
FROM: Dave Thomas, CPPO, Purchasing Director
SUBJ: CONTRACT AWARD RECOMMENDATION FOR THE US 278 STORMWATER POND RETROFIT PROJECT – SITE CLEARING AND GRUBBING
DATE: December 8, 2014

BACKGROUND: The project is part of a larger project to construct four (4) stormwater detention ponds along US 278 to capture and treat runoff from the roadway widening that occurred in 2013 – 2014. The ponds are to be constructed by the Beaufort County Stormwater Utility Infrastructure crews. In conjunction with this project, the excavated soil from the pond sites is being hauled and stockpiled at the Buckwalter Park soccer complex for a future project to construct additional soccer fields. **The scope of this contract is to provide clearing and grubbing only for the five sites to facilitate excavation and stockpiling.**

Beaufort County advertised for bid submittals on this project on October 24, 2014. On November 14, 2014, Beaufort County received the following quotes for the referenced project.

BIDDERS:	<u>Total Quote</u>
JS Construction Services Inc., Bluffton, SC	\$ 78,280.
Cleland Site Prep, Inc., Bluffton, SC	\$ 118,526.

Funding for the four (4) ponds is cost shared among the Stormwater Utility Capital Fund and the US 278 widening project. The US 278 widening project has \$29,693 remaining in the fund and is prorated between this project and the associated Hauling project. The Buckwalter soccer field expansion project is funding the clearing of the soccer field site for stockpiling.

FUNDING:
50260013-51160, Stormwater Capital Improvement Fund - \$73,680
33402-54503, US 278 2012 STP Fund (1 cent tax fund) - \$7,423
26520011, Buckwalter Soccer Field Expansion (PALS Impact Fees) - \$4,600

FOR ACTION: Natural Resources Committee meeting December 8, 2014.

RECOMMENDATION: The Natural Resources Committee approve and recommend to County Council to award the project to JS Construction Services Inc., Bluffton, SC in the amount not to exceed \$78,280 for the US 278 Stormwater Pond Retrofit project.

CC: Gary Kubic, County Administrator
Joshua Gruber, Deputy County Administrator
Alicia Holland, Chief Financial Officer
Eric Larson, Director of Environmental Engineering
Robert McFee, Director of Facilities and Construction Engineering
Scott Marshall, Parks and Leisure Services



MEMORANDUM

Date: November 5, 2014

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

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

1. This report will cover two major and five minor or routine projects. My staff may have been able to have a few more reports ready but I imposed an early cutoff date due to the Thanksgiving holidays and impending duck season. The Project Summary Reports are attached.

2. Major Projects:

- A. **George Williams Lane Channel #1**, completed in October in Sheldon, District 5; we bush hogged and cleaned out 3,215 feet of channel, reconstructed 3,215 feet of workshelf, installed 260 feet of channel pipe, one access pipe, one access gate, and 20 feet of roadside pipe. We also replaced one crossline pipe, replaced and extended one access pipe, jetted four crossline pipes, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$94,333**.
- B. **Milledge Village Road**, completed in September in the Burton area of Port Royal Island, District 6; we cleaned out two catch basins and 3,836 feet of roadside ditch, jetted out 31 driveway pipes, 304 feet of roadside pipe, hydroseeded for erosion control. Total cost of the project was **\$29,835**.

3. Minor or Routine Projects:

- A. **Wimbee Creek Road Channel #1**, completed in June in the Dale section of Sheldon Township, District 5; we cleaned out 735 feet of channel.
- B. **Judge Island Drive**, completed in September on Judge Island, District 7; we upsized one crossline pipe..
- C. **Pinewood Circle Channel # 1**, completed in September in the Burton area of Port Royal Island, District 6; we bush hogged 3,387 feet of channel and cleaned out 600 feet of channel.
- D. **Lady's Island Bush Hogging**, completed in October on Lady's Island, District 7; we bush hogged 29,796 feet of channel and workshelf. Total cost of the effort was **\$24,829** or **\$.83** per linear foot.
- E. **Shell Point Recreation Park**, completed in October on Port Royal Island, District 6; we jetted out one crossline pipe.



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: George Williams Lane Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Oct-14

Project improved 3,235 L.F. of drainage system. Bush hogged and cleaned out 3,215 L.F. of channel. Reconstructed 3,215 L.F. of workshelf. Installed 260 L.F. channel pipe, (1) access pipe, (1) access gate, 20 L.F. of roadside pipe for erosion prevention and rip rap for erosion control. Replaced (1) crossline pipe. Replaced and extended (1) access pipe. Jetted (4) crossline pipes. Hydroseeded for erosion control.

2014-611 / George Williams Lane Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Overhead Cost	Total Cost
AGI / Access Gate - Installed	30.0	\$675.00	\$195.24	\$212.28	\$0.00	\$301.20	\$1,383.72
APINS / Access pipe - installed	28.0	\$656.72	\$178.13	\$393.27	\$0.00	\$468.51	\$1,696.62
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
BKFILL / Back Fill	50.0	\$1,159.60	\$435.28	\$57.98	\$0.00	\$755.10	\$2,407.96
CLPINS / Crossline Pipe - Installed	50.0	\$1,114.78	\$430.24	\$194.43	\$0.00	\$715.35	\$2,454.80
CLPJT / Crossline Pipe - Jetted	38.0	\$840.70	\$217.54	\$85.49	\$0.00	\$484.89	\$1,628.62
DWR / Dewatered Road	12.0	\$267.42	\$51.46	\$30.55	\$0.00	\$169.74	\$519.17
HAUL / Hauling	364.8	\$8,207.30	\$3,909.62	\$15,452.04	\$0.00	\$5,487.86	\$33,056.82
HYDR / Hydroseeding	25.0	\$594.90	\$95.52	\$211.37	\$0.00	\$374.05	\$1,275.84
LM / Loading Materials	33.0	\$751.89	\$235.25	\$62.27	\$0.00	\$502.65	\$1,552.06
LR / Level Road	12.0	\$249.30	\$65.72	\$36.53	\$0.00	\$162.21	\$513.76
ODBH / Channel- bushhogged	31.0	\$698.70	\$180.84	\$295.46	\$0.00	\$492.01	\$1,667.01
ODCO / Channel - cleaned out	152.0	\$3,452.73	\$2,086.46	\$599.82	\$0.00	\$2,292.09	\$8,431.11
OFPI / Channel Pipe - Installation	140.0	\$3,099.83	\$801.32	\$3,865.67	\$0.00	\$1,978.10	\$9,744.91
ONJV / Onsite Job Visit	176.5	\$5,557.86	\$613.59	\$342.81	\$0.00	\$3,664.03	\$10,178.29
PP / Project Preparation	8.0	\$182.44	\$76.52	\$44.07	\$0.00	\$102.90	\$405.93
PRRECON / Project Reconnaissance	16.0	\$356.56	\$14.48	\$27.30	\$0.00	\$226.32	\$624.66
RB / Remove blockage from flowline	47.0	\$1,021.71	\$116.56	\$38.96	\$0.00	\$678.64	\$1,855.87
RRI / Rip Rap - Installed	50.0	\$1,108.12	\$333.52	\$196.45	\$0.00	\$718.17	\$2,356.26
RSPi / Roadside Pipe - Installed	36.5	\$821.31	\$436.32	\$165.51	\$0.00	\$520.86	\$1,944.00
SD / Soft Digging	10.0	\$223.38	\$110.80	\$21.53	\$0.00	\$149.55	\$505.26
STAGING / Staging Materials	83.0	\$1,832.34	\$123.02	\$32.30	\$0.00	\$1,038.99	\$3,026.65
UTLOC / Utility locates	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
WSBH / Workshelf - Bush Hogged	12.5	\$264.49	\$249.99	\$72.35	\$0.00	\$113.28	\$700.10
WSDR / Workshelf - Dressed	119.0	\$2,640.71	\$1,374.91	\$453.00	\$0.00	\$1,867.85	\$6,336.47
2014-611 / George Williams Lane Channel #1	1,526.3	\$35,818.71	\$12,332.33	\$22,891.41	\$0.00	\$23,290.81	\$94,333.25
Sub Total							
Grand Total	1,526.3	\$35,818.71	\$12,332.33	\$22,891.41	\$0.00	\$23,290.81	\$94,333.25

Before



During



After



Project: George William Lane Channel #1 Map 1

Activity: Bush Hog

Project #: 2014-611

Township: Sheldon

Completed: October 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 = 373 feet

Prepared By: BC Stormwater Management Utility

Date Print: 11/19/14

File: C:/sethdata/projects/projectmaps/BH/George William Ln 2014-611 Map1

Project: George William Lane Channel #1 Map 2

Activity: Vacuum Truck

Project #: 2014-611

Township: Sheldon

Completed: October 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 (2) crossline pipes.

Jetted (2) crossline pipes.



1 inch = 199 feet

Project: George William Lane Channel #1 Map 3

Activity: Routine/ Preventive Maintenance

Project #: 2014-611

Township: Sheldon

Completed: October 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 = 346 feet

Project: George William Lane Channel #1 Map 4

Activity: Routine/ Preventive Maintenance

Project #: 2014-611

Township: Sheldon

Completed: October 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 = 81 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Milledge Village Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Sep-14

Project improved 4,140 L.F. of drainage system. Cleaned out (2) catch basins and 3,836 L.F. of roadside ditch. Jetted (3) crossline pipes, (31) driveway pipes and 304 L.F. of roadside pipe. Hydroseeded for erosion control.

2014-615 / Milledge Village Road	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	32.0	\$714.82	\$354.56	\$106.92	\$0.00	\$478.56	\$1,654.86
DPJT / Driveway Pipe - Jetted	40.0	\$893.52	\$443.20	\$210.64	\$0.00	\$598.20	\$2,145.56
HAUL / Hauling	151.5	\$3,300.45	\$1,621.05	\$560.00	\$0.00	\$2,205.13	\$7,686.63
LP / Locate Pipe	16.0	\$356.56	\$14.48	\$5.84	\$0.00	\$226.32	\$603.20
ONJV / Onsite Job Visit	52.0	\$1,820.63	\$188.24	\$186.88	\$0.00	\$1,326.91	\$3,522.66
RB / Remove blockage from flowline	8.0	\$178.70	\$88.64	\$26.00	\$0.00	\$119.64	\$412.98
RSDCL / Roadside Ditch - Cleanout	305.0	\$6,742.95	\$1,524.72	\$621.28	\$0.00	\$4,502.60	\$13,391.55
RSPJ / Roadside Pipe - Jetted	7.0	\$158.00	\$88.64	\$31.00	\$0.00	\$106.20	\$383.84
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2014-615 / Milledge Village Road Sub Total	612.5	\$14,186.08	\$4,323.53	\$1,748.56	\$0.00	\$9,576.79	\$29,834.96
Grand Total	612.5	\$14,186.08	\$4,323.53	\$1,748.56	\$0.00	\$9,576.79	\$29,834.96

Before



During



After



Project: Milledge Village Road Map 1

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-615**

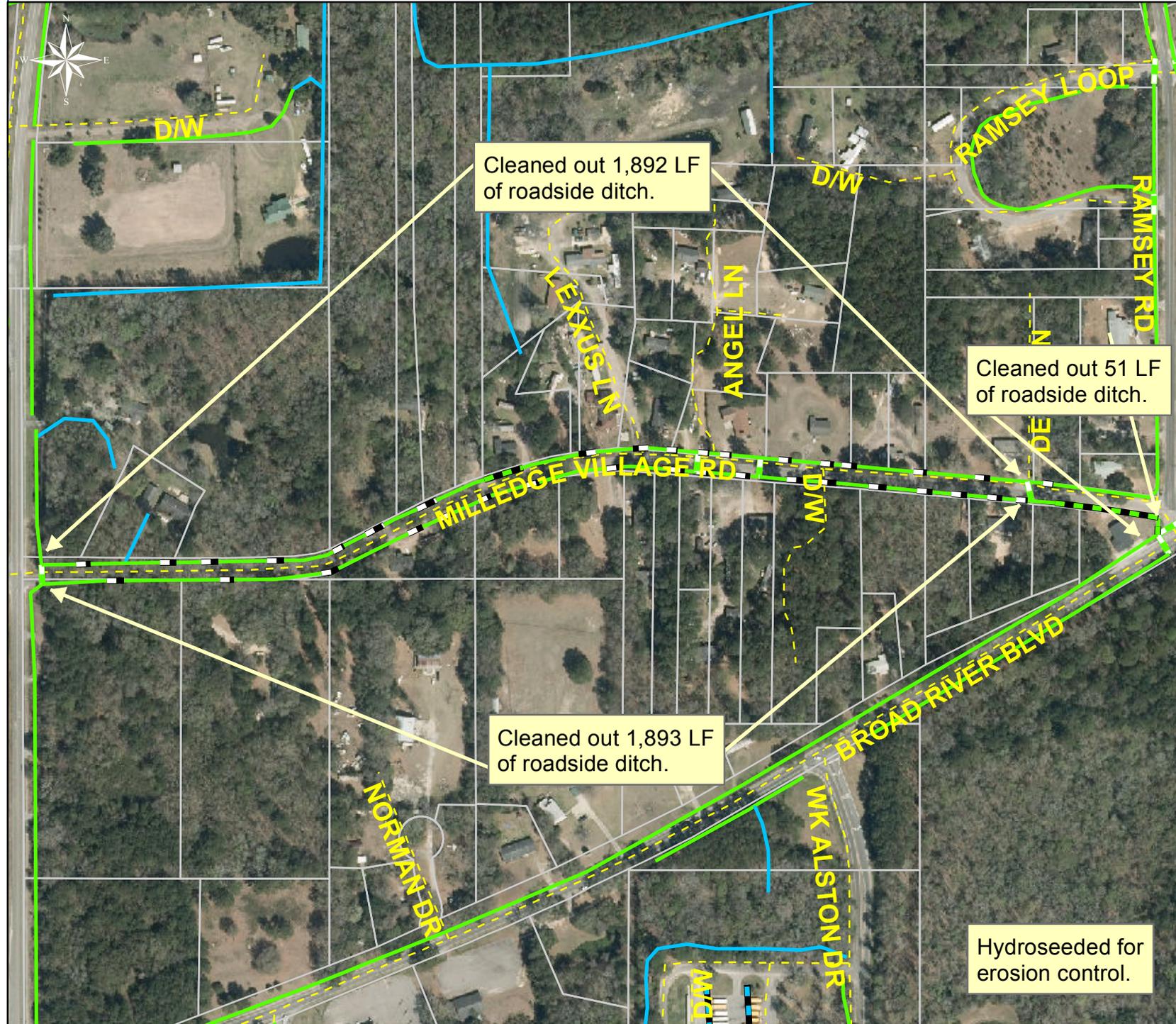
**Township: Port
Royal Island**

**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 = 306 feet

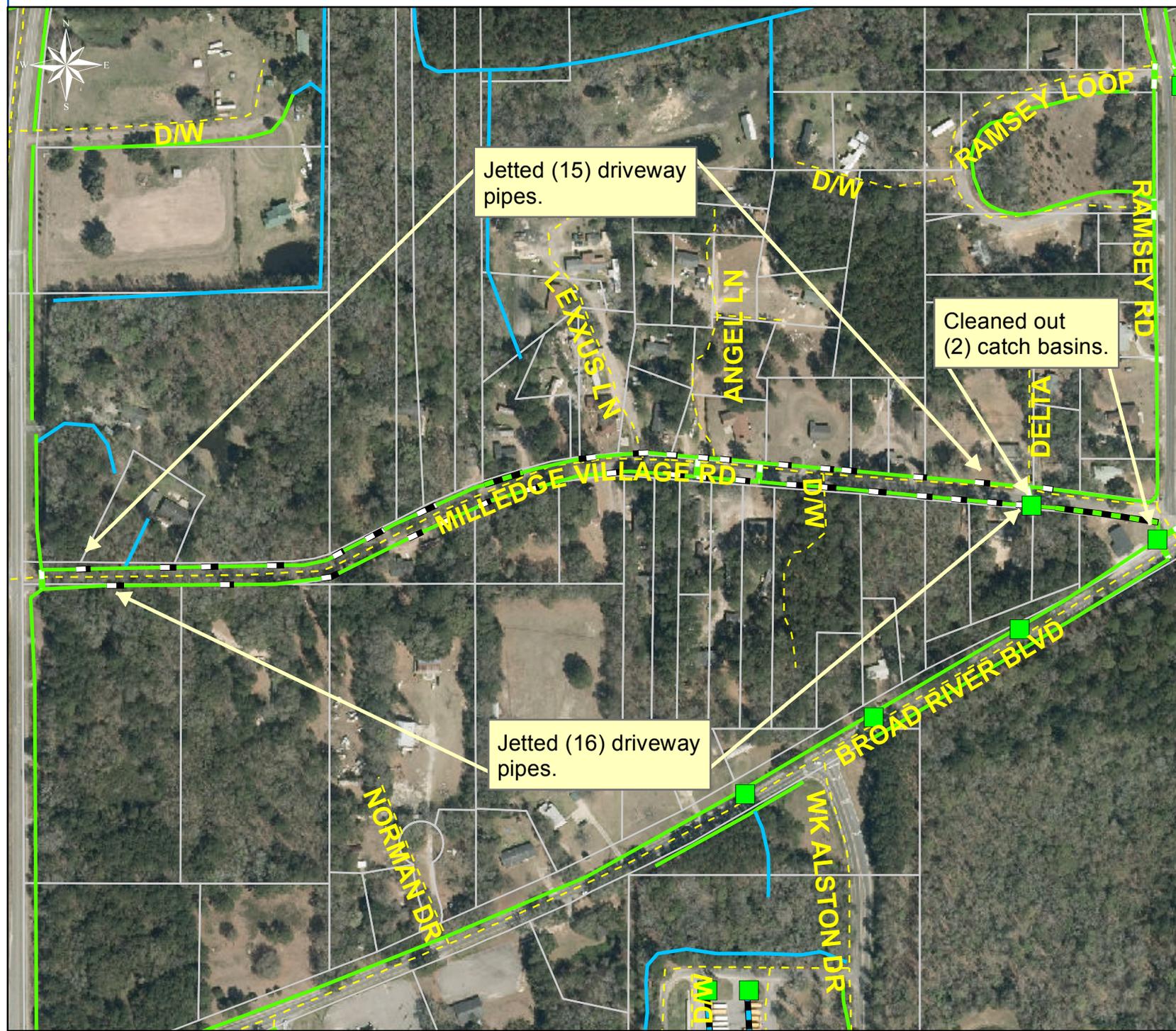
Project: Milledge Village Road Map 2

Activity: Vacuum Truck

Project #: 2014-615

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 = 306 feet

Project: Milledge Village Road Map 3

Activity: Vacuum Truck

Project #: 2014-615

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 = 163 feet



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

Project Summary: Wimbee Creek Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 735 L.F. of drainage system. Cleaned out 735 L.F. of channel.

Completion: Jun-14

2014-605 / Wimbee Creek Rd Channel #1	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	16.0	\$351.30	\$171.20	\$120.99	\$0.00	\$235.24	\$878.73
ODCO / Channel - cleaned out	52.0	\$1,223.49	\$362.02	\$81.13	\$0.00	\$785.32	\$2,451.97
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$6.38	\$0.00	\$36.46	\$109.76
2014-605 / Wimbee Creek Rd Channel #1 Sub Total	70.5	\$1,644.70	\$540.46	\$208.50	\$0.00	\$1,063.64	\$3,457.30
Grand Total	70.5	\$1,644.70	\$540.46	\$208.50	\$0.00	\$1,063.64	\$3,457.30

(Pictures Not Available)

**Project: Wimbee
Creek Road**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2014-605**

**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 = 198 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Judge Island Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Sep-14

Upsized (1) crossline pipe.

2015-524 / Judge Island 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
BKFILL / Back Fill	10.0	\$204.60	\$80.20	\$29.20	\$0.00	\$132.30	\$446.30
CLJS / Cleaned up jobsite	16.0	\$356.55	\$36.48	\$23.64	\$0.00	\$226.32	\$642.99
CPUP / Crossline Pipe - Upsized	40.0	\$891.40	\$127.43	\$275.30	\$0.00	\$555.60	\$1,849.73
HAUL / Hauling	23.0	\$497.49	\$246.10	\$416.28	\$0.00	\$331.66	\$1,491.53
ONJV / Onsite Job Visit	18.0	\$543.80	\$65.16	\$40.88	\$0.00	\$340.62	\$990.46
STAGING / Staging Materials	20.0	\$450.23	\$18.10	\$35.04	\$0.00	\$302.10	\$805.47
UTLOC / Utility locates	2.5	\$76.59	\$7.24	\$8.76	\$0.00	\$55.56	\$148.15
2015-524 / Judge Island Drive Sub Total	130.0	\$3,030.89	\$580.71	\$829.10	\$0.00	\$1,950.77	\$6,391.47
Grand Total	130.0	\$3,030.89	\$580.71	\$829.10	\$0.00	\$1,950.77	\$6,391.47

Before



During



After



Project: Judge Island Drive

Activity: Routine/ Preventive Maintenance

Project #: 2015-524

Township: Lady's Island

Completed: September 2014

Upsized (1) crossline pipe.

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 = 149 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/27/14

File:C:/sethdata/projects/projectmaps/Judge Is Dr 2015-524



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

Project Summary: Pinewood Circle Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Sep-14

Project improved 3,387 L.F. of drainage system. Bush hogged 3,387 L.F. of channel. Cleaned out 600 L.F. of channel.

2015-530 / Pinewood Circle Channel #1	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
EDO / Equipment Drop Off	12.0	\$303.34	\$21.72	\$13.12	\$0.00	\$211.14	\$549.32
HAUL / Hauling	13.0	\$281.19	\$152.15	\$91.84	\$0.00	\$187.46	\$712.64
ODBH / Channel- bushhogged	30.0	\$613.59	\$587.03	\$113.48	\$0.00	\$216.30	\$1,530.39
ODCO / Channel - cleaned out	30.0	\$758.34	\$329.69	\$180.40	\$0.00	\$527.85	\$1,796.28
ONJV / Onsite Job Visit	12.0	\$413.66	\$43.44	\$39.39	\$0.00	\$300.14	\$796.63
2015-530 / Pinewood Circle Channel #1	97.5	\$2,380.34	\$1,134.03	\$438.23	\$0.00	\$1,449.50	\$5,402.10
Sub Total							
Grand Total	97.5	\$2,380.34	\$1,134.03	\$438.23	\$0.00	\$1,449.50	\$5,402.10

Before



During



After



**Project: Pinewood
Circle Channel #1
Map 1**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-530**

**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

Cleaned out 200
LF of channel.

Cleaned out 400
LF of channel.



1 inch = 417 feet



**Project: Pinewood
Circle Channel #1
Map 2**

Activity: Bush Hog

**Project #:
2015-530**

**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

Bush hogged 3,387
LF of channel.



1 inch = 417 feet



Beaufort County Public Works

Stormwater Infrastructure

Project Summary

Project Summary: Ladys Island Bush Hog

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Oct-14

First rotation from August - October. Project improved 29,796 L.F. of drainage system. Bush hogged 29,796 L.F. of channel.

Project consisted of the following areas: Braeburn Lane (1,710 L.F.), Honeysuckle Lane (1,195 L.F.), Springfield Road (1,141 L.F.), Eustis Landing Road (895 L.F.), Beautyberry Lane (2,322 L.F.), Chowan Creek Bluff (1,045 L.F.), Airport Circle (2,893 L.F.), Old Distant Island (637 L.F.), Christine Place (298 L.F.), Shallowford Downs (182 L.F.), Faculty Drive (690 L.F.), Alumni Road (3,591 L.F.), Brickyard Point Road Ch#2 (601 L.F.), Pleasant Point Drive (1,363 L.F.), Deveaux Road (839 L.F.), Token Lane (873 L.F.), Little Capers Road (442 L.F.), Surf Drive (980 L.F.), Royal Pines Boulevard (1,964 L.F.), Thomas Sumpter Street (2,704 L.F.), Wade Hampton Drive (1,764 L.F.), Jasper Lane (600 L.F.), Francis Marion Circle (329 L.F.), Sheppard Road (311 L.F.) and Holly Hall Road (427 L.F.)

2015-302 / Ladys Island Bush Hog	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
ODBH / Channel- bushhogged	479.0	\$10,183.28	\$4,118.91	\$1,559.50	\$0.00	\$6,738.90	\$22,600.59
ONJV / Onsite Job Visit	33.0	\$1,106.03	\$119.46	\$152.50	\$0.00	\$817.00	\$2,194.99
2015-302 / Ladys Island Bush Hog Sub Total	513.0	\$11,309.77	\$4,238.37	\$1,712.00	\$0.00	\$7,569.13	\$24,829.27
Grand Total	513.0	\$11,309.77	\$4,238.37	\$1,712.00	\$0.00	\$7,569.13	\$24,829.27

Before



During



After





Beaufort County Public Works Stormwater Infrastructure *Project Summary*

Project Summary: Shell Point Recreation Park

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washout. Jetted (1) crossline pipe.

Completion: Oct-14

2015-540 / Shell Point Recreation Park	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
CLPJT / Crossline Pipe - Jetted	4.0	\$89.35	\$44.32	\$17.40	\$0.00	\$59.82	\$210.89
HAUL / Hauling	8.0	\$183.48	\$42.80	\$402.12	\$0.00	\$124.40	\$752.80
ONJV / Onsite Job Visit	5.0	\$149.20	\$18.10	\$3.05	\$0.00	\$91.15	\$261.50
2015-540 / Shell Point Recreation Park Sub Total	17.5	\$432.26	\$105.22	\$422.57	\$0.00	\$281.98	\$1,242.04
Grand Total	17.5	\$432.26	\$105.22	\$422.57	\$0.00	\$281.98	\$1,242.04

Before



During



After



**Project: Shell Point
Recreation Park
Map 1**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-540**

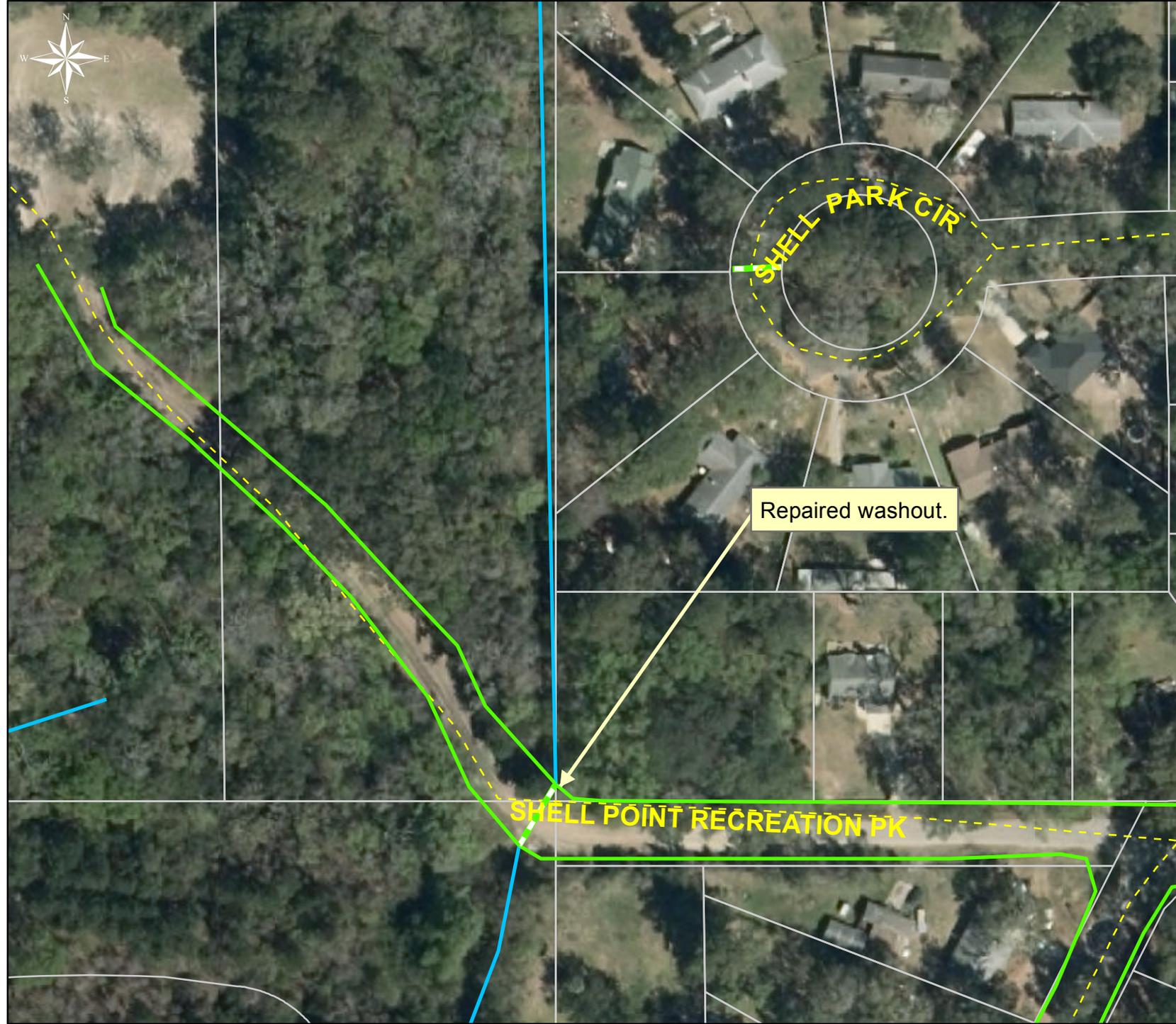
**Township: Port
Royal Island**

**Completed:
October 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 = 105 feet

**Project: Shell Point
Recreation Park
Map 2**

**Activity: Vacuum
Truck**

**Project #:
2015-540**

**Township: Port
Royal Island**

**Completed:
October 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 = 105 feet



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



January 7, 2015

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Stormwater and Public Works staff conducted an orientation briefing to new County Council member Alice Howard.
2. Staff is working on the Department's 2014 successes and FY 2016 goals in preparation for the County Council retreat in February. They will be presented to the Board for review at the January or February meeting.
3. Carolyn Wallace and Eric Larson conducted audits of utility fee credit applicants and on-lot volume control exemption applicants in December. Seven sites were done and included Berkeley Hall, Belfair, Oldfield, Dataw Island, Sun City, Habersham, Coosaw Point, and Somerset Point. No violations were found and only minor suggestions were offered.
4. The County Utility, and most of the Towns and City, responded to the bi-annual SESWA Utility survey. The data is published as a rate study and shared with members.
5. We are advertising for an Administrative Technician for the Stormwater Management staff. This was budgeted to be filled mid-year.

MS4 Update

1. MS4 Permit Application – DHEC reports the permit will not be issued by January 1, 2015 as we had hoped. No timeline was given.
2. Eric Larson and our consultant, ATM, have been working on the presentations for January 22, 2015 workshop. A preview of that workshop will be given during the January Board meeting.
3. Stormwater Workshop for County Council – The half day workshop for the County Council will be held January 22, 2015 from 12:30pm to 5pm at the County Council Chambers in the Administration Building on Ribaut Road. The Board and public are invited to attend. The agenda will include a summary of the background of the MS4 program regulations, a presentation of the current planning activities the Utility is performing, a look at needs in future years, and a review of the stormwater department's funding needs. At the end of the workshop, the staff hopes to receive feedback from the Council so that the program can implement the recommendations from the meeting.

Monitoring Update

1. USCB Lab – Dr. Warren and staff have provided us with the following update:
As an update from last month, we were seeking certification for “in-situ” parameters to include pH, Specific Conductivity, Salinity, Temperature, Dissolved Oxygen, and Turbidity. This type of certification was suggested by the SCDHEC Laboratory Certification Officer, Benny Cockerel. Following the required protocol for certification; PT study (SpC, pH and Turbidity, the other parameters do not require a PT study), start-up data, Initial Demonstration of Capabilities, SOPs, QAM, we have finished the PT study for SpC and pH. The turbidity PT study closed 12/29/14, so we have to wait for those results before we can send the rest of the required data to Benny.
In addition, the lab has recently analyzed samples for coliform bacteria (e. coli and fecal coliform) collected from the RiverPort development in Jasper Co. It’s good to be involved in such an important project that has the potential to influence water quality within the Savannah National Wildlife Refuge.

Stormwater Implementation Committee (SWIC) Report

1. Storm drain markers – The SWIC has been reviewing various storm drain marker designs for use throughout the community.
2. 2015 Pond Conference – Beaufort Conservation District is working on our behalf to apply for an educational grant from the Women in Philanthropy with the Community Foundation of the Low County. This will help offset costs and keep registration fees low.
3. Public Education MOA – The MOAs have been executed for the cost share of the stormwater public education and outreach contract with Beaufort Conservation District.
4. The Town of Bluffton is working on an informational pamphlet that will educate the public on the MS4 program, and its programmatic elements.

Stormwater Related Projects

1. US 278 Retrofit Ponds (\$356,000 budget) – Clearing should begin early January. Stormwater Infrastructure crews have begun constructing the site entrances. Permitting for the spoil site at Buckwalter Park is still pending.
2. County Admin. Complex Retrofit Project (\$327,768 budget) – Ongoing. The project will likely be completed ahead of schedule.
3. Turtle Lane Paving on Lady’s Island (stormwater add-on) (\$8,940 budget) – We accepted the proposal from the design-build consultant to address the design. We are waiting on the deliverable.
4. Okatie West / SC 170 widening retrofit land purchase (\$160,415 budget) – County Council approved the purchase. Closing is expected in January.
5. Graves Property stormwater project feasibility study – I am soliciting a proposal to evaluate the site to construct a regional BMP to serve the area and runoff from US 278.
6. Middleton Place subdivision on Hilton Head Island – The County and Town of Hilton Head Island have jointly offered to perform needed maintenance of a portion of the private system that receives runoff from the County and Town. Further, the Town has offered to assume future maintenance of a detention basin if the easement is granted. Discussion with the POA is on-going.

Professional Contracts Report

1. Financial Analysis of the Stormwater Utility (\$28,791 budget) – ATM has been reviewing the fee structure for the Utility. A draft report is scheduled for the January Board meeting. Findings will be presented to the County Council in January workshop. (See MS4 report above.)

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)
1. May River Watershed Action Plan – The Pine Grove volume reduction project using CWA Section 319 grant dollars is on-going. A request for proposals is open until January 9th. ToB had a voluntary pre-submittal meeting that was attended by representatives from eight consulting firms. The proposed project involves installing an irrigation system using the existing lagoon network as the water source. Stormwater reuse for irrigation from the lagoons should reduce the amount of stormwater runoff that leaves the site, and ultimately reaches the May River. The Stoney Creek watershed plan is on-going. (Jeremy Ritchie or Kim Jones may also report).
2. Salinity Study (\$25,000 budget – county portion) - On going. The Watershed Advisory Committee is meeting in late January to review the data analysis and recommend action items. A final report is expected in the upcoming months.
3. Sea Level Rise and Future Planning – On going. The Sea Grant staff is continuing work on the final report. A draft report is being reviewed by stakeholders. The report will likely be presented to the Planning Commission and Natural Resources Committee at a future date.
4. Drainage Issue on H.E. McCracken Circle in Bluffton – On going. Stormwater staff is evaluating the field data and defining possible actions.
5. Drainage Issue in Plantation Park in Bluffton – The County and Town staff are working together to determine a solution to a failing private stormsewer system and a request from the POA for government acceptance and repair. Discussions are on-going.
6. Old Woodland Plantation stormsewer system repairs – The County crews have been working with the Town of Hilton Head Island staff to perform routine maintenance to this subdivision which has a combination of Town owned and County owned infrastructure.



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

December 23, 2014

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

November 2014 Stormwater Financials Narrative and Analysis

Janet Andrews
Accounting Supervisor
843.255.2290
jandrews@bcgov.net

Since November is the 5th month of the fiscal year, one might expect expenses to be at 42% of budget based on consistent and recurring expenses and Stormwater is currently below this budget level at 35%.

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

Stormwater revenues are about \$267,000 lower than November 2013, but this is probably due to more taxpayers paying their property taxes on time and therefore fewer properties available for bidding during the Treasurer's Office October tax sale. Since Stormwater's main source of revenues is from Stormwater Utility fees in property taxes, it should have a better idea of revenue when most of the 2014 tax bills have been paid by the middle of January 2015.

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 decreased by about \$113,000 compared to last year, along with a decrease in fund balance by about \$252,000.

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

Respectively submitted,

Lori Sexton
Fiscal Tech
843.255.2801
loris@bcgov.net

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
November 30, 2014 & November 30, 2013

	Stormwater Utility Fund <u>November 30, 2014</u>	Capital Improvements Fund <u>November 30, 2014</u>	Stormwater Utility Fund <u>November 30, 2013</u>
<u>ASSETS</u>			
Current Assets			
Cash and Investments with Trustee	\$ 899,656	\$ 801,368	\$ 1,814,261
Receivables, Net	9,049	-	22,131
Inventories	113,850	-	92,511
Total Current Assets	<u>1,022,555</u>	<u>801,368</u>	<u>1,928,903</u>
Capital Assets	2,982,961	-	2,800,950
Accumulated Depreciation	<u>(2,109,674)</u>	<u>-</u>	<u>(2,041,909)</u>
	873,287	-	759,041
Total Assets	\$ 1,895,842	\$ 801,368	\$ 2,687,944
<u>LIABILITIES</u>			
Liabilities			
Account Payable	59,379	95,521	27,509
Accrued Payroll	47,477	-	59,125
Accrued Compensated Absences	7,823	-	6,247
Total Current Liabilities	<u>114,679</u>	<u>95,521</u>	<u>92,881</u>
Long Term Liabilities			
Accrued Compensated Absences	65,978	-	55,379
Net Other Postemployment Benefits Obligation	<u>920,444</u>	<u>-</u>	<u>786,712</u>
Total Long Term Liabilities	986,422	-	842,091
Total Liabilities	1,101,101	95,521	934,972
<u>NET ASSETS</u>			
Invested in Capital Assets, Net of Related Debt	873,287	-	759,041
Reserved for Encumbrances	99,910	212,099	242,520
Reserved for Capital Improvements Unrestricted	<u>(178,456)</u>	<u>493,748</u>	<u>-</u>
Total Net Assets	<u>\$ 794,741</u>	<u>\$ 705,847</u>	<u>\$ 1,752,972</u>

Unaudited and Preliminary
 BEAUFORT COUNTY, SOUTH CAROLINA
 STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS
 Stormwater Utility Fund
 For the Period Ended November 30, 2014

	Budget FY 2015	November 30, 2014	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,132,205	\$ 180,702	(2,951,503)	6%
Stormwater Utility Project Billings	44,189	1,197	(42,992)	3%
Total Operating Revenues	<u>3,176,394</u>	<u>181,899</u>	<u>(2,994,495)</u>	<u>6%</u>
Operating Expenses				
Personnel	2,261,074	829,942	(1,431,132)	37%
Purchased Services	684,864	264,044	(420,820)	39%
Supplies	350,509	73,198	(277,311)	21%
Depreciation	182,523	60,844	(121,679)	33%
Total Operating Expenses	<u>3,478,970</u>	<u>1,228,028</u>	<u>(2,250,942)</u>	<u>35%</u>
Operating Income (Loss)	(302,576)	(1,046,129)	(743,553)	346%
Non-Operating Revenues (Expenses)				
Interest Earned	7,823	-	6,247	0%
Total Non-Operating Revenues (Expenses)	<u>7,823</u>	<u>-</u>	<u>(7,823)</u>	<u>0%</u>
Transfers Out To Capital Improvement Fund	-	12,365	12,365	100%
Change in Net Assets	(294,753)	(1,058,494)	(763,741)	359%
Net Assets, Beginning	<u>1,853,235</u>	<u>1,853,235</u>		
Net Assets, Ending	<u>\$ 1,558,482</u>	<u>\$ 794,741</u>	(763,741)	51%

Unaudited and Preliminary
BEAUFORT COUNTY, SOUTH CAROLINA
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS
Stormwater Capital Improvements Fund
For the Period Ended November 30, 2014

	Budget FY 2015	November 30, 2014	Budget to Actual	Percent of Budget
Transfers In from Stormwater Utility Fund				
Administration Complex Parking Lot Retrofit	\$ -	\$ -	-	0%
Okatie East Retrofit	-	-	-	0%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	-	-	0%
Buckingham Plantation Retrofit	-	12,364	12,364	100%
Upper Battery Creek Retrofit	-	-	-	0%
Total Transfers In	<u>-</u>	<u>12,364</u>	<u>12,364</u>	<u>0%</u>
Capital Improvement Expenses				
Administration Complex Parking Lot Retrofit	-	93,886	93,886	100%
Okatie East Retrofit	-	3,452	3,452	100%
Highway 278 Retrofit	-	-	-	0%
Okatie West Retrofit	-	12,938	12,938	100%
Buckingham Plantation Retrofit	-	-	-	0%
Upper Battery Creek Retrofit	-	4,634	4,634	100%
Total Operating Expenses	<u>-</u>	<u>114,910</u>	<u>114,910</u>	<u>100%</u>
Change in Net Assets by Project				
Administration Complex Parking Lot Retrofit		(93,886)	(93,886)	
Okatie East Retrofit		(3,452)	(3,452)	
Highway 278 Retrofit		-	-	
Okatie West Retrofit		(12,938)	(12,938)	
Buckingham Plantation Retrofit		12,364	12,364	
Upper Battery Creek Retrofit		(4,634)	(4,634)	
Total Change in Net Assets by Project		<u>(102,546)</u>	<u>(102,546)</u>	
Net Assets, Beginning				
Administration Complex Parking Lot Retrofit		327,169		
Okatie East Retrofit		40,892		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		100,000		
Buckingham Plantation Retrofit		-		
Upper Battery Creek Retrofit		132,610		
Total Net Assets, Beginning		<u>808,393</u>		
Net Assets, Ending				
Administration Complex Parking Lot Retrofit		233,283		
Okatie East Retrofit		37,440		
Highway 278 Retrofit		207,722		
Okatie West Retrofit		87,062		
Buckingham Plantation Retrofit		12,364		
Upper Battery Creek Retrofit		127,976		
Total Net Assets, Ending	<u>\$ -</u>	<u>\$ 705,847</u>		

Unaudited and Preliminary
BEAUFORT COUNTY, SOUTH CAROLINA
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS
Stormwater Utility Fund
For the Period Ended November 30, 2013

	Budget FY 2014	November 30, 2013	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,475,000	\$ 437,061	(3,037,939)	13%
Stormwater Utility Project Billings	60,023	11,534	(48,489)	19%
Total Operating Revenues	<u>3,535,023</u>	<u>448,595</u>	<u>(3,086,428)</u>	<u>13%</u>
Operating Expenses				
Personnel	2,160,475	761,761	(1,398,714)	35%
Purchased Services	961,864	297,038	(664,826)	31%
Supplies	381,446	147,487	(233,959)	39%
Depreciation	242,119	100,885	(141,234)	42%
Total Operating Expenses	<u>4,201,895</u>	<u>1,307,171</u>	<u>(2,894,724)</u>	<u>31%</u>
Operating Income (Loss)	(666,872)	(858,576)	(191,704)	129%
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>14,745</u>	<u>(31,113)</u>	<u>(45,858)</u>	<u>0%</u>
Change in Net Assets	(652,127)	(889,689)	(237,562)	136%
Net Assets, Beginning	<u>2,642,661</u>	<u>2,642,661</u>		
Net Assets, Ending	<u>\$ 1,990,534</u>	<u>\$ 1,752,972</u>	(237,562)	88%



MEMORANDUM

Date: January 7, 2015

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

Re: **Maintenance Project Report for January 2015**

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

2. Major Projects:

- A. **Booker T. Washington Circle Channel**, completed in November in Big Estate, District 5; we Shinn cut and reconstructed 2,053 feet of channel, constructed 2,053 feet of workshelf, installed two access pipes and two bleeder pipes, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$54,525**.
- B. **Charleston Drive Channel #1**, completed in November in the Grays Hill area of Port Royal Island, District 6; we reconstructed 315 feet of channel, constructed 315 feet of workshelf, installed one access pipe and one access gate, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$18,965**.
- C. **Huron Drive**, completed in November in the Mink Point area of Port royal Island, District 6; we installed one catch basin and 228 feet of channel pipe and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$25,816**.
- D. **McNeal Circle/Crystal Street**, completed in November in the Stuart Point area of Port Royal Island, District 6; We cleaned out 3,903 feet of roadside ditch and jetted out five crossline pipes and 19 driveway pipes. Total cost of the project was **\$20,500**.

3. Minor or Routine Projects:

- A. **Sheldon Washout Repair – Backache Acres**, completed in July in District 5; we repaired 475 feet of workshelf.
- B. **Bluffton Township Valley Drains**, completed in August in District 9; we cleaned 16,008 feet of valley drains on four roads.
- C. **Sea Pines Drive**, completed in September in District 8; we installed one driveway pipe and cleaned out 54 feet of roadside ditch.

- D. **Mary Elizabeth Drive**, completed in September in District 7, we jetted one crossline pipe, repaired a sinkhole, constructed a swale, and installed sod for erosion control.
- E. **Pine Grove Road**, completed in September in District 6; we repaired washout and hydroseeded for erosion control.
- F. **Evelyns Way**, completed in October in District 9; we bush hogged and cleaned out 1,075 feet of roadside ditch, jetted out three crossline and three driveway pipes, and hydroseeded for erosion control.
- G. **Wiggfall Road, Channel #1**, completed in October in District 8; we grubbed and cleaned out 253 feet of channel, jetted out one crossline pipe, installed two access pipes, and installed rip-rap and hydroseeded for erosion control.
- H. **Sea Island Parkway Channel #2**, completed in October in District 8; we cleaned out 598 feet of channel and hydroseeded for erosion control.
- I. **Ashepool Drive**, completed in October in District 9, we cleaned out a perforated box.
- J. **Relative Lane**, completed in November in District 7; we installed one driveway pipe.
- K. **Pleasant Point Drive Channel**, completed in November in District 7, we cleaned out 472 feet of channel and reset four catch basin lids.
- L. **Capers Island Circle**, completed in November in District 8, we cleaned out 135 feet of roadside ditch and 545 feet of channel, jetted one access pipe and one crossline pipe, installed one driveway pipe, and installed rip-rap for erosion control.
- M. **Sheldon Bush Hogging**, completed in November in District 5; we bush hogged 43,717 feet of channel and workshelf. Total cost of the effort was **\$26,181** or **\$.60** per linear foot.
- N. **Joe Capers Road**, completed in November in District 8; we replaced one crossline pipe, cleaned out 120 feet of roadside ditch, and installed rip-rap for erosion control.



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Booker T. Washington Circle Channel

Activity: Drainage Improvement

Narrative Description of Project:

Project improved 2,053 L.F. of drainage system. Shinn cut and reconstructed 2,053 L.F. of channel. Constructed 2,053 L.F. of workshelf. Installed (2) access pipes, (2) bleeder pipes, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2011-030 / Booker T. Washington Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	46.0	\$1,022.32	\$141.35	\$129.88	\$0.00	\$657.08	\$1,950.64
AUDIT / Audit Project	1.5	\$30.69	\$0.00	\$0.00	\$0.00	\$19.85	\$50.54
BPINST / Bleeder pipe - Installed	40.0	\$903.00	\$195.24	\$337.42	\$0.00	\$484.20	\$1,919.86
DLO / Ditch Layout	40.0	\$926.30	\$368.68	\$160.47	\$0.00	\$628.40	\$2,083.85
HAUL / Hauling	154.0	\$3,395.76	\$1,433.80	\$2,376.15	\$0.00	\$2,153.22	\$9,358.93
HYDR / Hydroseeding	22.0	\$518.36	\$93.20	\$285.35	\$0.00	\$352.44	\$1,249.35
LM / Loading Materials	20.0	\$470.20	\$240.00	\$137.25	\$0.00	\$319.50	\$1,166.95
ODCO / Channel - cleaned out	100.0	\$2,288.00	\$1,266.52	\$450.18	\$0.00	\$1,542.30	\$5,547.00
ODGRB / Channel - grubbed	6.0	\$151.67	\$90.38	\$9.15	\$0.00	\$105.57	\$356.77
ODREC / Channel - reconstructed	70.0	\$1,592.20	\$430.24	\$648.71	\$0.00	\$1,070.40	\$3,741.55
ODSHN / Channel - Shinn cut	79.5	\$2,010.37	\$1,059.12	\$532.23	\$0.00	\$1,399.37	\$5,001.08
ONJV / Onsite Job Visit	60.5	\$2,091.78	\$200.91	\$149.50	\$0.00	\$1,435.97	\$3,878.16
PL / Project Layout	7.0	\$309.89	\$25.34	\$23.92	\$0.00	\$237.72	\$596.87
PP / Project Preparation	10.0	\$265.80	\$0.00	\$0.00	\$0.00	\$187.20	\$453.00
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$1,800.00	\$0.00	\$1,800.00
PRRECON / Project Reconnaissance	5.0	\$206.92	\$18.10	\$11.96	\$0.00	\$154.07	\$391.05
RMTRW / Remove trees - Workshelf	20.0	\$482.10	\$253.76	\$134.20	\$0.00	\$331.40	\$1,201.46
TC / Traffic Control - Jobsite	15.0	\$360.95	\$18.10	\$9.15	\$0.00	\$248.05	\$636.25
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
WSCON / Workshelf - Constructed	28.5	\$685.77	\$203.95	\$131.15	\$0.00	\$471.30	\$1,492.16
WSDR / Workshelf - Dressed	15.0	\$343.35	\$58.70	\$18.30	\$0.00	\$231.85	\$652.20
WSL / Workshelf - Level	30.0	\$723.15	\$372.26	\$225.70	\$0.00	\$497.10	\$1,818.21
WSREC / Workshelf - Reconstructed	30.0	\$663.20	\$205.76	\$164.70	\$0.00	\$441.60	\$1,475.26
WSSHN / Workshelf - Shinn cut	134.0	\$3,270.04	\$1,394.76	\$768.60	\$0.00	\$2,253.83	\$7,687.22
2011-030 / Booker T. Washington Circle (Sub Total	934.5	\$22,722.05	\$8,070.17	\$6,703.98	\$1,800.00	\$15,229.02	\$54,525.21
Grand Total	934.5	\$22,722.05	\$8,070.17	\$6,703.98	\$1,800.00	\$15,229.02	\$54,525.21

Before



During



After



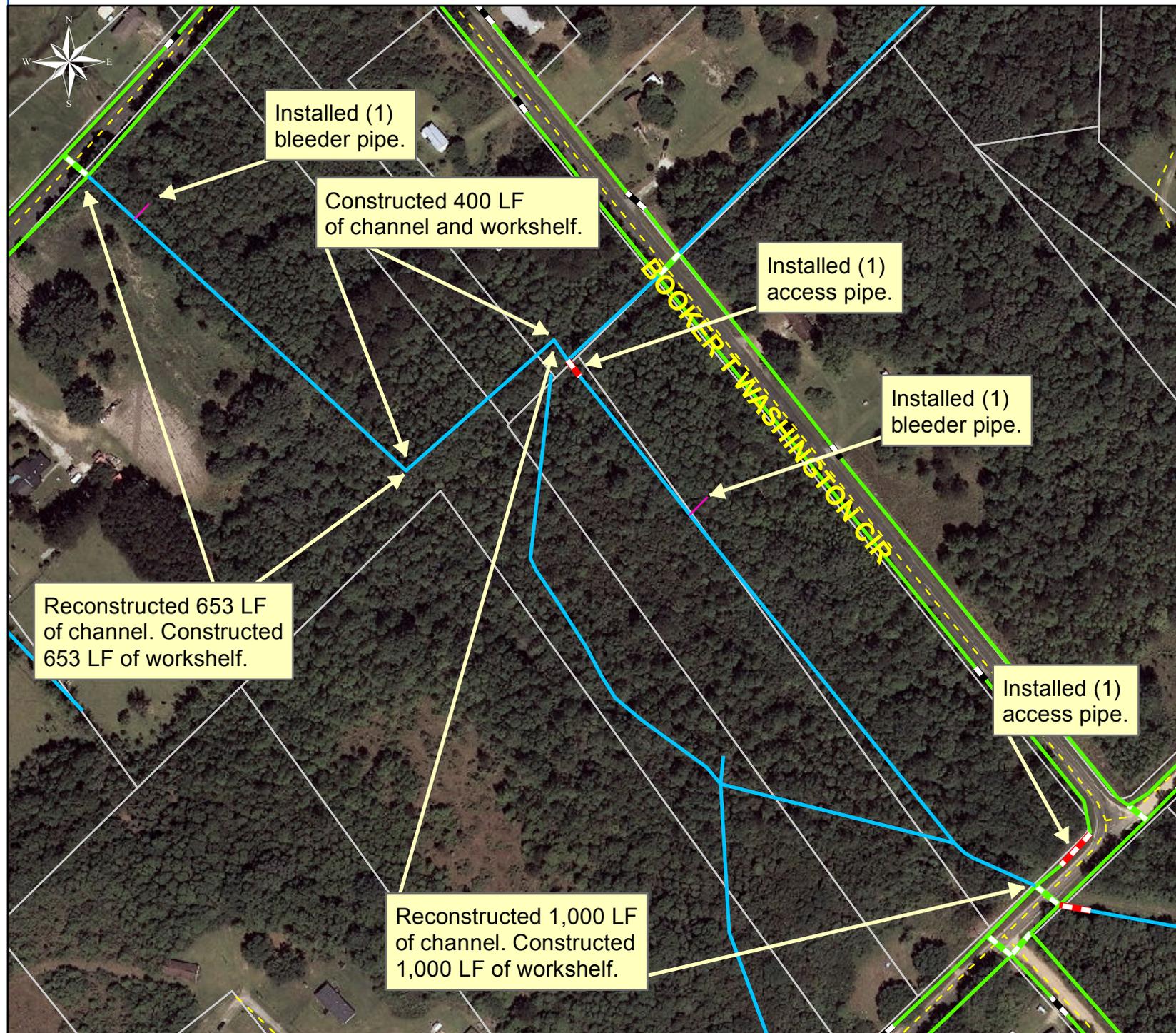
Project: Booker T Washington Circle

Activity: Drainage Improvement

Project #: 2011-030

Township: Sheldon

Completed: November 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 = 209 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/1/14

File:C:/sethdata/projects/projectmaps/Booker T Washington Cir 2011-030



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Charleston Drive Channel #1

Activity: Routine/preventive Maintenance

Narrative Description of Project:

Project improved 335 L.F. of drainage system. Reconstructed 315 L.F. of channel. Constructed 315 L.F. of workshelf. Installed 20 L.F. of channel pipe, (1) access gate, (1) access pipe, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2015-004 / Charleston Drive Channel #1	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	86.0	\$1,870.62	\$877.40	\$1,438.40	\$0.00	\$1,249.16	\$5,435.58
HYDR / Hydroseeding	10.0	\$222.20	\$18.10	\$89.38	\$0.00	\$133.35	\$463.02
ODCO / Channel - cleaned out	40.0	\$891.40	\$235.00	\$40.35	\$0.00	\$565.80	\$1,732.55
ODGRB / Channel - grubbed	13.0	\$291.14	\$137.38	\$33.37	\$0.00	\$179.94	\$641.83
OFPI / Channel Pipe - Installation	40.0	\$891.40	\$195.24	\$406.84	\$0.00	\$565.80	\$2,059.28
ONJV / Onsite Job Visit	59.0	\$1,799.52	\$206.34	\$62.79	\$0.00	\$1,128.49	\$3,197.14
PRRECON / Project Reconnaissance	8.0	\$245.40	\$21.72	\$20.93	\$0.00	\$158.32	\$446.37
WSDR / Workshelf - Dressed	19.0	\$432.28	\$106.54	\$59.53	\$0.00	\$270.09	\$868.44
WSGRB / Workshelf - Grubbed	90.0	\$2,013.20	\$642.44	\$162.40	\$0.00	\$1,286.40	\$4,104.44
2015-004 / Charleston Drive Channel #1 Sub Total	365.5	\$8,667.39	\$2,440.16	\$2,313.97	\$0.00	\$5,543.96	\$18,965.49
Grand Total	365.5	\$8,667.39	\$2,440.16	\$2,313.97	\$0.00	\$5,543.96	\$18,965.49

Before



During



After



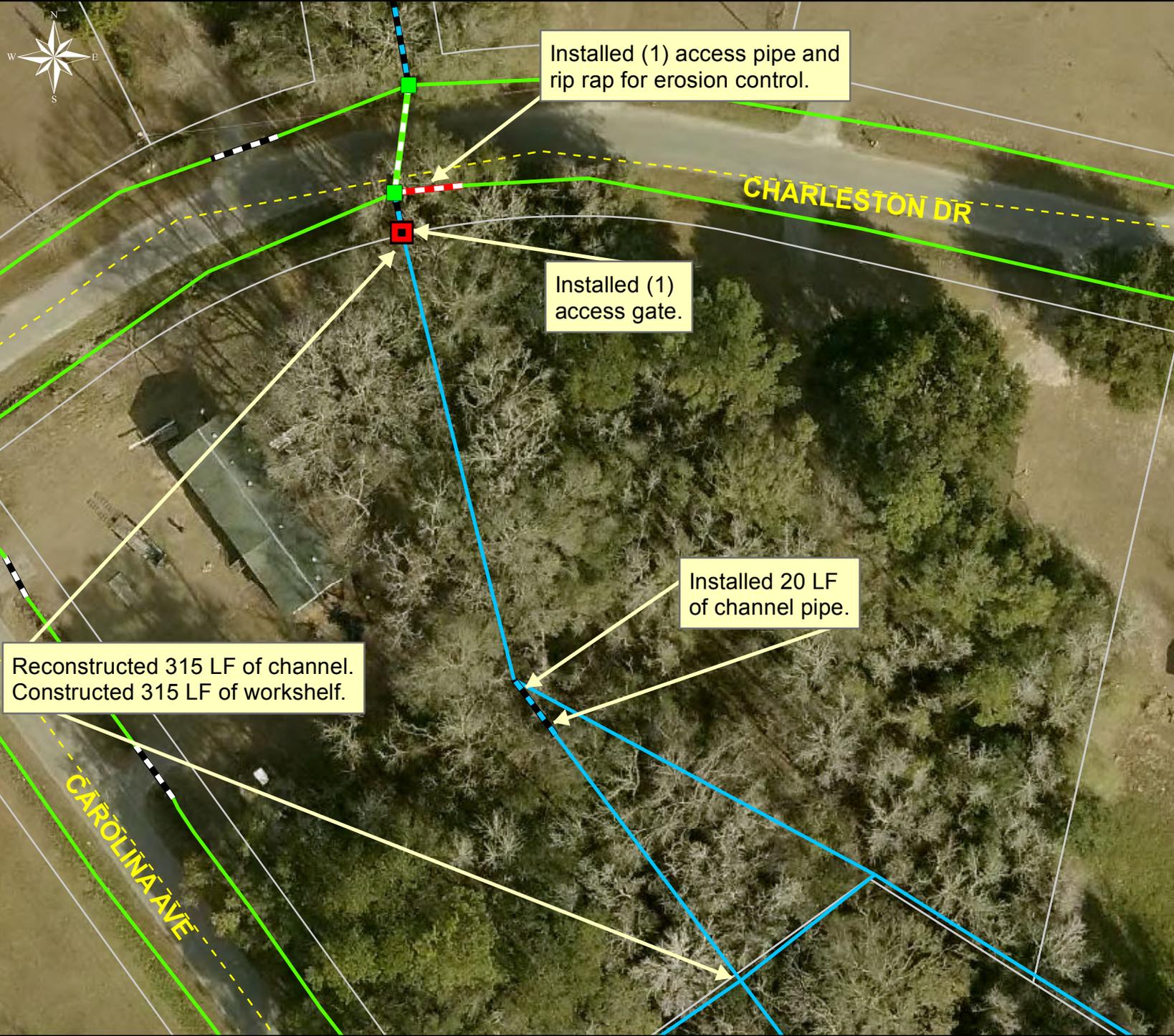
Project: Charleston Drive Channel #1

Activity: Routine/ Preventive Maintenance

Project #: 2015-004

Township: Port Royal Island

Completed: November 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

TYPE

- Catch Basin



1 inch = 52 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Huron Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 228 L.F. of drainage system. Installed (1) catch basin, 228 L.F. of channel pipe, rip rap and hydroseeded for erosion control.

Completion: Nov-14

2015-005 / Huron Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ASBUILT / Asbuilt - Project	2.0	\$88.54	\$7.24	\$5.82	\$0.00	\$67.92	\$169.52
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BKFILL / Back Fill	13.0	\$265.98	\$113.06	\$50.33	\$0.00	\$171.99	\$601.36
CBIR / Catch Basin - Inlet Raised	77.0	\$1,654.44	\$156.50	\$257.91	\$0.00	\$1,046.61	\$3,115.45
ESTP / Estimating Project	8.0	\$354.16	\$0.00	\$0.00	\$0.00	\$271.68	\$625.84
HAUL / Hauling	96.5	\$2,113.40	\$925.55	\$1,430.63	\$0.00	\$1,414.13	\$5,883.71
HYDR / Hydroseeding	12.0	\$274.72	\$39.36	\$147.57	\$0.00	\$173.40	\$635.05
OFPI / Channel Pipe - Installation	190.0	\$4,136.52	\$471.07	\$3,423.92	\$0.00	\$2,616.80	\$10,648.31
ONJV / Onsite Job Visit	49.0	\$1,505.45	\$206.34	\$80.73	\$0.00	\$940.46	\$2,732.98
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$64.56	\$0.00	\$64.56
STAGING / Staging Materials	30.0	\$667.71	\$140.12	\$80.61	\$0.00	\$417.05	\$1,305.49
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-005 / Huron Drive Sub Total	478.5	\$11,081.38	\$2,059.24	\$5,477.52	\$64.56	\$7,133.27	\$25,815.97
Grand Total	478.5	\$11,081.38	\$2,059.24	\$5,477.52	\$64.56	\$7,133.27	\$25,815.97

Before



During



After



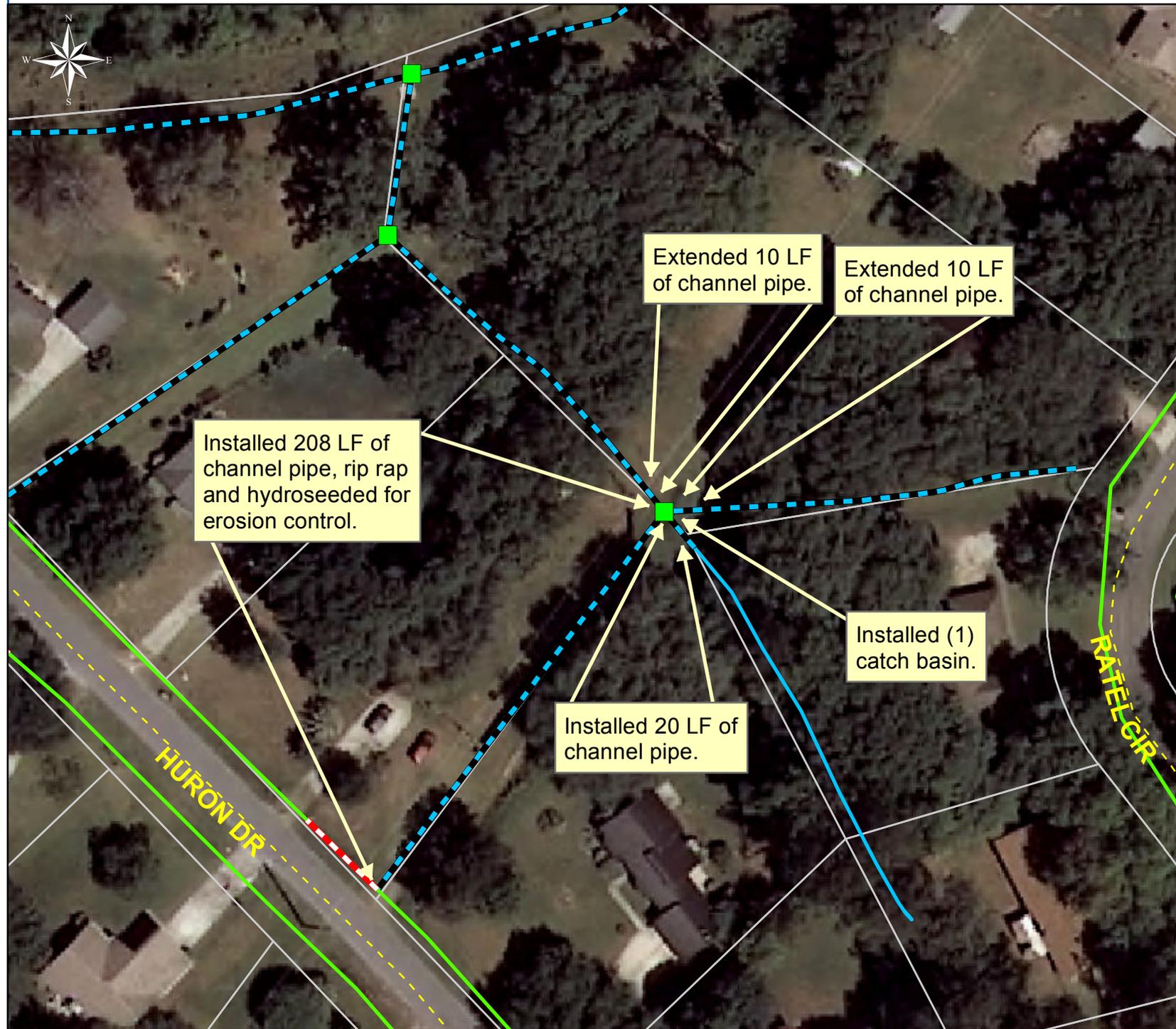
Project: Huron Drive

Activity: Drainage Improvement

**Project #:
2015-005**

**Township: Port
Royal Island**

**Completed:
November 2014**



0 15 30 60 90 120 Feet

1 inch = 65 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Huron Dr 2015-005



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: McNeal Circle/ Crystal Street

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Project improved 3,903 L.F. of drainage system. Cleaned out 3,903 L.F. of roadside ditch. Jetted (5) crossline pipes and (19) driveway pipes.

2015-537 / McNeal Circle/Crystal 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
CLPJT / Crossline Pipe - Jetted	38.0	\$837.41	\$284.02	\$179.15	\$0.00	\$558.88	\$1,859.46
COVD / Cleaned Out Valley Drains	35.0	\$810.25	\$123.92	\$80.32	\$0.00	\$549.30	\$1,563.79
HAUL / Hauling	70.0	\$1,514.10	\$874.28	\$509.35	\$0.00	\$1,009.40	\$3,907.13
HYDR / Hydroseeding	21.0	\$470.68	\$50.22	\$233.82	\$0.00	\$315.98	\$1,070.70
LP / Locate Pipe	9.0	\$201.72	\$10.86	\$5.98	\$0.00	\$135.42	\$353.98
ODCO / Channel - cleaned out	30.0	\$672.40	\$157.84	\$41.72	\$0.00	\$451.40	\$1,323.36
ONJV / Onsite Job Visit	29.0	\$984.40	\$97.74	\$77.74	\$0.00	\$728.61	\$1,888.49
PI / Project Inspection	1.0	\$44.27	\$3.62	\$5.98	\$0.00	\$33.96	\$87.83
PL / Project Layout	2.0	\$88.54	\$7.24	\$5.98	\$0.00	\$67.92	\$169.68
RSDCL / Roadside Ditch - Cleanout	176.0	\$4,037.18	\$884.68	\$248.64	\$0.00	\$2,728.96	\$7,899.46
TC / Traffic Control - Jobsite	7.0	\$151.41	\$74.90	\$15.25	\$0.00	\$100.94	\$342.50
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-537 / McNeal Circle/Crystal Street Sub Total	419.0	\$9,832.82	\$2,569.32	\$1,403.92	\$0.00	\$6,694.00	\$20,500.06
Grand Total	419.0	\$9,832.82	\$2,569.32	\$1,403.92	\$0.00	\$6,694.00	\$20,500.06

Before



During



After



Project: Crystal Street & McNeal Circle Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-537

Township: Port Royal Island

Completed: November 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 = 208 feet

Project: Crystal Street & McNeal Circle Map 2

Activity: Vacuum Truck

Project #: 2015-537

Township: Port Royal Island

Completed: November 2014

Jetted (19) driveway pipes.

Jetted (3) crossline pipes.

Jetted (2) crossline 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 = 194 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sheldon Washout Repair - Backache Acres

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired 475 L.F. of workshelf.

Completion: Jul-14

2015-503 / Sheldon Washout Repair	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	6.0	\$129.78	\$64.20	\$67.00	\$0.00	\$77.68	\$338.66
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$6.40	\$0.00	\$36.46	\$109.78
PRRECON / Project Reconnaissance	10.0	\$225.78	\$9.05	\$6.40	\$0.00	\$144.43	\$385.65
RPWO / Repaired Washout	44.0	\$982.57	\$249.74	\$178.90	\$0.00	\$638.32	\$2,049.53
WSREP / Workshelf - Repair	10.0	\$221.54	\$79.88	\$25.28	\$0.00	\$142.00	\$468.70
2015-503 / Sheldon Washout Repair Sub Total	72.5	\$1,629.58	\$410.11	\$283.98	\$0.00	\$1,045.50	\$3,369.17
Grand Total	72.5	\$1,629.58	\$410.11	\$283.98	\$0.00	\$1,045.50	\$3,369.17

(Pictures Not Available)

Project: Backache Acres

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-503**

**Township: Port
Royal Island**

**Completed:
July 2014**

Repaired 475 LF
of workshelf.

BACKACHE ACRES

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: 12/29/14

File: C:/sethdata/projects/projectmaps/Backache Acres 2015-503



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bluffton Valley Drains

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 16,008 L.F. of drainage system. Cleaned 16,008 L.F. of valley drains. This project consisted of the following areas:
 Buck Point Road (3,250 L.F.), Ballfield Road (2,730 L.F.), Lake View Court (7,000 L.F.) and Mammy Grant Road (3,028 L.F.)

Completion: Aug-14

2015-315 / Bluffton Valley Drains	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
COVD / Cleaned Out Valley Drains	40.0	\$841.81	\$160.40	\$150.19	\$0.00	\$553.00	\$1,705.40
HAUL / Hauling	17.0	\$367.71	\$181.90	\$108.24	\$0.00	\$211.99	\$869.84
ONJV / Onsite Job Visit	2.0	\$66.36	\$7.24	\$9.09	\$0.00	\$48.94	\$131.63
2015-315 / Bluffton Valley Drains Sub Total	59.5	\$1,286.11	\$349.54	\$267.52	\$0.00	\$820.55	\$2,723.71
Grand Total	59.5	\$1,286.11	\$349.54	\$267.52	\$0.00	\$820.55	\$2,723.71

Before



During



After



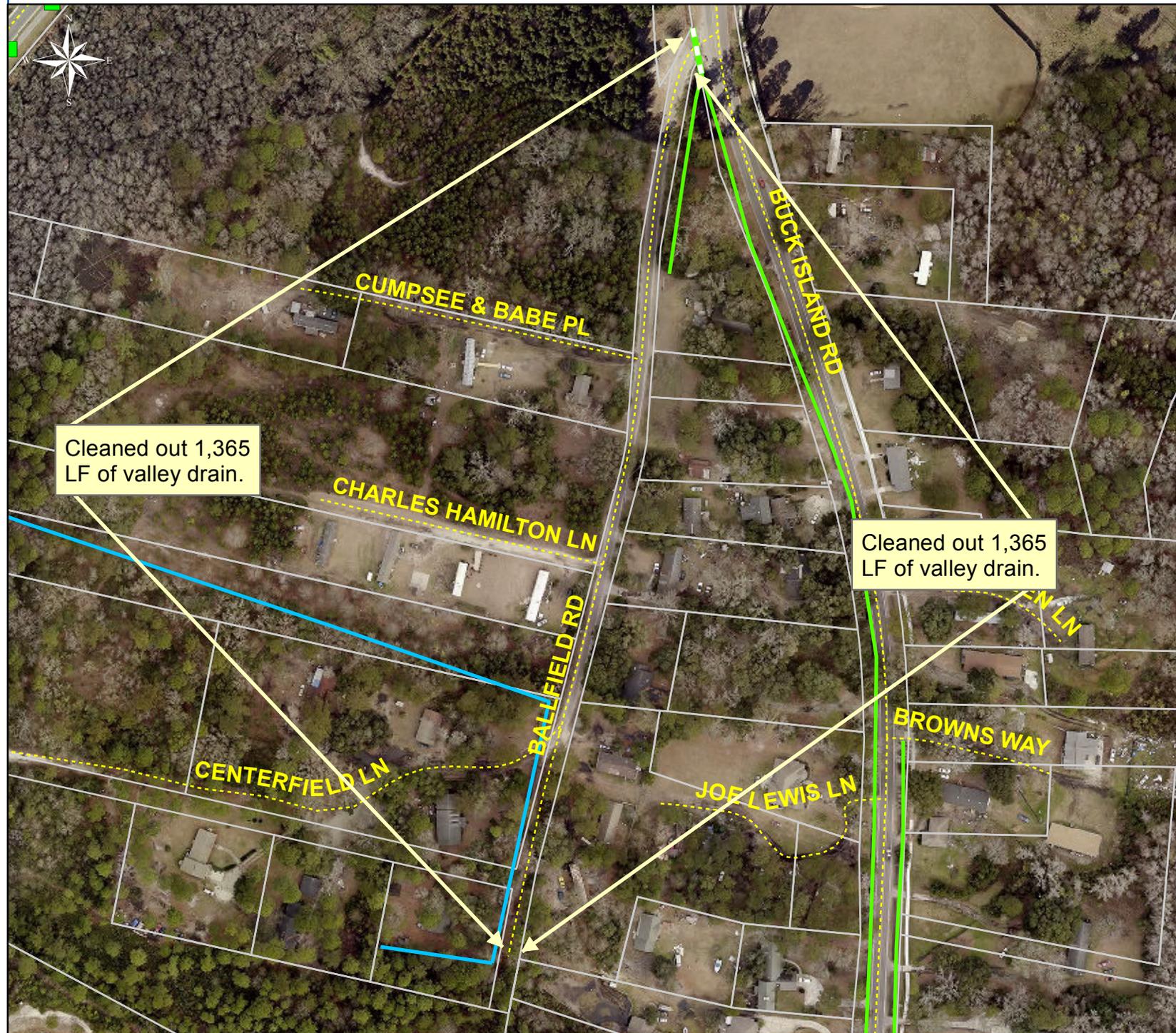
Project: Ballfield Road

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-315**

**Township:
Bluffton**

**Completed:
August 2014**



Cleaned out 1,365
LF of valley drain.

Cleaned out 1,365
LF of valley drain.

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

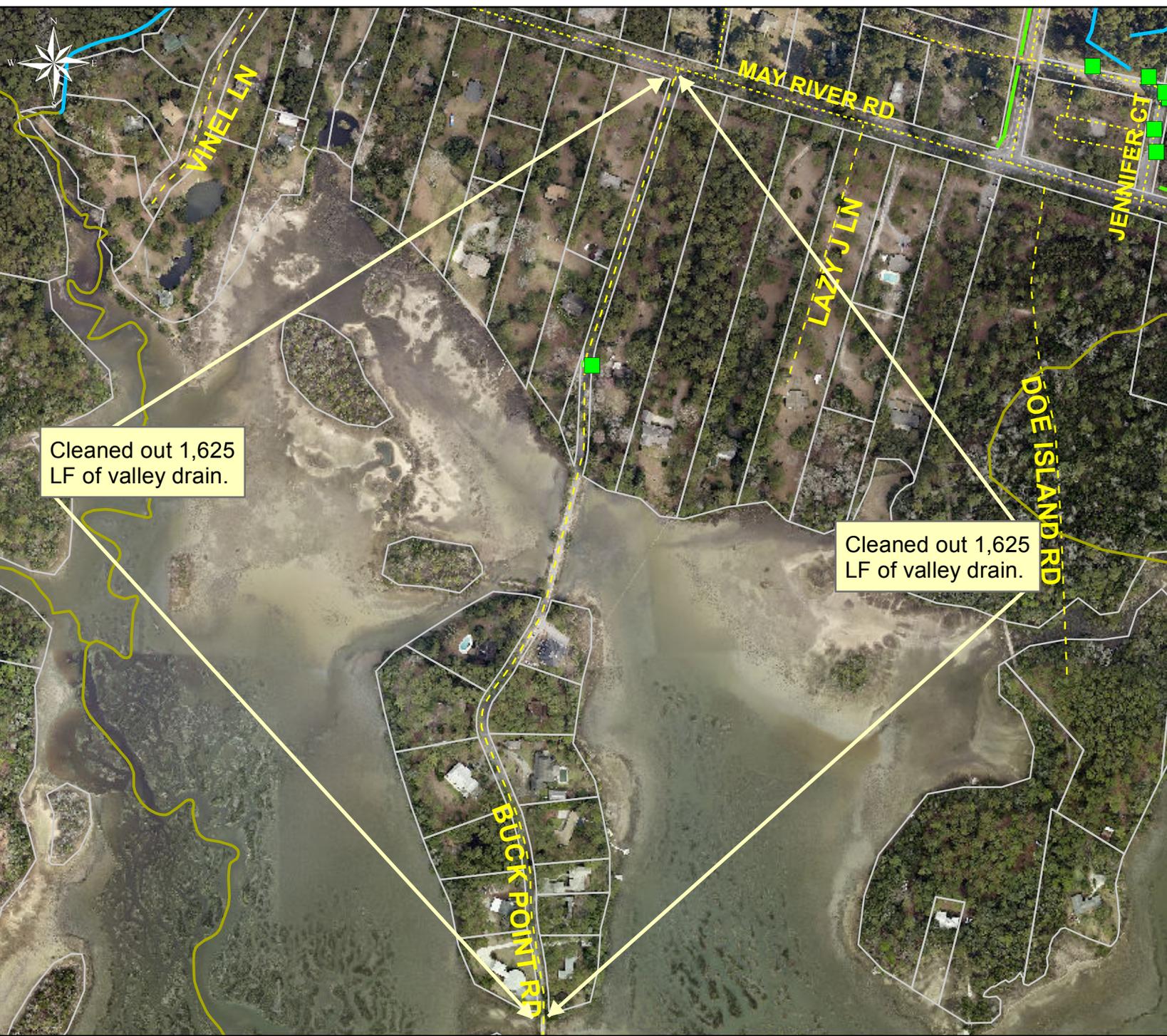
Project: Buck Point Road

Activity: Routine/
Preventive
Maintenance

Project #:
2015-315

Township:
Bluffton

Completed:
August 2014



Cleaned out 1,625
LF of valley drain.

Cleaned out 1,625
LF of valley drain.

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 = 371 feet

Project: Lake View Court

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-315**

**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



1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Lake View Ct 2015-315

Project: Mammy Grant Road

Activity: Routine/ Preventive Maintenance

Project #: 2015-315

Township: Bluffton

Completed: August 2014



Cleaned out 1,514 LF of valley drain.

Cleaned out 1,514 LF of valley drain.

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 40 80 160 240 320 Feet

1 inch = 167 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sea Pines Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 54 L.F. of roadside ditch. Cleaned out 54 L.F. of roadside ditch. Installed (1) driveway pipe.

Completion: Sep-14

2015-506 / Sea Pines 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
DPINS / Driveway Pipe - Installed	15.0	\$336.19	\$78.92	\$61.11	\$0.00	\$225.70	\$701.92
HAUL / Hauling	10.0	\$216.30	\$107.00	\$59.89	\$0.00	\$144.20	\$527.39
ONJV / Onsite Job Visit	5.0	\$165.90	\$18.10	\$18.30	\$0.00	\$122.35	\$324.65
UTLOC / Utility locates	3.5	\$71.61	\$14.07	\$6.10	\$0.00	\$46.31	\$138.09
2015-506 / Sea Pines Drive Sub Total	34.0	\$800.23	\$218.09	\$145.40	\$0.00	\$545.17	\$1,708.89
Grand Total	34.0	\$800.23	\$218.09	\$145.40	\$0.00	\$545.17	\$1,708.89

During



After



Project: Sea Pines Drive

Activity: Routine/ Preventive Maintenance

Project #: 2015-506

Township: St. Helena 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 = 264 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Mary Elizabeth Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Jetted (1) crossline pipe. Repaired sinkhole. Constructed swale for runoff. Installed sod for erosion control.

Completion: Sep-14

2015-535 / Mary Elizabeth 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
CLPJT / Crossline Pipe - Jetted	16.0	\$375.06	\$177.28	\$94.12	\$0.00	\$255.12	\$901.58
HAUL / Hauling	15.0	\$324.45	\$160.50	\$64.00	\$0.00	\$216.30	\$765.25
ONJV / Onsite Job Visit	12.0	\$398.16	\$43.44	\$40.88	\$0.00	\$293.64	\$776.12
PI / Project Inspection	2.0	\$88.54	\$7.24	\$11.68	\$0.00	\$67.92	\$175.38
PRRECON / Project Reconnaissance	2.0	\$88.54	\$7.24	\$8.76	\$0.00	\$67.92	\$172.46
SCON / Swale - Constructed	39.8	\$872.82	\$44.52	\$21.02	\$0.00	\$581.17	\$1,519.53
SI / Sod - Installation	15.0	\$336.20	\$18.10	\$47.04	\$0.00	\$225.70	\$627.04
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-535 / Mary Elizabeth Drive Sub Total	102.8	\$2,504.23	\$458.32	\$287.51	\$0.00	\$1,721.00	\$4,971.05
Grand Total	102.8	\$2,504.23	\$458.32	\$287.51	\$0.00	\$1,721.00	\$4,971.05

Before



After



Project: Mary Elizabeth Drive Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-535

Township: Lady's 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

Repaired sinkhole. Constructed swale for runoff. Installed sod for erosion control.



1 inch = 151 feet

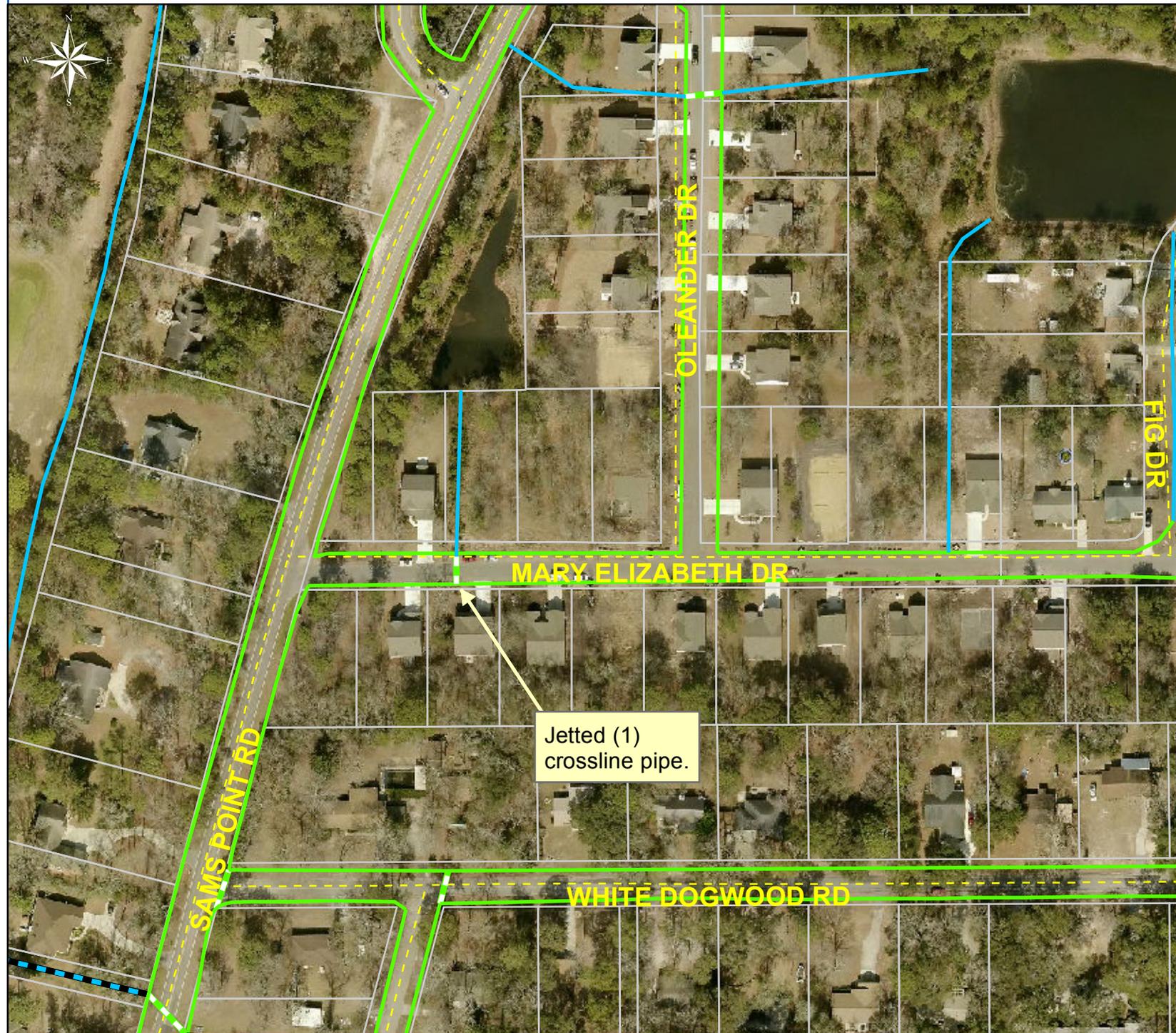
Project: Mary Elizabeth Drive Map 2

Activity: Vacuum Truck

Project #: 2015-535

Township: Lady's 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

Jetted (1)
crossline pipe.



1 inch = 151 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Vac/Mary Elizabeth Dr 2015-535 Map1



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pine Grove Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washout. Hydroseeded for erosion control.

Completion: Sep-14

2015-541 / Pine Grove Road	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	2.0	\$43.26	\$21.40	\$22.93	\$0.00	\$28.84	\$116.43
ONJV / Onsite Job Visit	2.0	\$59.68	\$7.24	\$3.05	\$0.00	\$36.46	\$106.43
RPWO / Repaired Washout	11.0	\$243.18	\$45.30	\$96.04	\$0.00	\$153.06	\$537.58
2015-541 / Pine Grove Road Sub Total	15.5	\$356.35	\$73.94	\$122.02	\$0.00	\$224.98	\$777.29
Grand Total	15.5	\$356.35	\$73.94	\$122.02	\$0.00	\$224.98	\$777.29

(Pictures Not Available)

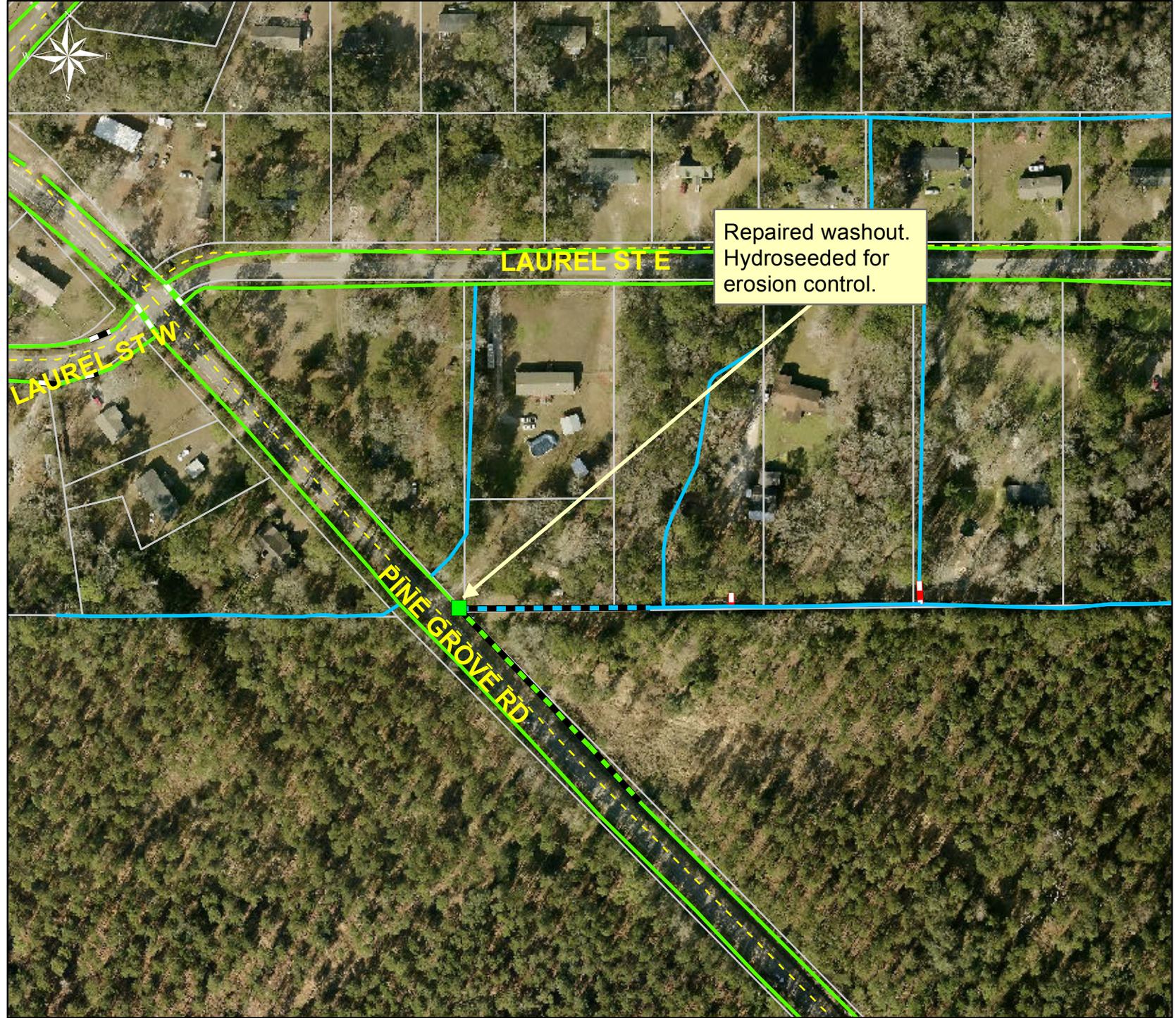
Project: Pine Grove Road

Activity: Routine/ Preventive Maintenance

Project #: 2015-541

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
-  Road Pipe
-  Crossline Pipe
-  Driveway Pipe
-  Access Pipe
-  Bleeder Pipe



1 inch = 180 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Evelyns Way

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 1,075 L.F. of drainage system. Bush hogged and cleaned out 1,075 L.F. of roadside ditch. Hydroseeded for erosion control. Jetted (3) crossline pipes and (3) driveway pipes.

Completion: Oct-14

2015-543 / Evelyns Way	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
CLPJT / Crossline Pipe - Jetted	20.0	\$432.56	\$221.60	\$112.10	\$0.00	\$164.70	\$930.96
HAUL / Hauling	30.0	\$648.90	\$321.00	\$152.36	\$0.00	\$432.60	\$1,554.86
HYDR / Hydroseeding	30.0	\$648.90	\$109.46	\$165.98	\$0.00	\$429.30	\$1,353.64
ODBH / Channel- bushhogged	34.0	\$735.35	\$288.94	\$137.25	\$0.00	\$504.90	\$1,666.44
ONJV / Onsite Job Visit	15.0	\$497.70	\$54.30	\$38.87	\$0.00	\$367.05	\$957.92
RSDCL / Roadside Ditch - Cleanout	70.0	\$1,525.70	\$315.68	\$89.65	\$0.00	\$1,013.00	\$2,944.03
2015-543 / Evelyns Way Sub Total	199.5	\$4,499.34	\$1,310.98	\$696.21	\$0.00	\$2,918.17	\$9,424.70
Grand Total	199.5	\$4,499.34	\$1,310.98	\$696.21	\$0.00	\$2,918.17	\$9,424.70

Before



During



After



Project: Evelyns Way Map 1

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-543**

**Township:
Bluffton**

**Completed:
November 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 = 208 feet

Project: Evelyns Way Map 2

Activity: Vacuum Truck

**Project #:
2015-543**

**Township:
Bluffton**

**Completed:
November 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 = 199 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Wiggfall Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 253 L.F. of drainage system. Grubbed and cleaned out 253 L.F. of channel. Installed (2) access pipes, rip rap and hydroseeded for erosion control. Jetted (1) crossline pipe.

Completion: Oct-14

2015-006 / Wiggfall Road Ch #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	40.0	\$891.40	\$97.02	\$526.20	\$0.00	\$565.80	\$2,080.42
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CLPJT / Crossline Pipe - Jetted	8.0	\$178.70	\$88.64	\$38.00	\$0.00	\$119.64	\$424.98
ESTP / Estimating Project	3.0	\$132.81	\$0.00	\$0.00	\$0.00	\$101.88	\$234.69
HAUL / Hauling	62.0	\$1,357.48	\$642.00	\$1,505.65	\$0.00	\$901.66	\$4,406.79
HYDR / Hydroseeding	9.0	\$201.72	\$23.30	\$67.66	\$0.00	\$135.42	\$428.10
ODCO / Channel - cleaned out	40.0	\$891.36	\$277.28	\$104.06	\$0.00	\$565.80	\$1,838.50
ODGRB / Channel - grubbed	67.0	\$1,537.19	\$368.82	\$120.50	\$0.00	\$761.11	\$2,787.62
ONJV / Onsite Job Visit	25.0	\$813.74	\$79.64	\$44.85	\$0.00	\$537.39	\$1,475.62
PL / Project Layout	6.0	\$265.62	\$21.72	\$26.91	\$0.00	\$203.76	\$518.01
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$450.00	\$0.00	\$450.00
PRRECON / Project Reconnaissance	2.0	\$59.68	\$7.24	\$5.98	\$0.00	\$36.46	\$109.36
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-006 / Wiggfall Road Channel #1 Sub Total	263.0	\$6,350.16	\$1,605.66	\$2,439.81	\$450.00	\$3,942.15	\$14,787.78
 Grand Total	 263.0	 \$6,350.16	 \$1,605.66	 \$2,439.81	 \$450.00	 \$3,942.15	 \$14,787.78

Before

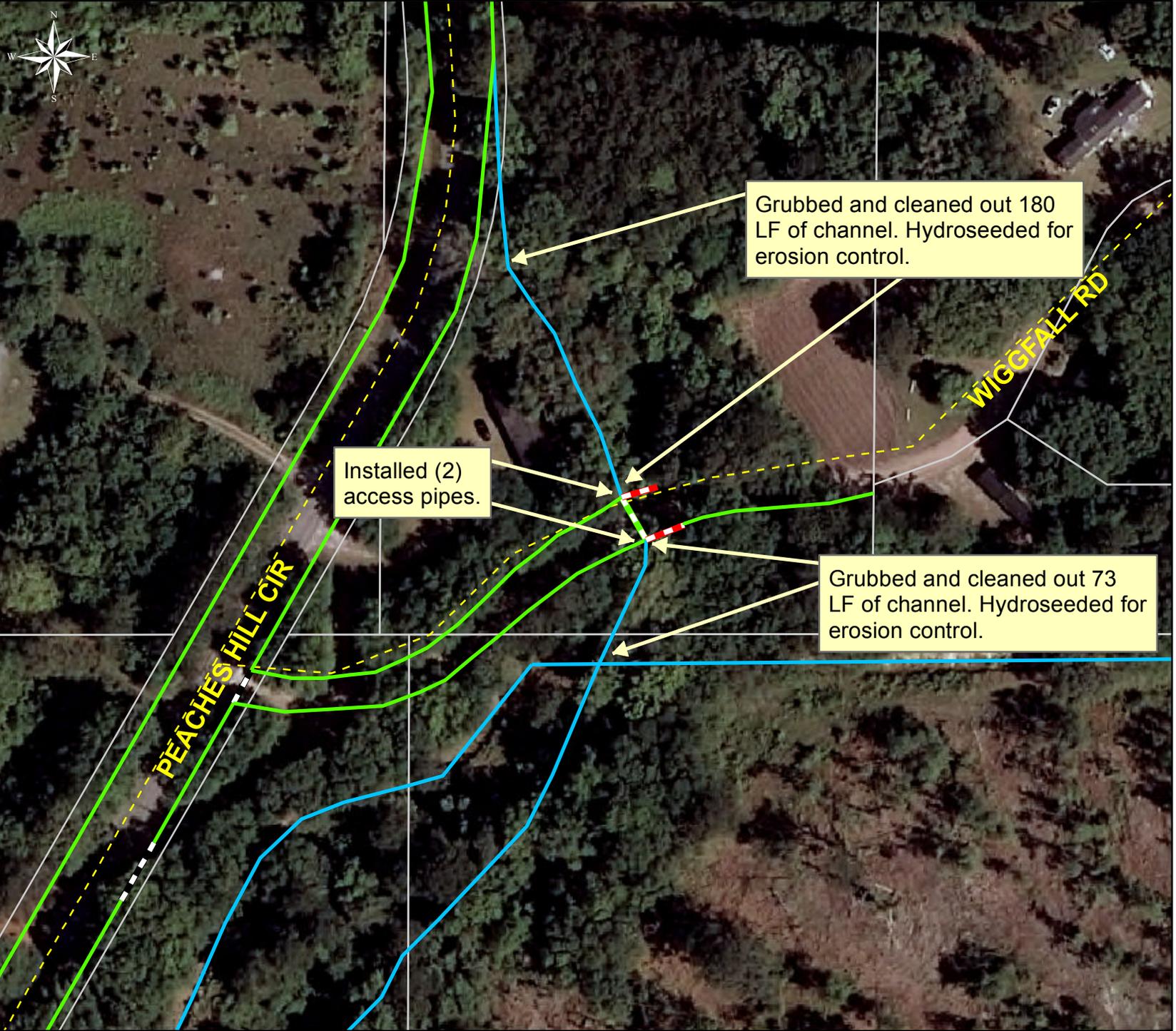


During



After





Project: Wiggfall Road Channel #1 Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-006

Township: St. Helena Island

Completed: October 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 = 91 feet

**Project: Wiggfall Road Channel #1
Map 2**

Activity: Vacuum Truck

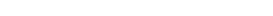
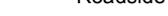
**Project #:
2015-006**

**Township: St.
Helena Island**

**Completed:
October 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 = 91 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sea Island Parkway Channel #2

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 598 L.F of drainage system. Cleaned out 598 L.F. of channel. Hydroseeded for erosion control.

Completion: Oct-14

2015-548 / Sea Island Parkway Ch #2	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	20.0	\$432.60	\$214.00	\$204.61	\$0.00	\$288.40	\$1,139.61
HYDR / Hydroseeding	6.0	\$143.88	\$23.30	\$79.89	\$0.00	\$98.79	\$345.86
ODCO / Channel - cleaned out	60.0	\$1,297.80	\$346.09	\$76.96	\$0.00	\$858.60	\$2,579.45
ONJV / Onsite Job Visit	18.0	\$641.60	\$65.16	\$35.88	\$0.00	\$478.42	\$1,221.06
UC / Utility Coordination	1.5	\$30.69	\$6.03	\$5.98	\$0.00	\$19.85	\$62.55
2015-548 / Sea Island Parkway Ch #2	106.0	\$2,556.80	\$654.58	\$403.32	\$0.00	\$1,750.67	\$5,365.37
Sub Total							
Grand Total	106.0	\$2,556.80	\$654.58	\$403.32	\$0.00	\$1,750.67	\$5,365.37

Before



During



After



Project: Sea Island Drive Channel #2

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-548**

**Township: St.
Helena Island**

**Completed:
October 2014**

Cleaned out 598 LF of channel.
Hydroseeded for erosion control.

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

TYPE

- Catch Basin

0 55 110 220 330 440
Feet

1 inch = 223 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/16/14

File:C:/sethdata/projects/projectmaps/Sea Island Dr Ch#2 2015-548



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Rivers End Subdivision- Ashepoo Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Cleaned out perforated box.

Completion: Oct-14

2015-546 / Rivers End Subdivision- Ashepo	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
SCON / Swale - Constructed	2.0	\$45.61	\$1.81	\$3.59	\$0.00	\$30.81	\$81.81
2015-546 / Rivers End Subdivision- Ashep Sub Total	2.5	\$55.84	\$1.81	\$3.59	\$0.00	\$37.42	\$98.66
Grand Total	2.5	\$55.84	\$1.81	\$3.59	\$0.00	\$37.42	\$98.66

(Pictures Not Available)

**Project: Rivers End
Subdivision -
Ashepool Drive**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-546**

**Township:
Bluffton**

**Completed:
October 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

TYPE

-  Catch Basin



1 inch = 95 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/11/14

File: C:/sethdata/projects/projectmaps/Ashepool Drive 2015-546



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Relative Lane

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Installed (1) driveway pipe.

Completion: Nov-14

2015-554 / Relative Lane	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ARR / Add rock	12.0	\$274.72	\$36.48	\$18.30	\$0.00	\$173.40	\$502.90
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
BKFILL / Back Fill	12.0	\$238.44	\$65.72	\$33.55	\$0.00	\$152.64	\$490.35
DPINS / Driveway Pipe - Installed	15.0	\$343.38	\$51.36	\$16.78	\$0.00	\$216.75	\$628.26
HAUL / Hauling	13.5	\$297.88	\$144.45	\$103.56	\$0.00	\$199.80	\$745.69
ONJV / Onsite Job Visit	12.0	\$358.08	\$43.44	\$14.95	\$0.00	\$218.76	\$635.23
STAGING / Staging Materials	4.0	\$79.48	\$29.24	\$12.20	\$0.00	\$50.88	\$171.80
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-554 / Relative Lane Sub Total	69.5	\$1,612.44	\$370.69	\$199.34	\$0.00	\$1,025.45	\$3,207.92
Grand Total	69.5	\$1,612.44	\$370.69	\$199.34	\$0.00	\$1,025.45	\$3,207.92

Before



During



After



Project: Relative Lane

**Activity: Routine/
Preventive
Maintenance**

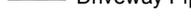
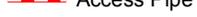
**Project #:
2015-554**

**Township: Lady's
Island**

**Completed:
November 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 = 84 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/4/14

File:C:/sethdata/projects/projectmaps/Relative Ln 2015-554



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Pleasant Point Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 472 L.F. of drainage system. Reset (4) catch basin lids. Cleaned out 472 L.F. of channel.

Completion: Nov-14

2015-542 / Pleasant Point 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
CBREP / Catch basin - repaired	6.0	\$119.22	\$32.86	\$12.20	\$0.00	\$76.32	\$240.60
HAUL / Hauling	5.5	\$124.84	\$58.85	\$48.80	\$0.00	\$84.44	\$316.93
LM / Loading Materials	8.0	\$158.96	\$36.48	\$27.45	\$0.00	\$101.76	\$324.65
ODCO / Channel - cleaned out	45.0	\$1,030.18	\$137.45	\$73.23	\$0.00	\$650.25	\$1,891.10
ONJV / Onsite Job Visit	20.0	\$514.70	\$143.20	\$39.53	\$0.00	\$326.50	\$1,023.93
2015-542 / Pleasant Point Drive Sub Total	85.0	\$1,958.13	\$408.84	\$201.21	\$0.00	\$1,245.88	\$3,814.05
Grand Total	85.0	\$1,958.13	\$408.84	\$201.21	\$0.00	\$1,245.88	\$3,814.05

Before



During



After



Project: Pleasant Point Drive Channel #1

Activity: Routine/ Preventive Maintenance

Project #: 2015-542

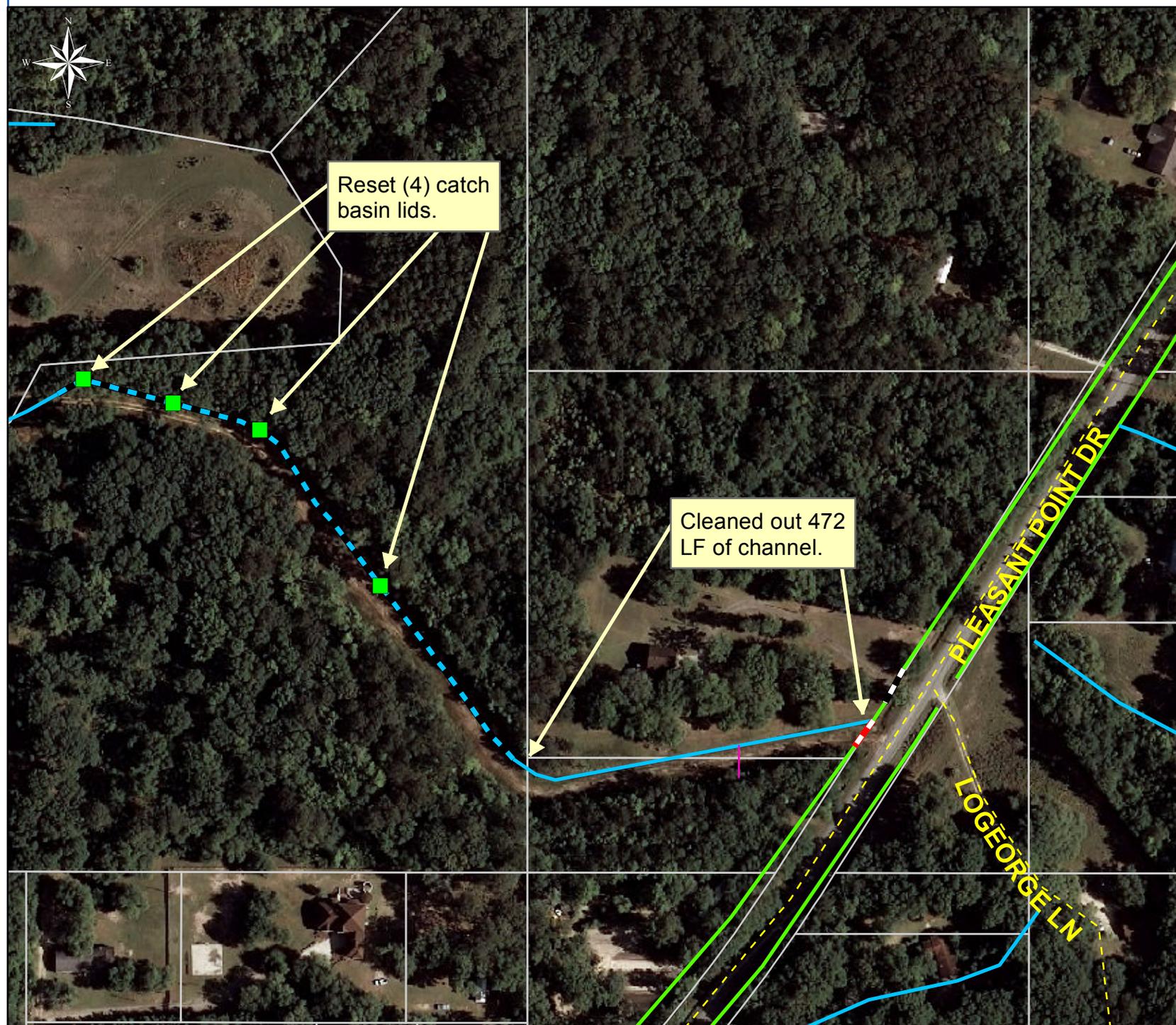
Township: Lady's Island

Completed: November 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 = 178 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Capers Island Circle

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 680 L.F. of drainage system. Cleaned out 135 L.F. of roadside ditch and 545 L.F. channel. Jetted (1) access pipe and (1) crossline pipe. Replaced (1) crossline pipe. Installed (1) driveway pipe and rip rap for erosion control.

Completion: Nov-14

2015-527 / Capers Island 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
CLPJT / Crossline Pipe - Jetted	12.0	\$268.06	\$132.96	\$48.55	\$0.00	\$179.46	\$629.03
DPINS / Driveway Pipe - Installed	40.0	\$841.70	\$188.25	\$542.99	\$0.00	\$551.40	\$2,124.34
HAUL / Hauling	20.0	\$432.60	\$214.00	\$920.99	\$0.00	\$288.40	\$1,855.99
HYDR / Hydroseeding	10.0	\$222.20	\$18.10	\$96.85	\$0.00	\$133.35	\$470.50
ONJV / Onsite Job Visit	4.0	\$126.04	\$14.48	\$17.94	\$0.00	\$85.40	\$243.86
PI / Project Inspection	2.0	\$88.54	\$7.24	\$5.98	\$0.00	\$67.92	\$169.68
PRRECON / Project Reconnaissance	2.0	\$59.68	\$7.24	\$8.97	\$0.00	\$36.46	\$112.35
RSDCL / Roadside Ditch - Cleanout	40.0	\$783.00	\$157.84	\$83.17	\$0.00	\$498.60	\$1,522.61
STAGING / Staging Materials	39.0	\$823.52	\$100.24	\$90.36	\$0.00	\$540.86	\$1,554.98
TRAIN / Training	20.0	\$385.60	\$0.00	\$0.00	\$0.00	\$0.00	\$385.60
2015-527 / Capers Island Circle Sub Total	189.5	\$4,041.17	\$840.35	\$1,815.80	\$0.00	\$2,388.46	\$9,085.78
Grand Total	189.5	\$4,041.17	\$840.35	\$1,815.80	\$0.00	\$2,388.46	\$9,085.78

Before



During



After



Project: Capers Island Circle Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-527

Township: St. Helena Island

Completed: November 2014



Cleaned out 545 LF of channel.

Replaced (1) crossline pipe. Installed rip rap for erosion control.

Installed (1) driveway pipe.

Cleaned out 135 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
	Catch Basin



1 inch = 135 feet

Project: Capers Island Circle Map 2

Activity: Vacuum Truck

Project #: 2015-527

Township: St. Helena Island

Completed: November 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 = 135 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Sheldon Bush Hog

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Second rotation from September 2014 to November 2014. Project improved 43,717 L.F. of drainage system. Bush hogged 43,717 L.F. of channel. This project consisted of the following areas: Jasmine Hall Road (4,725 L.F.), Old Dawson Acres (5,297 L.F.), Gum Tree Lane (5,109 L.F.), Hunt Ter (3,669 L.F.), Middlefield Circle (5,749 L.F.), Mount Pisgah Church Road (656 L.F.), Keans Neck Road (863 L.F.), Coker Lane (893 L.F.), Coakley Road (684 L.F.), Oakhurst Road (1,792 L.F.), Spann Circle (1,790 L.F.) and Wimbee Landing Road (12,490 L.F.)

2015-303A / Sheldon Bush Hog	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
ODBH / Channel- bushhogged	505.0	\$10,358.14	\$9,456.59	\$1,700.47	\$0.00	\$4,430.15	\$25,945.35
ONJV / Onsite Job Visit	3.0	\$99.54	\$10.86	\$17.94	\$0.00	\$73.41	\$201.75
2015-303A / Sheldon Bush Hog Sub Total	509.0	\$10,478.14	\$9,467.45	\$1,718.41	\$0.00	\$4,516.79	\$26,180.79
Grand Total	509.0	\$10,478.14	\$9,467.45	\$1,718.41	\$0.00	\$4,516.79	\$26,180.79

Before



During



After





Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Joe Capers Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 120 L.F. of drainage system. Replaced (1) crossline pipe. Cleaned out 120 L.F. of roadside ditch. Installed rip rap for erosion control.

Completion: Nov-14

2015-549 / Joe Capers Road	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
CLPI / Crossline Pipe - Installation	60.0	\$1,274.40	\$188.25	\$393.16	\$0.00	\$838.10	\$2,693.91
CLPINS / Crossline Pipe - Installed	47.5	\$1,015.73	\$97.02	\$140.18	\$0.00	\$669.75	\$1,922.67
HAUL / Hauling	48.5	\$1,096.06	\$518.95	\$422.86	\$0.00	\$740.37	\$2,778.23
ONJV / Onsite Job Visit	14.0	\$457.84	\$50.68	\$26.91	\$0.00	\$330.10	\$865.53
PRRECON / Project Reconnaissance	3.0	\$99.54	\$10.86	\$11.96	\$0.00	\$73.41	\$195.77
RSDCL / Roadside Ditch - Cleanout	12.0	\$256.05	\$71.68	\$27.70	\$0.00	\$168.48	\$523.91
STAGING / Staging Materials	8.0	\$178.80	\$14.48	\$100.65	\$0.00	\$119.64	\$413.57
TRAIN / Training	10.0	\$192.80	\$0.00	\$0.00	\$0.00	\$0.00	\$192.80
UTLOC / Utility Locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-549 / Joe Capers Road Sub Total	204.0	\$4,591.67	\$951.92	\$1,123.42	\$0.00	\$2,953.08	\$9,620.09
Grand Total	204.0	\$4,591.67	\$951.92	\$1,123.42	\$0.00	\$2,953.08	\$9,620.09

Before



During



After



Project: Joe Capers Road

Activity: Routine/
Preventive
Maintenance

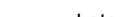
Project #:
2015-549

Township: St.
Helena Island

Completed:
November 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 = 83 feet



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



County Council Stormwater Workshop
Administration Building, 100 Ribaut Road
County Council Chambers
January 22, 2015

- 1) Arrival @ 12pm
- 2) Box lunch and causal discussion (30 min)
- 3) Introductions (15 min)
 - a. Introduction of Participants (Council Members, County Staff, Consulting Team)
 - b. Review of workshop's agenda and goals
- 4) The new MS4 program (30 min)
 - a. History – 2003 to Present Phase II Small MS4 SCDHEC General Permit
 - b. General MS4 Permit requirements – Key elements of NOI submitted to DHEC
 - c. Obligations of the MS4 Permit and implementation of regulatory mandated timeline
- 5) Overview of Beaufort County's 5-year plan (45 min)
 - a. Expansion of stormwater services via update of the Level of Service and Extent of Service policies
 - b. Program elements
 - i. MS4 Permit compliance, development of revised Stormwater Ordinances and BMP Manual update
 - ii. Evaluation and update of 2006 Stormwater Master Plan
 - iii. Manpower needs (Management, Regulatory, and Infrastructure crews)
 - iv. Equipment needs
 - v. Capital projects
- 6) Program costs (30 min)
 - a. Trends on expenses and revenue over life of the Stormwater Utility
 - b. Anticipated operational costs for Stormwater Utility for next five years
 - i. Operational cost (staff, equipment, MS4 permit compliance)
 - ii. Capital Improvements
- 7) Intergovernmental Agreements (30 min)
 - a. Main elements of current IGA and MOU agreements already in place
 - b. Current issues related to implementation of the IGAs
 - c. Current and potential cost sharing of MS4 requirements via IGAs and MOUs to maximize Intergovernmental participation in key stormwater initiatives
 - d. Impact to proposed program elements and costs
- 8) Break (15 min)
- 9) Funding Study Results/Findings/Recommendations (75 min)
 - a. Proposed expansion of credits program and impact on revenue
 - b. Options for funding Stormwater Utility Operations costs
 - i. Implementing an increase with the current rate structure
 - ii. Alternative structure(s)

1. County surcharge
 2. Watershed models
 - c. Options for funding Stormwater Capital costs
 - i. " Pay as you go" – use current resources and revenue stream
 - ii. Issuance of G.O. and/or revenue bonds
 - d. Discussion of options
 - i. Impact on current Stormwater Utility rates
 - ii. Revenues that could be generated
 - iii. Benchmarking of rates compared to peer utilities
- 10) Decision point - key items to complete to move the Stormwater Program forward (15 min)
 - a. Expansion of services within Stormwater Infrastructure
 - b. "Ramp up" Stormwater Program to comply with MS4 mandated time lines for implementation by creation of necessary elements of MS4 program (e.g. new ordinances, programs, update BMP manual, etc.)
 - c. Review and update of Stormwater Master Plan and create updated Capital Plan
 - d. Revisiting IGAs to correct inequalities in jurisdiction, to cost share MS4 requirements when possible, and to implement common stormwater goals
 - e. Review and update the Stormwater fee structure by developing funding concepts, timing and determining how to budget operational and capital costs and/or increase & funding scenarios (debt vs. paygo)
- 11) Wrap-up (Q&A) (15 min)
- 12) Adjournment @ or before 5pm

Stormwater Utility Priorities for 2014 – End of Year Report

===

The following is a summary of our status on the goals the Utility Board set for 2014.

===

As presented January 8, 2014

Overall Priority – Implementing the Utility Vision of an Efficient Utility Addressing the Stormwater Needs of the County, while Protecting its Water Resources

Staff's Top Three Internal Management Goals

1. Implement ditch Maintenance schedules with Pubworks. Include construction of BMPs in maintenance projects where possible. *In 2014, staff worked closely with the vendor of Pubworks to create a maintenance scheduling system. Unfortunately, the software is still not capable of doing this. The staff continues to look for methods to create a work plan. Current scheduling efforts involve a logical thought process of reviewing historical maintenance needs and proactively scheduling maintenance prior to a failure of the system occurring.*
2. GIS mapping efforts
 - a. Determine utility outfalls under permit – Once the permit is received, the county will identify the outfalls within their jurisdiction. *In 2014, staff has developed a draft map of outfalls based on the requirements of the MS4 permit. We are awaiting the approval of our MS4 permit application so that the outfall inventory can be approved by DHEC.*
 - b. (Ongoing) Develop water collection (Catch Basin) identification and inspection schedule. Mosquito control inventoried all catch basins in the county. Now that we have received the data we would like to create a numbering system for the catch basins and start an inspection program. *In 2014, the staff has researched various mobile hardware and software applications to facilitate this and other tasks to create a holistic asset management program to inventory, inspect, assess the condition, and develop a maintenance schedule and capital needs list for the stormsewer system. Implementation is pending MS4 permit approval and approval of a five year plan that includes additional staffing for this effort.*
 - c. (Ongoing) Complete drainage characterization (assigning a specific ID that's relative to the location of channels that are maintained by SW and adding this attribute to the Geographic Information System (GIS) drainage layer table) for Unincorporated County and develop comprehensive map of SW needs picture with what we are and not doing. Gather relevant SW mapping data from municipalities as it becomes available and integrate into County GIS data base. *2014 – See item 2.b above.*
 - d. Implement a Utility Locate System. There has been new legislature requiring utilities to locate or hire a locate company to locate their underground systems. The new legislature DID NOT include counties. However, because the Infrastructure section has had to replace crossline pipes because of damage during contractors or utility companies' projects, the section would like to voluntarily join the 811 program that would require an agency request locates from the county before digging. Develop 811 program and then promote participation to the municipalities. *In 2014, this goal was accomplished. We promoted one staff member as a coordinator for this program and hired another staff member to*

serve as a field technician. We believe this has prevented damage to the stormsewer system and improved coordination with contractors.

- e. (Ongoing) Complete LIDAR (Light Detection and Ranging) and update drainage layer with 2013 DEM (digital elevation model shows land elevation change using a color scale). The county and municipalities purchased LIDAR 10 years ago and it was funded through a cost-share. The county and municipalities have again entered in to a cost-share program to fund the update. The data is being checked for quality and assurance (Q&A) by the county and municipalities' staff, and once completed will be shared with the municipalities. Once delivered the municipalities will be invoiced for their cost-share. *In 2014, the final deliverable was received and distributed to all municipalities. Updating the drainage layers of GIS based on the new surface elevation data is an on-going process done as time permits.*
3. Develop a decision process to help move projects forward in a timely manner. *In 2014, the Stormwater Utility Management staff began overseeing major capital projects. We are still utilizing the assistance and experience of the Engineering Department with project management and will eventually be able to handle all tasks in-house. This will streamline the decision process and move projects forward in a timely manner.*

Staff's Top Ten External Goals Nominees (ongoing projects and tasks given higher priority to assure completion.)

1. (Ongoing) Promote use of the new University of South Carolina, Beaufort Campus (USCB) (located in the Hardeeville/Bluffton area) laboratory by Towns and the City within the County. Also to expand the monitoring effort to address MS4 requirements for all agencies in County. Once the County has officially received their designation as a MS4 community, there will be other agencies within the County required to have a monitoring program. Develop sampling protocols that tie sampling to climatological data (i.e. wet/dry periods). *In 2014, the lab was fully equipped. One additional staff member was hired and all USCB lab staff were trained on the equipment use. Certification of all the various procedures and methods is on-going and expected to be complete in 2015. The County's MS4 monitoring plan update has not been started due to delay in the approval of the MS4 permit by DHEC.*
2. (Ongoing) Continue support for two Research and Development (R&D) efforts – Water Budget and Salinity Study. The water budget study is almost complete and the final report should be presented the first of the year. Water budget study is comparing two watersheds of equal size (one developed, the other undeveloped), to see how much excess water is created and what happens to that excess. SC Department of Natural Resources (SCDNR) received a grant to accelerate the effort of the salinity study. The county and the ToB are also funding sources. Five watersheds are being studied simultaneously for several parameters to determine how salinity effects water quality. *In 2014, the Water Budget study was completed and presented to the Utility Board. The recommendations of the report can be used as a basis for new BMPs to be recommended in future versions of the BMP Manual. Similarly, the Salinity study should have recommendations of BMPs and land use practices that can be adopted by the Utility. The final report of the study is expected in 2015.*

3. (Ongoing) The construction of the Battery Creek retrofit project. Property in both the county and the City of Beaufort (CoB) tax district are in this impaired watershed. The CoB is the lead on this project and the county and the city have entered into a cost-share agreement to address the impairments and have received a grant to help with the funding to construct this project. The County SW staff should develop a specific list of parameters to measure the projected benefits of each retrofit project before proceeding with any retrofit project. *In 2014, the Battery Creek project progressed through preliminary design and permitting. The current status of the project involves easement acquisition. The schedule of the project has been updated to complete in October 2015. We have not begun creating a list of project parameters, or criteria, to identify, compare, and/or rank projects for retrofits. This is an expected outcome of the Master Plan update schedule for 2015 and 2016.*
4. (Ongoing) The construction of the Highway (Hwy) 278 ponds. As part of this widening program, while the treatment of the increased runoff from the increase in impervious area had to be addressed, the county saw the opportunity to also incorporate retrofits to address the runoff from existing development. Same comment as #3 above. *In 2014, the project design was completed and permitted. However, during the bidding process we determined the budgeted funds were insufficient to complete the project. An opportunity to partner with PALS and use the excavated soil as fill material for the soccer fields expansion at the Buckwalter complex brought additional funding to the project. The Public Works Stormwater Infrastructure crew will excavate the ponds as another cost savings measure. Bidding for clearing and hauling was completed in December and construction is expected to begin in January 2015.*
5. (Ongoing) Actively participate in the Okatie 319 grant. This is a grant to address failing or septic systems needing repair. Phase I is completed and the county is engaged in developing the scope for Phase II. Also the cost of the county efforts to address WQ issues in the Okatie River watershed can be provided by LCOG, allowing LCOG to receive the grant funding. *In 2014, the project was completed and accepted by DHEC. Projects completed by the grant included developing a composting facility in cooperation with Oldfield development, identifying septic systems failing and needing repair, managing residential runoff, addressing pet waste, and educating boaters on best management practices.*
6. Start preparations for National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) permit.
 - a. Develop application – Once South Carolina Department of Health and Environmental Control (SCDHEC) officially notify the county by letter, the county must submit its application within one year. *The County did not receive a letter from DHEC designating us as a MS4 until June. The MS4 permit application was developed to address items b and c through j and was submitted to DHEC in November. Permit approval is expected in the first quarter of 2015.*
 - b. Establish program reporting elements – There are six Minimum Control Measures (MCM) in the permit. The County will be required to report their activities for each MCM. *See item 6.a.*
 - c. If the municipalities would like to address some or all of the MCMs jointly with the county, then the Intergovernmental Agreements (IGAs) between the County and the municipalities will have to be revised to reflect new MS4 rules and activities. *In 2014, the SWIC held multiple discussions before determining that each jurisdiction will submit a separate MS4 application. However, a MOA was established for Public Education and Outreach and involves a cost sharing*

agreement to hire the Beaufort Soil and Water Conservation District as our educational partner.

- d. Determine utility outfalls under permit – Once the permit is received, the county will identify the outfalls within their jurisdiction. *See item 6.a. above and “top three goals” item 2.a.*
 - e. Pollution Prevention Plans for the SW Utility is required once the county is designated as a MS4. All government owned facilities will need to be inventoried and a plan for pollution prevention for each facility will be developed based on uses at the facility and pollution potential. *See item 6.a.*
 - f. Develop inspection procedures/checklist for Best Management Practices (BMPs) and to identify “hot spots” including drainage systems owned by South Carolina Department of Transportation (SCDOT). Encourage participation by municipalities. *See item 6.a.*
 - g. Develop Pond Maintenance System. The task is to develop a written operating procedure and annual inspection for all public and private owned ponds. We will develop a list of all county owned ponds and schedule for maintenance, chemical treatment, mowing, etc. We will also inventory private owned ponds and set up a maintenance schedule to meet MS4 permit requirements. Resources such as Carolina Clear will be used to develop operating and inspection procedures. *See item 6.a.*
 - h. Develop Water Collection (Catch Basin) identification and inspection schedule. Mosquito control inventoried all catch basins in the county. Now that we have received the data we would like to create a numbering system for the catch basins and start an inspection program. Develop a common numbering and information (attributes) system that all communities can use and keep in the County GIS. The data also needs to be revisited and supplemented with data form within the municipalities if not included and to check what attributes were collected and add variables if needed. *See item 6.a. above and “top three goals” item 2.b.*
 - i. Explore with Public Works adopting a program and software similar to Charleston’s SWU use of Global Positioning System (GPS) touch devices to locate and inventory their assets within their road and drainage system. *See item 6.a. above and “top three goals” item 2.b.*
 - j. Research and select MS4 permit management software for permit reporting and inspections. *See item 6.a. above and “top three goals” item 2.b.*
7. Initiate agreements to start the development of the update to the Stormwater (SW) Management Master Plan. This is a ten year plan and was authored in 2006 and funded through a cost-share between the county and the municipalities. Therefore the plan should be updated by 2016 and the county needs to engage the municipalities. *In 2014, the SWIC discussed funding and the timeline of the Master Plan update. Funding was not available to begin the project in FY 15 but SWIC members agreed that it should be budgeted for FY 16.*
8. Redefine the role of the SW Implementation Committee (SWIC) and how it relates to the Stormwater Management Utility (SWMU) board. The Stormwater Manager would like to expand the membership of the group to include members of the water quality community and development / construction community. The group can serve as a technical advisory body to the Stormwater Utility board and provide comment and recommendations on new policies, procedures, and activities. *This goal evolved somewhat in 2014. Mr. Larson, as the newly hired Stormwater Manager, learned more about the function of the SWIC, it was clear that multiple groups were needed. While the SWIC serves as an implementation body, advisory groups are needed representing the*

water quality community and development / construction community. These will be established as part of MS4 Public Involvement activities and implemented throughout the permit term.

9. Expand role of the SW manager to be more involved in storm water capital project development and implementation. Currently, the SW Manager is involved in the project identification level. Design and construction is handled by the County Engineer's office. The proposed change would keep capital projects within the Stormwater management division for contracting design services and construction, as well as oversight during construction. This will provide continuity throughout the process and into maintenance phases. *See "top three goals" item 3.*
10. Look for ways to stress economic value of SW protecting water quality. The county's natural resources are appealing to industries, tourists, and for outdoor enthusiasts. Water quality is pertinent and connected with the environment. The protection of the WQ is valuable. *In 2014, the Stormwater Utility Department the County Planning Department began working together on a conceptual re-development concept of the Buckingham Plantation Drive area. Using green infrastructure techniques along with "complete streets" design, retrofitting the County infrastructure will spur re-development of the adjacent properties. This goal will continue into 2015.*
11. Restoration Agreement with Town of Bluffton on May/Okatie Rivers. The Town is the primary on the efforts within the May River watershed to monitor, address impairments and water quality and the county is the primary on the efforts to monitor and address issues within the Okatie River watershed. Since they both have parcels in their tax district within these watersheds, the county and town needs to establish some type of cost-share agreement. This would include the Stormwater Manager participating in the MayRiver Watershed Action Plan Advisory Committee to show regional coordination and cooperation. *While a formal written agreement was not made in 2014, staff of both the County and Town of Bluffton discussed the need for such an agreement and determined that formalizing partnerships and cost sharing of activities may actually impede progress. However, in 2014 the Town of Bluffton made progress on two separate CWA Section 319 grants for the May River watershed and completed a detention pond retrofit in the New River area. In turn, the County completed the Okatie East retrofit and continues to model runoff from that site to determine water quality benefits. Also, a conceptual study was performed to identify stormwater BMPs that are needed to address increased runoff from the SC 170 widening. Lastly, the Stormwater Department, in partnership with Rural and Critical Lands, acquired the New Leaf, LLC tract on SC 170 and will use the site for detention ponds identified in the widening stormwater concept and the Okatie West concept plan.*
12. Make purchase of property needed for Okatie West retrofit in time to utilize current wetlands delineation. The wetlands delineation has expired and the county will have to apply again to have the wetlands boundaries determined. As indicated by the Ward Edward report that was funded by the county and the municipalities, this is a "highly feasible" and a "high priority" retrofit project. See #3 above. *See item 11 above.*
13. Develop plan and costs to address SCDOT outfalls and Beaufort County School Districts (BCSD) drainage issues. Currently the Utility does not maintain these Outfalls. These tasks will determine feasibility and cost of implementation. *In 2014, the Stormwater Manager spent considerable time trying to determine the magnitude of the problem. Discussions expanded to include the responsibility and funding of needed maintenance*

on County and State roads within the jurisdictional limits of the Towns and City. While no decision or consensus was reached, this goal will continue into 2015 and will become part of a larger discussion concerning the five year plan and utility funding.

14. Continue to develop Utility capability to do water quality retrofit projects. The Infrastructure section has constructed two WQ projects – Backache Acres pond and Okatie East. The section would like to continue to develop these capabilities so that they can improve their efficiency and proficiency in constructing projects in the future. See #3 above. *See item 4 above.*
15. Follow-up on public education slots for County Channel. There are slots available and the county could develop SW related educational segments. Town of Bluffton staff is working to develop 30 sec. Spots. Together for Beaufort Water Quality Coalition is also involved / available for public outreach efforts. Explore bringing Carolina Clear back to provide Public Education and Public Involvement. *In 2014, the SWIC contracted with the Beaufort Soil and Water Conservation District to provide Stormwater Public Education and Outreach. (See item 6.c above). The scope of services includes utilizing the County Channel as a media outlet for education and will be implemented in 2015. The Town of Bluffton did produce the 30 second spots in conjunction with the County Channel. In addition, the County produced a water quality documentary in cooperation with State Representative Weston Newton which aired on the County Channel in October.*
16. Create interactive website graphics on SW that can be used as tool to educate the public and students and to promote awareness in our communities. The Town of Bluffton has already developed some of these graphics and are willing to share with the County. *In 2014, the SWIC contracted with the Beaufort Soil and Water Conservation District to provide Stormwater Public Education and Outreach. (See items 6.c and 15 above.) The scope of services includes website development in partnership with the Town of Bluffton and the Neighbors for Clean Water campaign. It is anticipated that formal agreements with the Town on the use of the Neighbors for Clean Water slogan will be entered into in 2015.*

Guiding principles for Utility determinations were

1. Actions needed for NPDES Permit
2. Addressing WQ Issues
3. Improve efficiency in Utility operation

DEPARTMENTAL SUCCESSES 2014

Beaufort County

February 2015

DEPARTMENT: Stormwater Utility

Please list your department's most important achievements that were completed during 2014 under "Success." Under "Impacts", please explain what the benefits to the county and to a resident were as a result of each achievement.

Success: Okatie East wetland restoration and Stormwater retrofit

The project involved replacement of a failed culvert pipe and restoration of a roadway embankment that historically served to restrict flow of stormwater runoff into the Okatie River. Upstream of this culvert there exists a natural wetland area that had been inadvertently drained by the culvert failure. Restoration of the pipe, embankment, and wetland creates an opportunity to treat stormwater quality and volume via the wetland system. Construction was completed in the spring of 2014 with a total cost in design of \$46,736 with construction costs of \$102,342. The project was funded from the Stormwater Utility Fund.

Impacts: This project, located off of the Hampton Lakes Parkway adjacent to the Island West Development near Bluffton, is the first of many water quality improvements and wetland restoration projects the County and its municipal partners plan to complete to combat pollution in our rivers and restore the estuaries to their intended use.

Success: MS4 Stormwater Permit Program Development

During 2013 and continuing into 2014 and beyond, the County will be implementing the Municipal Separate Stormsewer System (MS4) program. The program is mandated by the US EPA and consists of 6 minimum control measures:

- 1) Public Education and Outreach
- 2) Public Involvement and Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Runoff Program
- 5) Post Construction Best Management Practices
- 6) Pollution Prevention in Municipal Operations

Development and implementation of the program is funded by the Stormwater Utility Enterprise Fund. Direct spending in fiscal year 2015 is estimated at \$50,000 with an additional \$90,000 to \$100,000 to be allocated in additional staff and equipment. Spending in future years will be comparable and will likely increase over time.

Impacts: Population and Development growth can lead to unforeseen consequences. With the announcement that areas of Beaufort County were designated as an Urban Area by the 2010 U.S. Census, the requirements of the US EPA Clean Water Act must now be implemented in Beaufort County. Most notably, a Municipal Separate Stormsewer System (MS4) permit will be issued by DHEC to the County in the upcoming months. This will result in increased local regulatory authority and acquiring the resources needed to comply with the MS4 permit.

Work must begin now to reach program compliance deadlines set forth in the approved permit. Deadlines are as early as 12 months away and will involve extensive work to create work plans and update county regulations. The initial MS4 permit is 5 years in duration. At the end of the permit cycle, full compliance with all the program elements is expected. However, that is just the beginning. The permit will be re-issued in 5 year increments. Each permit cycle will likely increase requirements and evolve as the science of water quality continues to grow our understanding of urban stormwater runoff pollution.

Educating the elected officials is as critical as public education to prevent roadblocks in approvals which could result in fines for violation of the permit.

Success: Establishing the USCB Water Quality Lab

This task involved the joint effort with the University of South Carolina, Beaufort to create a Water Quality Laboratory on their Bluffton Campus. Establishing a local lab provides the community multiple benefits, including quicker response to sampling and testing needs, improved focus on client service, and keeping utility revenues local via employment of local staff and utilizing local resources.

The Stormwater Utility funded the initial set up of the lab in the amount of \$250,000. The County has currently budget an additional \$90,000 annually for services to be provided by the lab.

Impacts: Water quality is an important aspect to the community's environment and economy. With the implementation of the Municipal Separate Stormsewer System (MS4) permit, the County's efforts in water quality sampling and testing will evolve and grow. The key to success is investing in the community to provide the services needed using local facilities and staff and spending the Stormwater Utility funding in the community to continue to invest in the local economy.

Success: Completion of Research and Development (R&D) efforts – Water Budget Study

The water budget study was completed this year. The Water Budget study compared a developed watershed in the County with other undeveloped watersheds within the State to see how much excess water is created and what happens to that excess.

Impacts: The focus of this study was to determine the effects of development on runoff of fresh water into the salt water receiving bodies. The goal was to understand where excess fresh water is impacting the estuaries and identify opportunities for water re-use, retention, evaporation, and/or infiltration.

Success: Establishing a Utility Locate program within the Infrastructure Crew

There was new legislation in 2014 requiring utilities to locate or hire a locate company to locate their underground systems. The new legislation DID NOT include counties. However, because the Infrastructure section has had to replace crossline pipes because of damage during contractors or utility companies' projects, the section wanted to voluntarily join the 811 program that would require an agency request locates from the county before digging. The crew hired a full time Locates Technician and promoted another Technician to supervise the program.

Impacts: The effort has resulted in preventing accidental damage to our system and also prevented our crews from damaging other utilities

Success: Developing In-House capability within the Stormwater Department to manage capital projects

Most capital projects involving stormwater were managed by Stormwater staff in 2014 with continued support from Engineering. Stormwater promoted a stormwater inspector to serve as a supervisor for the other inspectors and to coordinate management of the capital projects.

Impacts: Having projects managed in-house has allowed the stormwater staff to expand their knowledge base, coordinate use of the Infrastructure crew, and cut project costs.

Success: Okatie Watershed 319 grant

This was a grant to address poor water quality in the Okatie watershed. Projects included developing a composting facility in cooperation with Oldfield development, identifying septic systems failing and needing repair, managing residential runoff, addressing pet waste, and educating boaters on best management practices. LCOG received the grant funding and lead the project.

Impacts: This project attempted to take a comprehensive approach to address primary sources of target pollutants. A unique feature of this project is the inclusion of stormwater quantity provisions. Water quantity control is the key to controlling the total amount of pollutant loading to the river and to controlling the longevity of the pollutants in the waterbody, which are a result of increased survivability of bacteria in less saline waters.

Success: SC 170 widening stormwater study

With the widening of SC 170 between May River Road (SC46) and Fording Island Road (US 278), the Stormwater Department identified a need to study the corridor for stormwater volume reduction and water quality treatment. A conceptual design study was completed and identified seven locations for wet detention ponds to intercept road runoff. The project budget was \$14,000.

Impacts: The study identified the need for volume reduction and pollutant removal and provided a master plan of the corridor that can be used for land acquisition and ultimately design and construction.

Success: Purchase of the New Leaf LLC tract for the Okatie West and SC 170 widening stormwater projects

Prompted by the 2010 study entitled “Okatie West” and the 2014 SC 170 widening stormwater study, the Stormwater staff partnered with Rural and Critical Lands to acquire the New Leaf LLC tract along SC 170 near the headwaters of the Okatie River.

Impacts: This purchase will allow the County to build two stormwater facilities to address runoff from SC 170 and a majority of the developed watershed above the west branch of the Okatie River, most significantly – Sun City.

Success: Establishing a cost share agreement with the Towns and City for Stormwater Public Education and contracting with the Beaufort Soil and Water Conservation District for implementation.

In 2014, the Stormwater Implementation Committee (SWIC) developed a scope of services for an education partner that would meet the requirements of the 2006 Master Plan and the pending MS4 permit. The scope includes TV spots on County Channel, updating our website presence, educating in the schools, conducting community surveys, and creating outreach opportunities. Project costs were \$50,000 and split among the County, the Towns of Hilton Head Island, Bluffton, and Port Royal, and the City of Beaufort.

Impacts: Partnering with the other municipalities within the County will allow us to continue to have a singular message and combine efforts in the most effective manner. Contracting with the Beaufort Conservation District is allowing us to also utilize existing efforts being done by others with BSWCD coordinating and compiling records for MS4 permit compliance.

Success: Stormwater Utility Credit Program and On-Lot Exemption Program Audits

In 2014, the Stormwater Management Staff conducted audits of all current applicants. The current list of applicants include Berkeley Hall, Belfair, Oldfield, Dataw Island, Sun City, Habersham, Coosaw Point, and Somerset Point.

Impacts: The Credit program and On-Lot Exemption program are both designed to reduce the burden on the County’s stormsewer system by creating private development programs that reduce runoff and pollutants in the receiving water bodies.

Success: Drainage Easement Protocols

In 2014, the County Council approved a new operating procedure in acquiring easements that allows for condemnation if deemed necessary.

Impacts: From time to time, the Department identifies projects to correct a drainage problem is needed to protect the public. This procedure will allow the Department is proceed with the project if we cannot obtain 100% volunteer participation by the adjacent landowners.

MAJOR CHALLENGES

Beaufort County

February 2015

DEPARTMENT: Stormwater Utility

From your department's perspective, what are the major challenges facing the county over the next 5 years?

- Increased workload as a result of an expanded Level of Service plan, Extent of Service Plan, and MS4 permit requirements will require additional funding. A comprehensive look at Utility revenues is needed to meet the demand of our services.
- Promote use of the new University of South Carolina, Beaufort Campus (USCB) (located in the Hardeeville/Bluffton area) laboratory by towns and city in county. Also to expand the monitoring effort to address MS4 requirements for all agencies in county. Once the county has officially received their designation as a MS4 community, there will be other agencies within the county required to have a monitoring program.
- Look for ways to stress economic value of stormwater protecting water quality. The county's natural resources are appealing to industries, tourists, and for outdoor enthusiasts. Water quality is pertinent and connected with the environment. The protection of the water quality is valuable.
- Continue to develop Utility capability to do water quality retrofit projects. The Infrastructure section has constructed several WQ projects – Backache Acres pond, Okatie East, Rice Road, and Shanklin Road. The section would like to continue to develop these capabilities so that they can improve their efficiency and proficiency in constructing projects in the future.
- Get an agreement with the military facilities on the payment of stormwater utility fees. The military has taken the position that their facilities are exempt from the fees. The County has presented evidence to the contrary. Several correspondences have been exchanged on the issue. The County and the DoD need to resolve this issue, reconcile any past fees, and define a plan moving forward.
- Increased cooperation, partnering, and cost share between the County and the four municipal stormwater programs with regard to MS4 program activity implementation, such as education, inspection, ordinance and regulation development, and capital projects. If the municipalities would like to address some or all of the MCMs jointly with the county, then the Intergovernmental Agreements (IGAs) between the County and the municipalities will have to be revised to reflect new MS4 rules and activities.
- Expansion of stormwater staff to meet the program requirements of the MS4 permit.

- Expansion of the stormwater infrastructure crew to implement an expanded Level of Service plan and Extent of Service plan.
- Developing an inventory of our stormsewer system for better GIS mapping and asset management using improved technology in the field.
- **The County, along with the Towns of Bluffton and Hilton Head Island, have been identified by DHEC as required to submit a permit as a Municipal Separate Storm Sewer System (MS4). Implementation of the permitting requirements will involve developing ordinances related to non-stormwater discharges, construction runoff, and post construction water quality and establishing inspection and enforcement programs defined by these ordinances. Other programs, such as spill prevention at municipal facilities, GIS mapping, MS4 system assessment, and public education will be required. Data management will be a critical component. Funding and intergovernmental agreements will need to be reassessed to assure adequate resources are available.**
- Intergovernmental Agreements for Stormwater need to be revisited to clarify interpretation as to intent of the language to resolve on-going issues with jurisdictional responsibilities and funding of operations and maintenance.
- Driveway permitting on County Roads
Driveway encroachments onto existing County Roads can cause many problems if not done correctly, including stormwater backups due to improperly sized or damaged pipes. Implementation of existing and updated regulations is needed to eliminate the problem. Resources in Stormwater Department and other departments is needed.

MANAGEMENT IN PROGRESS 2015

PROJECTS AND ISSUES

Beaufort County

February 2015

DEPARTMENT: Stormwater Utility

Please list departmental projects or issues in progress (meaning there is work currently being done on them).

- 1 Stormsewer system inventory
Building on the goals of 2014, we need to continue to map our system and assess its condition. This will involve use of new technologies in the field and the development of a logical numbering / naming system began in 2013. The implementation of the Mobile GIS platform and MUNIS software will be part of this development. This inventory will be the foundation of the MS4 inspection and monitoring programs.
- 2 Continue support for Research and Development (R&D) efforts – Salinity Study. SC Department of Natural Resources (SCDNR) is studying the impact of fresh water runoff on the receiving estuaries. DNR received a grant in 2013 to accelerate the effort of the salinity study. The county was also a funding source. Five watersheds are being studied simultaneously for several parameters to determine how salinity effects water quality.
- 3 Start preparations for National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems (MS4) permit program.
 - a. Begin permit – The permit has been submitted and the County is awaiting permit issuance by South Carolina Department of Health and Environmental Control (SCDHEC).
 - b. Establish program reporting elements – There are six Minimum Control Measures (MCM) in the permit. The County will be required to report their activities for each MCM.
 - c. Determine utility outfalls under permit – Once the permit is received, the county will identify the outfalls within their jurisdiction.
 - d. Pollution Prevention Plans for the SW Utility is required once the county is designated as a MS4. All government owned facilities will need to be inventoried and a plan for pollution prevention for each facility will be developed based on uses at the facility and pollution potential.
 - e. Develop inspection procedures/checklist for Best Management Practices (BMPs) and to identify “hot spots” including drainage systems owned by South Carolina Department of Transportation (SCDOT).
 - f. Develop Pond Maintenance System. The task is to develop a written operating procedure and annual inspection for all public and private owned ponds. We will develop a list of all county owned ponds and

schedule for maintenance, chemical treatment, mowing, etc. We will also inventory private owned ponds and set up a maintenance schedule to meet MS4 permit requirements. Resources such as Carolina Clear will be used to develop operating and inspection procedures. Possible training to private owners via a “Pond Conference / Workshop” in conjunction with Sea Grant and DNR-Coastal Training Program.

- g. Develop Water Collection (Catch Basin) identification and inspection schedule. Mosquito control inventoried all catch basins in the county. Now that we have received the data we would like to create a numbering system for the catch basins and start an inspection program. The data also needs to be revisited and supplemented with data form within the municipalities if not included and to check what attributes were collected and add variables if needed.
- h. Research and select MS4 permit management software(s) for permit reporting and inspections.

4 US 278 widening stormwater pond retrofit project

The project is to construct four (4) stormwater detention ponds along US 278 to capture and treat runoff from the roadway widening that occurred in 2013 – 2014. The ponds are to be constructed by the Beaufort County Stormwater Utility Infrastructure crews. In conjunction with this project, the excavated soil from the pond sites is being hauled and stockpiled at the Buckwalter Park soccer complex for a future project to construct additional soccer fields. Project budget from Stormwater is \$231,400, from US 278 widening is \$124,600, and from PALS impact fees is \$122,680.

5 Administration Building Campus Stormwater retrofit

A portion of the parking lot was replaced with porous clay pavers and rain gardens, both providing opportunities for infiltration and filtering of stormwater before being discharged into the Battery Creek. The project also involved routine stormwater pond maintenance. Construction began in November 2014 and continued for approximately 120 days. Total cost in design is \$32,800 with construction costs are \$299,653. The pond maintenance was provided by the Infrastructure crew at a cost of \$64,863 and was completed in September 2014. The project was funded from the Stormwater Utility Fund.

This project is the second large scale stormwater retrofit to go into the construction phase. Located on the main County Administration campus off of Ribaut Road in the City of Beaufort, the site is a highly visible location that receives foot traffic from citizens all over the county. The goal of the project is to demonstrate numerous Low Impact Development, or Green Infrastructure, practices that are designed to reduce stormwater runoff and provide pollutant removal from stormwater.

6 Battery Creek (Burton Hill M2) Stormwater pond retrofit

The Burton Hill M2 watershed discharges stormwater runoff into the Battery Creek at Old Jericho Road near the intersection of Robert Smalls Parkway and Parris Island Gateway. Urban runoff pollution has been long cited as a cause for impairments to water bodies such as those found in Battery Creek. The project will address a pollution problem resulting from development within this watershed. During the course of the project, public education and involvement will provide opportunities for educating on the proper construction and maintenance of stormwater retention facilities.

Construction will begin in the spring of 2015. The project is jointly funded by the County and the City of Beaufort with 60% of the funding coming from a US EPA Clean Water Act Section 319 grant. The County share of the total cost for design and construction is \$132,609 coming from the Stormwater Utility Fund.

This project is an example of partnering with other governmental bodies for the successful achievement of a goal. The City of Beaufort is the lead agency for a grant application to fund the design and construction of the project. The partnering was prompted by a growing water quality impairment on the Battery Creek which was contributed to by stormwater runoff from both the City and County jurisdictions.

- 7 Buckingham Plantation Innovation District
This land use study is being done in partnership with the Planning Department. The goal of the project is to revitalize the area and prompt redevelopment via the upgrade of the public infrastructure (roads and stormsewer). Public input through a series of Charrettes has been completed and the next phase is conceptual design and development of a project budget. Funding sources must also be identified.
- 8 Turtle Lane paving stormwater plan
Address a localized flooding problem in conjunction with the paving of the road.
- 9 Forby Tract stormwater project
This site was purchased in 2014 with the goal of addressing a US 278 overtopping problem modeled in the 2006 Master Plan.
- 10 McCracken Circle drainage project
Localized flooding along McCracken Circle in Bluffton is causing safety concerns for motorists and pedestrians in the vicinity of the Bluffton School Campus.

INITIATIVES 2015: SHORT-TERM ISSUES AND PROJECTS

Beaufort County

February 2015

DEPARTMENT: Stormwater Utility

Please list issues or projects that you would like for the county to address this next year 2015.

- 1 Receive an issued MS4 permit and secure a contract with our consultant for program development.
- 2 Initiate agreements to start the development of the update to the Stormwater (SW) Management Master Plan. This is a ten year plan and was authored in 2006 and funded through a cost-share between the county and the municipalities. Therefore the plan should be updated by 2016 and the county needs to engage the municipalities. Due to funding constraints and the pending MS4 permit submittal, this effort was delayed in 2014.
- 3 Develop plan and costs to address SCDOT outfalls and Beaufort County School Districts (BCSD) drainage issues. Currently the Utility does not maintain these Outfalls. These tasks will determine feasibility and cost of implementation. The result will likely be a revision of the Extent of Service Plan adopted by the Stormwater Department and County Council.
- 4 Update the Level of Service plan adopted by County Council and the Stormwater Department to more effectively address the needs of the MS4 program.
- 5 Adoption and implementation of a Stormwater Five Year Plan.
- 6 Update of the Utility Fee rates and/or structure to provide the needed revenue for implementation of the Five Year Plan.
- 7 Graves Tract stormwater feasibility project
Study the watersheds draining to the Okatie via the Graves tract and look for opportunities for a stormwater facility on this site.
- 8 Plantation Park Subdivision stormwater
Partner with the POA and the Town of Bluffton to repair a failing stormsewer system.



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD
AGENDA

Wednesday, February 4, 2015
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 – January 7, 2015 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. MS4 Update - Eric Larson, P.E. ([backup](#))
 - C. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - E. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - F. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - G. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - H. Financial Report – ([backup](#))
 - I. Maintenance Projects Report – Eddie Bellamy ([backup](#))
5. UNFINISHED BUSINESS
 - A. Review of January 22nd Workshop – Eric Larson, P.E. ([backup](#))
6. NEW BUSINESS
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. March 4, 2015 ([backup](#))
9. ADJOURNMENT

