



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 – December 3, 2014 and 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
 - A. Consideration of a Revision to the 2015 Schedule – Eric Larson, P.E.
 - B. Rate Study - Eric Larson, P.E.
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. March 4, 2015 ([backup](#))
9. ADJOURNMENT



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

January 7, 2015 at 2:00 p.m. in Beaufort Industrial Village Building #3 Conference Room
Draft as of January 28, 2015

Board Members

Present	Absent
Allyn Schneider	James Fargher
Don Smith	Patrick Mitchell
William Bruggeman	
Marc Feinberg	
Larry Meisner	

Ex-Officio Members

Present	Absent
Andy Kinghorn	Kimberly Jones
Scott Liggett	
Van Willis	

Beaufort County Staff

Eric Larson
Gary Kubic
Josh Gruber
Eddie Bellamy
Carolyn Wallace
Danny Polk
Kevin Pitts

Visitors

Alice Howard, Beaufort County Council
Tony Maglione, ATM
Denise Parsick, Bft Soil & Water Conservation Dist
Kristina Wetzel, Citizen
Paul Moore, Ward Edwards

1. Meeting called to order – Don Smith

- A. Agenda – Approved.
- B. November 5, 2014 Minutes – Approved.
December 3, 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. **Utility Update** – Eric Larson
Staff Vacancy – This coming Friday, we are advertising for an Administrative Technician for the Stormwater Management staff.
New Board Members – We held orientation for Mr. Marc Feinberg and Mr. Larry Meisner earlier this week.
- B. **MS4 Update** – Eric Larson
Please see attached written report.
- C. **Monitoring Update** – Eric Larson
USCB Lab – Mr. Larson provided Dr. Alan Warren’s update on the certification of the lab in the manager’s report. The only update to the report is the turbidity PT study was approved.
- D. **Stormwater Implementation Committee (SWIC) Report** – Eric Larson
The committee will resume their regular schedule meetings next week.
- E. **Stormwater Related Projects** – Eric Larson
County Administration Complex Parking Lot Retrofit – The rain gardens are in and the contractor has begun laying the pavers.

Okatie West/SC 170 Widening Retrofit Land Purchase – County Council approved the purchase. Closing is pending. There is a development plan approved by the Town of Bluffton and the Rural and Critical Land Trust will have to go through a process to get it removed.

Graves Property – The County Council is interested in this property and Mr. Larson would like to look at it from a stormwater point of view and he has a proposal on his desk for a feasibility study.

F. Professional Contracts Report – Eric Larson

Please see attached written report.

G. Regional Coordination - Eric Larson

Old Woodland Plantation Stormsewer System Repairs – This project is 70% complete. The crew is having issues because there are driveway pipes installed by the property owners that are the wrong size or installed at the wrong elevation and some property owners are not completely satisfied with the work caused by these limitations.

H. Financial Report

Copies of the November financials were provided.

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

5. Unfinished Business – None.

6. New Business

Fiscal Year 2014 Actuals – Mrs. Carolyn Wallace provided a presentation on the actual revenue received and expended by the SW utility for FY 2014 ([please see attachment](#)). The reserve utilization for FY 2015, the set up of the USCB lab, the capital improvement fund and the uncollected SWU fees were some of the topics discussed.

January 22nd SW Workshop – Mr. Gary Kubic provided background information on the county’s stormwater efforts and commented on some of the upcoming challenges. Mr. Larson and Mr. Tony Maglione discussed the draft agenda for the workshop.

Status of the 2014 Goals and Review of the 2015 Goals – Mr. Larson reviewed the status of the 2014 goals. Then he presented on the draft of the 2015 goals. The Water Budget Study, the county’s collection efforts of the military’s delinquent SWU fees, driveway permits in the county’s right of ways, possibility of “stream restoration” as a water quality control, were some of the topics discussed. Mr. Smith said the utility needs to develop criteria to compare and rank capital projects. Recently, new projects have been identified and given high priority for funding without a thorough comparison to the other capital projects that have been identified and been on a priority list since the 2006 Master Plan. He asked that this be added to the 2015 list. Pursuant to Mr. Larry Meisner’s comments and the ensuing discussion, Mr. Larson also added “Continuing to look for opportunities for wetland and stream bank restorations, restoring fresh water channels to mimic natural waterways, stabilizing banks, and establishing vegetated buffers” to the 2015 goals.

Mr. Larson asked the board members to provide their input within the next two weeks.

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved.

9. Meeting Adjourned.



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)
2. 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).
3. 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.
4. 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.
5. Drainage Issue on H.E. McCracken Circle in Bluffton – On going. Stormwater staff is evaluating the field data and defining possible actions.
6. 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.
7. 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.



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



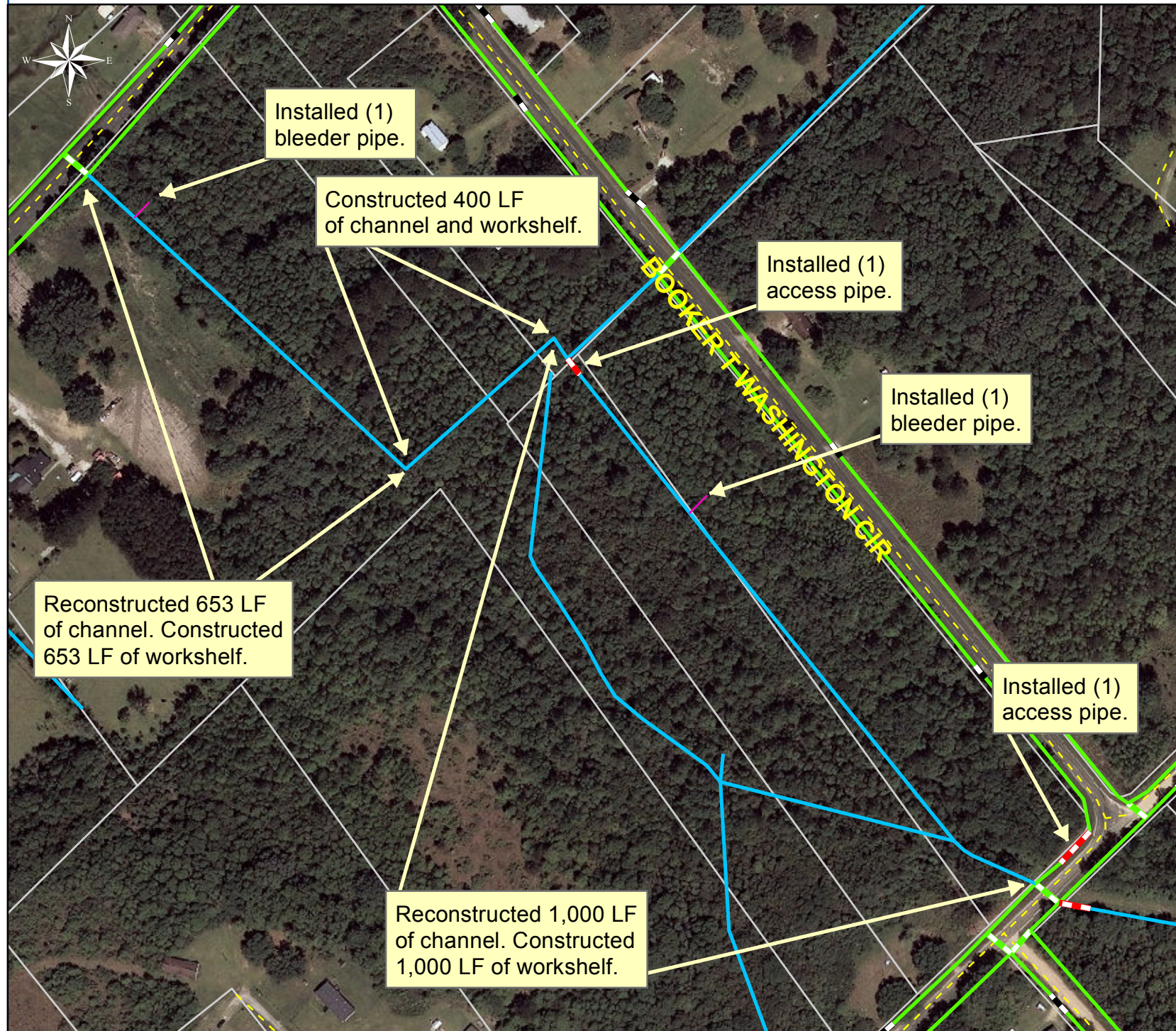
Project: Booker T Washington Circle

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



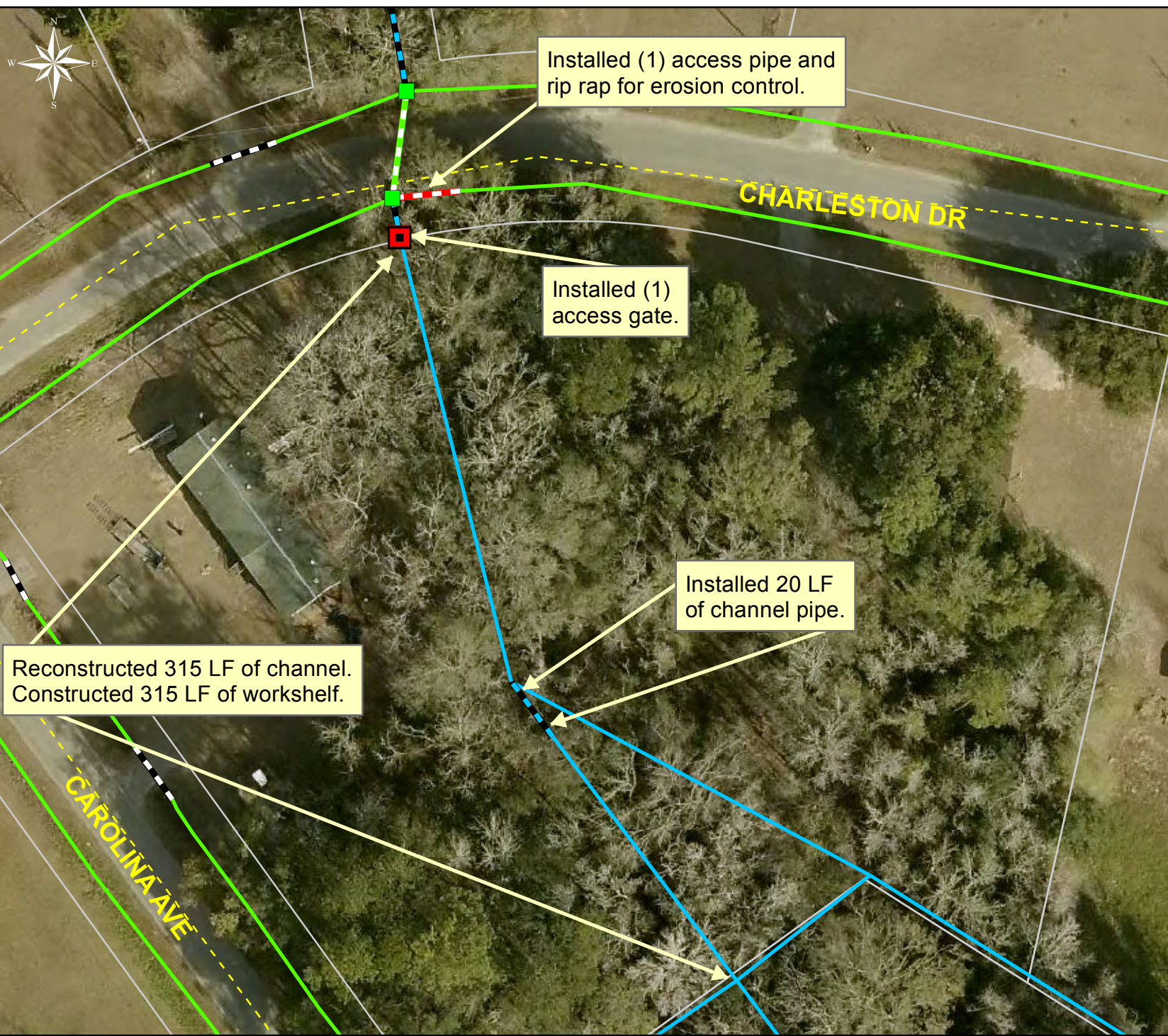
Project: Charleston Drive Channel #1

Activity: Routine/ Preventive Maintenance

Project #: 2015-004

Township: Port Royal Island

Completed: November 2014



Installed (1) access pipe and rip rap for erosion control.

Installed (1) access gate.

Installed 20 LF of channel pipe.

Reconstructed 315 LF of channel. Constructed 315 LF of workshelf.

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**

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

Installed 208 LF of channel pipe, rip rap and hydroseeded for erosion control.

Extended 10 LF of channel pipe.

Extended 10 LF of channel pipe.

Installed (1) catch basin.

Installed 20 LF of channel pipe.



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**



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

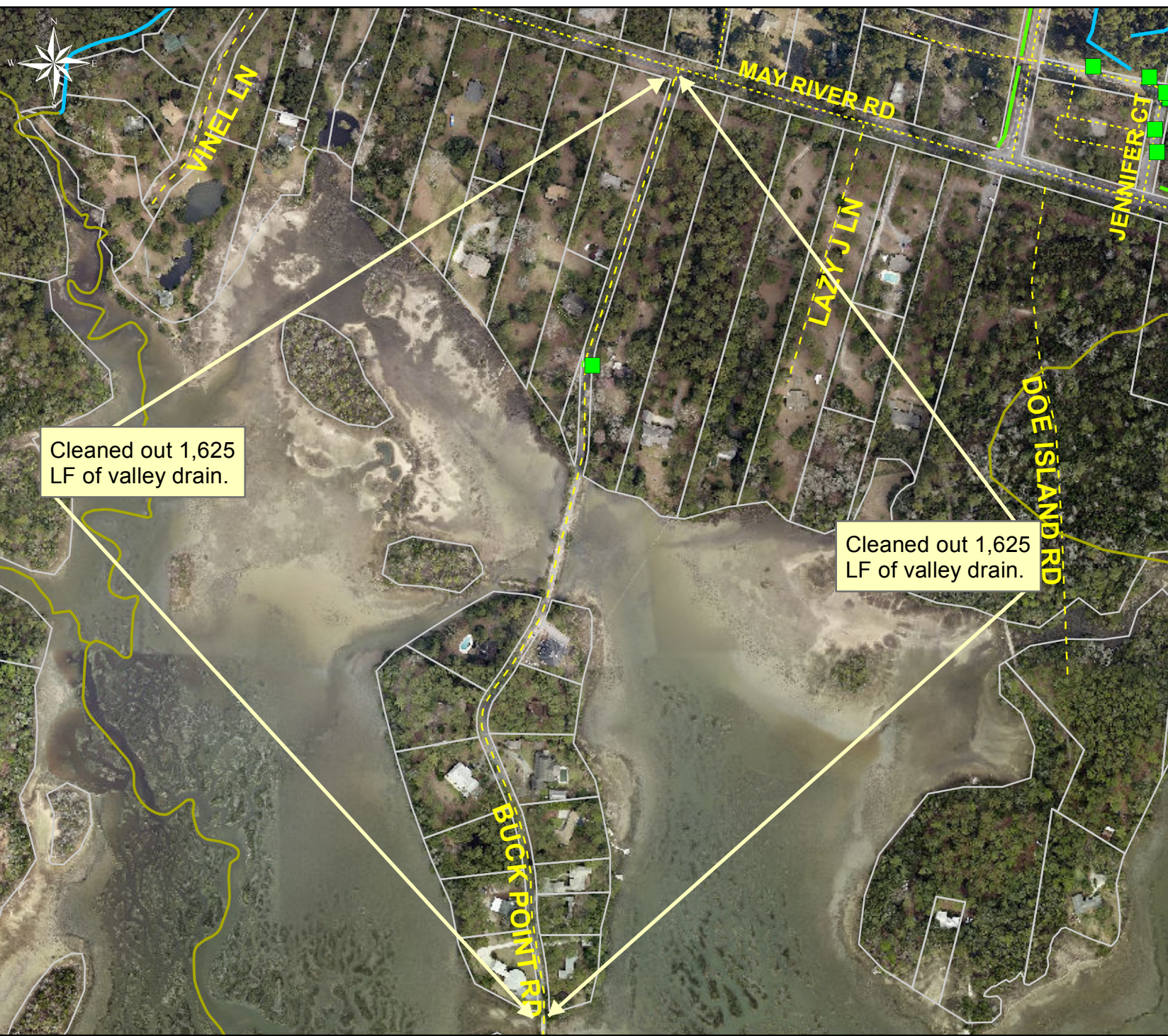
Project: Buck Point Road

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**

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 1,514 LF of valley drain.

Cleaned out 1,514 LF of valley drain.



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

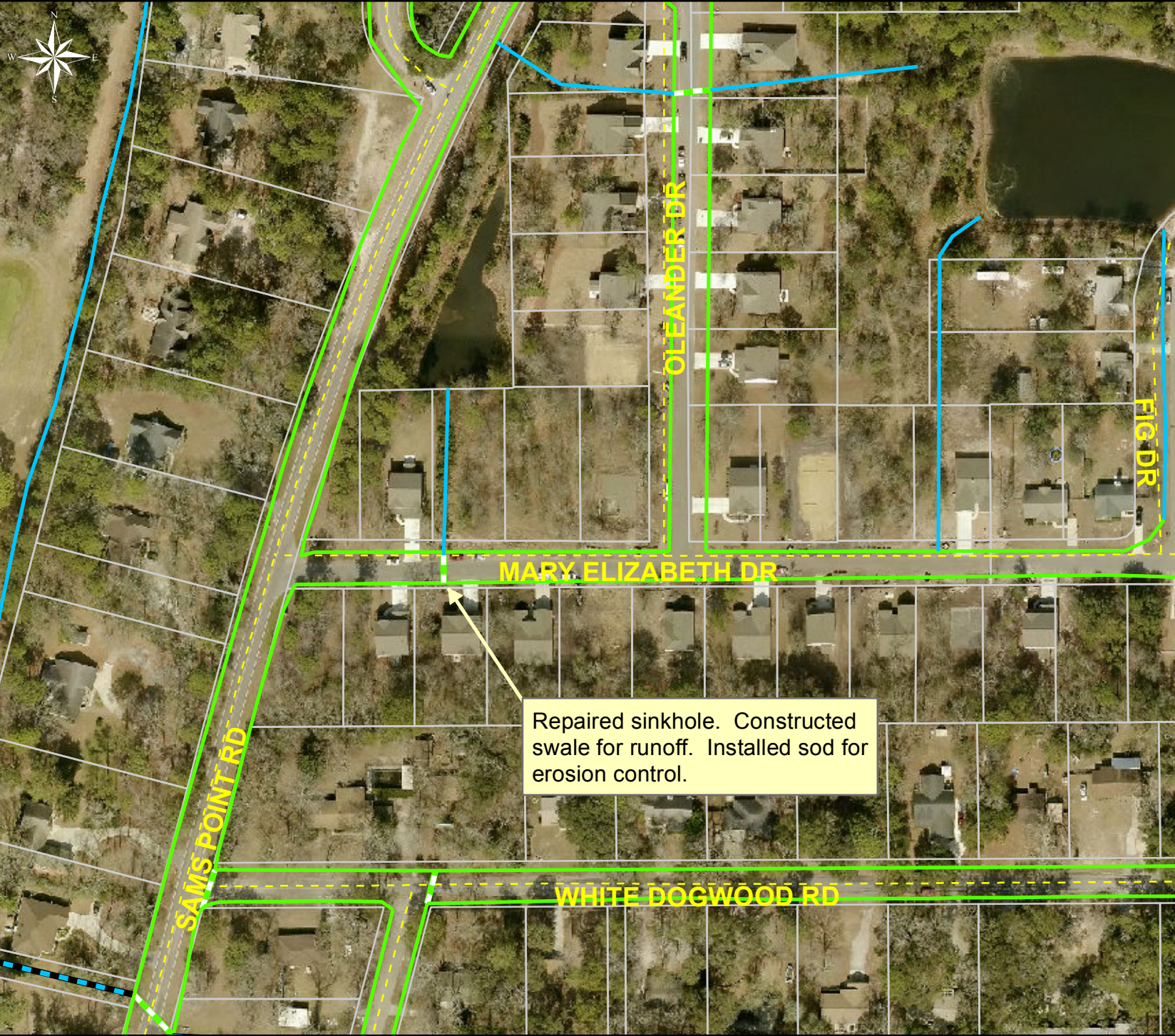
Completed: September 2014

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

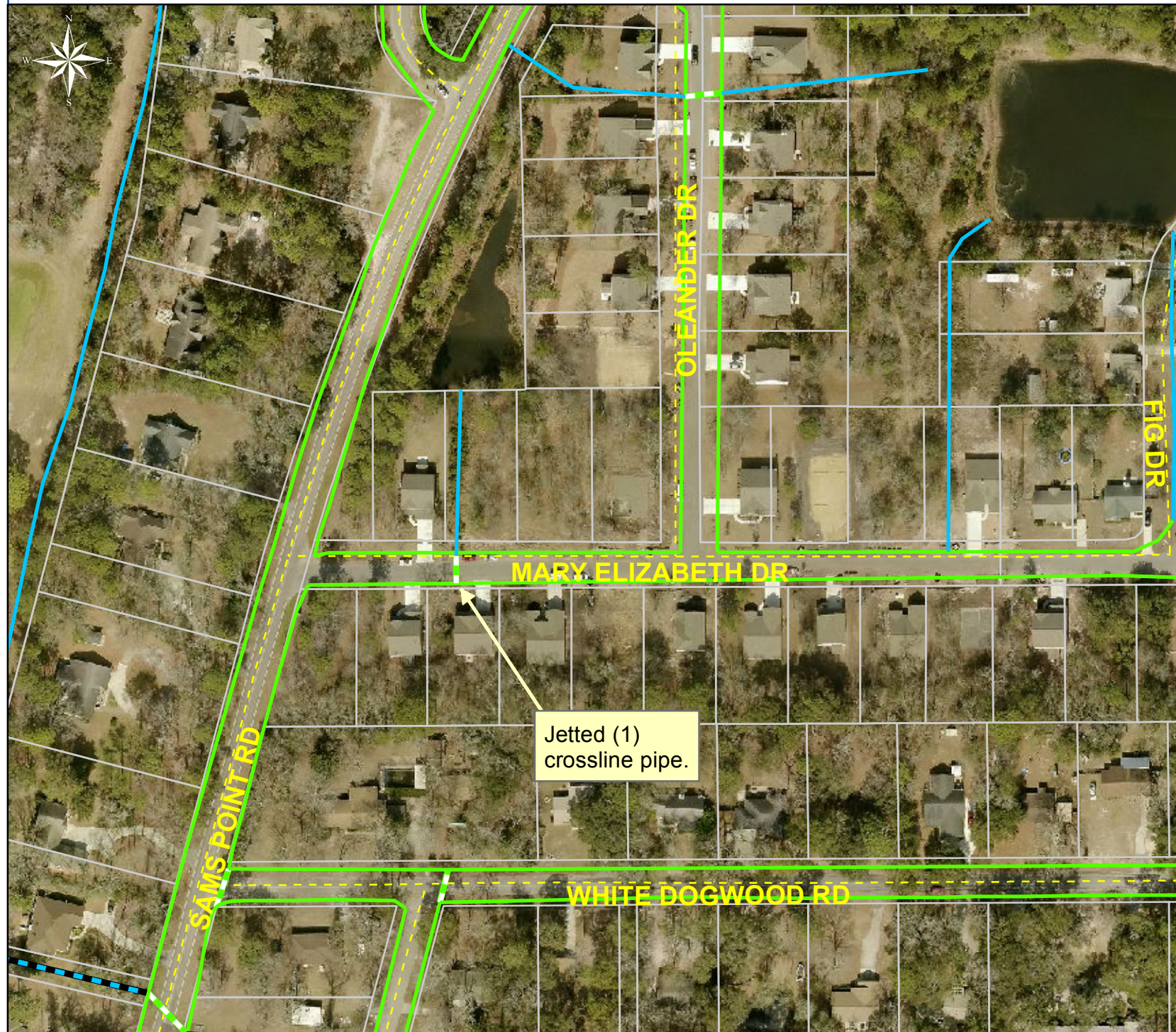
Township: Lady's Island

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



1 inch = 151 feet



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

Repaired washout. 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



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

Prepared By: BC Stormwater Management Utility

Date Print: 12/29/14

File:C:/sethdata/projects/projectmaps/Vac/Evelyns Way 2015-543 Map2



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

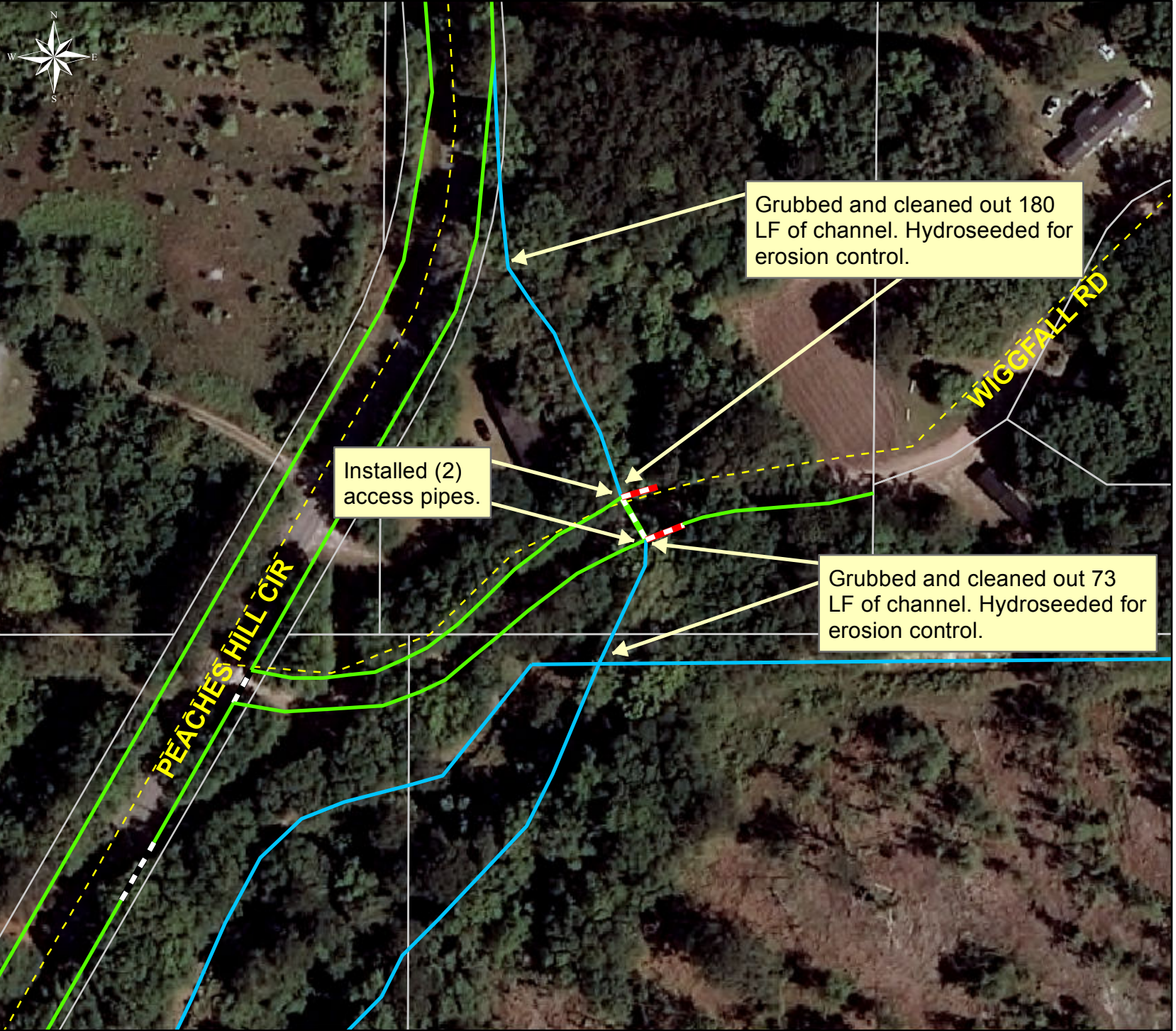


During



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**

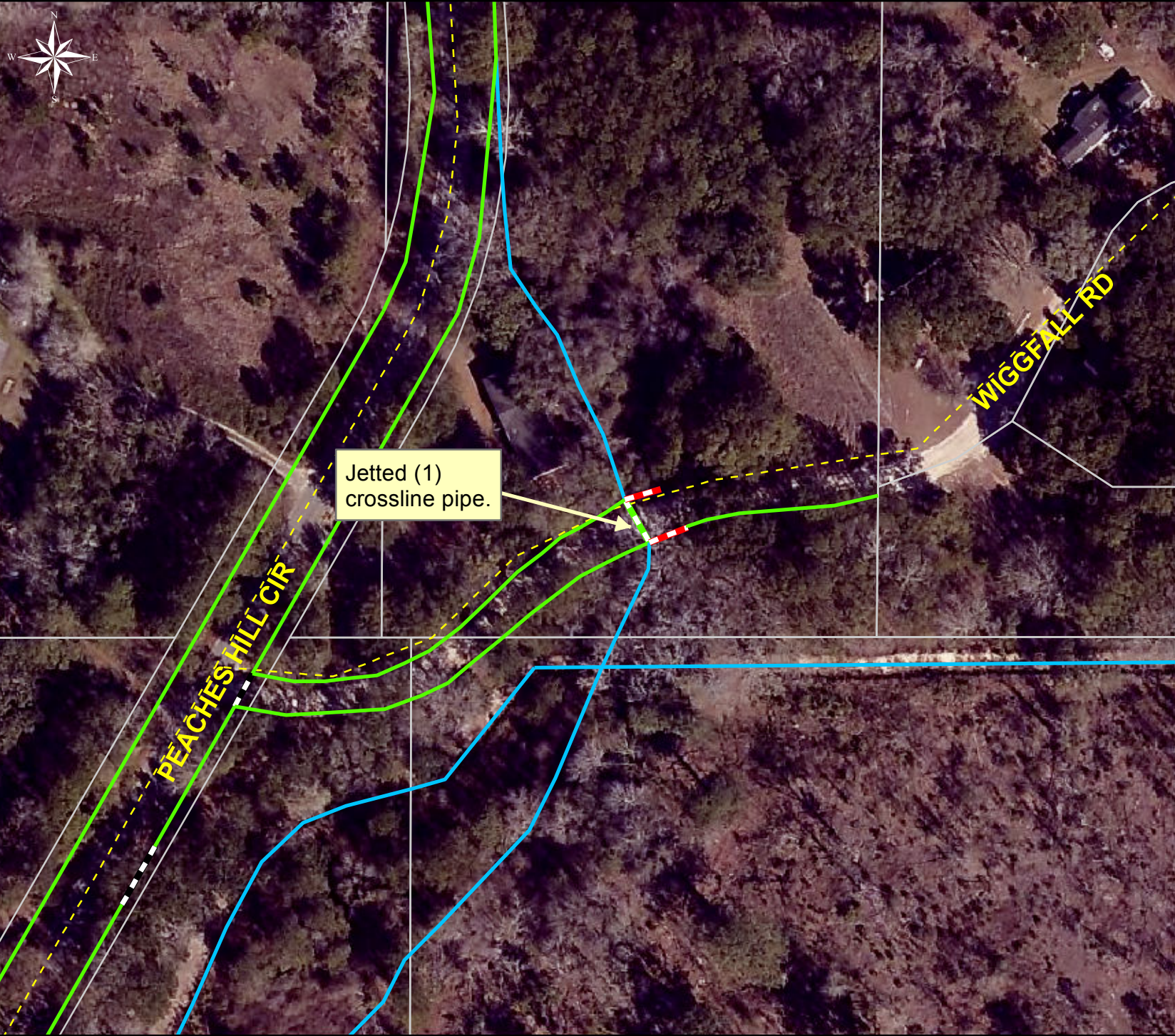
**Township: St.
Helena Island**

**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**













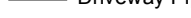
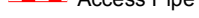

**Project #:
2015-554**

**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

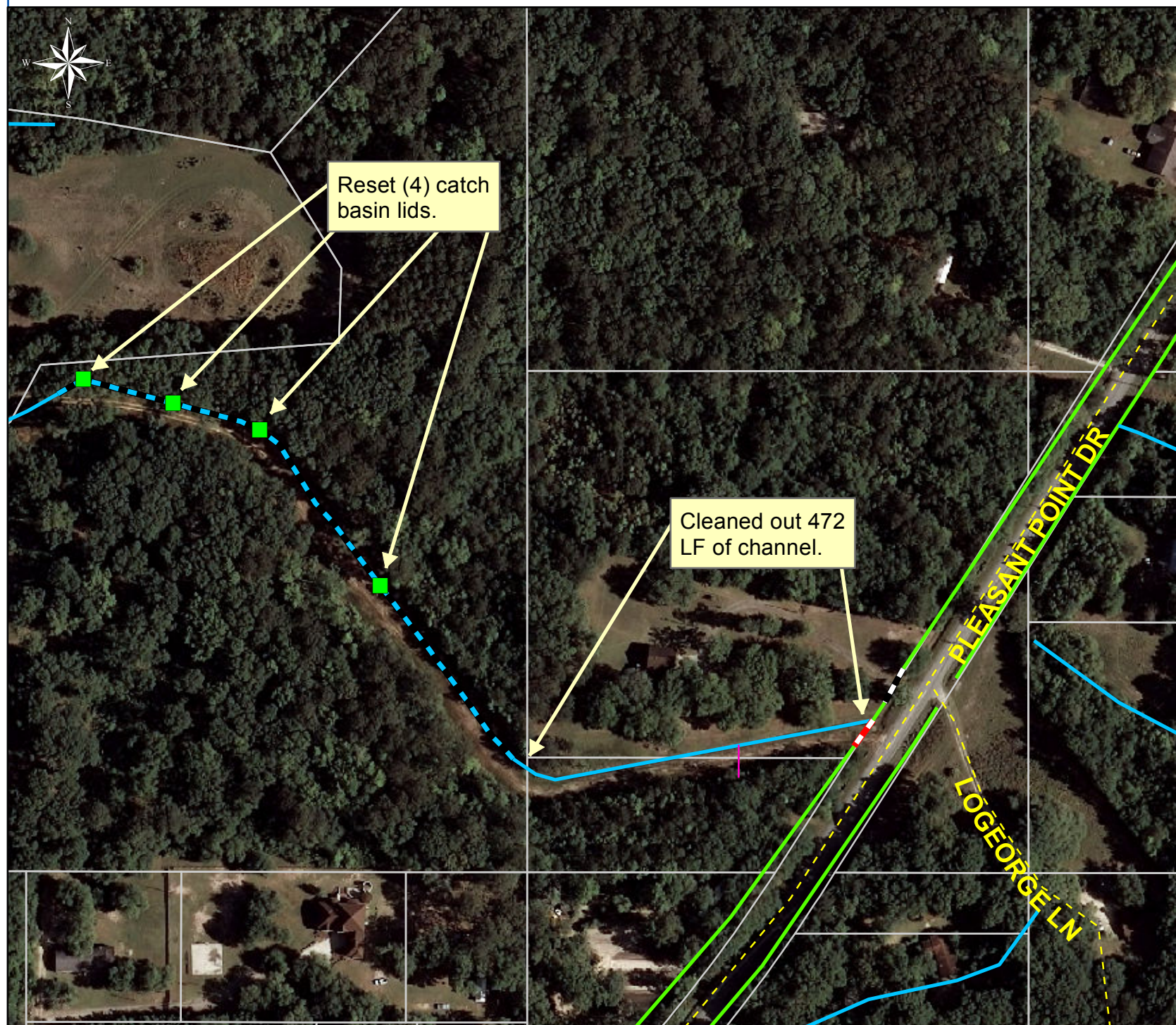
Township: Lady's Island

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



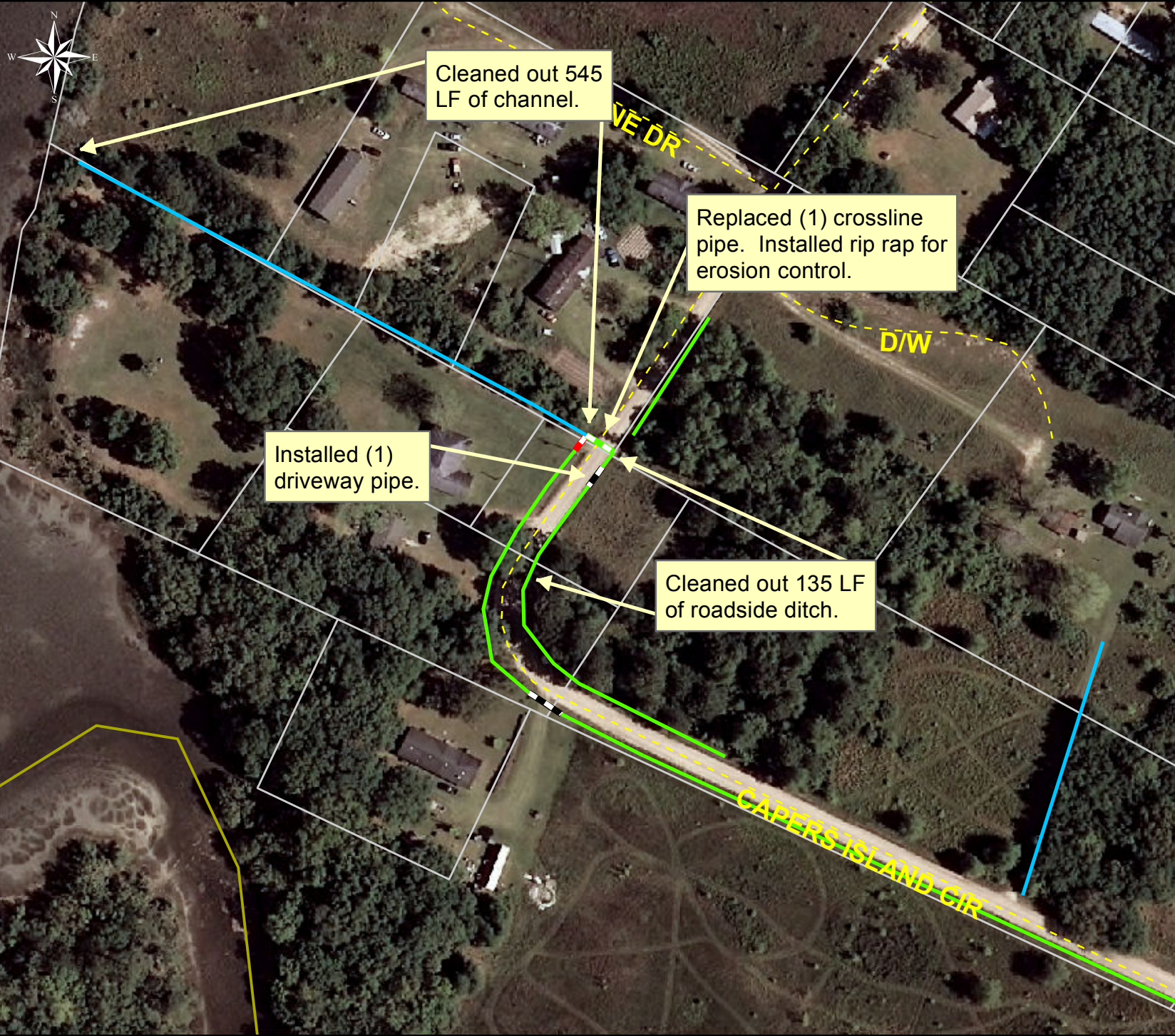
Project: Capers Island Circle Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-527

Township: St. Helena Island

Completed: November 2014



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 Public Works Stormwater Utility

FY 2014 Actuals

January 5, 2015

Revenue/Reserve Utilization

	FY2013 Audited Actual	Requested Board Budget	FY2014 Unaudited Actuals	Variance	FY 2015 Approved Budget
Revenue					
Admin SWU Fees	\$ 311,086	\$ 312,064	\$ 312,900	\$ (836)	\$ 313,460
Utility Activities SWU Fees	2,759,703	3,162,936	2,737,540	425,397	2,766,881
Total Revenue from SWU Fees	3,070,789	3,475,000	3,050,440	424,560	3,080,341
Reimbursable Projects	33,808	2,500	1,197	1,303	2,500
Interest	2,955	6,923	2,771	4,152	2,955
Loss on Sale of Capital Assets	-	-	(38,450)	38,450	-
Other	(2,920)	-	1,198	(1,198)	-
Cost-Share for Joint Efforts	50,403	57,522	139,068	(81,545)	41,689
Reserve Utilization					
Capital Improvement Fund	-	859,705	859,705	0	767,500
Stormwater Utility	90,986	-	(878,672)	878,672	351,091
	\$ 3,246,022	\$ 4,401,650	\$ 3,137,257	\$ 1,264,394	\$ 4,246,076

Efforts (Expenditures)

	FY2013	FY2014			
Admin	\$ 244,053	\$ 312,064	\$ 317,313	\$ (5,249)	\$ 313,460
Utility Activities					
UA/Control Reg	78,147	73,147	88,418	(15,271)	216,956
UA/WQ Monitoring	174,766	160,000	258,971	(98,971)	120,000
UA/WQ Controls	60,248	200,000	129,604	70,396	-
UA/Annual Maintenance	2,376,048	2,679,069	2,305,871	373,198	2,736,160
UA/Public Information/Outreach	67,665	67,665	(37,233)	104,898	50,000
UA/Drainage Enhancement	2,700	25,000	10,395	14,605	7,000
UA/Additional Studies	242,394	25,000	12,606	12,394	35,000
<i>Utility Activities Subtotal</i>	3,001,968	3,229,881	2,768,632	461,249	3,165,116
*Reserve Utilization					
Capital Improvement Fund					
Admin Parking Lot Retrofit		329,650	2,481	327,169	327,169
Okatie East Retrofit		60,237	19,345	40,892	-
Hwy 278 Retrofit		222,600	14,878	207,722	207,722
Okatie West/SC 170 Retrofit		100,000	-	100,000	100,000
Battery Creek Upper Retrofit		147,218	14,608	132,609	132,609
<i>Reserve Utilization Subtotal</i>	-	859,705	51,312	808,393	767,500
Efforts Total	\$ 3,246,022	\$ 4,401,650	\$ 3,137,257	\$ 1,264,393	\$ 4,246,076

*Efforts funded by utilizing the reserve are spread among all utility activities.

Change in Capital Assets On Balance Sheet

	FY2013	FY2014			
Capital Assets Additions	\$ 146,212	\$ 455,991	\$ 175,460	\$ 280,531	\$ 165,561
Depreciation	(248,463)	(242,119)	(211,656)	(30,463)	(182,523)
	\$ (102,250)	\$ 213,872	\$ (36,196)	\$ 250,068	\$ (16,962)



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



February 4, 2015

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Eric Larson met with Josh Gruber and Alicia Holland to determine the % allocation of SWU fees and General Fund for the Director of Environmental Engineering position for FY 16. Given the new duties providing management of Planning, Zoning, and Public Works, 20% of the salary will be funded by the General Fund in FY 16. The remaining 80% will continue to be funded by the Stormwater Utility Management fee.
2. We are reviewing applications for an Administrative Technician for the Stormwater Management staff. This was budgeted to be filled mid-year.
3. Looking at the adopted calendars for the Utility Board and the Natural Resources Committee for 2015, there is a potential problem. The Board will be meeting just days after the Committee most months of the year. As projects move forward from staff to the Board to the NRC and ultimately to County Council, this schedule could unnecessarily delay project a whole month. The Board should consider a schedule change.

MS4 Update

1. MS4 Permit Application – DHEC is still reviewing the application. We have not received feedback on the progress.
2. Stormwater Workshop for County Council – The half day workshop for the County Council was held January 22, 2015. The agenda included a summary of the background of the MS4 program regulations, a presentation of the current activities the Utility is performing, a look at needs in future years, and a review of the stormwater department's funding needs. [See Larson's report on the workshop attached.](#) As a result of the meeting, staff is soliciting proposals from our stormwater consultant, ATM, for a rate study (for implementation in FY 16) and a countywide master plan (management plan) update. Meetings with the SWIC members will be held in the near future to explore partnering options on both projects.

Monitoring Update

1. USCB Lab – Dr. Warren and staff have provided us with the following update:
As an update from last month, the Lab has submitted their application for certification for microbiology (E.coli and enterococci) and they will be submitting their application to SCDHEC the last week of January for the "in-situ" (field) parameters to include pH, Specific Conductivity, Salinity, Temperature, Dissolved Oxygen, and Turbidity. Once SCDHEC receives the application, the certification officer has 30 days to respond.

2. Field Equipment – With the help of the USCB lab, staff has researched and ordered a field parameter multi probe meter and three flow meters. These will assist us with determining volume released during storm event and to take field data that cannot be done in the lab. This equipment does not replace the use of USCB lab but gives us flexibility in our monitoring program and gives us the resources to respond to IDDE complaints in the event the lab is unavailable. Two of the flow meters are specifically designed to measure the stream profile and calculate volume, which will aid in many of our studies to determine volume reduction benefits.

Stormwater Implementation Committee (SWIC) Report

1. Storm Drain Markers – The SWIC has conceptually approved a storm drain marker design for use throughout the community. It will use the Neighbors for Clean Water slogan and provide hot line contact information for the applicable jurisdiction. Their first use will likely be a Boy Scout Eagle Project in the downtown Beaufort area.
2. The Neighbors for Clean Water MOA – The Town of Bluffton has approved the use of the NCW branding for countywide use. The other Towns and County are working through the MOA approval process.
3. The SWIC meets again on February 11th. Topics of discussion will include the master plan, Neighbors for Clean Water MOAs, and a presentation of the FY 16 management fee.

Stormwater Related Projects

1. US 278 Retrofit Ponds (\$356,000 budget) – Clearing has been delayed due to the permitting needs at the Buckwalter Soccer field spoil site. The Stormwater Infrastructure crews continue to construct the site entrances. Permitting for the spoil site at Buckwalter Park has been submitted and expected to be approved in February.
2. County Admin. Complex Retrofit Project (\$327,768 budget) – The project has substantial completion.
3. Turtle Lane Paving on Lady's Island (stormwater add-on) (\$8,940 budget) – We are waiting on the construction document (CD) deliverable.
4. Okatie West / SC 170 Widening Retrofit Land Purchase (\$160,415 budget) – Closing has been delayed due to the paperwork and approvals needed to remove the Town of Bluffton Development agreement terms on the property. Eric Larson has met with the SC 170 widening project team to discuss a design modification to direct some runoff into the New Leaf site as part of the overall plan.
5. Graves Property Stormwater Project Feasibility Study – After receiving a proposal of the conceptual design work, administration determined the cost was too high for the benefit offered by stormwater cost sharing on the property purchase. The idea of doing a stormwater pond is still being considered but the study to determine a fair cost share will not be pursued at this time.
6. Middleton Place Subdivision on Hilton Head Island – The County and Town of Hilton Head Island continue to negotiate with the POA for the dedication of an easement for the detention basin.

Professional Contracts Report

1. Financial Analysis of the Stormwater Utility (\$28,791 budget) – Findings were presented to the County Council in the January workshop. (See MS4 report above.)
2. Utility Rate Study – ATM has submitted a Task Order in the amount of \$48,521 to conduct a rate study and lead the County into a decision on a new rate structure and amount(s). Utility Board recommendation to the Natural Resources Committee is needed. (See MS4 report above.)
3. Stormwater Management Plan (master plan) Update – Staff has requested a proposal from ATM for a scope of services and fee for an update to be performed in FY 16. (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. DHEC and USACE permitting has been submitted. (Lamar Taylor may also report)
2. May River Watershed Action Plan – The Pine Grove volume reduction project using CWA Section 319 grant dollars is on-going. The Stoney Creek watershed plan is on-going. (Jeremy Ritchie may also report).
3. Salinity Study (\$25,000 budget – county portion) - On going. The Watershed Advisory Committee met February 2nd to review the data analysis and recommend action items. A final report is expected in the upcoming months.
4. Sea Level Rise and Future Planning – On going. The Sea Grant staff will report to the Planning Commission and Natural Resources Committee at a future date.
5. Buckingham Plantation Drive Innovation District Conceptual Design Study (\$25,000 budget – SWU portion) – The SWU is funding 50% of the cost of the study. The study has not been started pending funding of the other half from the Planning Department. Planning is considering CDBG funding or general fund funding.
6. Drainage Issue on H.E. McCracken Circle in Bluffton – After months of field investigations and data review, the staff has concluded the best option to alleviate flooding of the roadway is to raise the pavement elevation via patching. However, investigation also determined the flooding events are infrequent and of short duration. Therefore, we have recommended to administration and Town of Bluffton staff to continue to monitor the problem and budget for the asphalt paving in future fiscal years if the problem continues to be a serious concern.
7. Drainage Issue in Plantation Park in Bluffton – Staff conducted a site visit and prepared a report of findings to the administration. In summary, the private system is confined to development runoff and has no contribution from County right of way. The system failure is internal to the system. Staff is awaiting direction on the next step from County Administration.
8. Old Woodland Plantation Stormsewer System Repairs – (\$65,997) Equipment repairs have delayed completion of the work.



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



MEMORANDUM

TO: Beaufort County Stormwater Utility Board *Eric W. Larson*
FROM: **Eric W. Larson, Stormwater Manager**
SUBJECT: **Summary of the January 22, 2015 Stormwater Workshop**
DATE: **February 4, 2015**

The half day workshop for the County Council was held January 22, 2015. Attendees included 9 of the 11 County Council members, a majority of the Utility Board, County Stormwater management and technical staff, representatives from all three Towns and the City of Beaufort, and several members of the environmental community. The goal of the workshop was to convey a detailed summary of the activities of the stormwater program, including the management of the utility fee administration, operations and maintenance, capital project needs, and the newly implemented Municipal Separate Stormsewer System (MS4) permit program. The agenda included a summary of the background of the MS4 program regulations, a presentation of the current activities the Utility is performing, a look at needs in future years, a review of the stormwater department's expenditures and revenue needs, and an timely discussion of operational issues that are contributed to increased costs and decreased revenue. The day ended with a detailed look at various funding options for operations and maintenance and capital projects.

The five year plan looked at the impact of the MS4 permit on how the Utility will function in the future. Since the Utility's inception in 2001, the community has voluntarily made progressive strides towards improving the water quality in our rivers and coastal waters. It is no surprise that the County closely ties the water to economic growth and a way of life that draws thousands of people to come here on vacation and to choose to live here. The MS4 permit, in summary, makes what was voluntarily now mandatory under the framework of the Clean Water Act. Our permit requires us to implement a series of minimum control measures to educate the public, monitor our stormsewer system and receiving waters, and implement water quality best management practices to improve water quality over time. A proactive operations and maintenance program along with a robust capital project plan are needed if we truly want to see an improvement in our water and maintain compliance with the federally unfunded mandate of the MS4 program.

This effort does not come without a cost. Due to factors such as annexations by municipal neighbors, the County is seeing a decline in revenue. Yet are projected costs for program implementation will continue to rise. There are things that can be done to trim costs. There is a large portion of the County system within the municipal boundaries of the Towns and City in which the cost to maintain lies with the County, yet the Utility fees of the residents receiving direct benefit from that expense go to the Towns and City. It is fair to assume that all County residents should contribute to the cost of our program, not just those within the un-incorporated areas of the County. Also, the development of multiple MS4 programs among the government bodies designated as MS4s creates duplication of effort and therefore costs that could be reduced with a unified program, or at a minimum, shared program elements. The workshop participants were encouraged to consider ways to reduce costs at the same time as we determined how best to increase revenue.

As a result of the meeting, staff is soliciting proposals from our stormwater consultant, ATM, for a rate study (for implementation in FY 16) and a countywide master plan (management plan) update. Meetings with the SWIC members will be held in the near future to explore partnering options on both projects.



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

Chanel Lewis
Controller
843.255.2303
clewis@bcgov.net

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

Janet Andrews
Accounting Supervisor
843.255.2290
jandrews@bcgov.net

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

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

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

Lori Sexton
Fiscal Tech
843.255.2801
loris@bcgov.net

Michael Dunn
Fiscal Tech
843.255.2951
mdunn@bcgov.net

January 29, 2015

December 2014 Stormwater Financials Narrative and Analysis

Since December is the 6th month of the fiscal year, one might expect expenses to be at 50% of budget based on consistent and recurring expenses and Stormwater is currently below this budget level at 45%.

Stormwater revenues are about \$290,000 lower than December 2013. 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.

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 \$336,000 compared to last year, along with a decrease in fund balance by about \$473,000.

Respectively submitted,

Alan R. Eisenman, CPA

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
December 31, 2014 & December 31, 2013

	Stormwater Utility Fund <u>December 31, 2014</u>	Capital Improvements Fund <u>December 31, 2014</u>	Stormwater Utility Fund <u>December 31, 2013</u>
<u>ASSETS</u>			
Current Assets			
Cash and Investments with Trustee	\$ 1,919,652	\$ 705,592	\$ 2,961,594
Receivables, Net	9,049	-	22,131
Inventories	113,850	-	92,511
Total Current Assets	<u>2,042,551</u>	<u>705,592</u>	<u>3,076,236</u>
Capital Assets	2,982,961	-	2,800,950
Accumulated Depreciation	<u>(2,140,096)</u>	<u>-</u>	<u>(2,062,086)</u>
	842,865	-	738,864
Total Assets	\$ 2,885,416	\$ 705,592	\$ 3,815,100
<u>LIABILITIES</u>			
Liabilities			
Account Payable	17,930	127,032	39,567
Accrued Payroll	39,343	-	50,567
Accrued Compensated Absences	7,823	-	6,247
Total Current Liabilities	<u>65,096</u>	<u>127,032</u>	<u>96,381</u>
Long Term Liabilities			
Accrued Compensated Absences	65,978	-	55,379
Net Other Postemployment Benefits Obligation	<u>938,170</u>	<u>-</u>	<u>795,575</u>
Total Long Term Liabilities	<u>1,004,148</u>	<u>-</u>	<u>850,954</u>
Total Liabilities	1,069,244	127,032	947,335
<u>NET ASSETS</u>			
Invested in Capital Assets, Net of Related Debt	842,865	-	738,864
Reserved for Encumbrances	112,594	86,952	213,819
Reserved for Capital Improvements	-	491,608	-
Unrestricted	<u>860,713</u>	<u>-</u>	<u>1,915,082</u>
Total Net Assets	<u>\$ 1,816,172</u>	<u>\$ 578,560</u>	<u>\$ 2,867,765</u>

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

	Budget FY 2015	December 31, 2014	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,132,205	\$ 1,530,396	(1,601,809)	49%
Stormwater Utility Project Billings	44,189	3,802	(40,387)	9%
Total Operating Revenues	<u>3,176,394</u>	<u>1,534,198</u>	<u>(1,642,196)</u>	<u>48%</u>
Operating Expenses				
Personnel	2,261,074	980,830	(1,280,244)	43%
Purchased Services	684,864	356,131	(328,733)	52%
Supplies	350,509	130,669	(219,840)	37%
Depreciation	182,523	91,266	(91,257)	50%
Total Operating Expenses	<u>3,478,970</u>	<u>1,558,896</u>	<u>(1,920,074)</u>	<u>45%</u>
Operating Income (Loss)	(302,576)	(24,698)	277,878	8%
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	(299,621)	(37,063)	262,558	12%
Net Assets, Beginning	<u>1,853,235</u>	<u>1,853,235</u>		
Net Assets, Ending	<u>\$ 1,553,614</u>	<u>\$ 1,816,172</u>	262,558	117%

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

	Budget FY 2015	December 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	-	12,364	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	-	220,436	220,436	100%
Okatie East Retrofit	-	4,127	4,127	100%
Highway 278 Retrofit	-	62	62	100%
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>242,197</u>	<u>242,197</u>	<u>100%</u>
Change in Net Assets by Project				
Administration Complex Parking Lot Retrofit		(220,436)	(220,436)	
Okatie East Retrofit		(4,127)	(4,127)	
Highway 278 Retrofit		(62)	(62)	
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>(229,833)</u>	<u>(229,833)</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		106,733		
Okatie East Retrofit		36,765		
Highway 278 Retrofit		207,660		
Okatie West Retrofit		87,062		
Buckingham Plantation Retrofit		12,364		
Upper Battery Creek Retrofit		127,976		
Total Net Assets, Ending	<u>\$ -</u>	<u>\$ 578,560</u>		

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

	Budget FY 2014	December 31, 2013	Budget to Actual	Percent of Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,475,000	\$ 1,813,380	(1,661,620)	52%
Stormwater Utility Project Billings	60,023	11,534	(48,489)	19%
Total Operating Revenues	<u>3,535,023</u>	<u>1,824,914</u>	<u>(1,710,109)</u>	52%
Operating Expenses				
Personnel	2,160,475	950,192	(1,210,283)	44%
Purchased Services	961,864	316,905	(644,959)	33%
Supplies	381,446	180,538	(200,908)	47%
Depreciation	242,119	121,062	(121,057)	50%
Total Operating Expenses	<u>3,745,904</u>	<u>1,568,697</u>	<u>(2,177,207)</u>	42%
Operating Income (Loss)	(210,881)	256,217	467,098	-121%
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)	225,104	429,063	-110%
Net Assets, Beginning	<u>2,642,661</u>	<u>2,642,661</u>		
Net Assets, Ending	<u>\$ 2,438,702</u>	<u>\$ 2,867,765</u>	429,063	118%



MEMORANDUM

Date: February 4, 2015

To: Stormwater Management Utility Board

From: Eddie Bellamy, Public Works Director

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

1. This report will cover two major and 18 minor or routine projects. The Project Summary Reports are attached.

2. Major Projects:

- A. **Eastern Road Channel**, completed in December in Burton area of District 6; we replaced 60 feet of channel pipe that had failed and installed rip rap and hydroseeded for erosion control. Total cost of the project was **\$21,828**.
- B. **Big Estate Circle/Gray Road**, completed in November in the Big Estate area of District 5; we reconstructed 900 feet of channel and workshelf, repaired two washouts, installed two access pipes and two bleeder pipes, and installed rip-rap and hydroseeded for erosion control. Total cost of the project was **\$25,839**.

3. Minor or Routine Projects:

- A. **Port Royal Island Washout Repairs – Huron Drive and Pine Grove Road**, completed in August in District 6; we repaired two washouts.
- B. **Bluffton Township Vacuum Truck Work**, completed in October in District 9; we cleaned out two catch basins, jetted out a crossline pipe and 28 feet of channel pipe, and removed blockages from the flowline on three roads.
- C. **Sams Point Road Channel #1**, completed in November in District 7; we cleaned out 1,204 feet of channel.
- D. **Bluffton Center Channel #1**, completed in November in District 9, 341 feet of channel and 360 feet of roadside ditch.
- E. **Allendale Street and Martha Lane**, completed in November in District 9; we cleaned out 467 feet of roadside ditch and jetted out one crossline pipe and six driveway pipes.
- F. **Robert Smalls Parkway Channel #1**, completed in November in District 6; we removed blockages from the flowline and cleaned out 250 feet of channel.
- G. **Providence Road Channel #1**, completed in November in District 6; we repaired a washout and cleaned out 215 feet of channel.
- H. **Poppy Hill Road Channel #1**, completed in December in District 6; we cleaned out 2,553 feet of channel.

- I. **Jennings Road**, completed in December in District 6; we cleaned out 920 feet of roadside ditch, jetted out one crossline and one driveway pipe, and hydroseeded for erosion control.
- J. **Oakhurst Road**, completed in December in District 5; we cleaned out 1,435 feet of channel and jetted two access pipes and two crossline pipes.
- K. **Clydesdale Circle**, completed in December in District 6; we jetted out a driveway pipe.
- L. **Forrest Field Subdivision Channel #1**, completed in December in District 6; we removed fallen trees from the workshelf and cleaned out 2,923 feet of channel.
- M. **Warsaw Island Road**, completed in December in District 8; we repaired a washout and installed rip rap for erosion control.
- N. **Burton Wells Road**, completed in January in District 6; we removed blockages from the flowline.
- O. **Parkside Drive**, completed in January in District 9; we repaired a sinkhole and resealed a catch basin lid.
- P. **Powell Drive**, completed in January in District 6; we removed a fallen tree from the workshelf and cleaned out 579 feet of channel.
- Q. **Wimbee Landing Road Channel #1**, completed in January in District 5; we cleaned out 5,990 feet of channel.
- R. **Trask Parkway Channel #2**, completed in January in District 5; removed three blockages from the flowline and repaired a washout.



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Eastern Road Channel

Activity: Drainage Improvement

Narrative Description of Project:

Project improved 60 L.F. of drainage system. Installed 60 L.F. of channel pipe, rip rap and hydroseeded for erosion control.

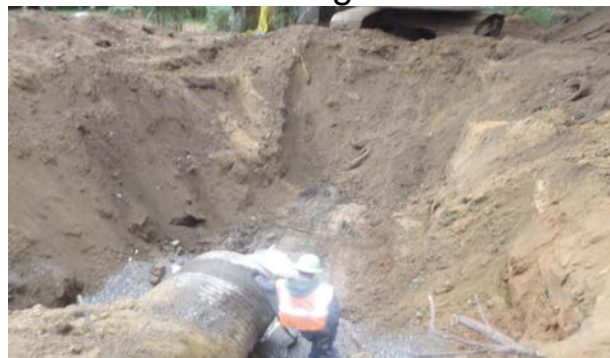
Completion: Dec-14

2015-011 / Eastern Road Outfall	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ASBUILT / Asbuilt - Project	1.0	\$44.27	\$3.62	\$5.82	\$0.00	\$33.96	\$87.67
AUDIT / Audit Project	1.0	\$20.46	\$0.00	\$0.00	\$0.00	\$13.23	\$33.69
AW / Administrative Work	2.0	\$88.54	\$0.00	\$0.00	\$0.00	\$67.92	\$156.46
BKFILL / Back Fill	20.0	\$409.20	\$226.40	\$61.28	\$0.00	\$264.60	\$961.48
DEBREM / Debris Removal - Jobsite	20.0	\$397.40	\$58.20	\$50.16	\$0.00	\$254.40	\$760.16
HAUL / Hauling	70.0	\$1,529.76	\$663.40	\$1,215.56	\$0.00	\$1,022.96	\$4,431.68
HYDR / Hydroseeding	39.0	\$835.74	\$128.84	\$103.87	\$0.00	\$550.47	\$1,618.92
ODGRB / Channel - grubbed	28.0	\$638.28	\$235.00	\$49.88	\$0.00	\$400.14	\$1,323.30
OFPI / Channel Pipe - Installation	38.0	\$819.28	\$155.48	\$2,323.07	\$0.00	\$512.04	\$3,809.87
ONJV / Onsite Job Visit	52.0	\$1,663.08	\$188.64	\$51.66	\$0.00	\$1,073.80	\$2,977.18
PI / Project Inspection	1.0	\$44.27	\$3.62	\$2.46	\$0.00	\$33.96	\$84.31
PL / Project Layout	5.0	\$221.35	\$18.10	\$12.30	\$0.00	\$169.80	\$421.55
PP / Project Preparation	1.0	\$44.27	\$3.62	\$4.92	\$0.00	\$33.96	\$86.77
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$752.00	\$0.00	\$752.00
PRRECON / Project Reconnaissance	60.0	\$1,389.34	\$126.64	\$44.13	\$0.00	\$894.74	\$2,454.85
RRI / Rip Rap - Installed	30.0	\$674.22	\$299.16	\$116.47	\$0.00	\$422.67	\$1,512.52
SR / Sinkhole repair	8.0	\$181.80	\$44.12	\$15.93	\$0.00	\$113.37	\$355.22
2015-011 / Eastern Road Outfall Sub Total	376.0	\$9,001.26	\$2,154.84	\$4,057.49	\$752.00	\$5,862.02	\$21,827.62
Grand Total	376.0	\$9,001.26	\$2,154.84	\$4,057.49	\$752.00	\$5,862.02	\$21,827.62

Before



During



After



Project: Eastern Road

Activity: Drainage Improvement

**Project #:
2015-011**

**Township: Port
Royal Island**

**Completed:
December 2014**

Installed 60 LF of channel pipe, rip rap and 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

0 30 60 120 180 240
Feet

1 inch = 131 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/7/15

File:C:/sethdata/projects/projectmaps/Eastern Rd 2015-011



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Big Estate Circle/Gray Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 900 L.F. of drainage system. Installed (2) access pipes. Grubbed, cleared and reconstructed 900 L.F. of channel and workshelf. Repaired washouts. Installed (2) bleeder pipes, rip rap and hydroseeded for erosion control.

Completion: Jan-15

2011-031 / Big Estate Circle/Gray Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APINS / Access pipe - installed	50.0	\$1,104.08	\$194.89	\$890.56	\$0.00	\$780.13	\$2,969.65
ASBUILT / Asbuilt - Project	9.0	\$213.06	\$10.86	\$13.15	\$0.00	\$145.26	\$382.33
AUDIT / Audit Project	2.0	\$40.92	\$0.00	\$0.00	\$0.00	\$26.46	\$67.38
BPINST / Bleeder pipe - Installed	20.0	\$467.10	\$239.60	\$259.48	\$0.00	\$317.40	\$1,283.58
HAUL / Hauling	130.5	\$2,851.76	\$1,310.75	\$2,142.91	\$0.00	\$1,913.59	\$8,219.01
HYDR / Hydroseeding	12.0	\$283.06	\$39.36	\$99.94	\$0.00	\$180.72	\$603.08
LM / Loading Materials	8.0	\$182.34	\$81.78	\$30.66	\$0.00	\$138.50	\$433.28
ODCO / Channel - cleaned out	26.0	\$624.50	\$197.80	\$35.79	\$0.00	\$398.88	\$1,256.97
ONJV / Onsite Job Visit	51.0	\$1,435.27	\$199.42	\$101.15	\$0.00	\$1,036.59	\$2,772.43
PAM / Preparing Ariel Maps	2.0	\$59.68	\$7.24	\$4.36	\$0.00	\$36.46	\$107.74
PP / Project Preparation	3.0	\$107.18	\$6.03	\$4.36	\$0.00	\$87.65	\$205.21
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$1,075.00	\$0.00	\$1,075.00
PRRECON / Project Reconnaissance	9.0	\$245.47	\$20.10	\$10.90	\$0.00	\$196.09	\$472.56
RMTRW / Remove trees - Workshelf	20.0	\$467.10	\$158.40	\$31.42	\$0.00	\$317.40	\$974.32
RPWO / Repaired Washout	21.0	\$482.16	\$89.26	\$82.64	\$0.00	\$303.45	\$957.51
SURVSVC / Surveying Services	1.0	\$40.23	\$4.02	\$2.18	\$0.00	\$33.96	\$80.39
WSDR / Workshelf - Dressed	67.0	\$1,551.63	\$198.18	\$110.54	\$0.00	\$1,000.65	\$2,861.00
WSGRB / Workshelf - Grubbed	20.0	\$467.10	\$276.60	\$56.35	\$0.00	\$317.40	\$1,117.45
2011-031 / Big Estate Circle/Gray Road Sub Total	451.5	\$10,622.63	\$3,034.29	\$3,876.39	\$1,075.00	\$7,230.57	\$25,838.88
Grand Total	451.5	\$10,622.63	\$3,034.29	\$3,876.39	\$1,075.00	\$7,230.57	\$25,838.88

Before



During



After



Project: Big Estate Circle-Gray Road

**Activity: Routine/
Preventive
Maintenance**













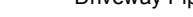

**Project #:
2011-031**

**Township:
Sheldon**

**Completed:
January 2015**

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 75 150 300 450 600
Feet

1 inch = 297 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/27/15

File:C:/sethdata/projects/projectmaps/Big Estate 2011-031



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Port Royal Island Repaired Washouts - Huron Drive and Pine Grove Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washouts.

Completion: Aug-14

2015-518 / Port Royal Island Repaired Washouts	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	7.0	\$156.11	\$74.90	\$46.83	\$0.00	\$105.03	\$382.87
PRRECON / Project Reconnaissance	2.0	\$88.54	\$7.24	\$6.06	\$0.00	\$67.92	\$169.76
RPWO / Repaired Washout	36.0	\$728.28	\$113.06	\$135.57	\$0.00	\$479.85	\$1,456.76
2015-518 / Port Royal Island Repaired Washouts Sub Total	45.5	\$983.16	\$195.20	\$188.46	\$0.00	\$659.42	\$2,026.23
Grand Total	45.5	\$983.16	\$195.20	\$188.46	\$0.00	\$659.42	\$2,026.23

(Pictures Not Available)

Project: Huron Drive

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-518**















**Township: Port
Royal Island**

**Completed:
August 2014**



Legend

TYPE

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



1 inch = 113 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/23/15

File: C:/sethdata/projects/projectmaps/Huron Dr 2015-518

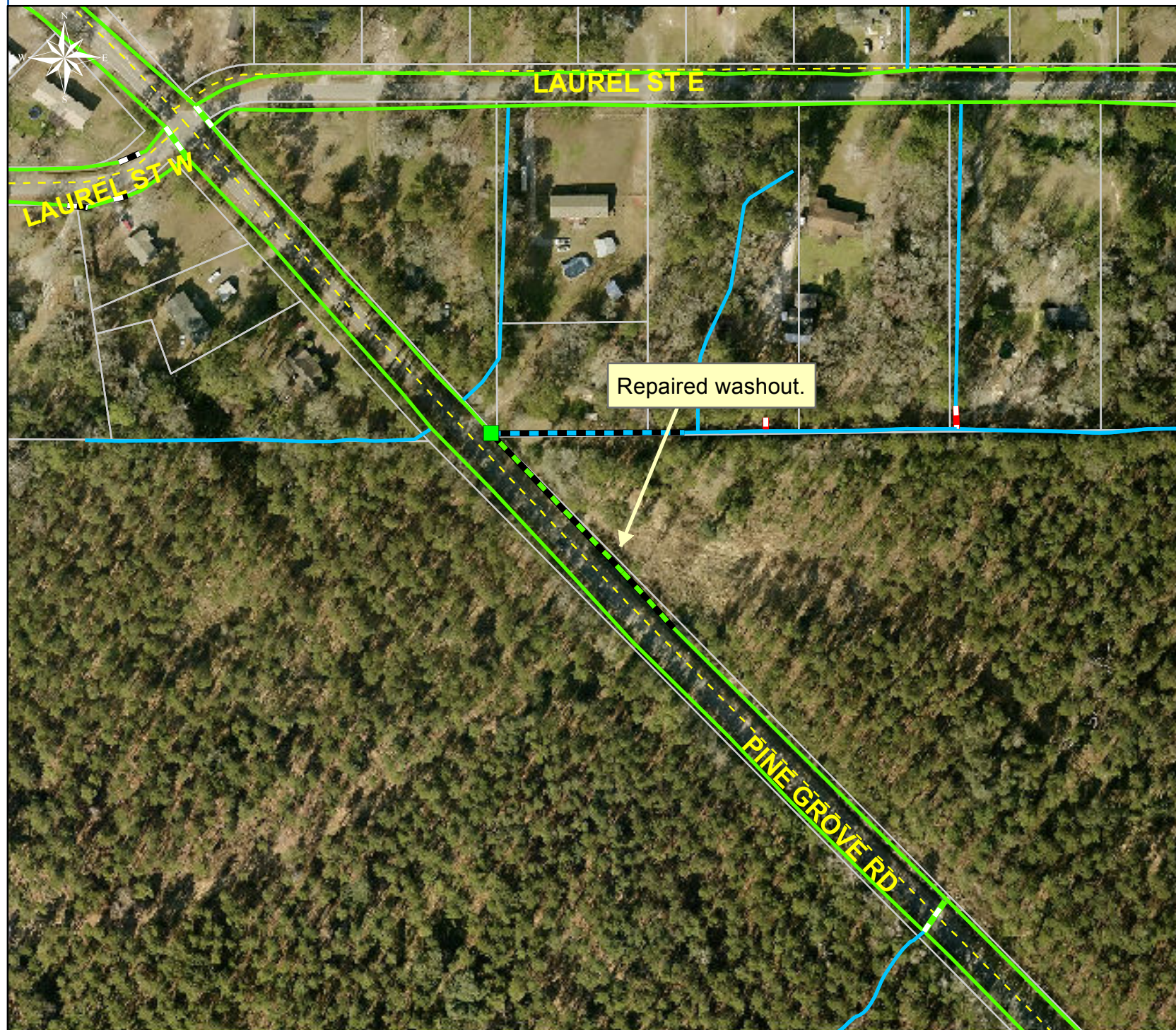
Project: Pine Grove Road

Activity: Routine/ Preventive Maintenance

Project #: 2015-518















Township: Port Royal Island

Completed: August 2014



Legend

TYPE

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



1 inch = 180 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/23/15

File: C:/sethdata/projects/projectmaps/Pine Grove Rd 2015-518



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bluffton Vacuum Truck - Ashepoo Drive, Lotus Court and East Morningside Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Remove blockage from flowline. Cleaned out (2) catch basins. Jetted (1) crossline pipe and 28 L.F. of channel pipe.

Completion: Oct-14

2015-310 / Bluffton Vacuum Truck	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	16.0	\$357.41	\$177.28	\$104.73	\$0.00	\$239.28	\$878.69
PRRECON / Project Reconnaissance	10.0	\$223.38	\$18.10	\$32.89	\$0.00	\$149.55	\$423.92
RB / Remove blockage from flowline	10.0	\$223.38	\$110.80	\$42.70	\$0.00	\$149.55	\$526.43
2015-310 / Bluffton Vacuum Truck Sub Total	36.5	\$814.40	\$306.18	\$180.32	\$0.00	\$545.00	\$1,845.89
Grand Total	36.5	\$814.40	\$306.18	\$180.32	\$0.00	\$545.00	\$1,845.89

Before



After



Project: Ashepool Drive

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-310**

**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



Removed blockage from flowline.



1 inch = 78 feet

Project: Lotus Court

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-310**

**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



1 inch = 83 feet

Project: East Morningside Drive

Activity: Vacuum Truck















Project #: 2015-310

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

Cleaned out (2) catch basins and jetted (1) crossline pipe.

Jetted 28 LF of channel pipe.

E MORNINGSIDE DR



1 inch = 50 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/26/15

File: C:/sethdata/projects/projectmaps/E Morningside Dr 2015-310



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sams Point Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Project improved 1,204 L.F. of drainage system. Cleand out 1,204 L.F. of channel.

2015-547 / Sams Point Road 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	28.0	\$605.64	\$299.60	\$183.00	\$0.00	\$403.76	\$1,492.00
ODCO / Channel - cleaned out	58.0	\$1,242.84	\$270.79	\$72.88	\$0.00	\$819.18	\$2,405.69
ONJV / Onsite Job Visit	12.0	\$420.34	\$43.44	\$38.87	\$0.00	\$312.62	\$815.27
TRAIN / Training	10.0	\$192.80	\$0.00	\$0.00	\$0.00	\$0.00	\$192.80
2015-547 / Sams Point Road Channel #1 Sub Total	108.5	\$2,471.85	\$613.83	\$294.75	\$0.00	\$1,542.18	\$4,922.60
Grand Total	108.5	\$2,471.85	\$613.83	\$294.75	\$0.00	\$1,542.18	\$4,922.60

(Pictures Not Available)

**Project: Sams
Point Road
Channel #1**

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-547**

**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

Cleaned out 479
LF of channel.

Cleaned out 725
LF of channel.



1 inch = 148 feet

Prepared By: BC Stormwater Management Utility

Date Print: 12/1/14

File: C:/sethdata/projects/projectmaps/Sams Pt Rd Ch#1 2015-547



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Bluffton Center Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 968 L.F. of drainage system. Cleaned out 341 L.F. of channel and 360 L.F. of roadside ditch. Jetted 267 L.F. of channel pipe.

Completion: Nov-14

2015-550 / Bluffton Center Ch #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
DLO / Ditch Layout	30.0	\$648.90	\$36.20	\$19.53	\$0.00	\$429.30	\$1,133.93
HAUL / Hauling	31.5	\$681.35	\$337.05	\$171.00	\$0.00	\$454.23	\$1,643.63
ODCO / Channel - cleaned out	100.0	\$2,144.40	\$388.08	\$110.12	\$0.00	\$1,415.80	\$4,058.40
OPFJ / Channel Pipe - Jetted	16.0	\$369.59	\$531.84	\$129.08	\$0.00	\$250.56	\$1,281.06
ONJV / Onsite Job Visit	18.0	\$597.24	\$65.16	\$39.36	\$0.00	\$440.46	\$1,142.22
PI / Project Inspection	1.0	\$44.27	\$3.62	\$7.38	\$0.00	\$33.96	\$89.23
UB / Underbrush	28.0	\$597.45	\$25.34	\$10.58	\$0.00	\$393.12	\$1,026.49
UTLOC / Utility locates	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
2015-550 / Bluffton Center Ch #1 Sub Total	225.5	\$5,103.65	\$1,387.29	\$487.04	\$0.00	\$3,430.66	\$10,408.64
Grand Total	225.5	\$5,103.65	\$1,387.29	\$487.04	\$0.00	\$3,430.66	\$10,408.64

Before



After



Project: Bluffton Center

**Activity: Routine/
Preventive
Maintenance**















**Project #:
2015-550**

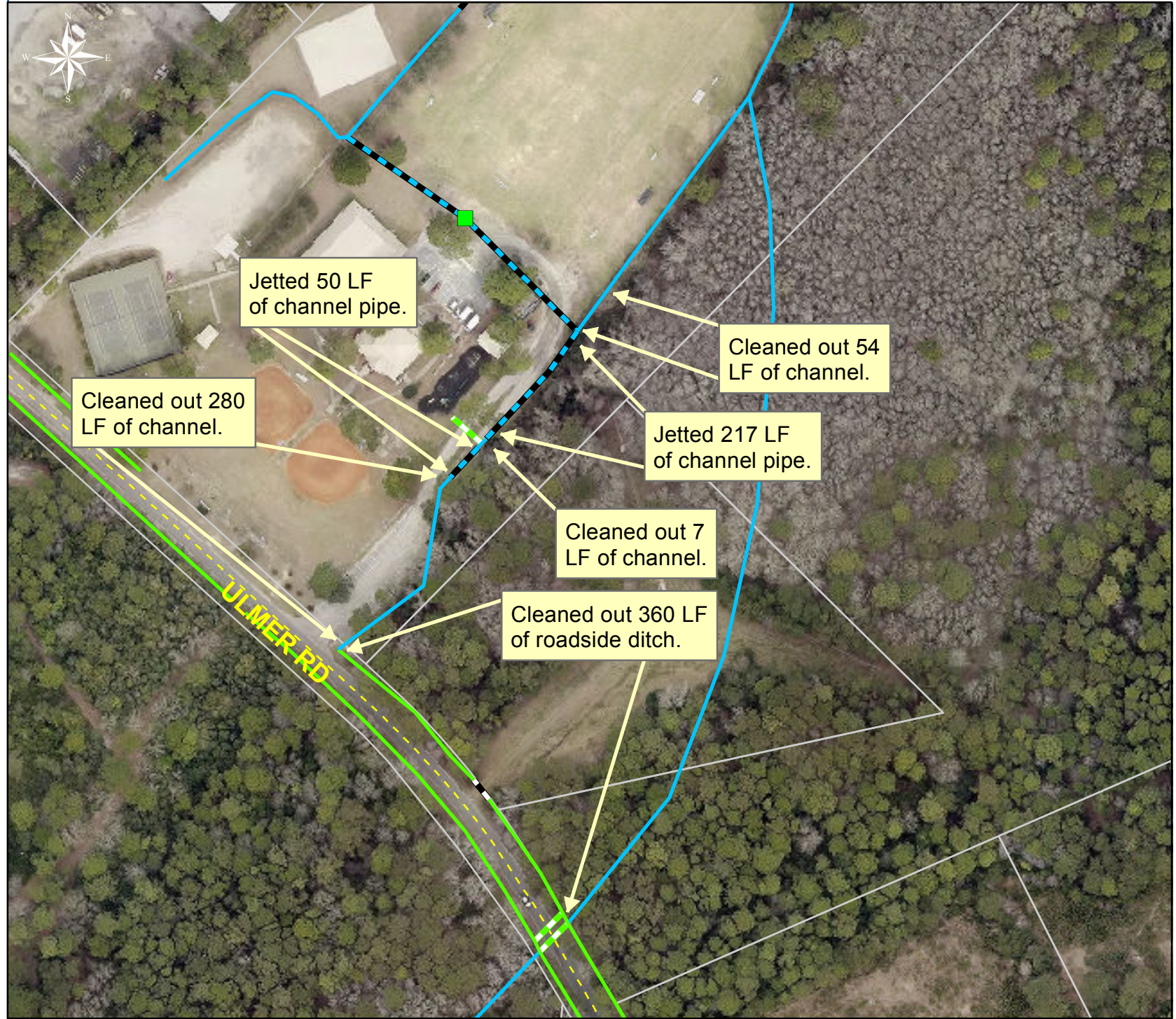
**Township:
Bluffton**

**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 = 163 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/23/15

File: C:/sethdata/projects/projectmaps/Bluffton Center 2015-550



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Allendale Street and Martha Lane

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 467 L.F. of drainage system. Cleaned out 467 L.F. of roadside ditch. Jetted (1) crossline pipe and (6) driveway pipes.

Completion: Nov-14

2015-551 / Allendale 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
DPJT / Driveway Pipe - Jetted	12.0	\$266.62	\$132.96	\$37.08	\$0.00	\$178.20	\$614.85
HAUL / Hauling	25.0	\$540.75	\$267.50	\$51.30	\$0.00	\$360.50	\$1,220.05
ONJV / Onsite Job Visit	10.0	\$342.89	\$36.20	\$27.06	\$0.00	\$254.19	\$660.34
RSDCL / Roadside Ditch - Cleanout	80.0	\$1,707.00	\$359.12	\$90.32	\$0.00	\$1,125.26	\$3,281.70
2015-551 / Allendale Street Sub Total	127.5	\$2,867.49	\$795.78	\$205.76	\$0.00	\$1,924.76	\$5,793.79
Grand Total	127.5	\$2,867.49	\$795.78	\$205.76	\$0.00	\$1,924.76	\$5,793.79

Before



During



After



Project: Allendale Street & Martha Lane Map 1

Activity: Routine/ Preventive Maintenance















Project #: 2015-551

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 = 100 feet

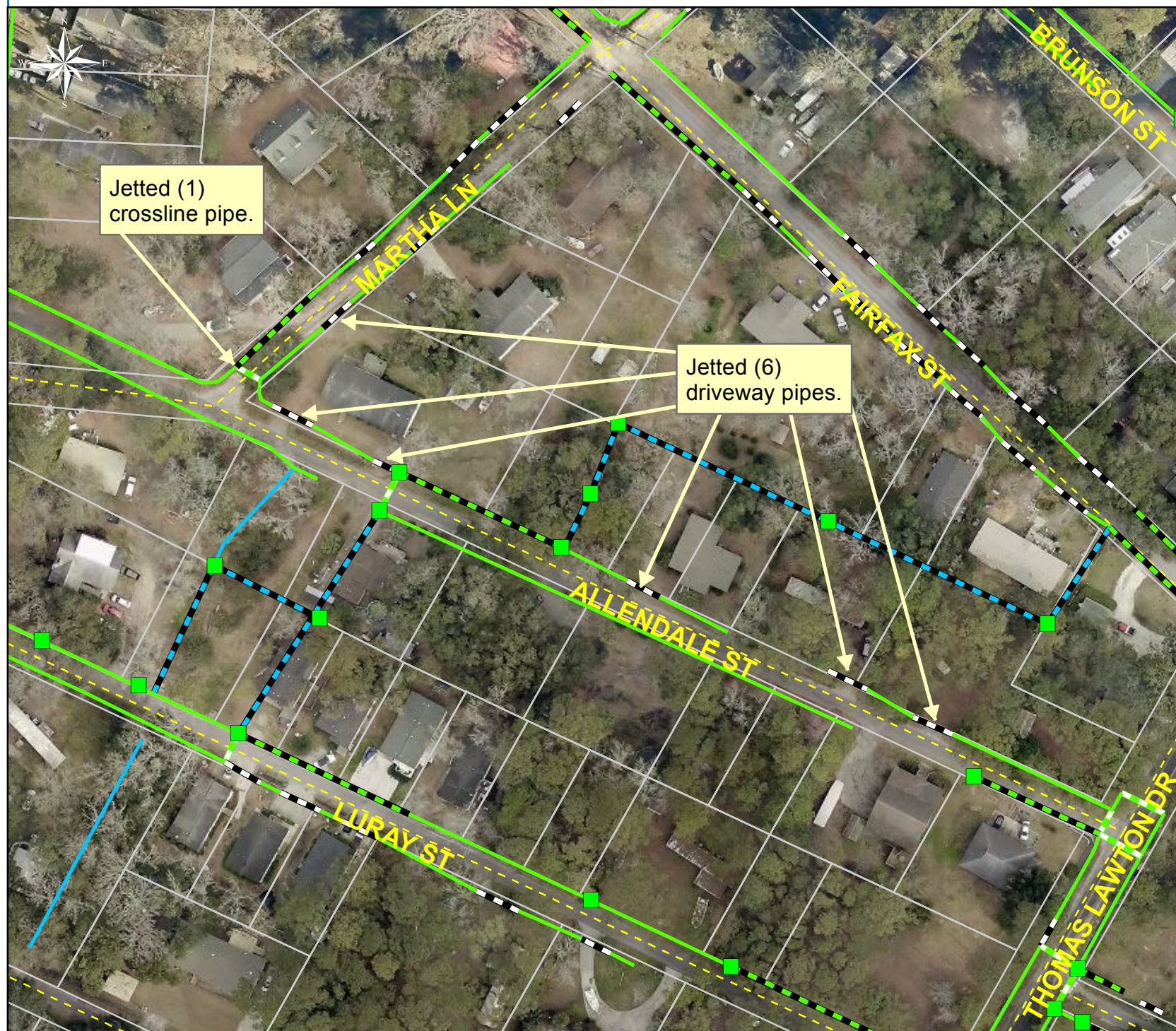
Project: Allendale Street & Martha Lane Map 2

Activity: Vacuum Truck

Project #: 2015-551

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

0 25 50 100 150 200 Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/9/15

File: C:/sethdata/projects/projectmaps/Vac/Allendale&Martha 2015-551



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Robert Smalls Parkway Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 250 L.F. of drainage system. Removed blockages from flowline. Cleaned out 250 L.F. of channel.

Completion: Nov-14

2015-557 / Robert Smalls Pkwy Ch #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	17.0	\$372.41	\$181.90	\$62.70	\$0.00	\$249.24	\$866.25
ODCO / Channel - cleaned out	60.0	\$1,372.22	\$292.86	\$37.96	\$0.00	\$924.75	\$2,627.79
ONJV / Onsite Job Visit	8.0	\$252.08	\$28.96	\$19.68	\$0.00	\$170.80	\$471.52
2015-557 / Robert Smalls Parkway Ch #1 Sub Total	85.5	\$2,006.94	\$503.72	\$120.34	\$0.00	\$1,351.40	\$3,982.41
Grand Total	85.5	\$2,006.94	\$503.72	\$120.34	\$0.00	\$1,351.40	\$3,982.41

Before



During



After



Project: Robert Smalls Pkwy Channel # 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-557

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 = 288 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Providence Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Completion: Nov-14

Project improved 215 L.F. of drainage system. Cleaned out 215 L.F. of channel. Repaired washout.

2015-558 / Providence Road Ch #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	4.0	\$86.52	\$42.80	\$25.26	\$0.00	\$57.68	\$212.26
RB / Remove blockage from flowline	20.0	\$458.60	\$137.38	\$52.73	\$0.00	\$309.30	\$958.00
2015-558 / Providence Road Ch #1 Sub Total	24.5	\$555.35	\$180.18	\$77.99	\$0.00	\$373.59	\$1,187.11
Grand Total	24.5	\$555.35	\$180.18	\$77.99	\$0.00	\$373.59	\$1,187.11

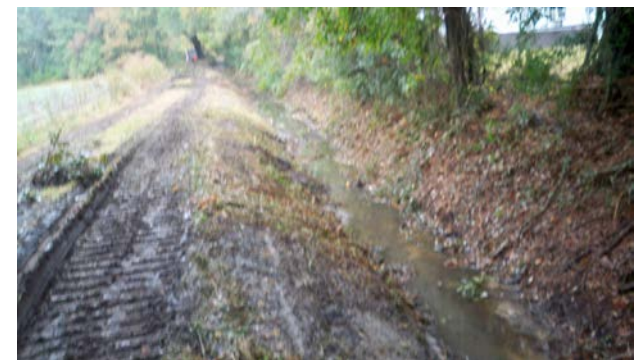
Before



During



After



Project: Providence Road Channel #1

Activity: Routine/ Preventive Maintenance

Project #: 2015-558

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

0 40 80 160 240 320 Feet

1 inch = 167 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/20/15

File: C:/sethdata/projects/projectmaps/Providence Rd 2015-558



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Poppy Hill Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 2,553 L.F. of drainage system. Cleaned out 2,553 L.F. of channel.

Completion: Dec-14

2015-531 / Poppy Hill Road 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
RB / Remove blockage from flowline	30.0	\$675.00	\$158.80	\$105.45	\$0.00	\$451.80	\$1,391.05
2015-531 / Poppy Hill Road Channel #1	30.5	\$685.23	\$158.80	\$105.45	\$0.00	\$458.42	\$1,407.90
Sub Total							
Grand Total	30.5	\$685.23	\$158.80	\$105.45	\$0.00	\$458.42	\$1,407.90

Before



During



After



**Project: Poppy Hill
Road Channel # 1**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-531**

**Township: Port
Royal Island**

**Completed:
December 2014**



Legend

TYPE

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

0 75 150 300 450 600
Feet

1 inch = 301 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/16/15

File: C:/sethdata/projects/projectmaps/Poppy Hill Rd 2015-531



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Jennings Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 920 L.F. of drainage system. Cleaned out 920 L.F. of roadside ditch. Jetted (1) crossline pipe and (1) driveway pipe. Hydroseeded for erosion control.

Completion: Dec-14

2015-536 / Jennings 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
DPJT / Driveway Pipe - Jetted	10.0	\$223.38	\$110.80	\$33.15	\$0.00	\$149.55	\$516.88
HAUL / Hauling	30.0	\$648.90	\$321.00	\$94.73	\$0.00	\$432.60	\$1,497.23
ODCO / Channel - cleaned out	64.0	\$1,434.78	\$281.50	\$131.66	\$0.00	\$960.21	\$2,808.15
ONJV / Onsite Job Visit	18.0	\$577.20	\$65.16	\$32.70	\$0.00	\$403.02	\$1,078.08
RSDCL / Roadside Ditch - Cleanout	35.0	\$783.58	\$195.98	\$48.62	\$0.00	\$524.16	\$1,552.34
2015-536 / Jennings Road Sub Total	157.5	\$3,678.07	\$974.44	\$340.86	\$0.00	\$2,476.15	\$7,469.53
Grand Total	157.5	\$3,678.07	\$974.44	\$340.86	\$0.00	\$2,476.15	\$7,469.53

Before



During



After



Project: Jennings Road Map 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-536

Township: Port Royal Island

Completed: December 2014



Legend

TYPE

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



1 inch = 167 feet

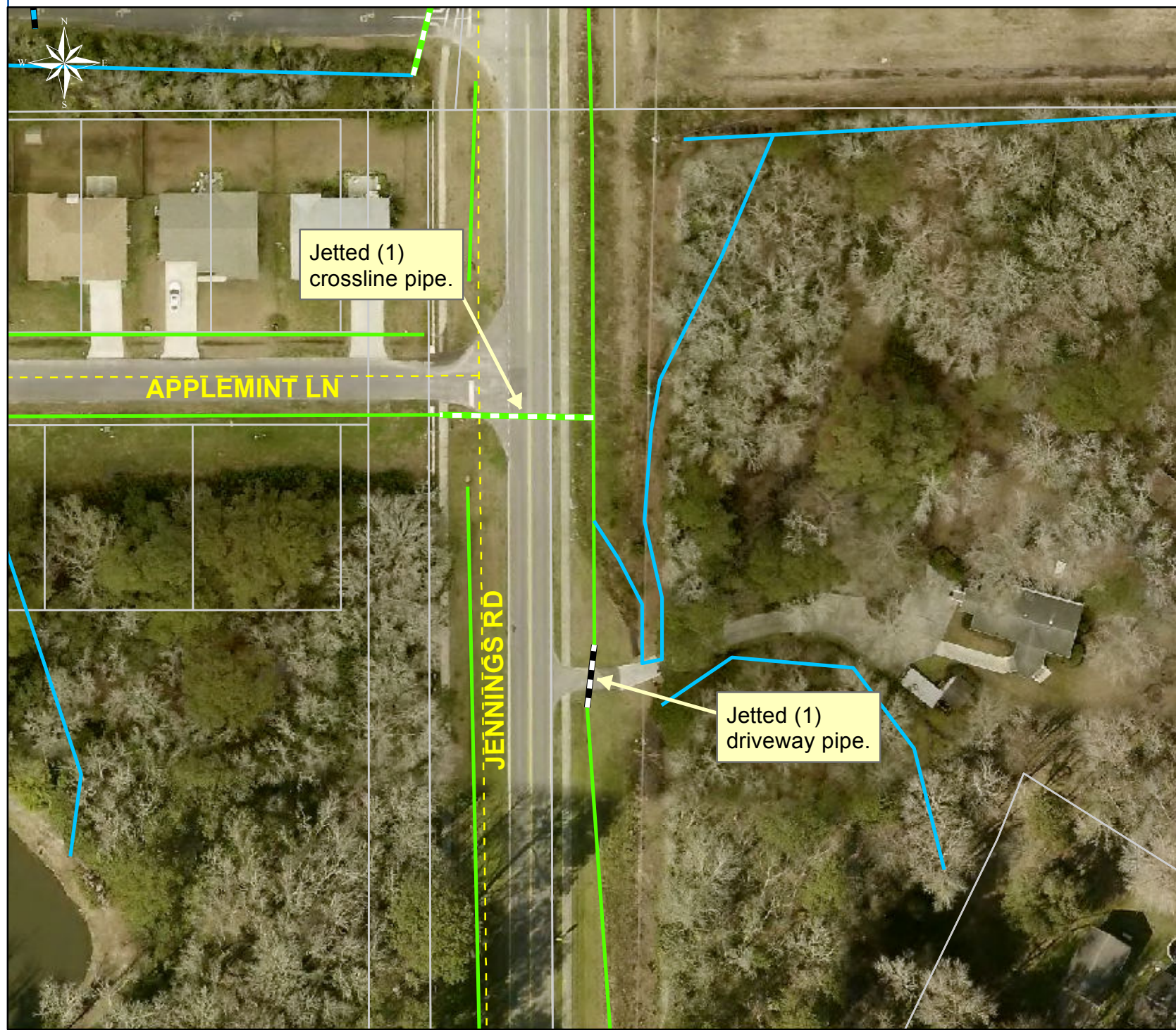
**Project: Jennings
Road Map 2**

**Activity: Vacuum
Truck**

**Project #:
2015-536**

**Township: Port
Royal Island**

**Completed:
December 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 = 72 feet



Beaufort County Public Works

Stormwater Infrastructure

Project Summary

Project Summary: Oakhurst Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 1,435 L.F. of drainage system. Cleaned out 1,435 L.F. of channel. Jetted (2) access pipes and (2) crossline pipes.

Completion: Dec-14

2015-560 / Oakhurst 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
CLPJT / Crossline Pipe - Jetted	17.5	\$386.82	\$166.20	\$57.05	\$0.00	\$257.93	\$868.00
HAUL / Hauling	43.0	\$930.09	\$389.30	\$119.70	\$0.00	\$620.06	\$2,059.15
LM / Loading Materials	50.0	\$1,058.00	\$97.02	\$28.96	\$0.00	\$695.60	\$1,879.58
ODCO / Channel - cleaned out	80.0	\$1,683.40	\$315.68	\$63.12	\$0.00	\$1,102.80	\$3,165.00
ONJV / Onsite Job Visit	9.0	\$285.26	\$32.58	\$31.98	\$0.00	\$195.27	\$545.09
2015-560 / Oakhurst Road Sub Total	200.0	\$4,353.80	\$1,000.78	\$300.80	\$0.00	\$2,878.27	\$8,533.65
Grand Total	200.0	\$4,353.80	\$1,000.78	\$300.80	\$0.00	\$2,878.27	\$8,533.65

Before



During



After



Project: Oakhurst Road

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-560**

**Township:
Sheldon**

**Completed:
December 2014**

Legend

TYPE

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



0 30 60 120 180 240
Feet

1 inch = 128 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/9/15

File:C:/sethdata/projects/projectmaps/Oakhurst Rd 2015-560



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Clydesdale Circle

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Jetted (1) driveway pipe.

Completion: Dec-14

2015-561 / Clydesdale 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
DPJT / Driveway Pipe - Jetted	4.0	\$89.35	\$44.32	\$20.65	\$0.00	\$59.82	\$214.14
2015-561 / Clydesdale Circle Sub Total	4.5	\$99.58	\$44.32	\$20.65	\$0.00	\$66.44	\$230.99
Grand Total	4.5	\$99.58	\$44.32	\$20.65	\$0.00	\$66.44	\$230.99

Before



During



After



Project: Clydesdale Circle

Activity: Vacuum Truck















Project #: 2015-561

Township: Port Royal Island

Completed: December 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) driveway pipe.



1 inch = 229 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Forest Field Subdivision Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 2,923 L.F. of drainage system. Removed fallen trees from workshelf. Cleaned out 2,923 L.F. of channel.

Completion: Dec-14

2015-562 / Forest Field Sub Ch #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	2.0	\$43.26	\$21.40	\$5.70	\$0.00	\$28.84	\$99.20
ODCO / Channel - cleaned out	40.0	\$914.80	\$102.72	\$39.90	\$0.00	\$616.50	\$1,673.92
2015-562 / Forest Field Sub Ch #1 Sub Total	42.5	\$968.29	\$124.12	\$45.60	\$0.00	\$651.96	\$1,789.97
Grand Total	42.5	\$968.29	\$124.12	\$45.60	\$0.00	\$651.96	\$1,789.97

Before



During



After



Project: Forest Field Subdivision Channel # 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-562

Township: Port Royal Island

Completed: December 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



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Warsaw Island Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired washout. Installed rip rap for erosion control.

Completion: Dec-14

2015-563 / Warsaw Island 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	5.5	\$118.97	\$64.07	\$229.13	\$0.00	\$50.47	\$462.63
RPWO / Repaired Washout	22.0	\$503.14	\$53.17	\$51.61	\$0.00	\$339.08	\$947.00
2015-563 / Warsaw Island Road Sub Total	28.0	\$632.34	\$117.24	\$280.74	\$0.00	\$396.16	\$1,426.47
Grand Total	28.0	\$632.34	\$117.24	\$280.74	\$0.00	\$396.16	\$1,426.47

Before



After





Project: Warsaw Island Road

Activity: Routine/ Preventive Maintenance















Project #: 2015-563

Township: St. Helena

Completed: December 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 washout.



1 inch = 79 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/15/15

File:C:/sethdata/projects/projectmaps/Warsaw Is Rd 2015-563



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Burton Wells Road

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Removed blockages from flowline.

Completion: Jan-15

2015-529 / Burton Wells 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	3.0	\$64.89	\$32.10	\$5.70	\$0.00	\$43.26	\$145.95
RB / Remove blockage from flowline	12.0	\$274.44	\$27.49	\$19.95	\$0.00	\$184.95	\$506.83
2015-529 / Burton Wells Road Sub Total	15.5	\$349.56	\$59.59	\$25.65	\$0.00	\$234.83	\$669.63
Grand Total	15.5	\$349.56	\$59.59	\$25.65	\$0.00	\$234.83	\$669.63

Before



During



After





Project: Burton Wells Road

Activity: Routine/ Preventive Maintenance

Project #: 2015-529

Township: Port Royal Island

Completed: January 2015

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 = 200 feet



Beaufort County Public Works Stormwater Infrastructure Project Summary

Project Summary: Parkside Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Repaired sinkhole and resealed catch basin lid.

Completion: Jan-15

2015-564 / Parkside Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.23	\$0.00	\$0.00	\$0.00	\$6.62	\$16.85
CBCO / Catch basin - clean out	4.0	\$89.35	\$44.32	\$13.15	\$0.00	\$59.82	\$206.64
CBREP / Catch basin - repaired	60.0	\$1,337.08	\$108.60	\$624.20	\$0.00	\$848.70	\$2,918.57
HAUL / Hauling	46.3	\$1,047.39	\$288.90	\$193.40	\$0.00	\$707.93	\$2,237.61
LM / Loading Materials	4.0	\$81.84	\$29.24	\$10.52	\$0.00	\$52.92	\$174.52
ONJV / Onsite Job Visit	27.0	\$805.68	\$97.74	\$63.22	\$0.00	\$492.21	\$1,458.85
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$1,500.00	\$0.00	\$1,500.00
PRRECON / Project Reconnaissance	2.0	\$59.68	\$7.24	\$6.54	\$0.00	\$36.46	\$109.92
SR / Sinkhole repair	43.0	\$1,024.21	\$47.06	\$35.02	\$0.00	\$667.68	\$1,773.97
2015-564 / Parkside Drive Sub Total	186.8	\$4,455.46	\$623.10	\$946.04	\$1,500.00	\$2,872.33	\$10,396.93
Grand Total	186.8	\$4,455.46	\$623.10	\$946.04	\$1,500.00	\$2,872.33	\$10,396.93

Before



During



After





Project: Parkside Drive

Activity: Routine/ Preventive Maintenance

Project #: 2015-564

Township: Bluffton













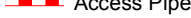

Completed: January 2014

PARKSIDE DR

Repaired sinkhole.
Resealed catch basin lid.

Legend

TYPE

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



1 inch = 64 feet



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Powell Drive

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 579 L.F. of drainage system. Removed fallen tree from workshelf. Cleaned out 579 L.F. of channel.

Completion: Jan-15

2015-566 / Powell 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
HAUL / Hauling	2.0	\$43.26	\$21.40	\$5.26	\$0.00	\$28.84	\$98.76
RB / Remove blockage from flowline	20.0	\$457.40	\$71.74	\$28.93	\$0.00	\$308.25	\$866.32
2015-566 / Powell Drive Sub Total	22.5	\$510.89	\$93.14	\$34.19	\$0.00	\$343.70	\$981.92
Grand Total	22.5	\$510.89	\$93.14	\$34.19	\$0.00	\$343.70	\$981.92

Before



During



After



Project: Powell Drive

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-566**

**Township: Port
Royal Island**

**Completed:
January 2015**

Legend

TYPE

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



1 inch = 122 feet

Prepared By: BC Stormwater Management Utility
Date Print: 1/16/15

File: C:/sethdata/projects/projectmaps/Powell Dr 2015-566



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Wimbee Landing Road Channel #1

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Project improved 5,990 L.F. of drainage system. Cleaned out 5,990 L.F. of channel.

Completion: Jan-15

2015-567 / Wimbee Landing Rd Ch #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	10.0	\$216.30	\$107.00	\$42.08	\$0.00	\$144.20	\$509.58
ODCO / Channel - cleaned out	20.0	\$457.40	\$84.62	\$28.93	\$0.00	\$308.25	\$879.20
2015-567 / Wimbee Landing Rd Ch #1	30.5	\$683.93	\$191.62	\$71.01	\$0.00	\$459.06	\$1,405.62
Sub Total							
Grand Total	30.5	\$683.93	\$191.62	\$71.01	\$0.00	\$459.06	\$1,405.62

Before



During



After



Project: Wimbee Landing Road Channel 1

Activity: Routine/ Preventive Maintenance

Project #: 2015-567

Township: Sheldon

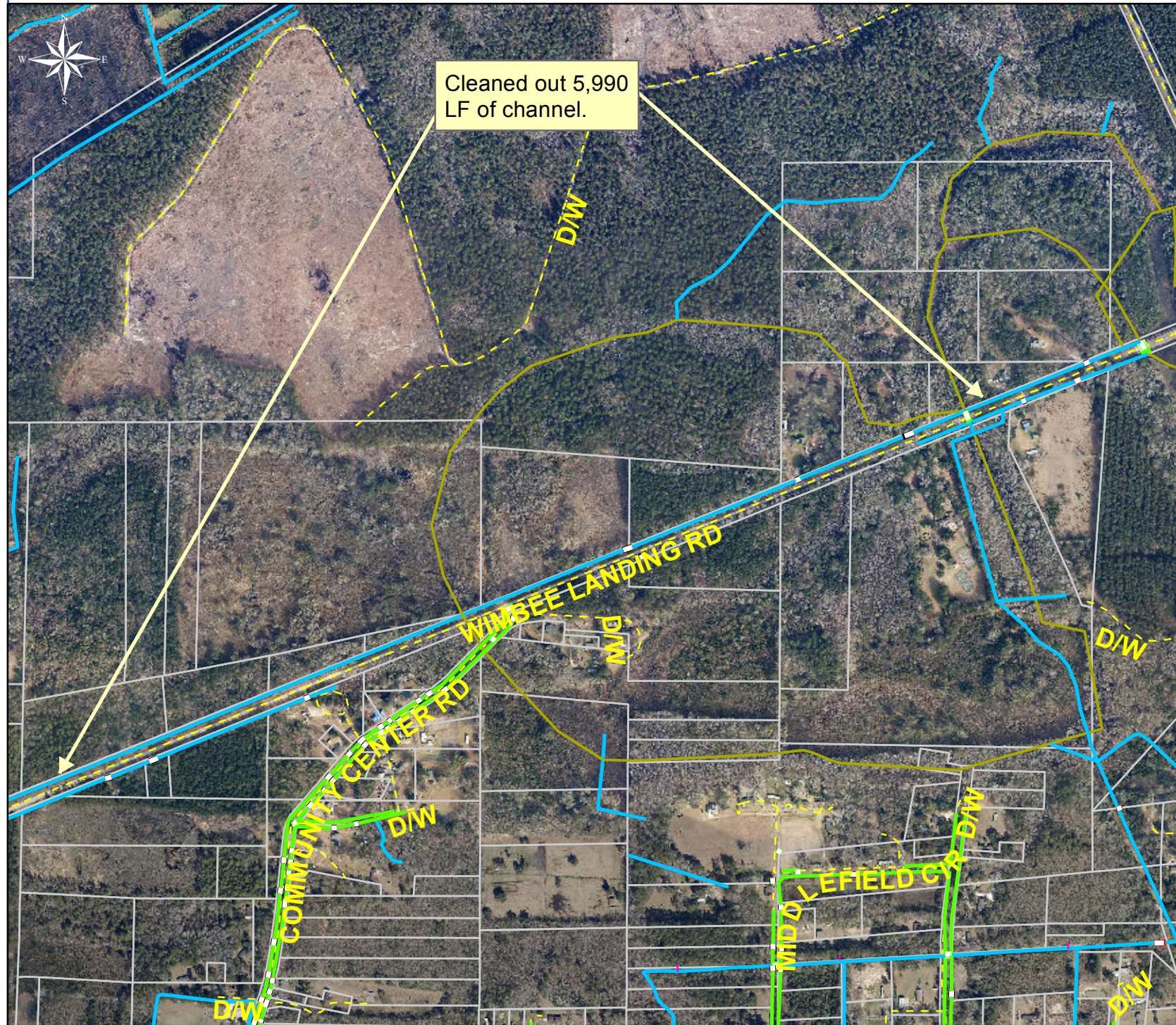
Completed: January 2015

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 5,990 LF of channel.



1 inch = 770 feet

Prepared By: BC Stormwater Management Utility

Date Print: 1/16/15

File: C:/sethdata/projects/projectmaps/Wimbee Landing Rd 2015-567



Beaufort County
Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Trask Parkway Channel #2

Activity: Routine/Preventive Maintenance

Narrative Description of Project:

Removed blockages and repaired washout.

Completion: Jan-15

2015-568 / Trask Parkway Channel #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	8.0	\$173.04	\$85.60	\$39.54	\$0.00	\$115.36	\$413.54
RB / Remove blockage from flowline	12.0	\$274.44	\$44.12	\$13.15	\$0.00	\$184.95	\$516.66
2015-568 / Trask Parkway Channel #2	20.5	\$457.71	\$129.72	\$52.69	\$0.00	\$306.93	\$947.05
Sub Total							
Grand Total	20.5	\$457.71	\$129.72	\$52.69	\$0.00	\$306.93	\$947.05

Before



During



After



**Project: Trask
Parkway Ch #2**

**Activity: Routine/
Preventive
Maintenance**

**Project #:
2015-568**

**Township:
Sheldon**

**Completed:
January 2015**

Legend

TYPE

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

Removed blockages from
flowline. Repaired washout.



1 inch = 230 feet



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD
AGENDA

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

