



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, March 11, 2020
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

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

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – January 8, 2020 ([backup](#)) and February 12, 2020 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Neil Desai ([backup](#))
 - B. Monitoring Update – Neil Desai ([backup](#))
 - C. Stormwater Implementation Committee Report – Neil Desai ([backup](#))
 - D. Stormwater Related Projects – Neil Desai ([backup](#))
 - E. Upcoming Professional Contracts Report – Neil Desai ([backup](#))
 - F. Regional Coordination – Neil Desai ([backup](#))
 - G. Municipal Reports – Neil Desai ([backup](#))
 - H. MS4 Update – Neil Desai ([backup](#))
 - I. Maintenance Projects Report – Matthew Rausch ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - A. Voting for Stormwater Management Utility Board Chairman and Vice Chairman
 - B. FY21 Budget ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. April 8, 2020 ([backup](#))
9. ADJOURNMENT

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

January 8, 2020 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Draft Minutes 1/30/2020

Board Members

Present

William Bruggeman
Steven Andrews
Patrick Mitchell
Allyn Schneider
James Clark
Marc Feinberg

Absent

James Fargher

Ex-Officio Members

Present

Van Willis
Scott Liggett

Absent

Kim Jones
Nate Farrow

Beaufort County Staff

Daniel Rybak
Melissa Allen
Katie Herrera
Amber Woods
Matthew Rausch

Visitors

Alan Warren, USCB
Alice Howard, County Council
Ellen Sturup Comeau, Clemson Extension
Danielle Mickel, USCB
Tye Pettay, USCB

1. Meeting called to order – William Bruggeman

- A. Agenda – Approved.
- B. December 11, 2019 Minutes – Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – Mr. Daniel Rybak provided a written report which is included in the posted agenda and can be accessed at:

<https://www.beaufortcountysc.gov/stormwater-management-utility-board/agendas/2020/010820.pdf>

A. Utility Update – Daniel Rybak

In reference to item #1, the draft manual and ordinance are available online for public review and comment. It was posted on the County Stormwater page on January 6th and the comment period will close on February 17th. The Public Stakeholder meetings will be held on January 23rd at Palmetto Electric, January 28th at Beaufort County Council Chambers, and January 30th at the Town of Bluffton Town Hall.

In reference to special presentations, staff is reaching out to Dr. Eric Monti with USCB.

Delinquent accounts, item #5, the County is moving forward and will be meeting with Gentry Locke relative to delinquent fees associated with federal properties on January 16th.

Annual reports have been received from Town of Port Royal and Town of Bluffton and they are attached in the packet. Beaufort County is pending CAFR completion.

B. Monitoring Update – Daniel Rybak

Please reference the report, no additional updates.

C. Stormwater Implementation Committee (SWIC) Report – Daniel Rybak

Please reference the report, no additional updates.

D. Stormwater Related Projects – Daniel Rybak

In reference to the Shell Point, a meeting is to be scheduled.

E. Professional Contracts Report – Daniel Rybak

Please reference the report, no additional updates.

F. Regional Coordination – Daniel Rybak

Please reference the report, no additional updates.

G. Municipal Reports – Daniel Rybak

Please reference the report, no additional updates.

H. Municipal Separate Storm Sewer System (MS4 Update) – Daniel Rybak

Mr. Rybak briefly went over the MS4 activity comparisons for plan review, stormwater permits and inspections and pointed out periods of rain on the weather station chart.

Ms. Ellen Sturup Comeau shared that she is gearing up for Cultivating Carolina Yards presentation at Port Royal Plantation on HHI. She will be attending two workshops in January. They are getting ready to launch the 2020 projects as outlined in the strategic plans and reordering merchandise.

In reference to Energov permitting software, there is a meeting scheduled in March.

I. Maintenance Projects Report – Matthew Rausch

Mr. Matthew Rausch shared that there was one major project and nine minor projects. Crystal Lake was the major project that improved 1,024 feet of drainage.

Mr. Billy Bruggeman asked about Okatie East Retrofit, was it problem that needed fixed. Mr. Rausch said they repaired a catch basin and washout.

5. Unfinished Business –

RV Park Update – This is to follow up on a question. Mr. Rybak spoke with the zoning office on the submittal and they advised that the determination was a developed camp group which is outside of the zoning for the area. That decision is currently under appeal [by the applicant].

6. New Business – None.

7. Public Comment(s) – Dr. Warren acknowledged Matt's effort assisting the lab. The crew has recently pumped out storm drains on Saint Helena and Lady's Island. The lab is going through it to classify the material recovered (debris, litter, etc.). This is modeling what is done in California.

The Saint Helena portion is complete and about to begin the Lady's Island portion. The vac-truck dumped the contents on a piece of land that John Trask III has allowed the lab to use.

Mr. Marc Feinberg asked if they are going to do a write up. Dr. Warren responded they plan to do a write up and photo documentation as well. They are quantifying everything.

8. Next Meeting Agenda – Approved.

Mr. Scott Liggett asked when they should be preparing to review the proposed budget for the next fiscal year and when should we expect to see stakeholder comments from the public meeting. Mr. Rybak replied staff is currently working on the stormwater budget and a meeting with administration is scheduled for next week about the date for the first draft. Concerning regional ordinance and manual, the public comment ends on February 17th. The comments will be gathered and evaluated and determination will be made for those that warrant modifications or revisions of the draft as proposed. The final draft will probably be ready by the end of March.

9. Meeting Adjourned

DRAFT

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

February 12, 2020 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Draft Minutes 2/27/2020

Board Members

Present

Steven Andrews
Allyn Schneider
James Clark
James Fargher

Absent

Marc Feinberg
William Bruggeman
Patrick Mitchell

Beaufort County Staff

Daniel Rybak
Melissa Allen
Katie Herrera
Amber Woods
Neil Desai
Carolyn Wallace

Ex-Officio Members

Present

Van Willis
Scott Liggett
Kim Jones
Nate Farrow

Absent

Visitors

Hamp Simkins, USCB
Alice Howard, County Council
Ellen Sturup Comeau, Clemson Extension
York Glover, County Council
Chris Lloyd, Citizen
Denise Parsick, Beaufort SW Conservation District

1. Meeting called to order – Allyn Schneider

- A. Agenda – No quorum at the start of the meeting. Revisited after Item 8. *
- B. January 8, 2019 Minutes – No quorum at the start of the meeting. Revisited after Item 8 *

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – Mr. Daniel Rybak provided a written report which is included in the posted agenda and can be accessed at:

<https://www.beaufortcountysc.gov/stormwater-management-utility-board/agendas/2020/021220.pdf>

A. Utility Update – Daniel Rybak

In reference to item #1, Public Stakeholder meetings were held on January 23rd at Palmetto Electric, January 28th at Beaufort County Council Chambers, and January 30th at the Town of Bluffton Town Hall. Attendance was fair, 10-25 people at the meetings. The comment period is scheduled to close on February 17th. The technical committee is scheduled to meet on March 6th to review comments and see what adjustments may be needed.

In reference to special presentations, Dr. Eric Monti with USCB in unavailable this semester with his class schedule, will reach out after the semester ends.

Delinquent accounts, item #5, stormwater staff met with Gentry Locke on January 17th to discuss fees, processes, procedures and policies to give them an overview of the program.

Annual reports have been received from Town of Port Royal and Town of Bluffton. Beaufort County is pending CAFR completion.

B. Monitoring Update – Daniel Rybak

Please reference the report, no additional updates.

C. Stormwater Implementation Committee (SWIC) Report – Daniel Rybak

Update to item #2, the FY19 annual summary report and FY21 utility management fee proposed budget and rates will be discussed under new business. Drafts of the memos were provided to the Board.

D. Stormwater Related Projects – Daniel Rybak

In reference to the Bluffton Flyover Bridge project, critical line delineation is complete and consultant is working on preliminary design and permitting.

In reference to the Shell Point project, a meeting will be scheduled for the end of February. Developing a scope of work for a drainage study in the area, planning to utilize a contract that has three consultants available to issue a task order to.

E. Professional Contracts Report – Daniel Rybak

Salt Creek and Shanklin Road, the 30% design submittal under review. Right-of-way acquisition areas are being assessed.

Brewer Memorial, SCDOT has responded favorably to County request for pipe diversion and consultant is seeking final approval.

Evergreen, 90% Design submittal under review. Public Meeting is scheduled for Friday, February 14th, 2020, from 10:30 to 11:30 am at the Palmetto Electric Coop Building in Hardeeville. The public is welcome to come learn about the benefits associated with the project.

F. Regional Coordination – Daniel Rybak

Ms. Kim Jones shared that the next Joint Councils meeting will be on February 25th to discuss a long term strategy for extension of sewer.

In regards to the Mossy Oaks task force, Mr. Nate Farrow shared that the City is working with engineering contractor, as well as looking into possible grants.

G. Municipal Reports – Daniel Rybak

Mr. Farrow shared that the City of Beaufort has a continued effort in Battery Shores for road side clean out and a possible pipe project.

H. Municipal Separate Storm Sewer System (MS4 Update) – Daniel Rybak

Mr. Rybak briefly went over the MS4 activity comparison charts for plan review, stormwater permits and inspections and pointed out periods of rain on the weather station chart.

Ms. Ellen Sturup Comeau shared that the registration for the Master Rain Gardener course is now open. There will be a field day in Charleston in the spring. Mr. Rybak commented that Ellen will be participating in the Evergreen Public Meeting as well.

In reference to Energov permitting software, there was a module demo and training held on February 4th.

I. Maintenance Projects Report – Daniel Rybak

There was one major project and nine minor projects. The Wade Hampton Drive (major) project improved 6,510 feet of drainage.

5. Unfinished Business –

A. *City of Beaufort Intergovernmental Agreement (IGA)* – At the October 10, 2018 Stormwater Utility Board meeting the Stormwater manager at the time presented to the Board that the City of Beaufort requested an extension of the existing IGA to be associated to correspond with bonds they hope to issue for Capital Projects. The City and County attorneys have been working on a draft, which has been provided in the packet. There were no major changes within the IGA and the time frame was originally identified to be 25 years, but the draft is written for a 20 year period from the date of acceptance.

Mr. Allyn Schneider noted that a quorum is now present.

6. New Business –

A. *Proposed Changes to the Stormwater Ordinance* – Mr. Rybak explained that the proposed changes are to provide additional exemptions related to private roadways, reflect organizational changes within the County's organization structure in regards to the stormwater utility's jurisdiction.

Mrs. Carolyn Wallace shared the current exemptions, roads that are maintained by SCDOT, the County and municipalities are exempt from stormwater utility fees. When it comes to private roads if they are shown in their own separate parcel and service more than one parcel, they are exempt. Wanting to expand it to private roads that are not shown in their own parcel, but service more than one property owner. Mrs. Wallace shared examples. In the first example the red indicates a county road which is exempt and the green indicates a private road which is not exempt. In the second example the blue shows the impervious area that has been measured for the parcel. Example 3, started capturing private roads that aren't in their own unique polygon, the road serves several properties. Example 4 is showing an example of the type of road we would not want to exempt, as it services only one property and functions more as a driveway. Driveways are not exempt, would only be fair to charge private roads that only service one parcel. [See attached.](#)

Mrs. Wallace summarized the impact, explaining she has identified 41 that would fall in this category and the reduction in fees would be around \$8,000.

Discussion took place:

What is the driving force? Need to continue to roll out this effort to improve the base data. Try to fully apply the ordinance to the stormwater utility fees, as written. The first example would need to be measured to charge for that impervious area [portion of the road that is private].

Mr. Rybak shared that this came about when a request came in when someone felt they were charged incorrectly. This proposed exemption would make it more consistent across the board.

Mr. Van Willis asked to view the current exemptions again. He expressed the irony that additional roads can cause additional issues.

Mr. Scott Liggett asked if an improved roadway is defined. Mrs. Wallace responded there is no distinction in the current rate study and that if it is a road, it is impervious. If it is dirt, gravel or paved it doesn't matter.

Mr. Liggett asked about the fees that would be collected on the parcel that had a road running through it. Mrs. Wallace clarified that there would be a charge for gross area and impervious, the square footage of what remains minus the road.

Mr. Rybak shared that the other changes were to get away from Environmental Engineering and Land Management language reference and make it Beaufort County.

A motion was made that the board approve the proposed changes to the stormwater ordinance. The motion was approved (4/0).

In response to a question and comment about the roads being impervious whether or not it was paved the charge would be the same, Mrs. Wallace expressed she is not the engineer but is told because it is compacted overtime that it becomes impervious.

B. *FY19 Annual Summary Report* – This report was provided in the packet and was provided per the IGA. It is based on historical data for the fiscal year. The report includes total number of accounts billed and collected, the collection rates and the management fees that were paid. It includes accounts and fees in arrears, accounts with credits, and the amounts and the number of accounts that had adjustments.

C. *FY21 Utility Management Fee Proposed Budget and Rates Memo* – This report is required by the IGA to be provided to the municipalities by February 15th. This report provides the management budget to establish the cost share rates. The IGA requires the municipalities to provide a response to the County by April 1st. The stormwater budget will be presented at the board meeting in March. [Draft attached.](#)

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved with Addition.

Addition to New Business – FY21 Budget

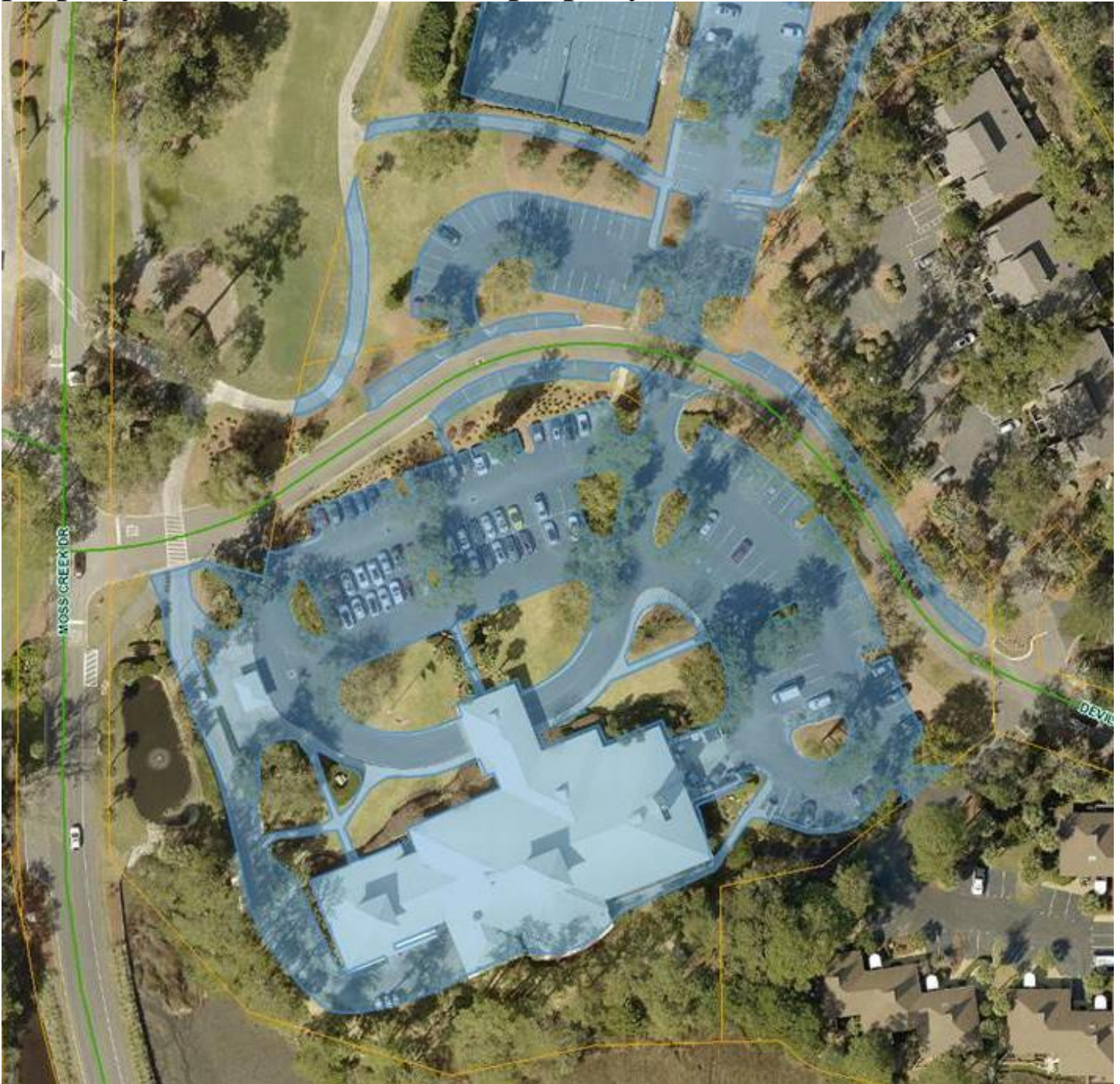
* The board went back to Item #1A to approve the agenda (4/0) and to Item #1B to approve the minutes from January 8, 2020 (3-Yays/1-Abstained). Mr. James Fargher abstained from the approval of the January 8, 2020 minutes as he was not present at that meeting.

9. Meeting Adjourned

R700 039 000 0049 0000 - Portion of the road is a county maintained road and would be exempt from the impervious area charge. But under the current ordinance, the portion that is a private road would be charged the impervious area (IA) charge because it is not shown as a separate parcel of land in GIS. The private roadway is being used by more than one property owner to access their property.



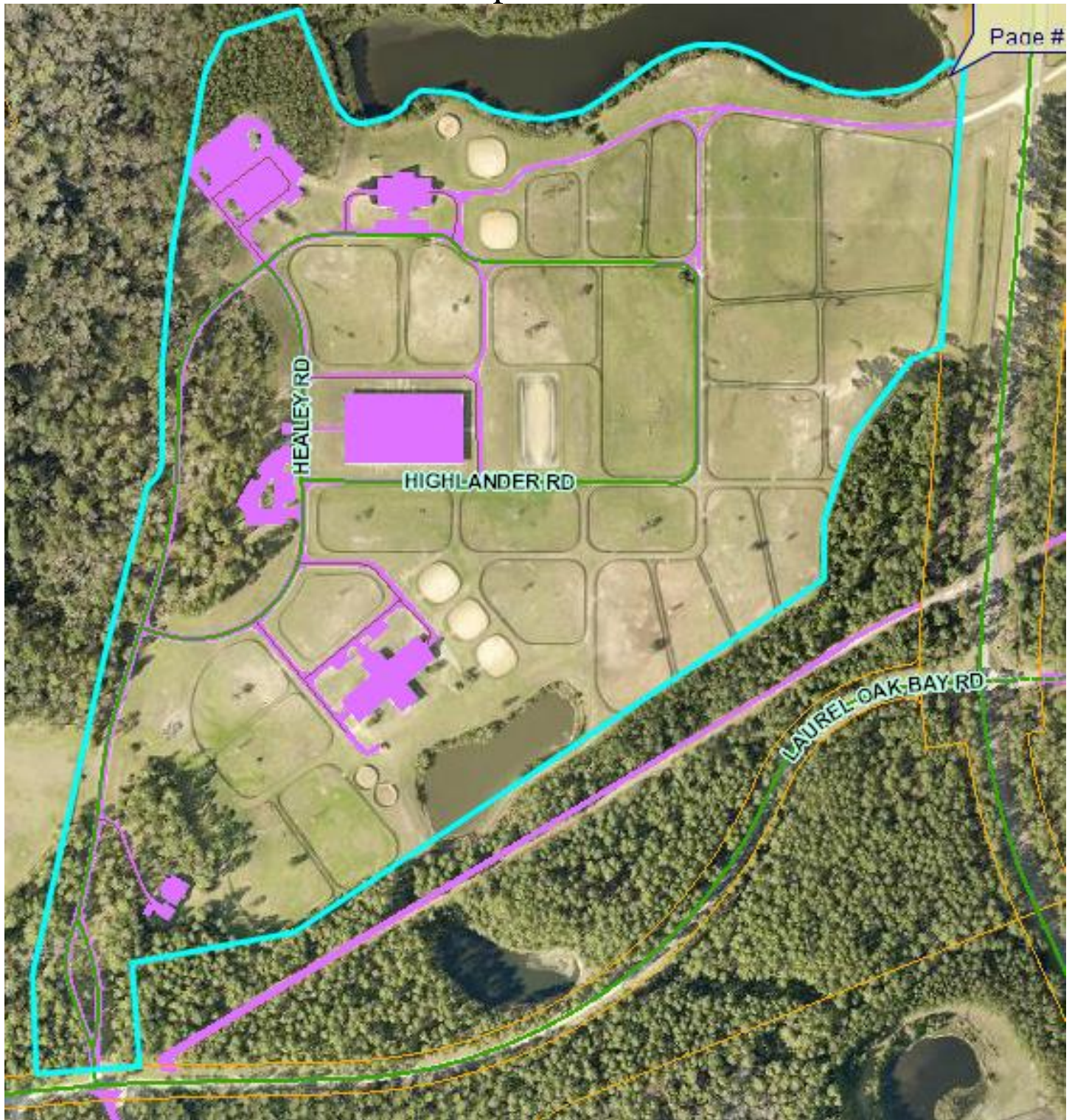
R600 040 00B 0093 0000 - The private roadway is not shown as a separate parcel of land in GIS but is being used by more than one property owner to access their property.



R112 034 000 0249 0000 – For tax year 2019, we just started this effort to capture the IA for private roadways that are not shown in its own polygon. In this example this would be approximately 6 units of IA charge that would be loss in revenue if the ordinance is revised. The exemption of private roadways that service more than one property owner should only cause a small reduction in revenue (I would estimate less than \$10k).



R614 045 000 0602 0000 - This is an example of a private road that would remain without an exemption.





BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
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MEMORANDUM

TO: Stormwater Implementation Committee (SWIC) Members

FROM: Dan Rybak, Beaufort County Stormwater Utility Manager

SUBJECT: Fiscal Year (FY) 2021/Tax Year (TY) 2020 Utility Management Fee Proposed Budget and Rates

DATE: February 15, 2020

This is the fourth year for the annual management fee budget proposal format. The updated rate model, attached by reference to this memo, is intended to replace this analysis by presenting previous year's actual numbers and projecting the Management fee annually once the actuals are added to the spreadsheet. Please note only the billable units have been updated in the model; the individual City and Town budgets were not provided to the County and therefore the Summary Tabs for each jurisdiction will not be a valid representation of your revenue and expenses. This change redistributed the management fee and cost shares to all jurisdictions within the County.

The scope of services to be provided by the Utility are defined by the IGA, specifically Section 5.04. Those services have been provided by the County staff to the municipalities for many years and will continue in fiscal year FY 2021.

The final but unaudited collections for TY 2018 have been inputted into the model along with the final billed units for TY 2019. With this information input in the model, the distribution of cost shares and "percent of the whole" has shifted to reflect the most equitable method of cost sharing going into FY 2021.

	TY 2018 Total Billed	TY 2018 Total Collected	TY 2018 Billed Units (Actual)	TY 2018 Collected Units	Collection Rates
Port Royal	\$397,974	\$229,621	7,100 IA 3,838 Acct.	# 3,714 Acct.	57.70% 96.77%
Beaufort, City	\$1,641,549	\$1,138,799	13,918 IA 6,499 Acct.	# 6,409 Acct.	69.37% 98.62%
HHI	\$4,928,366	\$4,899,449	33,987 IA 38,255 Acct.	# 37,874 Acct.	99.41% 99.00%
Bluffton	\$1,562,107	\$1,542,770	15,940 SFU* 12,782 Acct.	15,743 SFU* 12,639 Acct.	98.76% 98.88%
Unincorp. BC	\$4,877,093	\$4,652,227	54,405 IA 64,467 Acct.	# 62,376 Acct.	95.39% 96.76%
Total	\$13,407,089	\$12,462,866			

*Under Option A, the SFU are based on total dollar amount billed/collected divided by the SFU rate, not from the analysis of the Impervious Layer.

Under Option E, our current accounting system and SWU fee reporting software will not easily determine the exact collected billable units for IA and GA. Much like Option A, a percentage based on dollar amounts collected is assumed for projection of collection rates for billable units for the upcoming year.

	Billable Unit in TY 2019 (actual)	Calculated Growth Rate (TY18 to TY19)	Billable Units for TY 2020	Distribution for FY 2021 B.C. only ^	Distribution for FY 2021 NoB only ^
Port Royal	3,919 Acct.	102.1%	4,002 Acct.	3.09%	5.19%
Beaufort, City	6,467 Acct.	99.5%	6,435 Acct.	4.96%	8.34%
HHI	38,236 Acct.	100.0%	38,217 Acct.	29.47%	N/A
Bluffton	13,519 Acct.	105.8%	14,298 Acct.	11.03%	N/A
Unincorp. BC	64,509 Acct.	103.4%	66,715 Acct.	51.45%	86.47%
Total				100%	100%

^ Based on TY 2019 projected billable acct. units for all jurisdictions within Beaufort County only.

The following cost shares are proposed for FY 2021:

- 1) Public Education and Outreach - \$90,000. This is a continuation of the MOA for PE/PO and our contract with Clemson University. Distribution will be by the FY 2021 percentages. These jurisdictions are using the Option E rate structure and will pay this cost share as part of the Management fee.
- 2) Water Quality Monitoring North of the Broad River – \$120,000. This cost share is only for the County, Town of Port Royal, and City of Beaufort. This is a continuation of the MOA for monitoring and our contract with University of South Carolina, Beaufort (USCB) Lab. Distribution will be by the FY 2021 percentages. These jurisdictions are using the Option E rate structure and will pay this cost share as part of the Management fee.

Cost Shares	PE/PO	Monitoring
Port Royal	\$2,781	\$6,228
Beaufort, City	\$4,464	\$10,008
HHI	\$26,523	N/A
Bluffton	\$9,927	N/A
Unincorp. BC	\$46,305	\$103,764
Total	\$90,000	\$120,000

The proposed Management budget for FY 2021 is \$435,293. The following is a breakdown summary of major budget categories:

Salaries, Fringe, Training, Memberships = \$399,540
 Depreciation, Insurance, Repairs = \$8,099
 Cost Shares = \$150,073 (not included in Management budget)
 Office Supplies, Operational Expenses = \$10,154
 Professional & Non-Prof. Services = \$5,000
 Professional Services (not included in Management budget) = \$150,000
 Aerial Photography (budgeted annually, expended every 2 years) = \$12,500

Based upon the number of billable units, distribution percentages, and the Management budget, the following Management fee per billable unit and total Management fee has been estimated.

Mgt. Fee	Billable Unit For TY 2019	Rate	Total Mgt. Budget	Total Mgmt. Budget w/ PE/PO & Monitoring Cost Shares (\$)
Port Royal	3,919 Acct.	\$5.61 / Acct.	\$13,451	\$22,460
Beaufort, City	6,467 Acct.	\$5.61 / Acct.	\$21,591	\$36,063
HHI	38,236 Acct.	\$4.05 / Acct.	\$128,281	\$154,804
Bluffton	13,519 Acct.	\$4.05 / Acct.	\$48,013	\$57,940
Unincorp. BC	64,509 Acct.	\$14.00 / Acct. ⁽¹⁾	\$223,958	\$374,027
Total	126,650		\$435,293	\$645,293

\$ - Note that due to the lack of rounding within the Excel Spreadsheet "rate model" these values do differ slightly (\$10 or less) from the model.

⁽¹⁾ Beaufort County has elected to fund a portion of its Regulatory program on a per account basis, therefore, the cost share amounts do not change the account fixed fee being proposed like it does other jurisdictions.

Per Section 4.01 of the IGA, prior to April 1, 2020, please submit in writing your jurisdiction's approval of the Management fee for TY 2020 within FY 2021.

END



**BEAUFORT COUNTY
STORMWATER UTILITY**

120 Shanklin Road

Beaufort, South Carolina 29906

Voice (843) 255-2805 Facsimile (843) 255-9436



March 11, 2020

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Southern Lowcountry Regional Board (SoLoCo)
 - a) The current schedule for completion and finalization on the document and activities of Center for Watershed Protection (CWP) is as follows:
 - Public Comment Period ended February 17, 2020

Remaining project milestones to be completed:

- CWP Review of Public Comments Due to Committee
 - Committee Meeting to Review Public Comments
 - Meeting held March 6, 2020 to review Public Comments.
 - Final Draft of Ordinance and Design Manual
 - Final Delivery
2. Regionalization
 - a) Regional Stormwater Design Standard and Model Ordinance Project – See update above.
 - b) Regionalization of programs – Pending finalization of the Regional Stormwater Design Standard and Model Ordinance it is hoped each participating jurisdiction will adopt these policy documents for implementation to provide consistent administration of Stormwater Management guidelines and policies in the region. Discussions of a Regional Stormwater Authority to administer the adopted guidelines and policies holistically within the region/jurisdictions can be fostered.
 3. Special presentation suggestions –
 - Suggestions for Future Meetings?
 4. Military installation and other State and Federal properties SWU fees – See “Delinquent Accounts” below. Staff continues to work with GIS to update impervious area layers for the military installations.
 5. Delinquent accounts – Phase I Investigations with Gentry Locke Attorneys (looking at data, laws, ordinances, synopsis of case law) to provide recommendations and likely outcomes of either negotiations or litigation.
 - Request for additional information from Gentry Lock received and being compiled.

6. Reminder: Annual Financial report from the Municipalities are due – Per the Intergovernmental Agreements for the Utility, each year on September 30th, the City and Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.
 - a) Beaufort County – Actuals pending CAFR completion.
 - b) Town of Hilton Head Island – Not Received.
 - c) Town of Bluffton – Received.
 - d) Town of Port Royal – Received.
 - e) City of Beaufort – Not Received.

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel)
 - i. [See the attached report.](#)

Stormwater Implementation Committee (SWIC) Report

1. The SWIC has not met in the last month.
2. The annual summary reports for FY19 and the FY21 Utility Management Fee Proposed Budget and Rates were emailed to the SWIC. [See Attached.](#)

Stormwater Related Projects

1. Easements – Staff is working on easement requests and meets monthly to review status. A few condemnations are still being pursued using outside legal counsel.
2. Complaints – Staff continually works numerous drainage related complaints each month.
 - a) Horse Island – Staff met with Council Member Glover. The Public Works department completed an assessment and determined this project falls within their scope of work. The Finance Committee approved project funding in the Public Works budget for FY21.
 - b) Flyover bridge preventative maintenance and deferred maintenance repairs – Last update: Consultant working on preliminary design and permitting.
 - c) Shell Point Community Meeting – Community Meeting was held on February 27, 2020 to discuss goal and objectives of Drainage study to be performed. Cranston Engineering retained to perform drainage study and has begun work.
3. Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision (Design Cost \$49,873, Tree Mitigation Cost \$18,200 & \$18,200, Construction Cost by the Developer) – Construction on-going and estimated to be 60% complete. Developer has requested a one year extension to March 23, 2021. Request for 1 year extension to March 23, 2021 to complete work approved.
4. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost =

\$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Construction on-going and estimated to be 80% complete.

5. Graves Property / Pepper Hall Public / private partnership – Property owner has requested meeting with County Administrator to discuss Joint Developer Agreement implementation/timing. Meetings with internal staff and property owner ongoing.
6. Whitehall property purchase – No additional update at this time.
7. US 278 “super street” widening on Jenkins Island (Windmill Harbor area) – No update at this time.
8. Lady’s Island Plan, Sea Level Rise, and “no-fill” ordinance – Next Committee meeting to be held March 10, 2020.

Professional Contracts Report

1. CIP FY 18 Grouping Stormwater Projects – (Design - Ward Edwards \$202,000, Andrews Engineering \$560,490, Const. est. \$5,512,900) – All projects are in early design phase.
 - a) Salt Creek and Shanklin Road – 30% Design submittal under review. Right-of-way acquisition areas being assessed and Notice to property owners affected by project work and property acquisition requirements being finalized.
 - b) Brewer Memorial – SCDOT has approved County request for pipe diversion and consultant is preparing final design and permitting.
2. Evergreen Regional Pond 319 grant project – (Design=\$89,286, Construction=\$590,000. Grant=\$229,124) – 90% Design submittal under review. A Public Meeting was held on Friday, February 14th, 2020, from 10:30am to 11:30am at the Palmetto Electric Coop Building in Hardeeville.

Regional Coordination

2. Town of Bluffton and Beaufort County Joint meetings on Sanitary Sewer in the May River watershed – Representatives from County and Town of Bluffton met on February 27th to discuss Sanitary sewer extension work and priority. The next meeting is scheduled for March 31st with the Town of Bluffton, Beaufort County and BJWSA.
3. Mossy Oaks Task Force – (Design \$20,404, Construction \$205,000; County portions only). See Municipal Reports.
4. Charleston Area MS4 managers group – Meeting was held in Charleston on February 14, 2020.
5. May River Watershed Modeling – See municipal reports for more information.
6. Port Royal Sound Conservation Working Group – No additional update at this time.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. [See the attached report.](#)
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See the attached report.](#)
3. City of Beaufort (From Nate Farrow, Public Works Director)
 - i. No information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. No information was available at the time of this report.

MS4 Report

1. Plan Review – [See the attached chart](#) for Beaufort County Stormwater staff plan review workload for the past 12 months.
2. Stormwater Permits – [See the attached chart](#) for Beaufort County Stormwater permits issued for the past 12 months.
3. Monthly Inspection summary - [See the attached chart](#) for Beaufort County Stormwater staff inspection, complaint, IDDE, and violations summary for the past 12 months.
4. Weather Station Data. [See attached chart.](#)
5. Public Education – [See attached report.](#)
6. Energov permitting software – Stormwater staff did an internal process walk through of Energov on February 20th.
7. MS4 Statewide General permit – No update at this time.
8. Statewide General permit for Construction – No update at this time.
9. Katie Herrera and Beth McLaughlin, Consultant, presented the Beaufort County Comprehensive Monitoring plan at the International Erosion Control National Conference. The presentation highlighted not only the importance Beaufort County places on permit compliance with state guidelines, but also the County's desire to understand water quality conditions countywide and to hopefully prevent additional waterbody impairments. The presentation briefly discussed preliminary results from year one, lessons learned through such a comprehensive monitoring program, as well as future considerations for the Stormwater program.

USCB Water Quality Lab Update

Beaufort County

BC Monitoring Plan 2020:

- **Description:** New monitoring plan for 2020 complete including sampling sites covering all 5 categorical types:

Category 1: TMDL monitoring

Category 2: IDDE screening and monitoring

Category 3: Water quality monitoring (baseline, based upon 303d list)

Category 4: MOA points

Category 5: Special project monitoring

- **Status:** First quarter sample collection started in January.

Okatie West Pond: Bold and Gold

- **Description:** Environmental Conservation Solutions, LLC, in conjunction with Beaufort County, installed an innovative bacteria and nutrient removing side-bank filter to a section of a newly constructed wet detention pond for the Okatie West Regional Stormwater Project. The purpose of the joint effort is to evaluate the efficiency of the Bold & Gold Side-Bank filter for the possible application in the county to achieve target stormwater treatment in existing and new stormwater BMPs. The pilot project is a 60-foot side bank filter with a 2-foot layer of Bold & Gold® CTS Filtration media as the treatment mechanism, overlaid by a 6-inch well-draining soil that is connected to an underdrain pipe. The filter is located on the south side of the wet detention pond.
- **Status:** Environmental Conservation Solutions, LLC would like us to perform another sampling and analytical effort to measure the ability of the Bold and Gold filtration media to remove bacteria from stormwater detained in the pond known as Okatie West in the very near future. We are waiting on water levels to rise to perform this effort.

Port Royal Cypress Wetland

- **Description:** The Town of Port Royal wanted to continue with WQ monitoring at the Cypress as the Town is working on a plan to renovate the wetlands to eliminate invasives as much as possible, re-dredge the open water areas and eliminate as many Tallow trees as possible. Having a current base line of WQ information before any work is performed is critical to assessing the "before and after" conditions in Cypress.
- **Status:** Cypress wetland project latest sampling effort was on September 13th and 18th 2019 for a dry and wet event respectively. Power Point report was included in the February lab update.

Port Royal Redevelopment:

- **Description:** The Town of Port Royal continues with WQ monitoring for the four sites in the proposed redevelopment area. The sampling schedule is quarterly wet events and is included in Beaufort County's Monitoring Plan.
- **Status:** First quarter of 2020 has been collected.

Town of Bluffton

- **Description:** New monitoring plan for 2020 complete and includes monitoring for the categories; water quality, 319, MS4, MST, TMDL, and shared locations. A request from Town of Bluffton was made for data analysis of sampling sites dating from 2009 to present.
- **Status:** Monitoring for 2020 has begun. USCB is putting together a plan and awaiting data from the Town for the requested data analysis.

USCB Laboratory

Additional Projects:

- Palmetto Bluff: Continued sampling efforts of 12x/year for 6 wet/6 dry events.
- Water Oak Utility: Continue accepting weekly samples for *E.coli* from their pump station.
- GEL Engineering: Continue accepting samples for Hilton Head collected by GEL Engineering 4x/ quarter.
- Haig Point: New weekly sample for *E.coli* from their effluent.

Lab Projects:

- On February 21, 2020, an investigation of an oyster aquaculture operation on St. Helena Island was performed at the request of the owner. The aquaculture pond's water is largely supplied by Wallace Creek, which is frequently closed to shellfish harvesting.
- Dr. Warren supplied USCB's mathematicians/computational science faculty with SCDHEC water quality data at every shellfish station in Areas 14-20. This is similar to what Dr. Warren did a few years ago, and what Dr. Montie did more recently with examining long-term trends and exceedances of fecal coliform based on harvesting standards.
- New equipment arrived to include Rhodamine sensor for various studies, including pond retention times.
- 2020 Proficiency testing for the Water Pollution study has closed and all analyses have passed. The Water Supply study closes March 19th. Proficiency testing must be completed within the year for all certified analysis to upkeep lab certification.



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436



MEMORANDUM

TO: Stormwater Implementation Committee (SWIC) Members

FROM: Dan Rybak, Beaufort County Stormwater Utility Manager 

SUBJECT: Fiscal Year (FY) 2019 Stormwater Utility (SWU) Financial Summary

DATE: February 15, 2020

The following analysis serves as the end of year financial report provided each year as required by IGA Section 5.04(e). At the time of this report, our Administration has not issued the final, audited Comprehensive Annual Financial Report (CAFR) for FY 2019. While no change is anticipated, this report includes un-audited values.

In Tax Year (TY) 2018, Beaufort County, the Town of Port Royal, the City of Beaufort, and the Town of Hilton Head Island continued their method of billing to “option E” as defined in the 2015 Rate Study. For TY 2018, the Town of Bluffton opted to continue with “option A” but in FY 2020 elected to switch to “option E”. The 2015 Rate Study explains how GIS information for impervious area and parcel acreage is used to determine billable units, based on the standard of 4,906 square feet per Single Family Unit (SFU) or Impervious Area (IA). SWU fees are determined by the utility staff and reported to the County Auditor’s office for inclusion in the annual property tax notice.

	TY 2018 Total Billed	TY 2018 Total Collected	TY 2018 Billed Units (Actual)	TY 2018 Collected Units	Collection Rates	TY 2018 Mgt. fees paid
Port Royal	\$397,974	\$229,621	7,100 IA 3,838 Acct.	# 3,714 Acct.	57.70% 96.77%	\$32,646
Beaufort, City	\$1,641,549	\$1,138,799	13,918 IA 6,499 Acct.	# 6,409 Acct.	69.37% 98.62%	\$48,452
HHI	\$4,928,366	\$4,899,449	33,987 IA 38,255 Acct.	# 37,874 Acct.	99.41% 99.00%	\$141,649
Bluffton	\$1,562,107	\$1,542,770	15,940 SFU* 12,782 Acct.	15,743 SFU* 12,639 Acct.	98.76% 98.88%	\$39,986
Unincorp. BC	\$4,877,093	\$4,652,227	54,405 IA 64,467 Acct.	# 62,376 Acct.	95.39% 96.76%	\$748,512
Total	\$13,407,089	\$12,462,866				\$1,011,245

A spreadsheet is attached providing detailed information per account:

In Arrears

A spreadsheet is attached which provides a complete accounting of all accounts in arrears, including a summary of actions taken to attempt collection. The following table summarizes the total number of accounts and fees in arrears for each jurisdiction.

	Accounts in arrears	Fees in arrears
Port Royal	91	\$167,723
Beaufort, City	78	\$504,990
HHI	355	\$27,530
Bluffton	139	\$9,038
Unincorp. BC	1,979	\$141,156
Total	2,642	\$850,437

Credits

A spreadsheet is attached which provides a complete accounting of all accounts receiving credits on SWU fees. The following table summarizes the total number of accounts and amount of credits given for each jurisdiction.

	Accounts with credits	Credit Amount
Port Royal	0	\$0
Beaufort, City	1	\$1,379
HHI	2	\$31,481
Bluffton	2	\$1,399
Unincorp. BC	545	\$89,802
Total	550	\$124,062

Adjustments

A spreadsheet is attached which provides a complete accounting of all accounts receiving adjustments on SWU fees after the initial billing for TY 2018. The following table summarizes the total number of accounts for each jurisdiction.

	Accounts with adjustments
Port Royal	4
Beaufort, City	17
HHI	14
Bluffton	8
Unincorp. BC	150
Total	193

END




BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436



MEMORANDUM

TO: Stormwater Implementation Committee (SWIC) Members

FROM: Dan Rybak, Beaufort County Stormwater Utility Manager 

SUBJECT: Fiscal Year (FY) 2021/Tax Year (TY) 2020 Utility Management Fee Proposed Budget and Rates

DATE: February 15, 2020

This is the fourth year for the annual management fee budget proposal format. The updated rate model, attached by reference to this memo, is intended to replace this analysis by presenting previous year's actual numbers and projecting the Management fee annually once the actuals are added to the spreadsheet. Please note only the billable units have been updated in the model; the individual City and Town budgets were not provided to the County and therefore the Summary Tabs for each jurisdiction will not be a valid representation of your revenue and expenses. This change redistributed the management fee and cost shares to all jurisdictions within the County.

The scope of services to be provided by the Utility are defined by the IGA, specifically Section 5.04. Those services have been provided by the County staff to the municipalities for many years and will continue in fiscal year FY 2021.

The final but unaudited collections for TY 2018 have been inputted into the model along with the final billed units for TY 2019. With this information input in the model, the distribution of cost shares and "percent of the whole" has shifted to reflect the most equitable method of cost sharing going into FY 2021.

	TY 2018 Total Billed	TY 2018 Total Collected	TY 2018 Billed Units (Actual)	TY 2018 Collected Units	Collection Rates
Port Royal	\$397,974	\$229,621	7,100 IA 3,838 Acct.	# 3,714 Acct.	57.70% 96.77%
Beaufort, City	\$1,641,549	\$1,138,799	13,918 IA 6,499 Acct.	# 6,409 Acct.	69.37% 98.62%
HHI	\$4,928,366	\$4,899,449	33,987 IA 38,255 Acct.	# 37,874 Acct.	99.41% 99.00%
Bluffton	\$1,562,107	\$1,542,770	15,940 SFU* 12,782 Acct.	15,743 SFU* 12,639 Acct.	98.76% 98.88%
Unincorp. BC	\$4,877,093	\$4,652,227	54,405 IA 64,467 Acct.	# 62,376 Acct.	95.39% 96.76%
Total	\$13,407,089	\$12,462,866			

*Under Option A, the SFU are based on total dollar amount billed/collected divided by the SFU rate, not from the analysis of the Impervious Layer.

Under Option E, our current accounting system and SWU fee reporting software will not easily determine the exact collected billable units for IA and GA. Much like Option A, a percentage based on dollar amounts collected is assumed for projection of collection rates for billable units for the upcoming year.

	Billable Unit in TY 2019 (actual)	Calculated Growth Rate (TY18 to TY19)	Billable Units for TY 2020	Distribution for FY 2021 B.C. only ^	Distribution for FY 2021 NoB only ^
Port Royal	3,919 Acct.	102.1%	4,002 Acct.	3.09%	5.19%
Beaufort, City	6,467 Acct.	99.5%	6,435 Acct.	4.96%	8.34%
HHI	38,236 Acct.	100.0%	38,217 Acct.	29.47%	N/A
Bluffton	13,519 Acct.	105.8%	14,298 Acct.	11.03%	N/A
Unincorp. BC	64,509 Acct.	103.4%	66,715 Acct.	51.45%	86.47%
Total				100%	100%

^ Based on TY 2019 projected billable acct. units for all jurisdictions within Beaufort County only.

The following cost shares are proposed for FY 2021:

- 1) Public Education and Outreach - \$90,000. This is a continuation of the MOA for PE/PO and our contract with Clemson University. Distribution will be by the FY 2021 percentages. These jurisdictions are using the Option E rate structure and will pay this cost share as part of the Management fee.
- 2) Water Quality Monitoring North of the Broad River – \$120,000. This cost share is only for the County, Town of Port Royal, and City of Beaufort. This is a continuation of the MOA for monitoring and our contract with University of South Carolina, Beaufort (USCB) Lab. Distribution will be by the FY 2021 percentages. These jurisdictions are using the Option E rate structure and will pay this cost share as part of the Management fee.

Cost Shares	PE/PO	Monitoring
Port Royal	\$2,781	\$6,228
Beaufort, City	\$4,464	\$10,008
HHI	\$26,523	N/A
Bluffton	\$9,927	N/A
Unincorp. BC	\$46,305	\$103,764
Total	\$90,000	\$120,000

The proposed Management budget for FY 2021 is \$425,550. Information presented is based on Beaufort County's proposed FY 2021 Stormwater Budget submission and is subject to change based on final Beaufort County Council review, approval and adoption. The following is a breakdown summary of major budget categories:

Salaries, Fringe, Training, Memberships = \$389,797
 Depreciation, Insurance, Repairs = \$8,099
 Cost Shares = \$150,073 (not included in Management budget)
 Office Supplies, Operational Expenses = \$10,154
 Professional & Non-Prof. Services = \$5,000
 Professional Services (not included in Management budget) = \$150,000
 Aerial Photography (budgeted annually, expended every 2 years) = \$12,500

Based upon the number of billable units, distribution percentages, and the Management budget, the following Management fee per billable unit and total Management fee has been estimated.

Mgt. Fee	Billable Unit For TY 2019	Rate	Total Mgt. Budget	Total Mgmt. Budget w/ PE/PO & Monitoring Cost Shares (\$)
Port Royal	3,919 Acct.	\$5.54 / Acct.	\$13,149	\$22,158
Beaufort, City	6,467 Acct.	\$5.53 / Acct.	\$21,107	\$35,579
HHI	38,236 Acct.	\$3.98 / Acct.	\$125,409	\$151,932
Bluffton	13,519 Acct.	\$3.98 / Acct.	\$46,938	\$56,865
Unincorp. BC	64,509 Acct.	\$14.00 / Acct. ⁽¹⁾	\$218,945	\$369,014
Total	126,650		\$425,550	\$635,550

\$ - Note that due to the lack of rounding within the Excel Spreadsheet "rate model" these values do differ slightly (\$10 or less) from the model.

⁽¹⁾ Beaufort County has elected to fund a portion of its Regulatory program on a per account basis, therefore, the cost share amounts do not change the account fixed fee being proposed like it does other jurisdictions.

Per Section 4.01 of the IGA, prior to April 1, 2020, please submit in writing your jurisdiction's approval of the Management fee for TY 2020 within FY 2021.

END

**Stormwater Utility Board Meeting
Town of Hilton Head Island
Monthly Report for January 2020**

1. MS4 Update (EBER/SCHUMACHER)

MCM1 Public Education & Outreach	<ul style="list-style-type: none"> Completed updates to stormwater page on Town's website (waiting on IT to update).
MCM2 Public Involvement & Participation	<ul style="list-style-type: none"> 2/2 Permeable Pavement Workshop Planning Planned Activity: Meeting with LSP about Healthy Pond workshop within a PUD (Indigo Run/Port Royal).
MCM3 Illicit Discharge Detection & Elimination	18 H2O quality monitoring sites tested & analyzed 0 Complaints received via Code Enforcement 0 Investigated 1 Eliminated or resolved (New Orleans)
MCM4 Construction Site SW Runoff Control	4 Plan reviews w/ corrections required 16 Plan reviews approved 13 Utility Permits 25 Active permitted construction sites 87 Inspections completed 2 NOV issued
MCM5 Post-Construction SW Management	<ul style="list-style-type: none"> No PCBMP inspection this month. All of 2016 – 2017 PCBMP have been updated and vetted for inspection. All 2017 PCBMP were updated and vetted in February. Employed Cartegraph for primary channel inspections.
MCM6 Pollution Prevention/Good Housekeeping	<ul style="list-style-type: none"> CD PP/GH presentation are scheduled for March. PP&F will be scheduled for June.

PCBMP inspections include:

- Memo to the PCBMP owner with the annual inspection date and reporting date and the tasks necessary for the inspection report
- A signed permanent stormwater maintenance and responsibility agreement.
- A copy of the PCBMP maintenance plan.
- A typical inspection checklist for the PCBMP facility(s).
- A copy of the As-Built plans.

2. Service Requests (LADD)

A. February 2020 Service Request Activity:

- New requests: 7 110 (FY20 to date)
- Requests closed: 42 50 (FY20 to date)

B. Open Requests as of February 29, 2020:

- Open Qualifying: 249
 - Public (94)
 - Private* (155) * Located in residential POAs with current maintenance agreements
- Open Enforcement 7
 - IDDE (2)
 - Other (5)
- Open Referrals 31
 - County (18)
 - SCDOT (13)

C. Service Request Totals as of February 29, 2020:

- Open 287 change in last 29 days -1
- Closed 994 change in last 29 days: +11
- Total 1281 change in last 29 days: +10

Evaluation, prioritization and budget validation for all open requests will be completed in February to inform the development of the SWU FY21 Budget.

3. Major Capital Improvements Update (NETZINGER)

A. Jarvis Creek SW Pump Station - Electrical System Rehabilitation

Major improvements including raising elevation of emergency power cutoff switch boxes, replacement of the electrical distribution system, transfer switches, control systems, transducers, floats, and installing safety improvements. Work is being done by BRW Construction (the Town's on-call contractor for pump station maintenance). Notice to Proceed: July 2019; Work Scheduled for completion by March 1, 2020. **Project is 99% complete. Punch list items will be addressed in March.** Total Cost: \$1,446,028.

B. Lawton (Sea Pines) SW Pump Station - Pump Mount Repairs

Reengineering pump wall-mount system. One pump was pulled and the pump chamber evaluated for repair in October 2019. Pump is currently being repaired off-site. Repairs will be undertaken for one of the three pump chambers in March. **No change in status in the last 30 days.**

C. Lawton (Sea Pines) SW Pump Station – Electrical System Rehabilitation

An electric system assessment was completed by Chatham Engineering in November 2019. The assessment report recommended replacement of all major components of the electrical system due to age. **Preliminary design for replacing the pump station's electrical system is underway.** Conceptual cost estimate for the project is \$1.6 million. The overhaul project will be included in the FY21 SWU CIP budget.

4. Pump Station and Routine Maintenance Projects (LADD)

A. Completed in February 2020 (\$0)

- None

B. Underway during February 2020 (\$1,279,000)

- Jarvis Creek Pump Station – Electrical Upgrades (\$1,200,000)
- Lawton Canal Pump Station – Pump Repairs (\$79,000)

C. Planned for March/April 2020 (\$151,000)

- Work shelf/Access Clearing Projects (\$100,000)
 - Bermuda Pointe
 - Ashmore
 - Old Woodlands
- Routine Channel Maintenance Projects (\$35,000)
 - Muddy Creek North
 - Oakview Outfall
 - Gumtree
 - Yacht Cove Outfall
 - Airport Outfall
 - Lawton Canal Pump Station – Electrical Upgrade Design (\$16,000)

5. CIP and Maintenance Projects (UYESUGI)

Public Projects

DESCRIPTION	LOC	Budget*	Cat**	STATUS	Actual*	Notes
1014 William Hilton Parkway - Drainage System Improvements	XN	30	B	CANCELED		SCDOT issue
54 Shamrock Circle/Cobia Court - Drainage System Improvements	XN	70	B	DESIGN		Survey underway, Design to follow; BC will install pipe; THHI will clean outfall
71 Widewater Road/Muddy Creek - Channel Maintenance	XN	12	B	ON HOLD		Easement/Legal Issue
Northridge Theater - Drainage System Improvements	XN	80	B	ON HOLD		Easement needed
103 North Forest Beach Drive - Channel Maintenance	XN	10	B	Q3		
104 Cordillo Pkwy (Cordillo Courts) - Drainage System Improvements	XN	35	B	DESIGN		Design/Easement/Permit needed
55 New Orleans Road - Channel Maintenance	XN	15	B	ACTIVE		County Referral at NO, Town to complete @SH
30 Mathews Drive (Tabby Walk) - Pipe Cleaning/Channel Maintenance	XN	15	B	CANCELED		No issue found
Gateway Circle at Summit Drive - Channel Maintenance	XN	7	B	Q4		
4 Indigo Run Drive (Preserve, Villa 623) - Channel Maintenance	XN	6	B	COMPLETE	20.3	
400 William Hilton Parkway - The Oaks Pathway Flooding	XN		C	DESIGN		Design needed
Folly Field Drainage System Maintenance & Repairs	XN		C	COMPLETE	31.8	
Folly Field Channel - Excavation Moonshell Rd to Island Club	XN		C	Q3		
Jarvis Creek Pump Station - Box Culvert Cleaning	XN		C	COMPLETE	2.8	
23 Moonshell Road - Island Club Outfall Pipe	XN	29	R	ON HOLD		ROE needed
83 Old Wild Horse Road Drainage Improvements	XN	15	R	ON HOLD		Survey/Design needed

* Thousands of dollars

** B=FY20 budgeted; R=FY19 roll-forward; C=contingency

Maintenance Agreement Projects

DESCRIPTION	LOC	Budget*	Cat**	STATUS	Actual*	Notes
151 Seabrook Drive-Cygnet Ct-Sweet Bay Lane - Pipe Replacement	HH	2	B	Q4		
3 & 7 Conservancy Court - Pipe Replacement	HH	25	B	Q4		
Pine Island - Beach Renourishment	HH	100	B	N/A		Reimbursement
37 Deerfield Road Drainage Improvements	HH	22	R	DESIGN		Survey complete, design needed
7 Jingle Shell Lane - Pipe Replacement	HH		C	COMPLETE	63.9	
9 Bobcat Lane - Sinkhole Repair	HH		C	COMPLETE	2.7	
245 Seabrook Drive Weir Gate	HH		C	Q3		Need quote
1 Sunningdale Lane - Channel Maintenance	IR	12	B	COMPLETE	22.9	
53 Aberdeen Court - Sinkhole/Point Repair	IR	4	B	Q4		
Santee Cooper Lagoon Outfall Channel & Weir - Channel Maintenance	IR	60	B	ON HOLD		ROE needed
29 Primrose Lane - Channel Maintenance	IR	8	B	ACTIVE		Related to SR 1240
4 Drummond Lane (Santee Cooper Outfall)- Channel Cleaning	IR	24	R	ACTIVE		Related to SR 1240
6 Wheeler Lane - Indigo Run Weir	IR		C	COMPLETE	10.0	
2 Long Brow Road - Sinkhole/Point Repair	LC	5	B	Q4		Need site visit
48 Heath Court West - Point Repair/Pipe Cleaning	LM	10	B	Q4		
Dinghy Lane - Sinkhole Repair	PD	11	B	N/A		Potential reimbursement
Flotilla - Sinkhole Repair	PD	12	B	N/A		Potential reimbursement
2 High Rigger - Sinkhole Repair	PD	10	B	N/A		Potential reimbursement
1 Long Boat - Sinkhole Repair	PD	11	B	N/A		Potential reimbursement
29 Starboard Tack - Sinkhole Repair	PD		C	Q3		

* Thousands of dollars

** B=FY20 budgeted; R=FY19 roll-forward; C=contingency

Maintenance Agreement Projects, continued

DESCRIPTION	LOC	Budget*	Cat**	STATUS	Actual*	Notes
25 Lenox Ln to 19 Clyde Ln Lagoon - Pipe Cleaning/System Maintenance	PH	146	B	Q4		Needs diver investigation
32 Tucker Ridge Court - Sinkhole Repair	PH	146	C	COMPLETE	9.7	
16 Barnacle Road - Pipe Cleaning & Channel Maintenance	PR	3	B	Q4		
16 Coquina Road - Pipe Cleaning & Channel Maintenance	PR	3	B	Q4		
16 Donax Road - Pipe Cleaning & Channel Maintenance	PR	3	B	Q4		
24 Suttlers Row - Sinkhole	PR	3	R	CANCELED		Sinkhole filled in: need to re-budget
24 & 26 Audubon Place - Pipe Jetting	PR	1	R	Q4		
77 Fort Walker Drive - Outfall Pipe Repair	PR		C	COMPLETE	1.3	
Shelter Cove Lane at Chamber of Commerce Dr- Sinkhole	SC		C	COMPLETE	3.8	
Galleon Fairway Flooding - Culvert Replacement	SH	12	R	DESIGN		Culvert replacement at golf cart path
13 Barcelona Road - Building 700 (Port O'Call)	SH	5	R	ON HOLD		Need site visit- DNQ?
130 Shipyard Drive (Sonesta) - System Cleaning	SH	15	R	ACTIVE		
12 Valencia Road/ Cottages at Shipyard - Sinkhole Repair	SH	30	R	COMPLETE	24.1	
Sonesta Outfall System Drainage Improvements (Relief Channel)	SH		C	COMPLETE	2.7	
Lawton Pump Station Outfall Gate - Weir Gate Repair	SP	3	B	ON HOLD		Complete after pump station repaired
Mizzenmast Lane/Lighthouse Lane Intersection - Pipe Replacements	SP	100	B	ACTIVE		Cleaning and CCTV complete
232 South Sea Pines Drive (Salty Dog) - Channel Maintenance	SP	12	B	ACTIVE		
9 Pender Lane - Off of Lawton Canal Road - Control Structure Repair	SP	10	B	Q3		
405 Greenwood Drive - Channel Maintenance	SP	10	B	ON HOLD		CSA requesting OCRM permit
6 Scaup Court - CIPP Reimbursement	SP	20	B	CANCELED		House on top of pipe- DNQ

* Thousands of dollars

** B=FY20 budgeted; R=FY19 roll-forward; C=contingency

Maintenance Agreement Projects, continued

DESCRIPTION	LOC	Budget*	Cat**	STATUS	Actual*	Notes
Lighthouse Lane - Clean & CCTV	SP	15	B	ON HOLD		After pipe replacement is complete
14 South Beach Lane - Pipe Replacement	SP	15	B	ACTIVE		JO needed next
40 Sand Fiddler Road - Control Structure Replacement	SP	15	B	Q3		Need site visit
149 Lighthouse Road (Bubbler) - Drainage System Improvements	SP	75	B	N/A		Reimbursement with inspections
Lawton Canal Road - Channel Maintenance	SP	18	B	ON HOLD		CSA requesting OCRM permit
35 Baynard Park Road (Weir Gate) - Control Structure Repair	SP	7	B	COMPLETE	4.2	
38 Canvas Back Road - Pipe Replacement	SP	60	R	ACTIVE		Waiting on survey
Ruddy Turnstone Drainage Improvements	SP	80	R	COMPLETE	87.0	
Sand Hill Crane Road - Cleaning and CCTV	SP		C	COMPLETE	13.3	
11 Sand Hill Crane Road Structure Repair	SP		C	COMPLETE	12.0	
2 Fairfax Lane - Pipe Cleaning & Device Removal	WE	5	B	ON HOLD		WQ device
Primary Channel - Wexford Powerline/RV Park Ditch	WE	15	R	Q4		Access verified in Feb
Wexford Pump Station Debris Removal	WE		C	COMPLETE	1.2	

* Thousands of dollars

** B=FY20 budgeted; R=FY19 roll-forward; C=contingency

Summary

Project Totals	FY20 Budgeted	40	(budget total: \$960K)
	FY19 Roll-forward	13	(budget total: \$311K)
	Contingency	16	
Projects by Status	Complete	17	(actual spent: \$314K)
	Active	8	
	Design Phase	5	
	Programmed	18	
	On-hold	11	
	Pending reimbursement	6	(budget total: \$219K)
	Cancelled	4	(budget total: \$ 68K)

6. Inventory & Modeling Program (NETZINGER)

A. Mitchelville/Palmetto Hall Study (FY18 Budgeted Watershed)

The consultant (Woolpert) completed the report in November of 2019. The study identified several locations where capital improvements were likely to improve systemic deficiencies identified via modeling of the system. *The Town presented the results of the study to Town residents during a community meeting held at Town Hall on Monday, February 10, 2020.*

B. Lower Jarvis Creek Study (FY19 Budgeted Watershed)

The Town is utilizing Woolpert to conduct a study of the Lower Jarvis Creek Watershed. The study involves collecting data for the existing stormwater system in the field, and identifying infrastructure deficiencies and flood hazards. The study area includes portions of William Hilton Parkway, Wild Horse Road, Gum Tree Road, Spanish Wells Road and Jonesville Road and within portions of the Indigo Run Community. *Fieldwork was completed on February 28th. The Town conducted a community meeting at Town Hall on Monday, February 10, 2020 to engage the public and solicit feedback from residents.* The project is scheduled to be complete by September 2020.

C. Squire Pope/HH Plantation/Port Royal/Point Comfort Model 2D Conversions

The Town is utilizing Woolpert to revise and update models developed in previous studies from 1D to 1D/2D and to develop inundation maps for each watershed (GIS shapefiles). *Project is underway and is scheduled for completion in May 2020.*

D. South Forest Beach/Lawton Creek Study (FY20 Budgeted Watershed)

The Town will utilize an on-call consultant to study this watershed once we have the on-call contracts in place. We anticipate work beginning on this project in the spring.

7. Other Activities / Items of Interest (NETZINGER)

A. Current Staff Vacancy - Stormwater Engineer

Alexis Cook left the Town in January to take a position with the Kiewit Corporation in Denver Colorado as a design engineer. The Town advertised the position in mid-January with a close date of February 11. Several qualified applicants were interviewed in late February; the Town anticipates filling the position by the end of March.

B. Current RFQ – Stormwater Modeling

The Town issued an RFQ for ID/IC stormwater inventory and modeling services in January. The selected firm or firms will be utilized to study various watersheds on the Island identified in the Modeling Program which is programmed to be completed in FY2026. Close date was February 11th. Eight submittals were received and are currently under review. The Town anticipates selecting a consultant by the end of March.

TOWN COUNCIL

STAFF REPORT

Engineering Department



MEETING DATE:	March 17, 2020
SUBJECT:	Engineering Department Monthly Report
PROJECT MANAGER:	Bryan McIlwee, Director of Engineering

CAPITAL IMPROVEMENTS PROGRAM (CIP) AND SPECIAL PROJECTS UPDATE

PATHWAYS

1. Goethe-Shults Sidewalks Phase 2

- Construction documents, permitting and easement acquisition are underway.
- **Next Steps**
 - Complete easement acquisition, permitting and construction documents.
 - Begin construction in FY 2021.

2. Buck Island-Simmonsville Neighborhood Sidewalks and Lighting

- Construction of Phase 4 sidewalks (Buck Island Road from Jennifer Court to Grayco) is complete and awaiting SCDOT approval.
- Phase 5 (Kitty Road to 301 Buck Island Road) construction contract has been awarded to JS Construction.
- Phase 6 (along Simmonsville Road from Grayco northward to the existing New Mustang Road sidewalks) is under design.
- **Next Steps**
 - Phase 4 – SCDOT signoff of sidewalk construction.
 - Phase 5 – Construction (from Kitty Road to lot 310 Buck Island Road) anticipated to begin in late Spring 2020.
 - Phase 6 - Design and construction of the remaining Simmonsville Road sidewalks, Phase 6 to be completed in FY 2020 – 2021.

3. Bridge Street Streetscape

- Surveying, photometric plans and preliminary sidewalk alignment plans are complete.
- Submitted plans at the January TC Workshop for review and approval.
- **Next Steps**
 - Complete engineering design, street lighting plans, permitting and easement plats in FY 2020-21.

- Easement acquisition and bidding are proposed for FY 2021 with construction in FY 2022.

4. New Riverside Linear Trail

- FY21 parking, trail and signage improvements are complete.
- **Next Steps**
 - Installation of new entry gate in early March.

SEWER & WATER

1. Buck Island-Simmons ville Sewer (Phases 5A-5E)

- The construction contract for Phase 5A-D will be presented to Town Council in March.
- Construction to begin after BJWSA pre-construction meeting.
- **Next Steps**
 - Begin construction of Phase 5E (Posey's Court)

2. Historic District Sewer Extension Phase 1 – Pritchard Street

- Received SCDHEC permit to construct.
- Engineering Department has submitted Pritchard Street ownership request to SCDOT.
- **Next Steps**
 - Obtain road ownership from SCDOT.
 - Issue documents for bidding

3. Historic District Sewer Extension Phase 2 – Bridge Street

- Received SCDHEC permit to construct.
- **Next Steps**
 - Present request for road ownership to Town Council.
 - Obtain road ownership from SCDOT.

4. Jason-Able Neighborhood Sanitary Sewer

- A contract has been issued to Potter Construction for the sewer main to serve the additional lots fronting the May River Road.
- **Next Steps**
 - Complete construction and project closeout.

HISTORIC DISTRICT IMPROVEMENTS

1. Boundary Street Lighting

- Phase 2 photometric plans complete.
- Resubmitted Phase 2 street lighting for SCDOT encroachment permit.

- **Next Steps**
 - Obtain permits and agreements for the remainder of Boundary Street lighting in FY 2020.
 - Obtain easements as needed for Phase 2 street lighting.
- 2. **184 Bluffton Road Renovations**
 - Site work, landscaping, lighting and signage complete.
 - **Next Steps**
 - Install parking lot rules signs.
- 3. **Historic District Enhancements**
 - Town is evaluating survey data collected along Boundary Street and adjacent property.
 - **Next Steps**
 - Implement Storm Water Management feature to address drainage issues in the area.
- 4. **Calhoun Street Streetscape**
 - MKSK updated streetscape plans to incorporate alternate site furnishings and additional landscape at proposed Dominion Energy facilities
 - Met with Spectrum and Hargray to locate underground utilities.
 - **Next Steps**
 - Complete Streetscape Master Plans and illustrations and submit for review at the April TC Workshop.

PARK DEVELOPMENT

1. **Oyster Factory Park**
 - Obtained Conceptual Master Plan and cost estimate updates.
 - Garvin/Garvey interior signage is complete.
 - **Next Steps**
 - Coordinate the relocation of salvaged Calhoun Street dock components to Oyster Factory Park once the dock permit is obtained.
 - Present progress plans at the April TC Workshop for review and comment.
 - Begin final design of next phase of improvements per Town Council direction provided at the Workshop.
 - Garvin/Garvey exterior signage to be installed June 2020.
2. **68 Boundary Street Park Renovations**
 - Decorative gates installed for Martin Family and Dubois Park along Boundary Street.
 - **Next Steps**
 - Install retractable bollards at Green and Lawrence Street intersections.
 - Replace detectable warning mats with pavers.

3. Calhoun Street Dock and Public Riverfront Access Improvements

- Amended existing permit for public dock and submitted to SCDHEC and USACOE on 8/14/19. Public Notice period ended on 10/11/19.
- Staff received agency comments on 12/10/19 and 12/20/19 and has provided comment response letters.
- SCDHEC approved permit, currently in the 15 day appeal period.
- **Next Steps**
 - Prepare structural drawings and verify construction cost.
 - Construction start to be determined based on approval date of new permit application and contract negotiations. If approved, construction is anticipated to start in May.

4. Wright Family Park

- Bulkhead and boardwalk are complete.
- Site work construction began in January 2020. Parking area and utility construction is substantially complete.
- Hilton Head Landscape is grading the interior of the park and beginning sidewalk construction.
- Garage renovation, into restroom and kitchenette facility, is substantially complete. FFE of warming kitchen to be complete within 60 days.
- Squire Pope Carriage House survey results received 1/31/20. Met with architects to kick-off stabilization plans and construction documents.
- Selected contactor for interpretive signage. Meeting 3/11/20 to kick off project.
- **Next Steps**
 - Complete sidewalks, landscape, lighting and site furniture in April.
 - Complete garage renovation.
 - Obtain formal proposal for Squire Pope Carriage House engineering and construction drawings.

5. Oscar Frazier Park

- Survey and design of perimeter sidewalks are complete.
- Obtained new bids for sidewalk construction on 2/24/20.
- **Next Steps**
 - Review revised bids, execute contract and install perimeter sidewalks.

6. Veterans Memorial

- Project is substantially complete.
- Minor hardscape construction and punch list items area underway with Southern Palmetto Landscape and Grand Oaks Construction.
- **Next Steps**
 - Obtain quotes for installation of 200 engraved bricks.
 - Install brick borders to plaza planters

7. New Riverside Barn/Park

- Surveying and public input sessions are complete. Survey results were presented at January TC Workshop.
- **Next Steps**
 - Land planners and architects to prepare alternative Master Plans and conceptual architecture. Plans to be presented to staff in March 2020.
 - Revise plans and present master plan at the April TC Workshop.

TOWN FACILITIES AND MISCELLANEOUS PLANNING

1. Buckwalter Place Multi-County Commerce Park

- Playground equipment and site furnishings have been installed.
- Wayfinding signage installation is underway.
- Site Development Plans for the LEC expansion are 90% complete.
- Don Ryan is under construction. Project to be complete in late March 2020.
- Obtained bids for playground fence and executed contract. Fence is being fabricated.
- **Next Steps**
 - Complete construction of the Don Ryan Center for Innovation.
 - Continue construction documents and permitting for the LEC service yard expansion. Bidding is planned for March.
 - Continue infrastructure planning for the Town's future development parcels. Final design and construction pending FY 2021 budget approval.

2. Town of Bluffton Housing Project

- Surveying and geotechnical services complete for 1095 May River Road and 115 Bluffton Road sites.
- Evaluation and interviews of proposed joint venture partners are underway.

3. Ulmer Theater Improvements

- Renovation started on 8/5/2019 and was completed in February 2020.

4. Ghost Roads

- Surveying is underway for easement exhibits.
- Pritchard Street Quit Claim Deed exhibit is complete. The Town Attorney is working on finalizing the document with Beaufort County.
- Staff is meeting with property owners to raise awareness of the acquisition efforts and communicate next steps.
- **Next Steps**
 - Continue meeting with property owners and obtaining quit claim deeds

DIVISION/STAFF UPDATES

Project Management

Thirty-five (35) CIP projects are currently in progress. Two new parks, one parking area, one sidewalk project, one street lighting project and several improvements to existing public facilities were completed prior to the end of 2019. Additional CIP projects including BIS Phase 5 sewer, BIS Phase 5 sidewalks and Jason Able Sewer extension are set to start construction in the first quarter of 2020. The LEC expansion, Pritchard Street sewer and Calhoun Street dock are expected to start construction in the second quarter of 2020.

Watershed Management

1. Southern Lowcountry Regional Board (SoLoCo)

a. Southern Lowcountry Regional Stormwater Ordinance and Design Manual

- Via concurrence of the Mayor and direction by the Town Manager, staff has participated in the SoLoCo Technical Working Group to develop a regional stormwater model ordinance and design manual and investigate the viability of a regional stormwater authority.
- **Next Steps**
 - Updated project timeline is as follows.
 - 3/11/20 Stormwater Utility Board Meeting presentation
 - 3/24/20 SoLoCo Meeting presentation
 - 3/26/20 WAPAC Meeting presentation
 - 3/31/20 Final document delivery to jurisdictions for adoption
 - Municipal adoption by each jurisdiction will follow.

b. Sea Level Rise Task Force

- Following Beaufort County's presentation and request for regional participation at the 10/22/19 SoLoCo meeting, staff is attending the Sea Level Rise Task Force meetings to discuss a possible No Fill Ordinance and county-wide adaptation strategies.
- **Next Steps**
 - Staff and legal review of proposed No Fill Ordinance with intent for Beaufort County to initiate adoption and municipalities to consider adoption.
 - Bi-weekly meetings to discuss projected impacts of sea level rise on the region with a focus on ways that local government can respond through policies, ordinances and projects to mitigate the projected impacts of sea level rise.

2. Joint Councils Meeting for Watershed Management Initiatives

- BJWSA developed their CIP list for FY2020 sewer projects which does not include any projects in the County's jurisdiction in the May River Headwaters without cost-sharing.
- **Next Steps**
 - Based on WAPAC's 8/29/19 recommendation, the Joint Councils Meeting with BJWSA was held 2/25/20 to discuss long-term sewer extension strategy and water quality improvements in Beaufort County's jurisdiction of the May River

watershed.

3. **SC Department of Health and Environmental Control May River Shellfish Harvesting Monitoring Data Year-to-Date and May River Shellfish Harvesting Status Exhibit – Attachments 1 and 1a**
4. **May River Watershed Action Plan Implementation Summary – Attachment 2**
5. **MS4 Minimum Control Measure (MCM) – #1 Public Education and Outreach, and MS4 MCM – #2 Public Participation and Involvement**
 - Staff attended the monthly Beaufort County Stormwater Utility Board meeting on 2/12/20.
 - Staff attended the Lowcountry Property Management Association monthly luncheon on 2/18/20.
 - Staff participated in the STEM program for the Boys and Girls Club with Growth Management on 2/20/20.
 - Staff is working to secure partnerships and coordinate volunteer groups for the 20th Annual May River Cleanup which will be held 5/2/20.
 - Staff is providing content for both a Water Quality Story Map (completion anticipated 2/25/20) and Town website overhaul (anticipated Spring 2020).
 - Staff conducted a guest lecture for University of South Carolina graduate class on Town watershed management efforts on 2/26/20.
 - Staff participated in Building Safety's quarterly Contractor Meeting on 2/26/20.
 - May River Watershed Action Plan Advisory Committee meeting held 2/27/20.**Attachment 3**
6. **MS4 MCM – #3 Illicit Discharge Detection and Elimination**
 - Stormwater Infrastructure Inventory Map – **Attachment 4a**
 - *E. coli* Concentrations Trend Map – **Attachment 4b**
 - Monthly, Microbial Source Tracking (MST) Maps – **Attachments 4c and 4d**
 - Town staff coordinates with the SC Department of Health and Environmental Control (SCDHEC) to pull MST samples concurrently with the state's routine shellfish harvesting water quality sampling at stations 19-19, 19-19A, 19-19B, 19-19C, 19-24, and 19-16. SCDHEC will conduct sampling on 02/24/20.
 - Town staff collected MST samples in conjunction with quarterly MS4 sampling on 02/05/20. All MST results have not been received and pertinent results will be shared with Town Council and Senior Staff.
 - On 01/23/20, Dr. Kim Ritchie provided WAPAC with an update on the development of Biomeme qPCR handheld device. Following Dr. Ritchie's presentation, staff is investigating the possibility of developing qPCR capabilities at the regional USCB Water Quality Laboratory.
 - Illicit Discharge Investigations – **Attachment 4e**
7. **MS4 MCM – #4 Construction Site Stormwater Runoff Control – Attachment 5**

8. **MS4 MCM – #5 Stormwater Plan Review and Related Activity – Attachment 6**
9. **MS4 MCM – #6 Good Housekeeping (Staff Training/Education)**
 - Staff conducted code enforcement supervisor and inspector training on 2/26/20.
 - Staff participated in the quarterly SC Stormwater Manager’s meeting on 3/5/20.
10. **Citizen Drainage, Maintenance, and Inspections Concern Map – Attachment 7**
11. **Citizen Request for Watershed Management Services & Activities – Attachment 8**
12. **Neighborhood Assistance Program – Septic System Maintenance Assistance – Attachment 9**

Public Works

1. **MS4 MCM – #6 Good Housekeeping (Ditch, Drainage and Roadside Maintenance)**
 - Performed weekly, street sweeping on Calhoun Street, Highway 46, Bruin Road, May River Road, Pin Oak Street, and curbs and medians on Simmonsville and Buck Island Roads.
 - Performed ditch inspections
 - Arrow ditch (2,569 LF)
 - Red Cedar ditch (966 LF)
 - Buck Island roadside ditch (15,926 LF)
 - Simmonsville roadside ditch (13,792 LF)
 - Ongoing roadside mowing, litter clean-up and maintenance of Master’s Way, McCracken Circle, Hampton Parkway, Buck Island and Simmonsville Roads, Goethe Road, Shults Road, Jason and Able Streets, Whispering Pine Road, May River Road and Eagles Field.
 - Ongoing mowing of the New River Side Trail and field at New River barn.
2. **Beautification Program – Attachment 10**
 - Landscape Maintenance - ongoing routine
3. **Facilities**
 - Facilities and Parks Maintenance - ongoing routine
4. **Public Works Activities Report - Attachment 10**

Attachments

1. SCDHEC Shellfish Harvesting Monitoring Data Year-to-Date
 - a. SCDHEC May River Shellfish Harvesting Status Exhibit
2. May River Watershed Action Plan Implementation Summary*
3. MS4 Minimum Control Measures #1 and #2 – May River Watershed Action Plan Advisory Committee Agenda
4. MS4 Minimum Control Measure #3 – Illicit Discharge Detection and Elimination
 - a. Stormwater Infrastructure Inventory Map
 - b. *E. coli* Concentrations Trend Map

- c. Microbial Source Tracking Trend Map – Human Source
- d. Microbial Source Tracking Map – All Sources
- e. Illicit Discharge Investigations
- 5. MS4 Minimum Control Measure #4 – Construction Site Stormwater Runoff Control
- 6. MS4 Minimum Control Measure #5 – Stormwater Plan Review and Related Activity
- 7. Citizen Drainage, Maintenance and Inspections Concern Map
- 8. Citizen Request for Watershed Management Services and Activities Map
- 9. Beautification Committee Agenda
- 10. Public Works Activities Report

* Attachment noted above includes the latest updates in bold and italic font.

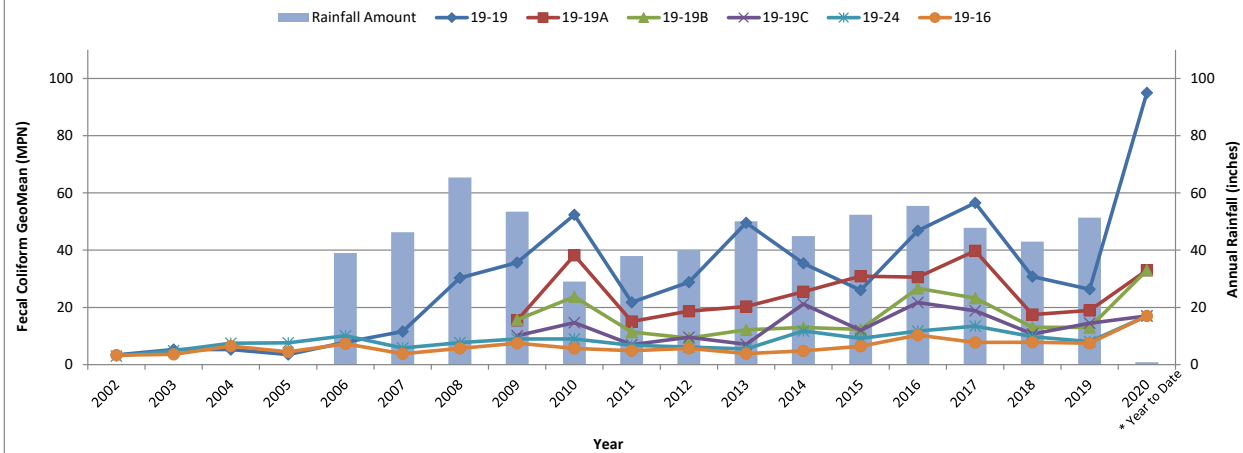
	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)
December	1600.0	79.0	170.0		920.0	49.0	33.0		540.0	33.0	140.0		240.0	46.0	33.0		220.0	23.0	13.0		49.0	21.0	110.0	
November	49.0	49.0	17.0		33.0	13.0	6.8		7.8	23.0	7.8		31.0	17.0	11.0		2.0	17.0	4.5		2.0	7.8	2.0	
October	22.0	79.0	7.8		49.0	23.0	4.5		33.0	7.8	2.0		23.0	7.8	4.5		6.8	7.8	1.8		2.0	2.0	2.0	
September	17.0	49.0	79.0		7.8	23.0	33.0		11.0	13.0	6.8		4.5	17.0	17.0		2.0	17.0	4.5		1.8	17.0	1.8	
August	79.0	70.0	70.0		70.0	23.0	49.0		21.0	13.0	33.0		33.0	4.5	22.0		33.0	7.8	7.8		33.0	17.0	17.0	
July	350.0	23.0	4.5		110.0	33.0	13.0		130.0	11.0	7.8		49.0	7.8	17.0		49.0	13.0	22.0		22.0	4.5	13.0	
June	23.0	11.0	33.0		49.0	23.0	49.0		13.0	23.0	49.0		17.0	7.8	46.0		7.8	4.5	13.0		4.5	1.8	4.5	
May	17.0	17.0	7.8		23.0	33.0	9.2		7.8	17.0	7.8		2.0	13.0	2.0		23.0	23.0	6.8		4.5	13.0	4.5	
April	7.8	33.0	23.0		23.0	13.0	13.0		4.5	17.0	7.8		7.8	17.0	6.8		13.0	49.0	23.0		4.5	17.0	6.8	
March	350.0	22.0	23.0		11.0	21.0	23.0		33.0	4.5	6.8		13.0	11.0	13.0		13.0	7.8	7.8		33.0	9.3	4.5	
February	13.0	17.0	64.0		7.8	7.8	33.0		13.0	17.0	23.0		9.3	17.0	31.0		4.5	2.0	6.8		1.8	7.8	13.0	
January	95.0	13.0	23.0	95.0	79.0	2.0	23.0	33.0	31.0	4.5	13.0	33.0	49.0	2.0	33.0	17.0	27.0	1.8	7.8	17.0	33.0	4.5	23.0	17.0
Additional Samples																								
Additional Samples																								
Average Annual GeoMean	56.5	30.8	26.4	95.0	39.8	17.5	19.0	33.0	23.3	13.1	13.0	33.0	18.8	10.7	14.5	17.0	13.5	9.8	8.0	17.0	7.7	7.9	7.5	17.0
** Truncated GeoMetric Mean	44.0	42.0	35.0	28.0	36.0	29.0	23.0	17.0	20.0	20.0	16.0	13.0	16.0	15.0	14.0	12.0	10.0	10.0	10.0	8.0	7.0	8.0	7.0	7.0
** Truncated 90th Percentile	203.0	176.0	168.0	89.0	133.0	115.0	89.0	49.0	83.0	71.0	63.0	40.0	57.0	56.0	52.0	37.0	37.0	44.0	38.0	26.0	29.0	30.0	32.0	28.0

NS = No Sample

AS = Additional Samples

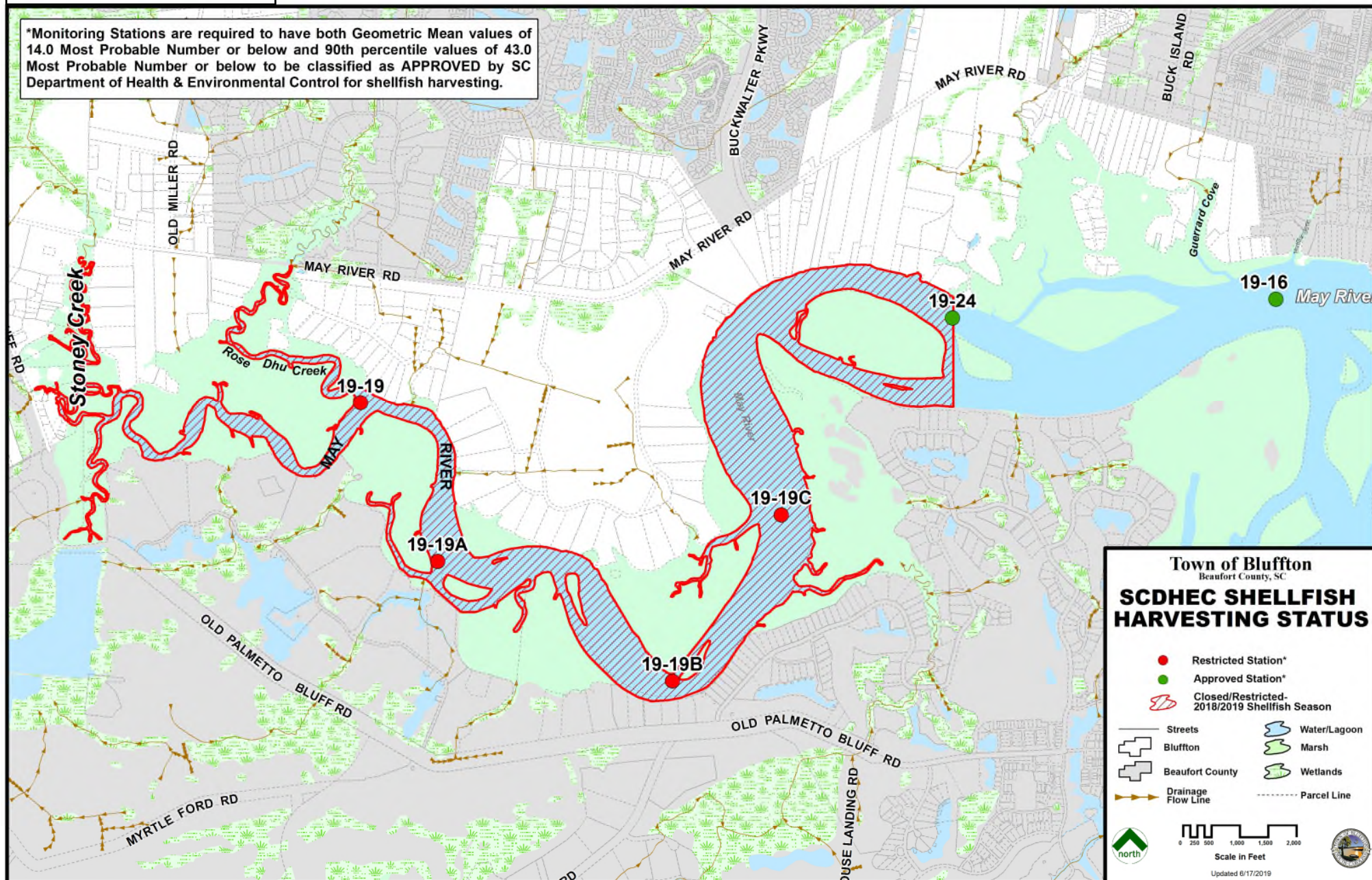
** Town staff calculations utilizing DHEC statistics

SC DHEC May River Headwaters Shellfish Stations Average Annual Fecal Coliform



May River Headwaters

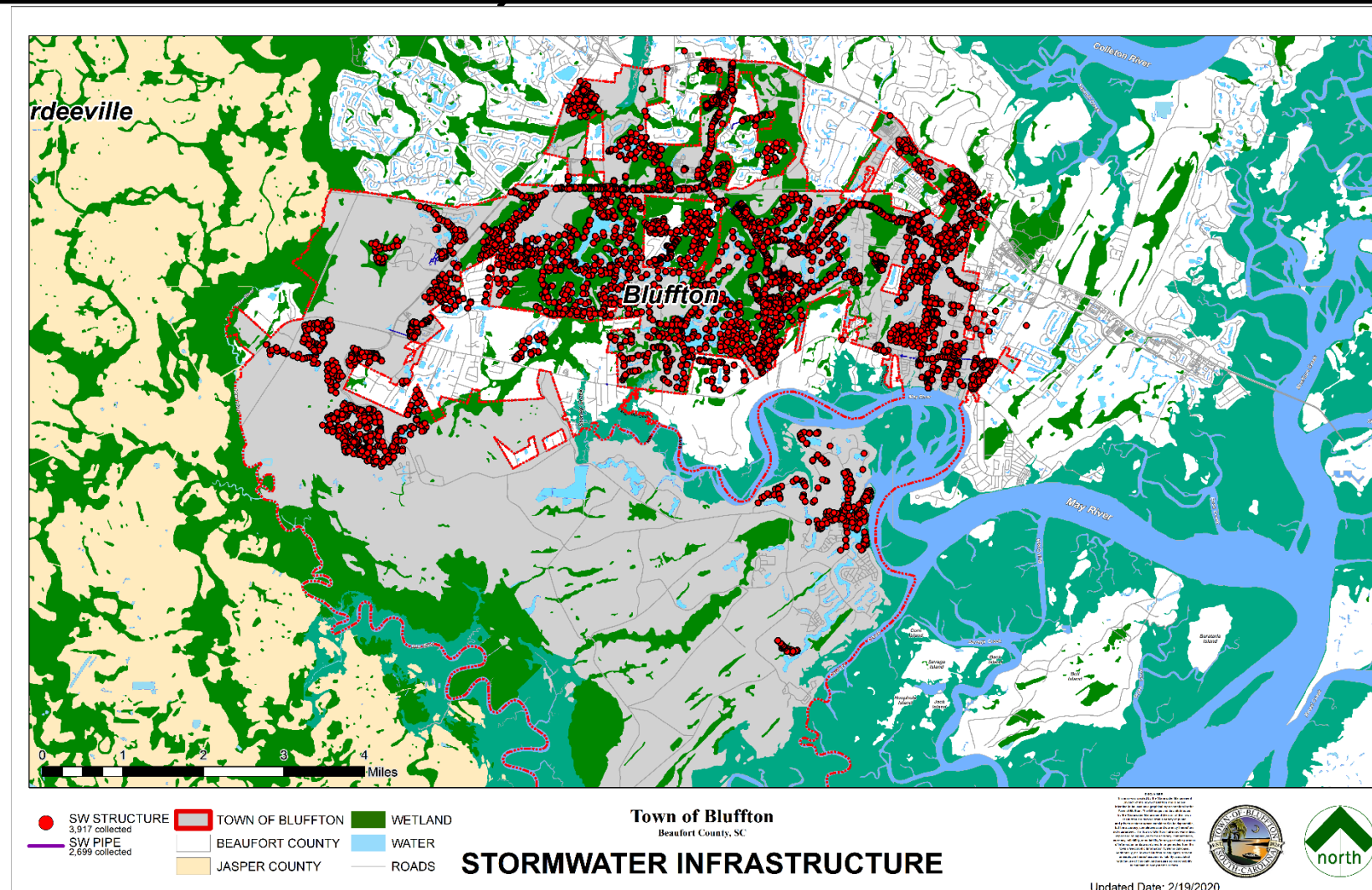
*Monitoring Stations are required to have both Geometric Mean values of 14.0 Most Probable Number or below and 90th percentile values of 43.0 Most Probable Number or below to be classified as APPROVED by SC Department of Health & Environmental Control for shellfish harvesting.



ACTIVITY - FINANCIAL	STATUS
Funding Opportunities	1/23/20 May River Watershed Action Plan Advisory Committee discussed a Stormwater Utility Fee increase for Tax Year 2020. Formal recommendation to Council to be considered at 2/27/20 WAPAC meeting. <i>Staff is submitting an initial proposal, due 3/13/20, for May River 319 Grant Phase 5 - Bridge Street Retrofit for stormwater treatment.</i>
ACTIVITY - POLICIES	STATUS
Sewer Connection & Extension Policy	<i>Completed 2017.</i>
Septic to Sewer Conversion Program	<i>Completed 2018.</i>
Sewer Connection Ordinance and Ordinance Amendment	<i>Completed 2015 and 2018, respectively.</i>
Southern Lowcountry Regional Stormwater Ordinance and Design Manual	<i>Current project updates are included in Engineering Consent Agenda under "Southern Lowcountry Regional Board (SoLoCo)."</i>
ACTIVITY - PROJECTS	STATUS
Sanitary Sewer Extension	Completed Buck Island/Simmons Road (BIS) Phases I, II, III, IV; Toy Fields; and Jason/Able. Six project phases of Historic District sewer extension are proposed in the 5-year Capital Improvement Program. <i>Current project updates are included in Engineering Consent Agenda under "Sewer & Water."</i>
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	<i>Completed 2013.</i>
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	<i>Completed 2016.</i>
May River 319 Grant Phase 3 - Town Hall Parking Retrofit (Grant award of \$231,350 in 2016)	<i>Completed 2019.</i>
May River 319 Grant Phase 4 - Sanitary Sewer Connections (Grant award of \$365,558.36 in 2019)	Grant to construct 49 sewer lateral connections in Poseys Court, Little Aaron and Historic District Phases 1 and 2. <i>Current project updates are included in Engineering Consent Agenda under "Sewer & Water."</i>
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Project on hold following Council direction on 5/31/17.
May River Watershed Water Quality Model	Contract awarded to McCormick Taylor with final deliverables anticipated 3/20.
ACTIVITY - PROGRAMS	STATUS
Public Outreach/Participation/Involvement (MS4 Minimum Control Measures #1 & 2)	Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water, through local cleanups, civic group presentations, and the May River Watershed Action Plan Advisory Committee. <i>Current updates are included in Engineering Consent Agenda and Attachment 3.</i>
Infrastructure Mapping/GIS (MS4 Minimum Control Measure #3)	Data points continue to be collected with new development to meet MS4 requirements & populate water quality model. <i>Current updates are included in Engineering Consent Agenda Attachment 4a.</i>

ACTIVITY - PROGRAMS continued	STATUS continued
Water Quality Monitoring Program (MS4 Minimum Control Measure #3)	1. SCDHEC Shellfish monitoring results and map 2. <i>E. coli</i> bacteria "hot spot" concentrations 3. Microbial Source Tracking of bacteria 4. Illicit Discharge investigation and monitoring 5. BMP efficacy monitoring 6. MS4 monitoring <i>Current updates are included in Engineering Consent Agenda Attachments 1, 1a, 4b - 4d.</i>
Illicit Discharge Detection & Elimination (IDDE) Program (MS4 Minimum Control Measure #3)	Response to reported and observed non-stormwater discharges to the stormwater drainage system. <i>Current updates are included in Engineering Consent Agenda Attachment 4e.</i>
Construction Site Stormwater Runoff Control Program (MS4 Minimum Control Measure #4)	Sediment and erosion control inspections with escalating enforcement response. <i>Current updates are included in Engineering Consent Agenda Attachment 5.</i>
Stormwater Plan Review & Related Activity Program (MS4 Minimum Control Measure #5)	SCDHEC delegated plan review-related activities. <i>Current updates are included in Engineering Consent Agenda Attachment 6.</i>
Ditch Inspection/Maintenance Program (MS4 Minimum Control Measure #6)	Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. <i>Current updates are included in Engineering Consent Agenda Attachment 7.</i>
Neighborhood Assistance Program - Septic System Maintenance Program	On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program (NAP). <i>Current updates are provided in Growth Management Consent Agenda.</i>

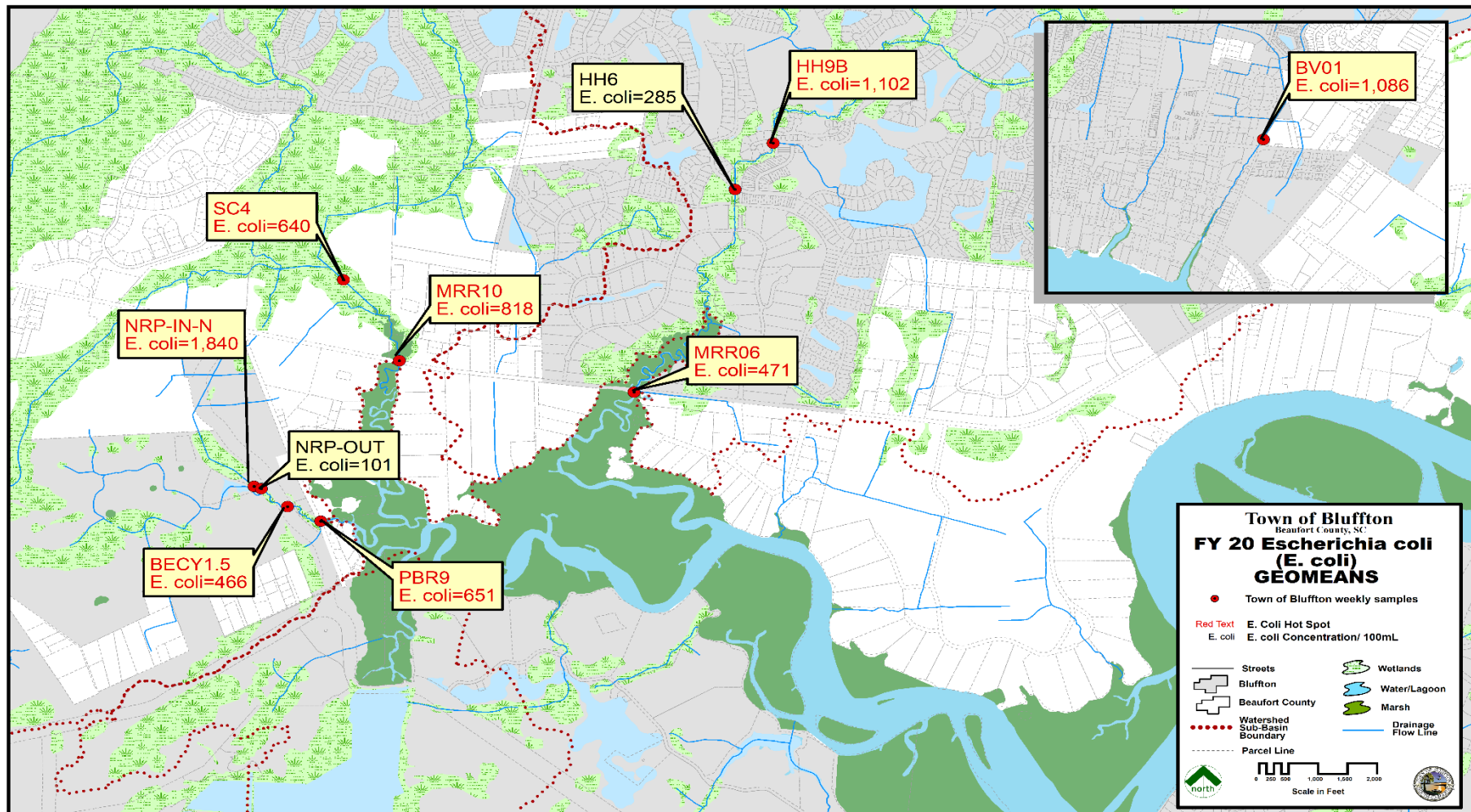
MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



Stormwater Infrastructure Inventory Collection Status

FY 2020 YTD Collection Totals	2,053
FY 2019 Collection Totals	2,925
FY 2018 Collection Totals	3,777

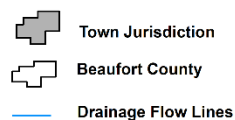
MS4 Minimum Control Measure #3 – IDDE: *E. coli* Concentrations Trend Map



	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2020 YTD Totals	135	89	96
FY 2019 Totals	280	193	264
FY 2018 Totals	216	217	224
FY 2017 Totals	307	179	224

2/21/2020

- MST program began November 2016; MS4 Quarterly Sampling initiated 2/2017
- Totals include only samples submitted for laboratory analysis, and not *in situ* parameters.



● 0 ● 1-3 ● 3-6 ● 6-9 ● >10

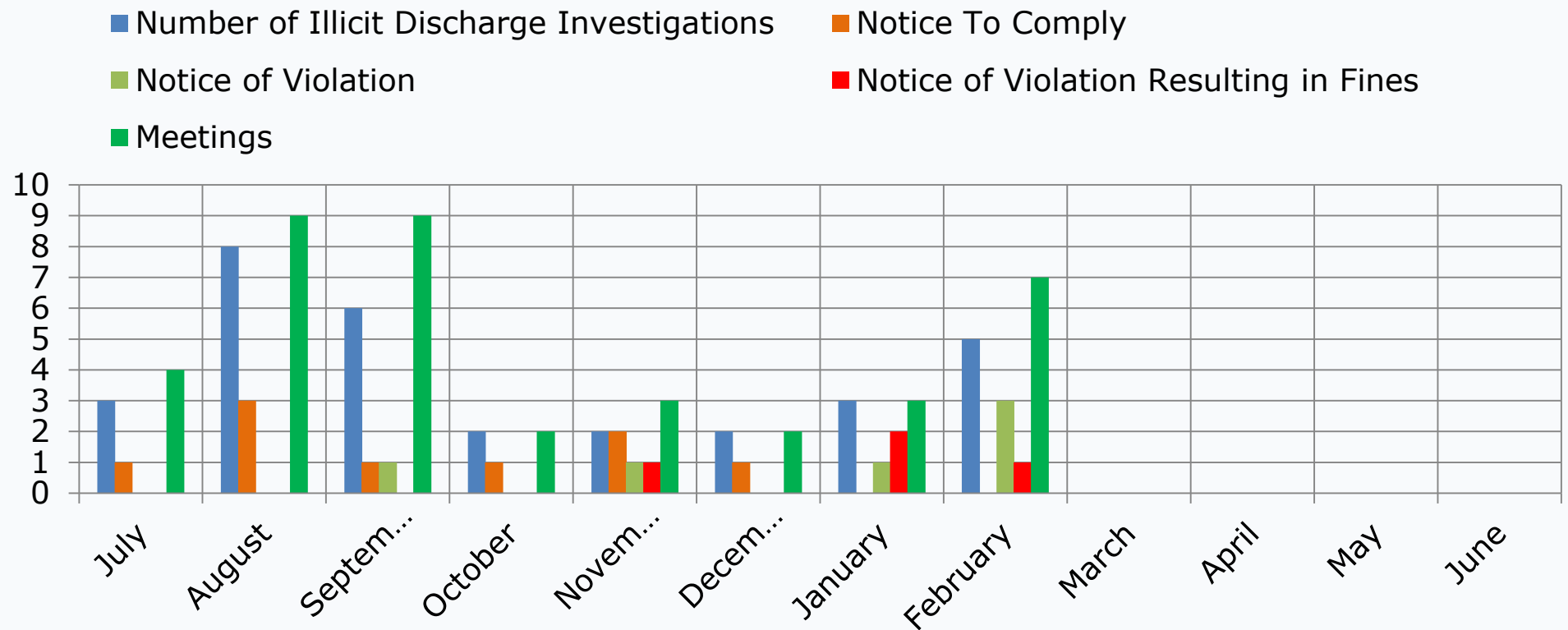
● 1 - 3 ● 4 - 6 ● 7 - 10 ● >10

Size of dot correlates to # of times the site has been sampled.

Updated Date: 2/21/2020



MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



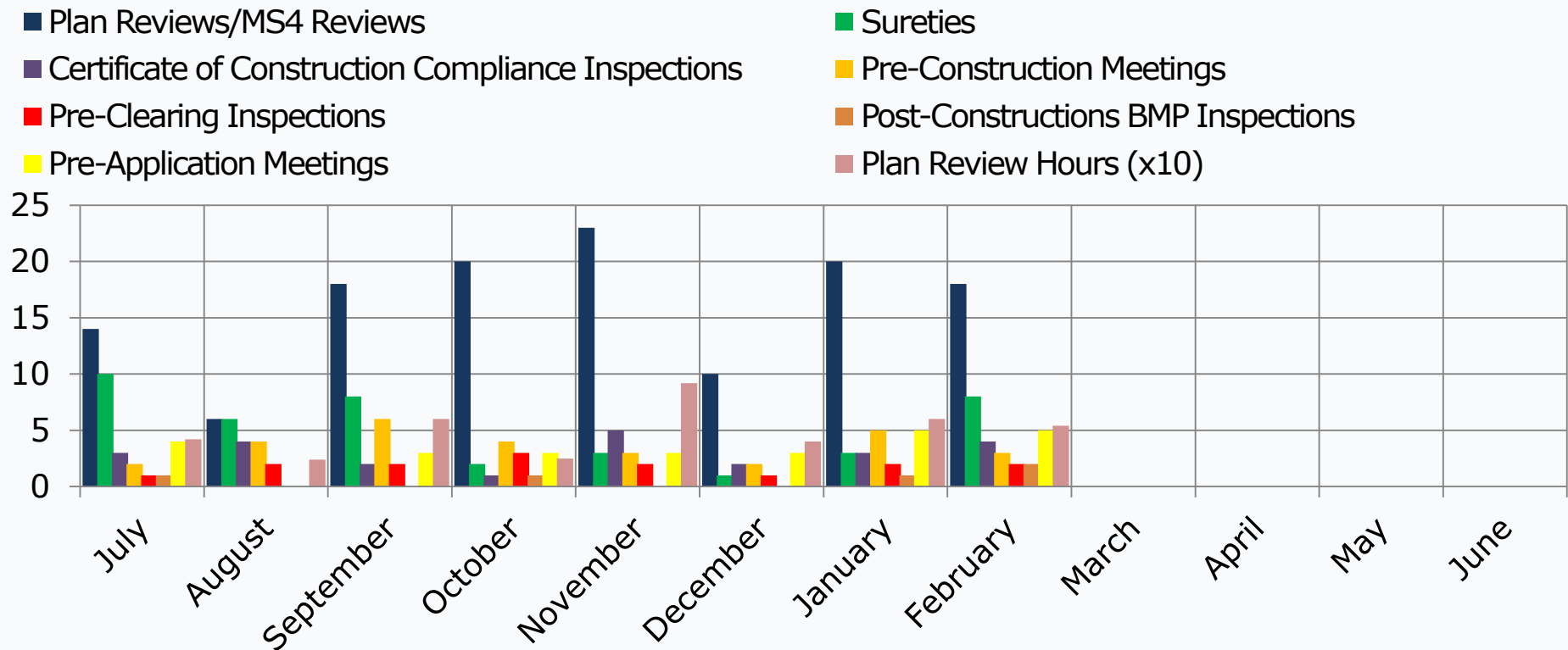
	Number of Illicit Discharge Investigations	Number of Notices To Comply Issued	Number of Notices of Violation Issued	Number of NOV Enforcement Actions	Number of Meetings
FY 2020 YTD Totals	31	9	6	4	39
FY 2019 Totals	38	20	3	1	61
FY 2018 Totals	48	20	4	2	60

MS4 Minimum Control Measure #4 - Construction Site Stormwater Runoff Control



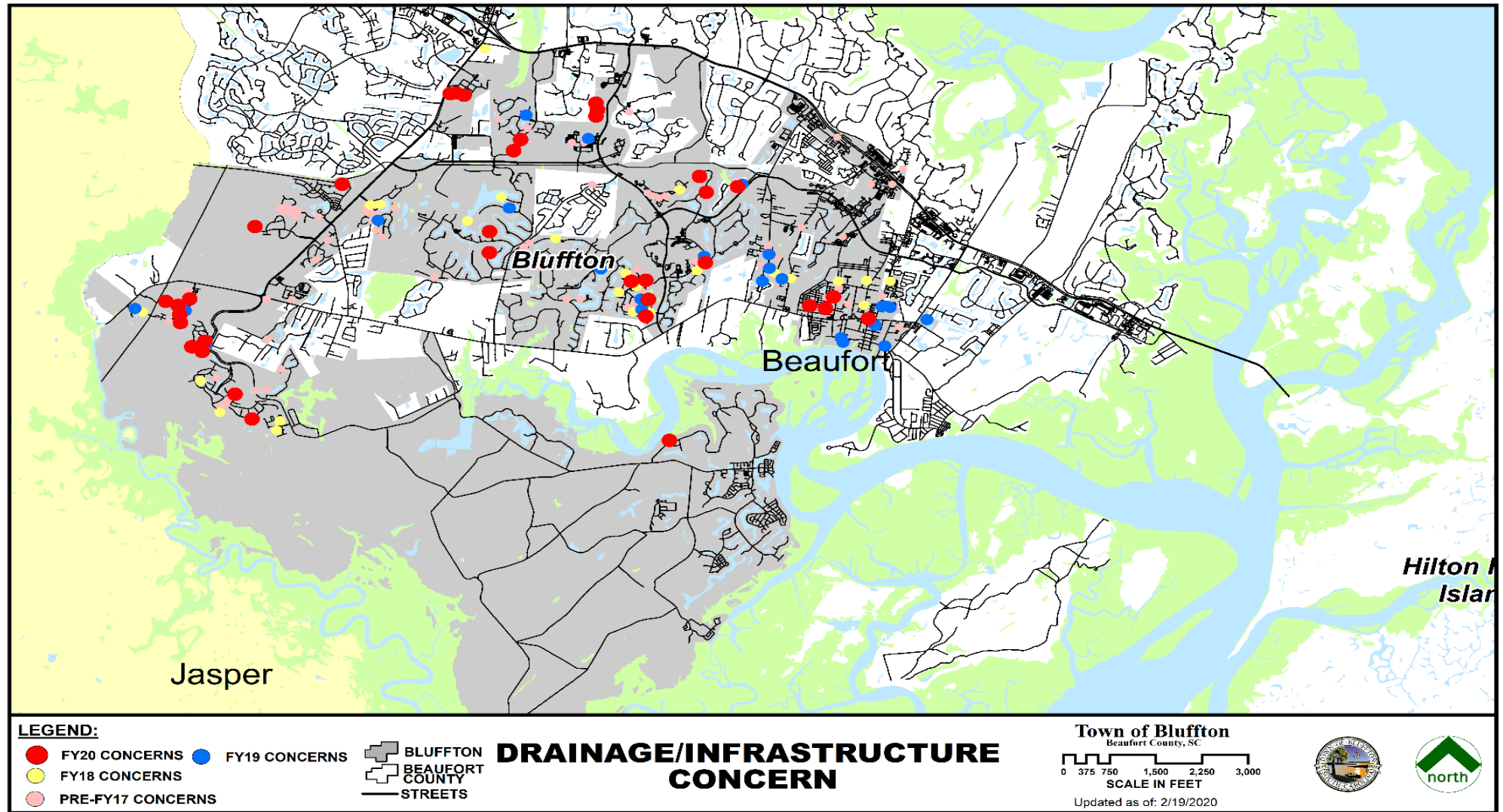
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NTC Issued	Number of NOV Issued	Number of SWO Issued	Number of NOV Enforcement Actions	Number of E&SC Meetings
FY 2020 YTD Totals	993	759	128	97	4	7	262
FY 2019 Totals	1,688	1,384	254	72	N/A	7	403
FY 2018 Totals	1,504	1,159	300	83	N/A	10	499

MS4 Minimum Control Measure #5 Stormwater Plan Review & Related Activity



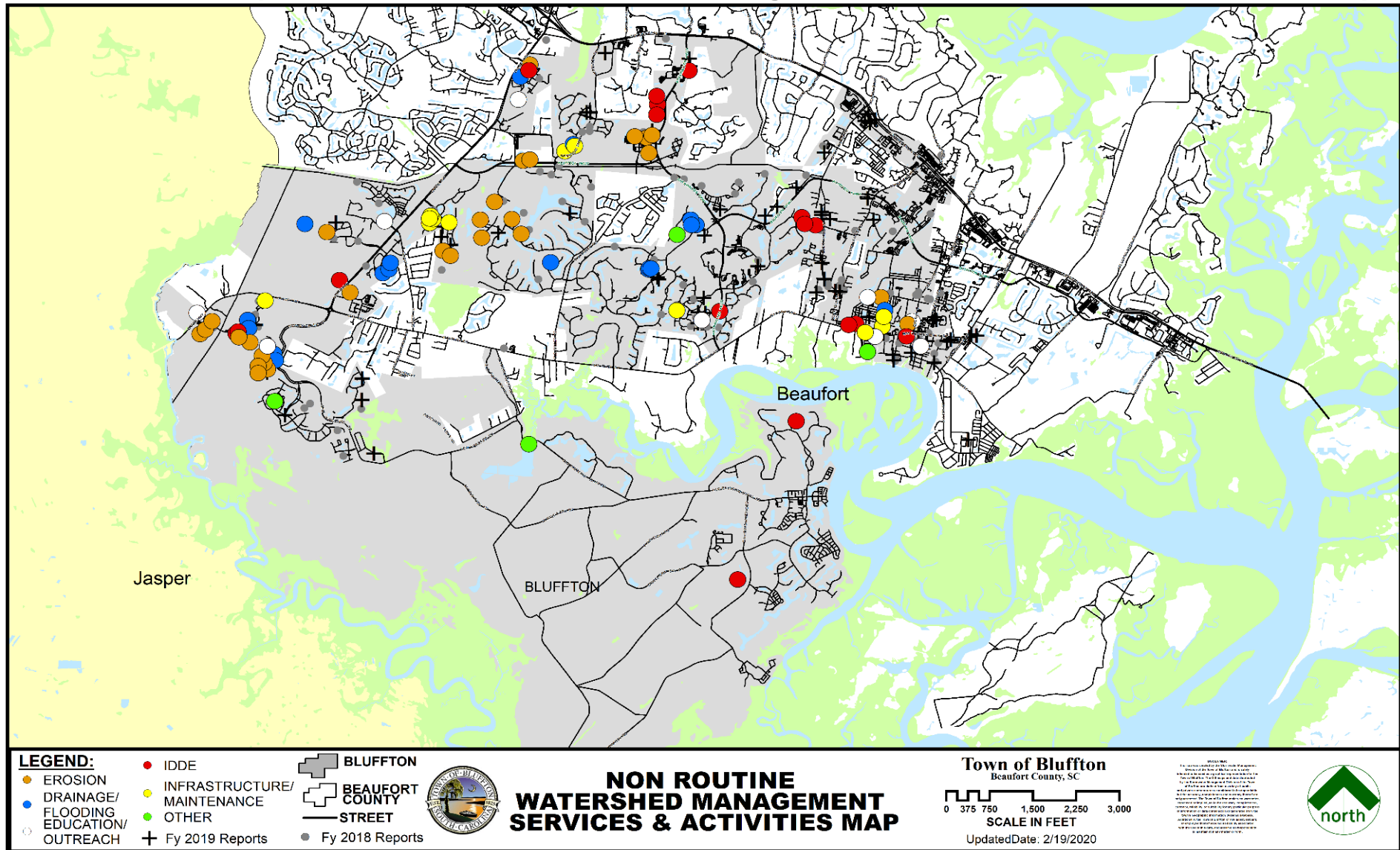
	Plan Reviews MS4 Reviews	Sureties	Certificate of Construction Compliance Inspections	Pre- Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2020 YTD Totals	129	41	24	29	15	5	26	397 Hrs.
FY 2019 Totals	208	52	53	47	37	27	63	1,040 Hrs.
FY 2018 Totals	242	59	50	32	32	88	88	1,210 Hrs.

Citizen Drainage, Maintenance and Inspections Concerns Map



	Number of Drainage Concerns Investigated	Number of Meetings
FY 2020 YTD Totals	42	53
FY 2019 Totals	54	59
FY 2018 Totals	48	75

Citizen Request for Watershed Mngt. Services & Activities Map

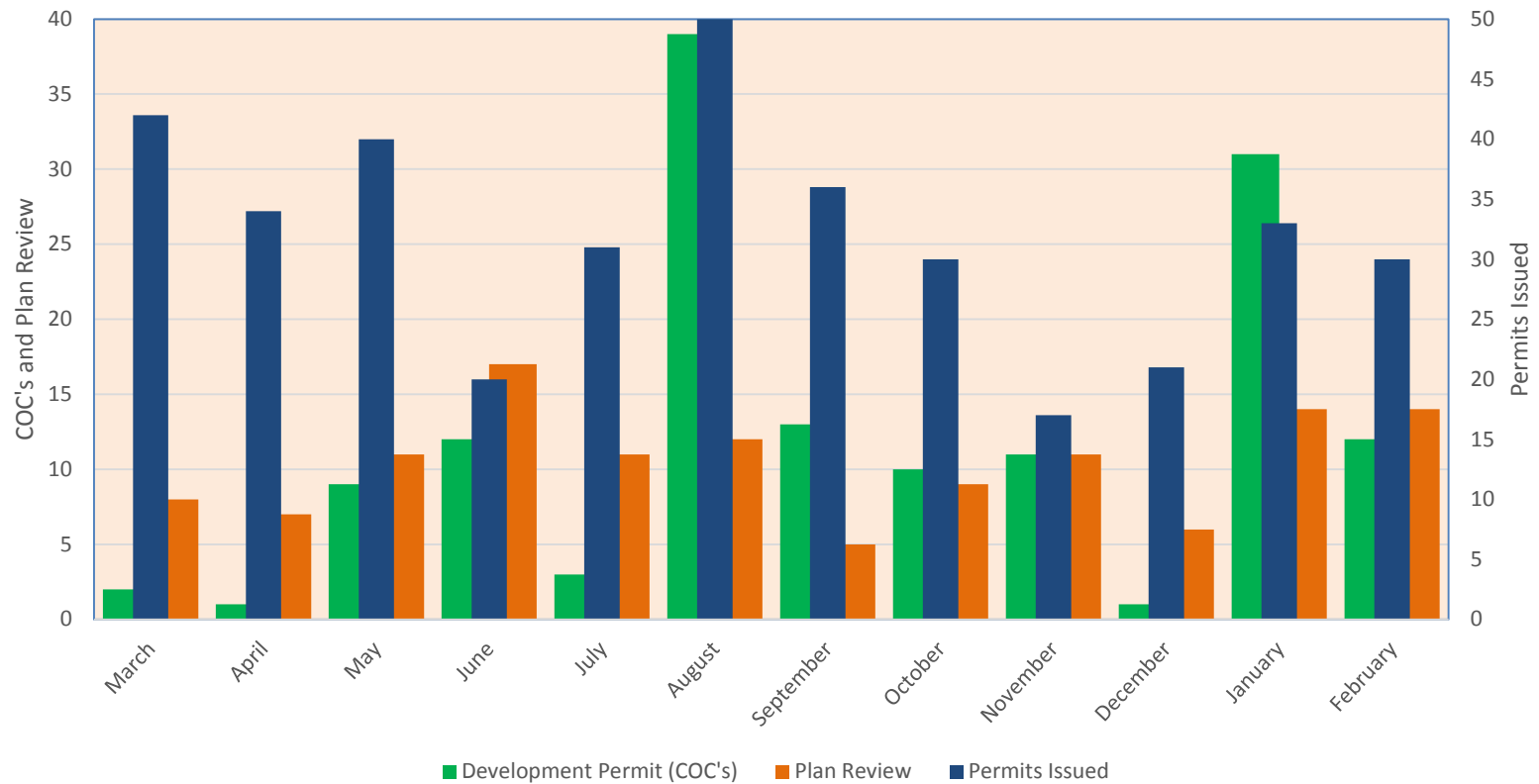


	Number of Citizen Requests Investigated	Number of Meetings
FY 2020 YTD Totals	82	86
FY 2019 Totals	75	79
FY 2018 Totals	53	82

PW - Activities Report

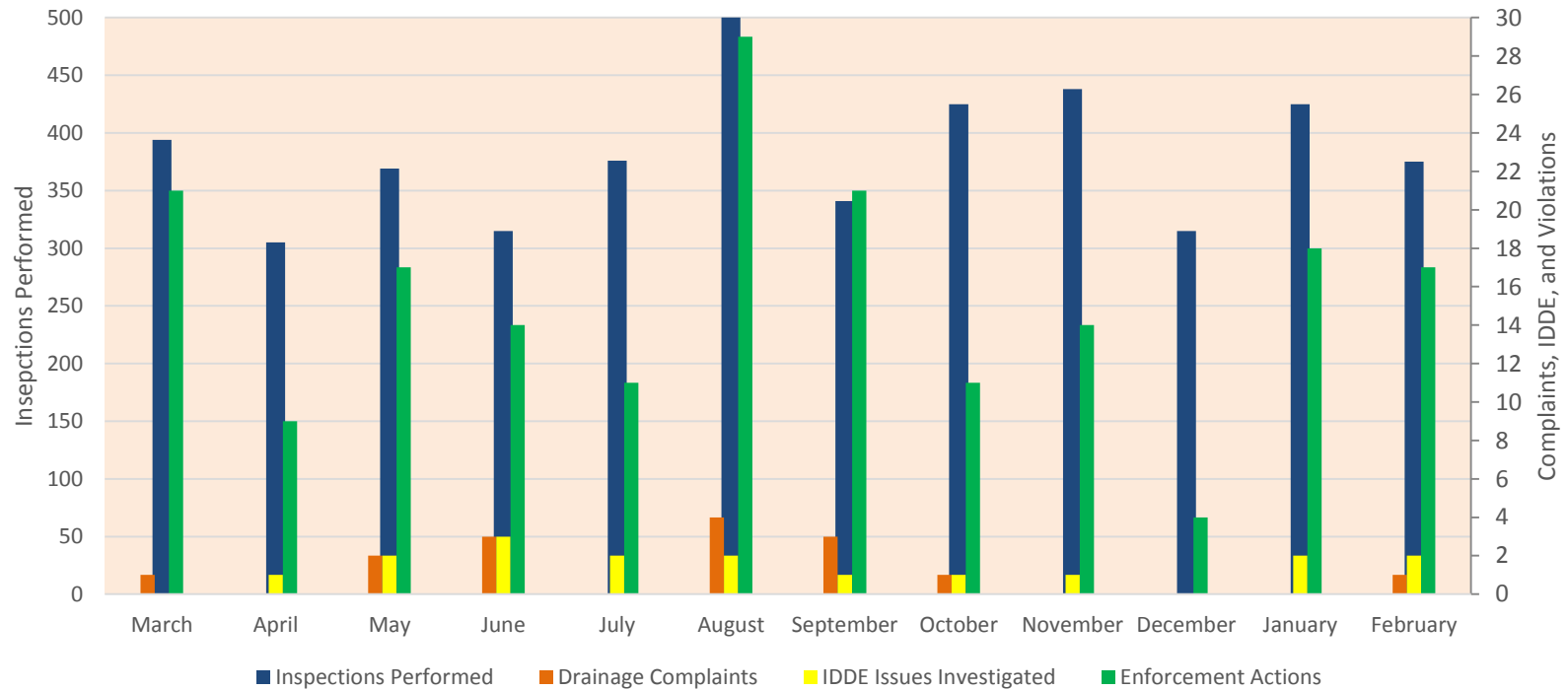
Week	# of Activities	Labor Cost	Equipment Cost	Other Cost	Total
FY20WK1	65	\$1,311.00	\$209.00	\$0.00	\$1,520.00
FY20WK2	89	\$2,547.00	\$878.00	\$0.00	\$3,425.00
FY20WK3	81	\$3,321.00	\$975.00	\$559.00	\$4,856.00
FY20WK4	40	\$2,396.00	\$803.00	\$0.00	\$3,199.00
FY20WK5	63	\$2,051.00	\$388.00	\$0.00	\$2,439.00
FY20WK6	75	\$2,566.00	\$622.00	\$0.00	\$3,187.00
FY20WK7	81	\$2,939.00	\$1,172.00	\$0.00	\$4,112.00
FY20WK8	71	\$3,059.00	\$3,013.00	\$0.00	\$6,072.00
FY20WK9	56	\$1,643.00	\$2,099.00	\$243.00	\$3,985.00
FY20WK10	8	\$810.00	\$483.00	\$0.00	\$1,293.00
FY20WK11	83	\$3,456.00	\$2,856.00	\$73.00	\$6,385.00
FY20WK12	66	\$3,824.00	\$4,161.00	\$0.00	\$7,985.00
FY20WK13	41	\$1,758.00	\$2,001.00	\$0.00	\$3,760.00
FY20WK14	50	\$3,555.00	\$3,619.00	\$1,677.00	\$8,851.00
FY20WK15	59	\$3,461.00	\$3,222.00	\$2,034.00	\$8,717.00
FY20WK16	48	\$3,200.00	\$1,682.00	\$207.00	\$5,090.00
FY20WK17	51	\$3,479.00	\$2,386.00	\$0.00	\$5,865.00
FY20WK18	68	\$4,041.00	\$3,823.00	\$0.00	\$7,863.00
FY20WK19	53	\$3,002.00	\$1,903.00	\$0.00	\$4,904.00
FY20WK20	41	\$2,392.00	\$1,519.00	\$0.00	\$3,911.00
FY20WK21	77	\$3,811.00	\$3,216.00	\$84.00	\$7,112.00
FY20WK22	50	\$2,058.00	\$1,226.00	\$49.00	\$3,333.00
FY20WK23	59	\$2,791.00	\$1,746.00	\$0.00	\$4,538.00
FY20WK24	82	\$3,176.00	\$3,354.00	\$83.00	\$6,613.00
FY20WK25	92	\$3,539.00	\$3,140.00	\$30.00	\$6,709.00
FY20WK26	47	\$1,457.00	\$766.00	\$0.00	\$2,223.00
FY20WK27	54	\$2,350.00	\$1,281.00	\$181.00	\$3,813.00
FY20WK28	80	\$4,488.00	\$3,468.00	\$347.00	\$8,303.00
FY20WK29	87	\$3,466.00	\$2,985.00	\$114.00	\$6,566.00
FY20WK30	68	\$3,077.00	\$3,470.00	\$180.00	\$6,728.00
FY20WK31	66	\$3,883.00	\$2,581.00	\$0.00	\$6,464.00
FY20WK32	53	\$4,675.00	\$3,580.00	\$671.00	\$8,927.00
FY20WK33	66	\$3,666.00	\$2,802.00	\$107.00	\$6,575.00
FY20WK34	77	\$3,440.00	\$2,978.00	\$0.00	\$6,419.00
FY20WK35					
FY20WK36					
FY20WK37					
FY20WK38					
FY20WK39					
FY20WK40					
FY20WK41					
FY20WK42					
FY20WK43					
FY20WK44					
FY20WK45					
FY20WK46					
FY20WK47					
FY20WK48					
FY20WK49					
FY20WK50					
FY20WK51					
FY20WK52					
Total	2147	\$100,688.00	\$74,407.00	\$6,639.00	\$181,742.00

MS4 Minimum Control Measure #5 Stormwater Plan Review



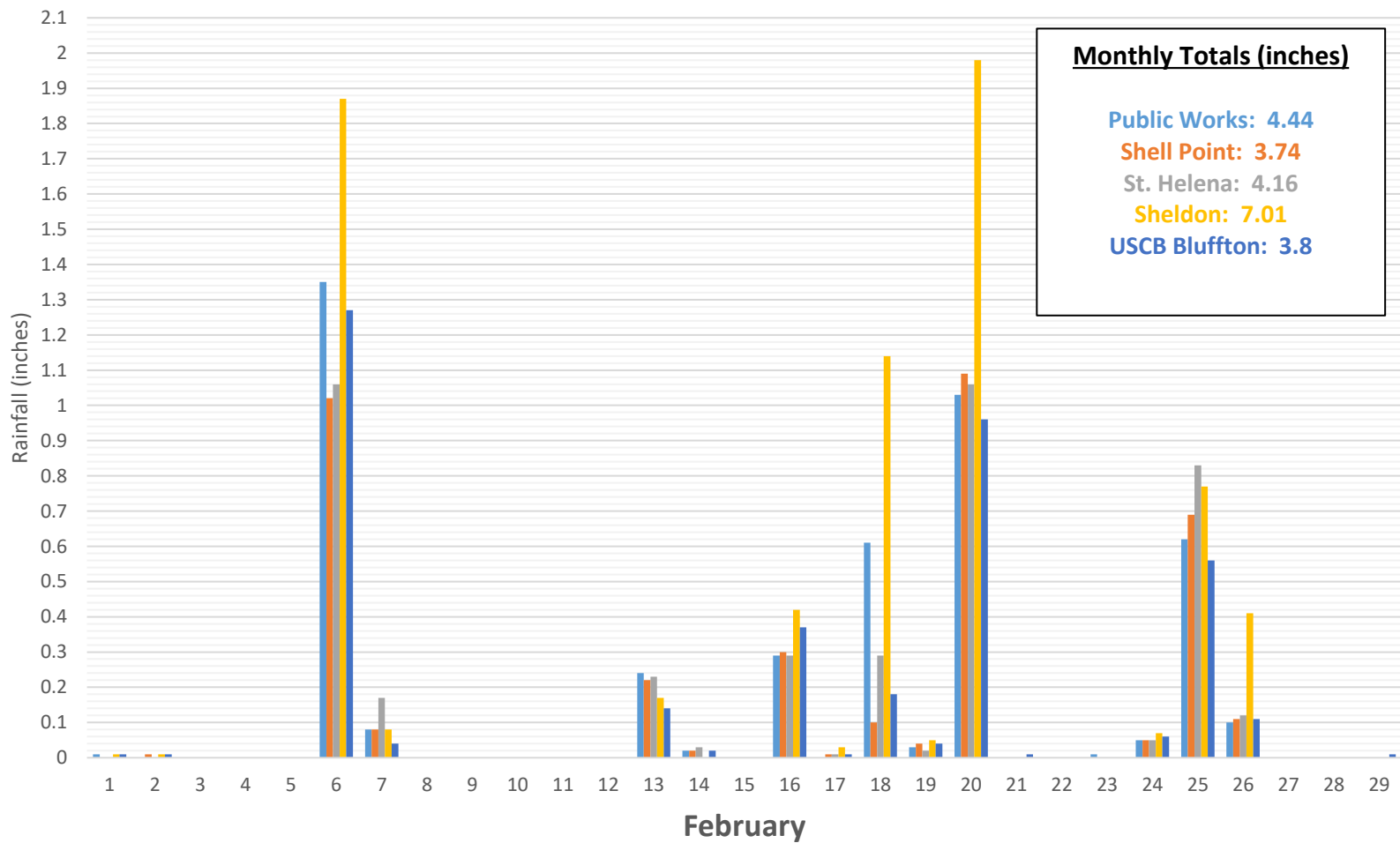
TYPE	March	April	May	June	July	August	September	October	November	December	January	February	Last 12 Months
Development Permit (COC's)	2	1	9	12	3	39	13	10	11	1	31	12	144
Plan Review	8	7	11	17	11	12	5	9	11	6	14	14	125
Permits Issued	42	34	40	20	31	50	36	30	17	21	33	30	384

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	March	April	May	June	July	August	September	October	November	December	January	February	Last 12 Months
Inspections Performed	394	305	369	315	376	525	341	425	438	315	425	375	4603
Drainage Complaints	1	0	2	3	0	4	3	1	0	0	0	1	15
IDDE Issues Investigated	0	1	2	3	2	2	1	1	1	0	2	2	17
Enforcement Actions	21	9	17	14	11	29	21	11	14	4	18	17	186

Beaufort County Weather Stations Daily Rainfall Amounts - February 2020



Lowcountry Stormwater Partners (LSP) Stormwater Utility Board Monthly Report
2/5/20 – 3/4/20

Stormwater outreach/involvement activities completed:

- Cultivating a Carolina Yard Workshop Part 2
 - Ellen Sturup Comeau will give the second part of her Carolina Yard workshop, which teaches homeowners sustainable landscaping practices with a watershed-friendly focus. This presentation will focus upon yard waste management and irrigation practices. This workshop will be given as part of an OLLI series.
 - 2/6/20, Hilton Head, 25
- Cultivating a Carolina Yard Workshop Part 3
 - Ellen Sturup Comeau will give the third part of her Carolina Yard workshop, which teaches homeowners sustainable landscaping practices with a watershed-friendly focus. This presentation will focus upon pest management and harvesting rainwater. This workshop will be given as part of an OLLI series.
 - 2/13/20, Hilton Head, 25
- 319 Grant Evergreen Pond Workshop
 - 2/14/20, Okatie, 4
- Cultivating a Carolina Yard Workshop Part 4
 - Ellen Sturup Comeau will give the fourth part of her Carolina Yard workshop, which teaches homeowners sustainable landscaping practices with a watershed-friendly focus. This offering will focus upon native plants and waterwise garden planning. This workshop will be given as part of an OLLI series.
 - 2/20/20, Hilton Head, 25
- LSP Newsletter
 - An informative publication for the general public with a small article on a stormwater topic and information on past, current, and future events.
 - 3/1/20, online, 90

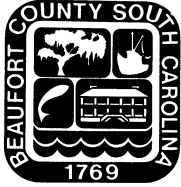
Stormwater outreach/involvement activities planned to take place:

- Interview for spotlight piece in Local Life magazine
 - 3/7/20
- Macroinvertebrate training
 - 3/16/20
- LSP Newsletter
 - An informative publication for the general public with a small article on a stormwater topic and information on past, current, and future events.
 - 3/19/20, online, 90
- LSP Consortium Meeting
 - 3/24/20
- Presenting at Beaufort County Senior Leadership
 - Ellen Sturup Comeau will present on stormwater issues, core POCs, and residential BMPs to the Beaufort County Senior Leadership Class
 - 4/1/20, Okatie
- Permeable Pavement Workshop
 - This one day workshop for planners and stormwater professionals will focus on design, construction, and maintenance of permeable pavement in stormwater management. This is part of our Low Impact Development Series.
 - 4/7/20, Bluffton
- LSP Newsletter

- An informative publication for the general public with a small article on a stormwater topic and information on past, current, and future events.
 - 4/17/20, online, 90
- Soft Shell Crab Fest
 - 4/18/20
- County Wide Cleanup
 - 4/22/20
- Earth Day
 - 4/25/20

Other related activities performed/considered:

- Finding/Purchasing LSP Merch
- Update LSP Website
- Updating FOG materials
- Planning Healthy Ponds Workshop Series for fall
- Planning Permeable Pavement Workshop for April
- Observing Master Pond Manager
- Facilitating Carolina Yard Online Course
- Taking Master Rain Gardener Course
- Planning Mossy Oaks Rain Garden
- Creating additional pet waste PSAs
- Coordinating Earth Day events and marketing
- Assisting Beaufort County Senior Leadership's Environmental Group with their course project



MEMORANDUM

Date: March 11, 2020

To: Stormwater Management Utility Board

From: Matthew Rausch, Stormwater Infrastructure Superintendent

Re: **Maintenance Project Report**

This report will cover two major project and eight minor projects. The Project Summary Reports are attached.

Major Project:

- **Telfair Subdivision – Lady’s Island (SWUD 7):** This project improved 7,109 feet of drainage system. The scope of work included removing blockages from flowline, cleaning out 6,619 feet of roadside ditch, constructing 1 concrete driveway, replacing 2 driveway pipes, jetting 13 crossline pipes, 104 driveway pipes, 490 feet of channel pipe, installing 1 driveway pipe, 1 catch basin, rip rap and hydroseeding for erosion control. The total cost was **\$79,575.08**.
- **Providence Road – Port Royal Island (SWUD 9):** This project improved 2,997 feet of drainage system. The scope of work included grubbing and clearing 560 feet of workshelf, cleaning out 2,337 feet of channel, installing 100 feet of channel pipe and rip rap for erosion control. The total cost was **\$28,901.47**.

Minor or Routine Projects:

- **Port Royal Island Bush Hog – Port Royal Island (SWUD 9):** This project improved 66,073 feet of drainage system. The scope of work included bush hogging 66,073. The total cost was **\$42,543.26**.
- **Lady’s Island Vacuum Truck – Lady’s Island (SWUD 7):** This project improved 1,897 feet of drainage system. The scope of work included cleaning out 69 catch basins, 7 manholes, jetting 1 access pipe, 24 crossline pipes, 13 driveway pipes, 368 feet of channel pipe and 1,529 feet of roadside pipe. The total cost was **\$22,417.84**.
- **Pond Maintenance – City of Beaufort, Port Royal Island, Lady’s Island, Bluffton (SWUD 1/9/7/4):** The scope of work included removing debris from perimeter of pond, cleaning out one catch basin, dewatering pond to safe elevation and handseeding for erosion control. The total cost was **\$12,682.80**.
- **Broad River Drive – Port Royal Island (SWUD 9):** This project improved 700 feet of drainage system. The scope of work included cleaning out 313 feet of roadside ditch, 95 feet of channel, jetting 292 feet of roadside pipe, 2 crossline pipes, replacing 1 catch basin lid, repairing 1 catch basin lid and hydroseeding for erosion control. The total cost was **\$8,089.69**.

- **Lady's Island Vacuum Truck – Lady's Island (SWUD 7):** This project improved 78 feet of drainage system. The scope of work included cleaning out 14 catch basins, jetting 4 driveway pipes, 1 access pipe, 12 crossline pipes and 78 feet of channel pipe. The total cost was **\$6,682.78.**
- **Bradley Circle – Hilton Head Island (SWUD 3):** This project improved 500 feet of drainage system. The scope of work included cleaning out 500 feet roadside ditch, jetting 3 driveway pipes and 1 crossline pipe. The total cost was **\$6,205.52.**
- **Chowan Creek Bluff – Lady's Island (SWUD 7):** This project improved 875 feet of drainage system. The scope of work included cleaning out 875 feet of channel. The total cost was **\$5,677.10.**
- **ToHHI Vacuum Truck – Hilton Head Island (SWUD 3):** This project improved 8 feet of drainage system. The scope of work included cleaning out 4 catch basins, jetting 1 crossline pipe and 8 feet of channel pipe. The total cost was **\$3,630.75.**



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Telfair Subdivision

Sherwood Lane, Telfair Drive, Le Moyne Drive Lucerne Avenue, Ogden Court,
 Brickyard Hills Court, Brickman Way and Marquis Way

Activity: Routine/Preventive Maintenance

Duration: 06/12/19-11/22/19

Narrative Description of Project:

Project improved 7,109 L.F. of drainage system. Removed blockages from flowline. Cleaned out 6,619 L.F. of roadside ditch. Constructed concrete driveway. Replaced (2) driveway pipes. Jetted (13) crossline pipes, (104) driveway pipes and 490 L.F. of channel pipe. Installed (1) driveway pipe and (1) catch basin, rip rap and hydroseeded for erosion control.

2019-574 / Telfair Subdivision	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ASBUILT / Asbuilt - Project	21.0	\$433.86	\$26.88	\$18.00	\$0.00	\$270.69	\$749.43
AUDIT / Audit Project	2.5	\$54.48	\$0.00	\$0.00	\$0.00	\$0.00	\$54.48
CBINS / Catch basin - installed	16.0	\$325.88	\$15.36	\$21.24	\$0.00	\$154.68	\$517.16
CCSRT / Concrete construction	39.5	\$1035.73	\$48.63	\$35.03	\$1940.90	\$349.92	\$3,410.20
CLPJT / Crossline Pipe - Jetted	48.0	\$1066.85	\$919.68	\$245.80	\$0.00	\$602.85	\$2835.18
CPJ / Channel Pipe - Jetted	10.0	\$222.80	\$191.60	\$99.00	\$0.00	\$143.40	\$656.80
DLO / Ditch Layout	35.0	\$862.98	\$36.00	\$34.10	\$0.00	\$348.00	\$1,281.07
DPINP / Driveway Pipe - Inspected	6.0	\$133.68	\$114.96	\$48.30	\$0.00	\$86.04	\$382.98
DPINS / Driveway Pipe - Installed	30.0	\$619.80	\$87.94	\$595.41	\$0.00	\$386.70	\$1,689.85
DPJT / Driveway Pipe - Jetted	230	\$5,124.40	\$4,258.60	\$1,014.90	\$0.00	\$3,298.20	\$13,696.10
DPRPL / Driveway Pipe - Replaced	50	\$1,025.30	\$199.54	\$865.99	\$0.00	\$519.00	\$2,609.83
HAUL / Hauling	300	\$6,786.12	\$4,288.96	\$1,745.99	\$0.00	\$2,220.68	\$15,041.75
HYDR / Hydroseeding	30	\$619.80	\$96.92	\$2,920.41	\$0.00	\$386.70	\$4,023.83
PP / Project Preparation	56	\$1,397.16	\$205.19	\$133.16	\$0.00	\$599.46	\$2,334.97
RB / Remove blockage from flowline	30	\$619.80	\$112.71	\$24.60	\$0.00	\$386.70	\$1,143.81
RSDCL / Roadside Ditch - Cleanout	717	\$15,221.62	\$3,478.48	\$1,453.86	\$0.00	\$8,895.63	\$29,049.59
UTLOC / Utility locates	4.5	\$98.06	\$0.00	\$0.00	\$0.00	\$0.00	\$98.06
2019-574 / Telfair Subdivision Sub Total	1,625.50	\$35,648.30	\$14,081.45	\$9,255.79	\$1,940.90	\$18,648.65	\$79,575.08
Grand Total	1,625.50	\$35,648.30	\$14,081.45	\$9,255.79	\$1,940.90	\$18,648.65	\$79,575.08

Before

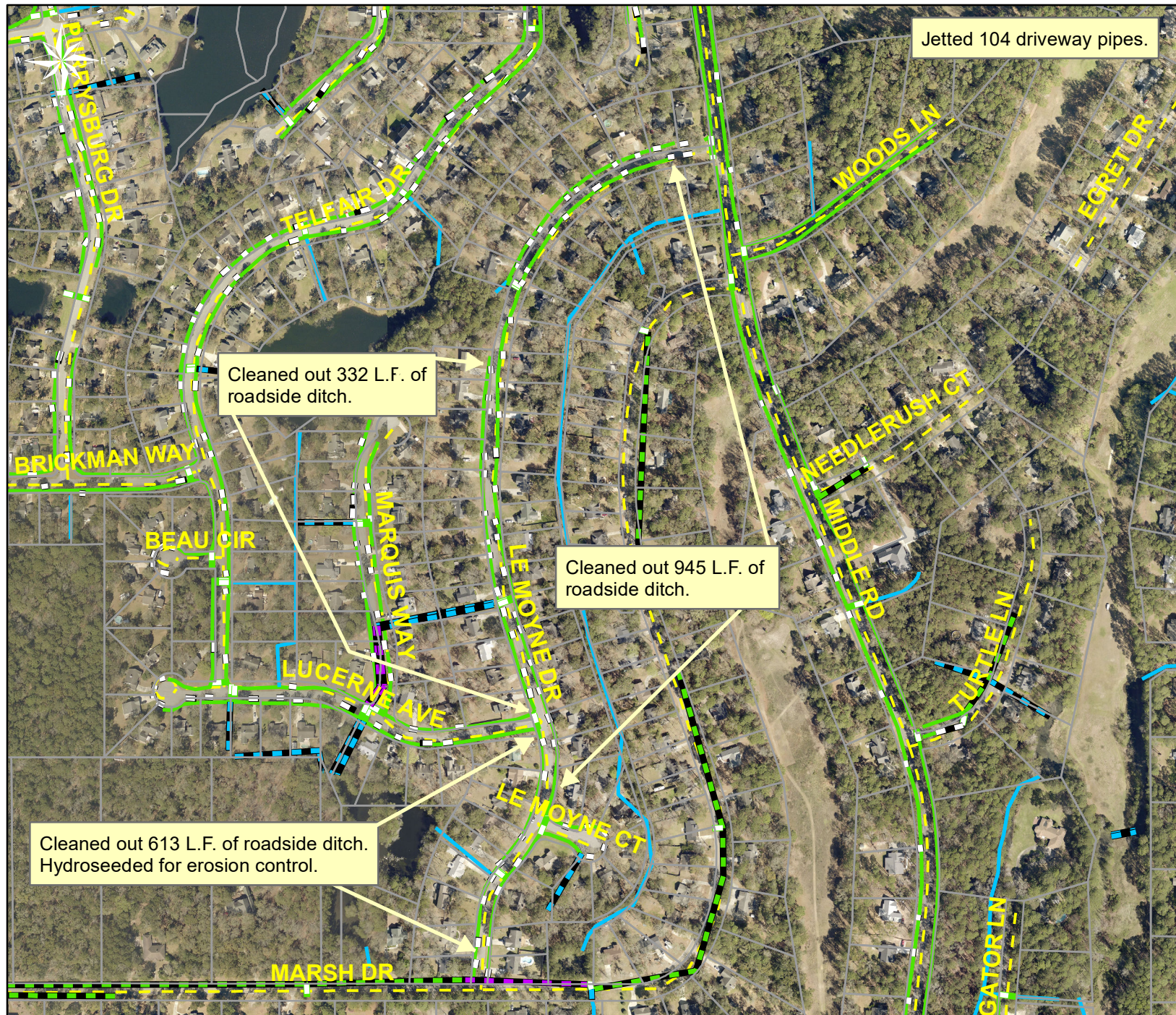


During



After





Project: Telfair
Subdivision-
Le Moyne Drive
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 100 200 400 600 800
Feet

1 inch = 420 feet

Prepared By: BC Stormwater Management Utility
Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Le Moyne Drive Map #1_2019-574



Project: Telfair Subdivision-
Lucerne Avenue,
Le Moyne Drive
and Telfair Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 45 90 180 270 360
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Lucerne Avenue, Le Moyne Dr and Telfair Dr Map #2_2019-574



Project: Telfair
Subdivision- Telfair
Drive
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- - - Crossline Pipe
- - - Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- - - Roadside Pipe

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Telfair Drive Map #3_2019-574



Project: Telfair
Subdivision-
Sherwood Drive
Map #4

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility
Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Sherwood Drive Map#4_2019-574



Project: Telfair
Subdivision-
Ogden Court
Map #5

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility
Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Ogden Court Map #5_2019-574



Project: Telfair
Subdivision-
Brickyard Hills
Court and
Brickman Way
Map #6

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 55 110 220 330 440
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Brickyard Hills Court and Brickman Way Map#6_2019-574



Project: Telfair
Subdivision-
Lucerne Avenue,
Le Moyne Drive
and Marquis Way
Map #7

Activity: Routine/
Preventive
Maintenance

Project #:
2019-574

Township/SW Dist:
Lady's Island/7

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/10/20

File: C:\project summaries map\Telfair Subdivision- Lucerne Ave, Le Moyne Dr and Marquis Way Map #7_2019-574



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Providence Road

Activity: Routine/Preventive Maintenance

Duration: 06/10/19-07/30/19

Narrative Description of Project:

Project improved 2,997 L.F. of drainage system. Grubbed and cleared 560 L.F. of workshelf. Cleaned out 2,337 L.F. of channel. Installed 100 L.F. of channel pipe and rip rap for erosion control.

2019-572 / Providence Rd	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$43.58	\$0.00	\$0.00	\$0.00	\$0.00	\$43.58
BKFILL / Back Fill	56.0	\$1227.24	\$427.15	\$80.26	\$0.00	\$594.00	\$2328.65
CCO / Channel - cleaned out	147.0	\$3087.88	\$579.44	\$276.26	\$0.00	\$1599.12	\$5542.70
CPI / Channel Pipe - Installation	123.0	\$3238.48	\$567.95	\$3014.01	\$0.00	\$973.02	\$7,793.45
HAUL / Hauling	134.0	\$3146.95	\$1864.87	\$1893.23	\$0.00	\$938.55	\$7843.60
PRRECON / Project Reconnaissance	15.0	\$309.90	\$19.20	\$6.39	\$0.00	\$193.35	\$528.84
STAGING / Staging Materials/Equipment	65.0	\$1,416.60	\$192.31	\$138.28	\$0.00	\$802.53	\$2,549.72
WSGRB / Workshelf - Grubbed	50.0	\$1,098.62	\$513.81	\$134.46	\$0.00	\$524.04	\$2,270.93
2019-572 / Providence Rd Sub Total	592.0	\$13,569.25	\$4,164.73	\$5,542.89	\$0.00	\$5,624.61	\$28,901.47
Grand Total	592.0	\$13,569.25	\$4,164.73	\$5,542.89	\$0.00	\$5,624.61	\$28,901.47

Before

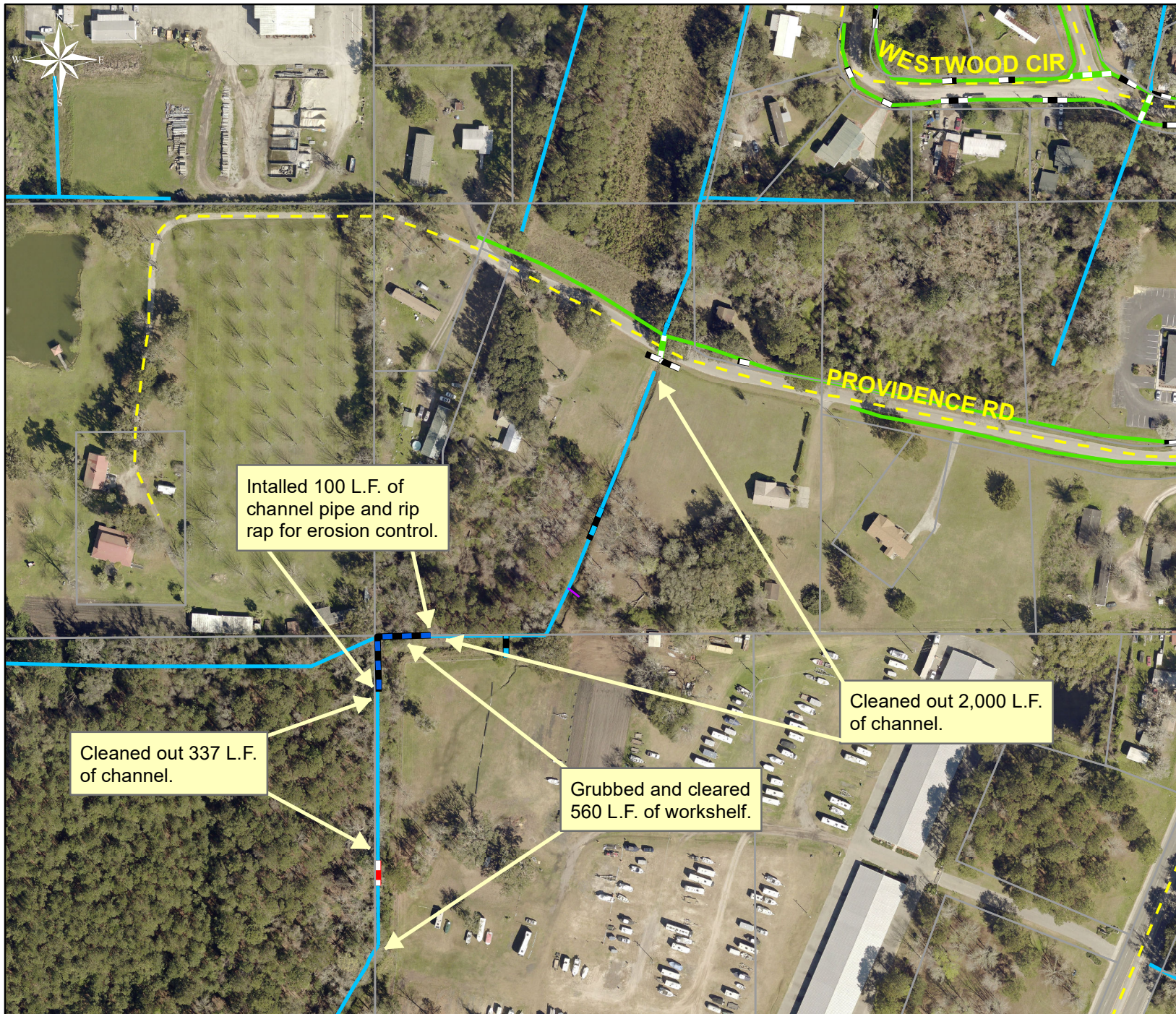


During



After

(No Picture Available)



Project: Providence Road

Activity: Routine/
Preventive
Maintenance

Project #:
2019-572

Township/SW Dist:
Port Royal Island/9

Completed:
July 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/03/20

File: C:\project summaries map\Providence Road_2019-572



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Port Royal Island Bush Hog

Activity: Routine/Preventive Maintenance

Duration: 07/08/19-11/14/19

Narrative Description of Project:

First Rotation: 07/08/19-11/14/19 Project improved 66,073 L.F. of drainage system. Bush hogged 66,073 L.F. of channel. This project consisted of the following areas: Rice Road (916 L.F.), Donaldson Camp Road (143 L.F.), Sammie Lane (784 L.F.), Leo Green Road (1,415 L.F.), Broad River Boulevard (920 L.F.), Possum Hill Road (900 L.F.), Burton Wells Road (7,428 L.F.), Burton Wells Park (5,170 L.F.), VFW Fairground (63 L.F.), Josephine Drive (235 L.F.), Blackburn Pierce Drive (159 L.F.), Franklin Drive (2,233 L.F.), Brilliant Lane (685 L.F.), Pine Grove Road (1,561 L.F.), Donaldson Drive (1,567 L.F.), County Shed Road (844 L.F.), Mamie Frazer Lane (471 L.F.), Peace Haven Drive (452 L.F.), Godwin Road (333 L.F.), Powell Drive (2,905 L.F.), Roseida Road (1,914 L.F.), Roseida Road Ext (2,401 L.F.), Lawson Road (663 L.F.), Zehm (7,820 L.F.), Bay Pines Road (3,013 L.F.), Schein Loop (2,128 L.F.), MrOz Road (1,170 L.F.), Pelican Circle (76 L.F.), Irongate Drive (217 L.F.), Capehart Circle (478 L.F.), Parker Drive (2,671 L.F.), Young Circle (1,096 L.F.), Gillison Loop (396 L.F.), Hobcaw Drive (1,232 L.F.), Delaney Circle (1,262 L.F.), Squash Court (485 L.F.), Island Tank Road (222 L.F.), Poppy Hill Road (3,431 L.F.), Gamecock Way (1,424 L.F.), Smalls Hill Road (595 L.F.), Mulrain Road (235 L.F.), Smith Road (100 L.F.), Ihly Farm Road (1,374 L.F.), Moultrie Circle (346 L.F.), Chisholm Hill Road (1,945 L.F.) and Greenleaf Lane (195)

2020-301 / Port Royal Island Bush Hog

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$43.58	\$0.00	\$0.00	\$0.00	\$0.00	\$43.58
CBH / Channel- bushhogged	998.0	\$20,281.05	\$12,041.71	\$2,818.75	\$0.00	\$7,358.17	\$42,499.68
2020-301 / Port Royal Island Bush Hog Sub Total	1000.0	\$20,324.63	\$12,041.71	\$2,818.75	\$0.00	\$7,358.17	\$42,543.26
Grand Total	1000.0	\$20,324.63	\$12,041.71	\$2,818.75	\$0.00	\$7,358.17	\$42,543.26

Before



During



After





Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Vacuum Truck

Marsh Hawk Drive, Telfair Drive, Fiddler Drive, Stellata Lane, Paul Heyward Drive, Old Distant Island Road, Ethel Grant Lane, Friendship Lane, Honeysuckle Lane, Needlerush Court, Deveaux Road, Marsh Drive, Ashley Drive, Factory Creek Road, Woodbine Drive, Blythewood Road, Shorts Landing Road, Wiggins Road, Miller Drive E, Fairfield Road, Faculty Drive, Rue Du Bois, Dore Drive, Mockingbird Drive, Wade Hampton Drive, Meadowlark Street, Ogden Court and Reeds Road

Activity: Routine/Preventive Maintenance

Duration: 02/17/19-06/26/19

Narrative Description of Project:

Project improved 1,897 L.F. of drainage system. Cleaned out (69) catch basins and (7) manholes. Jetted (1) access pipe, (24) crossline pipes, (13) driveway pipes, 368 L.F. of channel pipe and 1,529 L.F. of roadside pipe.

2019-307A / Lady's Island Vacuum Truck	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$43.58	\$0.00	\$0.00	\$0.00	\$0.00	\$43.58
CBCO / Catch basin - clean out	227.8	\$5,074.81	\$4,397.22	\$820.02	\$0.00	\$3,147.56	\$13,439.60
CLPJT / Crossline Pipe - Jetted	54.0	\$1,200.16	\$1,034.64	\$215.82	\$0.00	\$676.68	\$3,127.30
CPJ / Channel Pipe - Jetted	16.0	\$356.48	\$306.56	\$83.28	\$0.00	\$229.44	\$975.76
DPJT / Driveway Pipe - Jetted	66.0	\$1,469.37	\$1,264.56	\$215.88	\$0.00	\$909.81	\$3,859.62
RSPJ / Roadside Pipe - Jetted	16.0	\$356.48	\$306.56	\$79.50	\$0.00	\$229.44	\$971.98
2019-307A / Lady's Island Vacuum Truck Sub Total	381.8	\$8,500.88	\$7,309.54	\$1,414.49	\$0.00	\$5,192.93	\$22,417.84
Grand Total	381.8	\$8,500.88	\$7,309.54	\$1,414.49	\$0.00	\$5,192.93	\$22,417.84

Before



During



After





Project: Marsh Hawk Drive Map #1

Activity: Routine/ Preventive Maintenance

Project #: 2019-307A

Township/SW Dist: Lady's Island/7

Completed: June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200 Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility
Date Print:08/15/19
File:C:\project summaries map\Marsh Hawk Drive Map #1_2019-307A



Project: Telfair
Drive Map #2

Activity: Routine/
Preventive
Maintenance














Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Telfair Drive Map #2_2019-307A



Project: Fiddler
Drive Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Fiddler Drive Map #3_2019-307A



Project: Stellata
Lane Map #4

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Stellata Lane Map #4_2019-307A



Project: Paul
Heyward Drive
Map #5

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

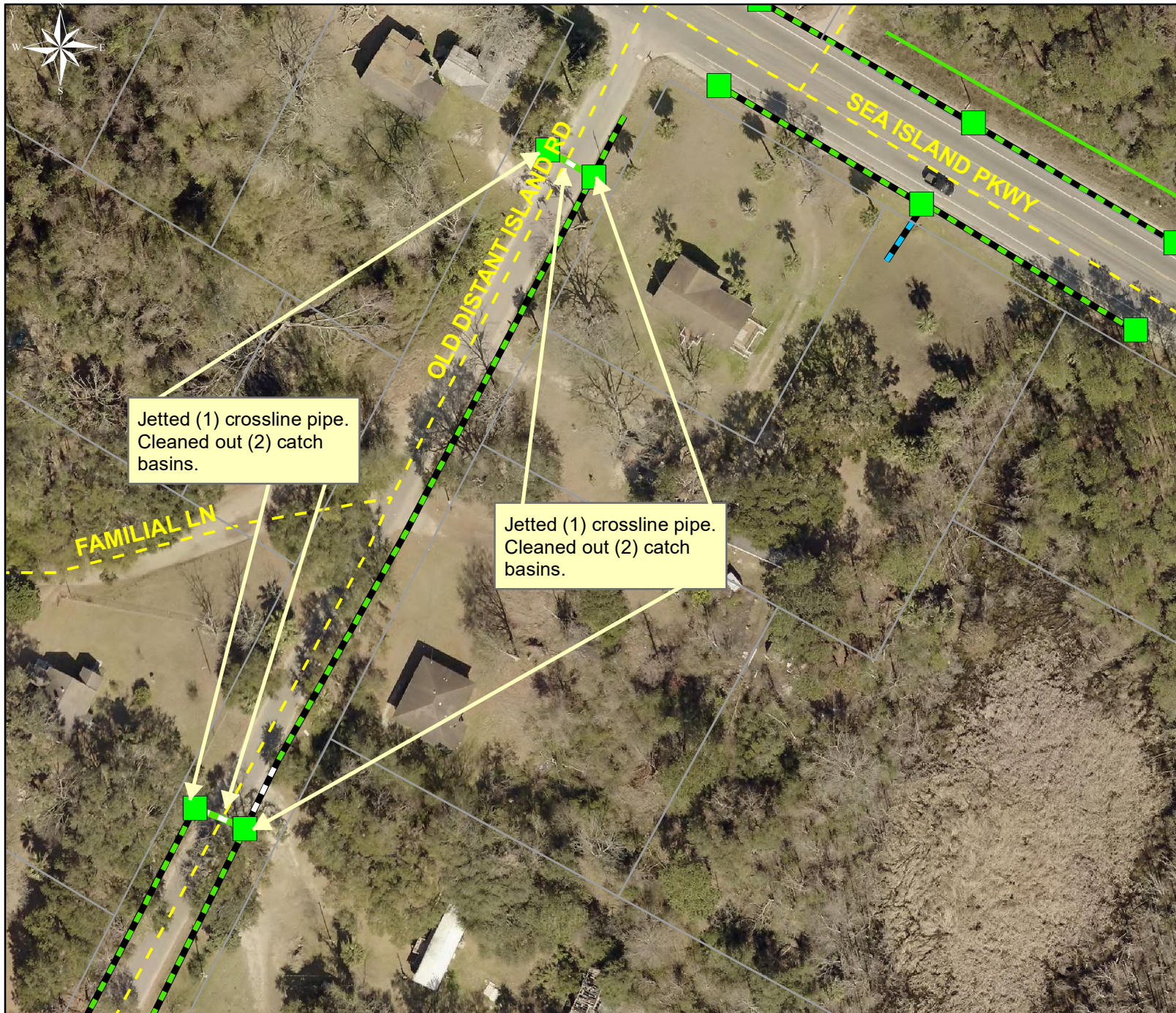
Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 10 20 40 60 80
Feet

1 inch = 42 feet

Prepared By: BC Stormwater Management Utility
Date Print:08/15/19
File:C:\project summaries map\Paul Heyward Drive Map #5_2019-307A



Project: Old Distant
Island Road
Map #6

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19
File: C:\project summaries map\Old Distant Island Road Map #6_2019-307A





Project: Lady's Island
Vacuum Truck -
Friendship Lane
Map #8

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 5 10 20 30 40
Feet

1 inch = 33 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Lady's Island Vacuum Truck - Friendship Lane Map #8_2019-307A



Project: Friendship Lane Map #9

Activity: Routine/ Preventive Maintenance

Project #: 2019-307A

Township/SW Dist: Lady's Island/7

Completed: June 2019

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Friendship Lane Map #9_2019-307A



Project: Honeysuckle Lane Map #10

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Honeysuckle Lane Map #10_2019-307A

Project: Needlerush
Court - Map #11

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Needlerush Court Map #11_2019-307A



Project: Deveaux
Road Map #12

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 77 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Deveaux Road Map #12_2019-307A

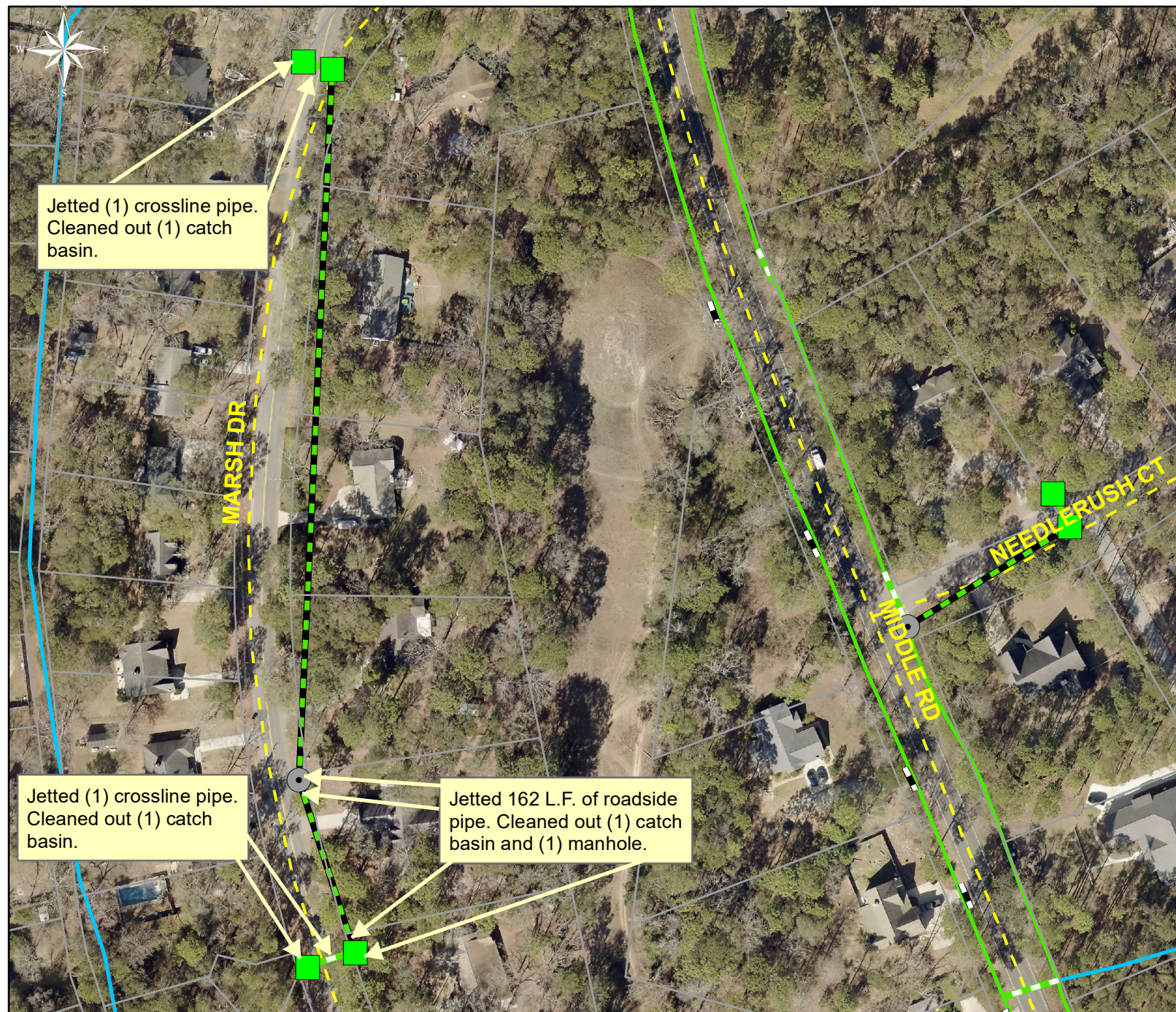
Project: Marsh
Drive Map #13

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19
File: C:\project summaries map\Marsh Drive Map #13_2019-307A

Project: Marsh
Drive Map #14

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Marsh Drive Map #14_2019-307A

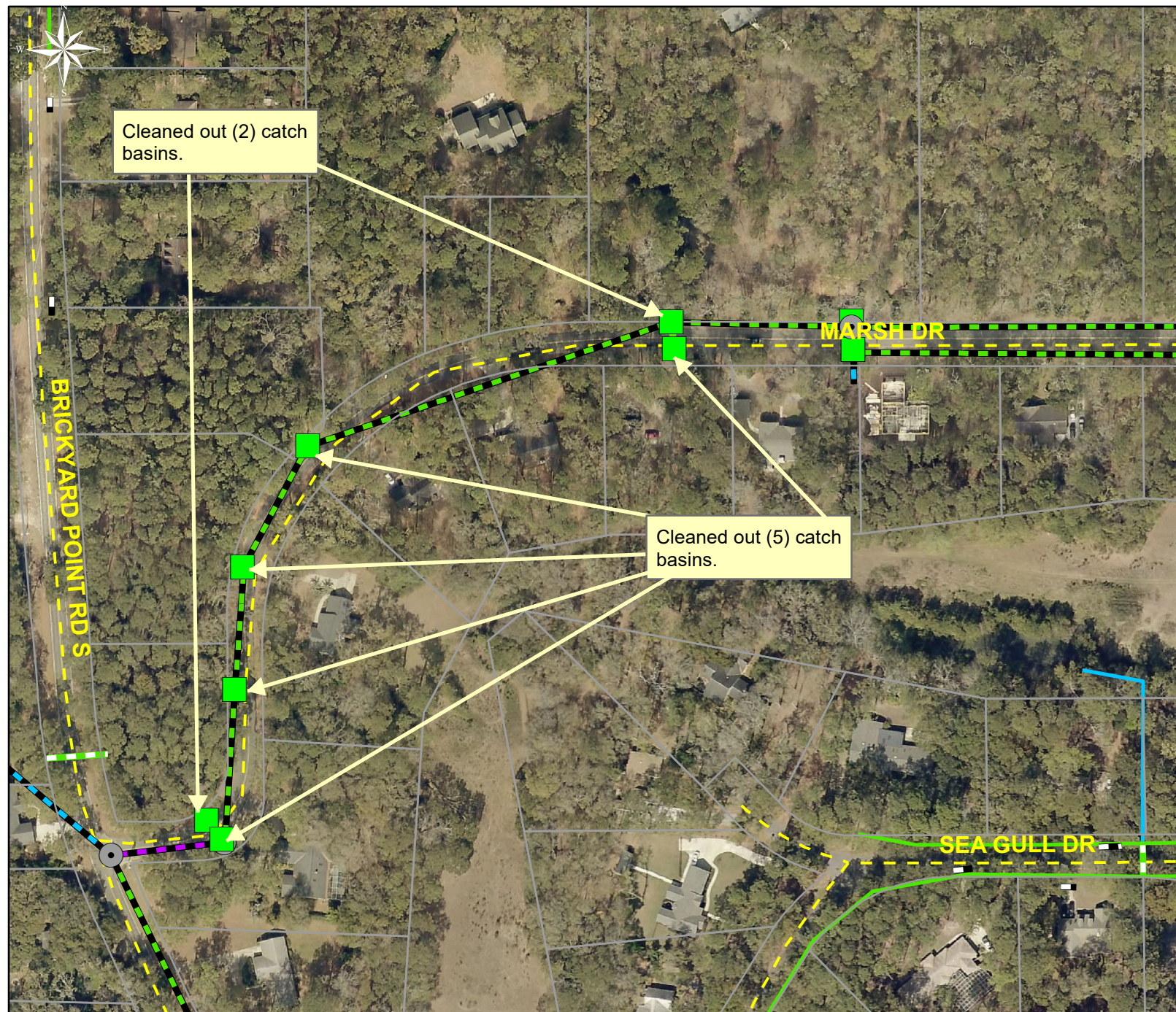
Project: Marsh
Drive Map #15

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19














File: C:\project summaries map\Marsh Drive Map #15_2019-307A



Prepared By: BC Stormwater Management Utility
Date Print:08/15/19
File:C:\project summaries map\Marsh Drive Map #16_2019-307A

Completed:
June 2019

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe



Project: Factory
Creek Road
Map #17

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Factory Creek Road Map #17_2019-307A

Project: Ashley
Drive Map #18

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A














Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 10 20 40 60 80
Feet

1 inch = 50 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Ashley Drive Map #18_2019-307A

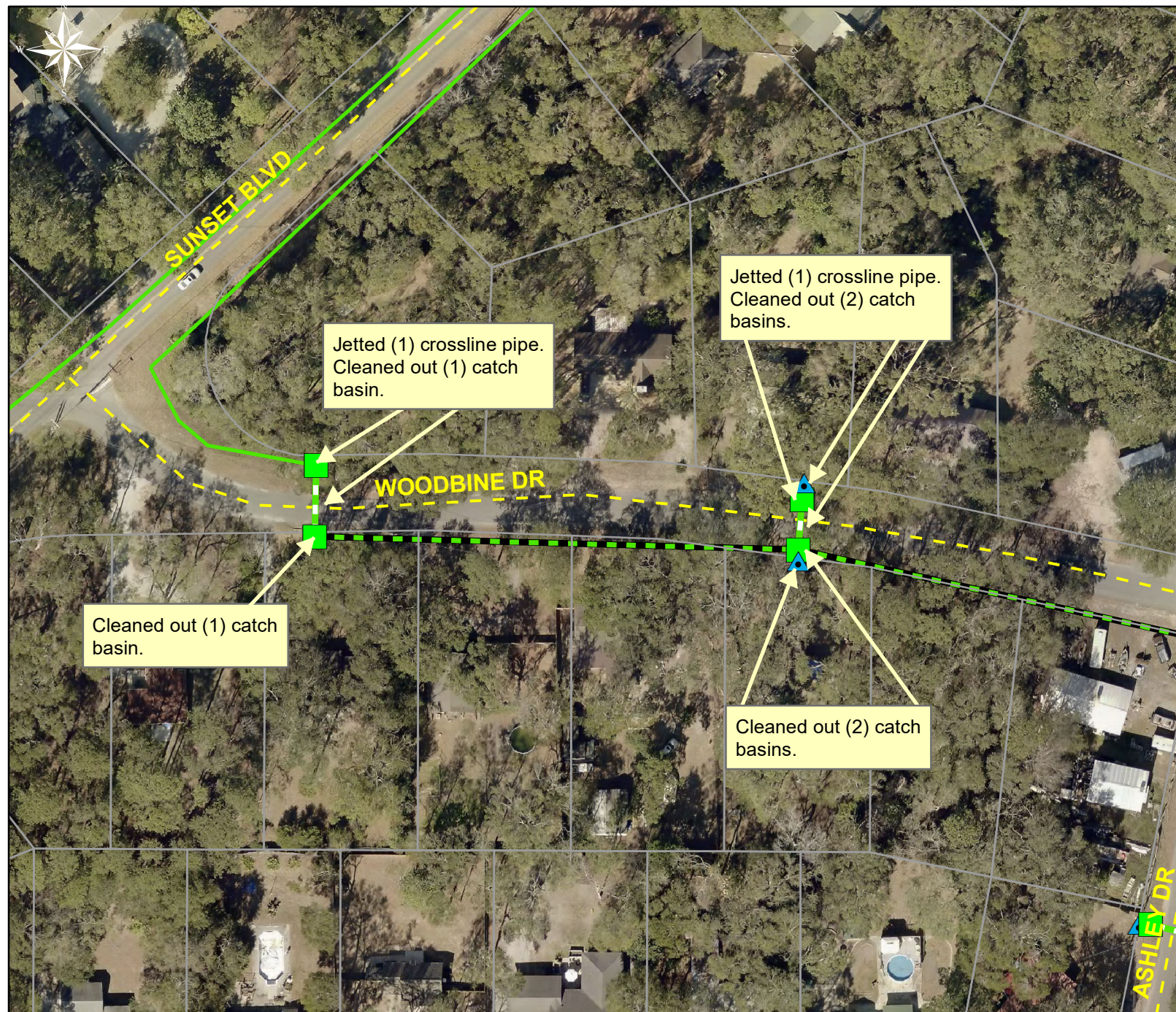
Project: Woodbine
Drive Map #19

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 91 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Woodbine Drive Map #19_2019-307A



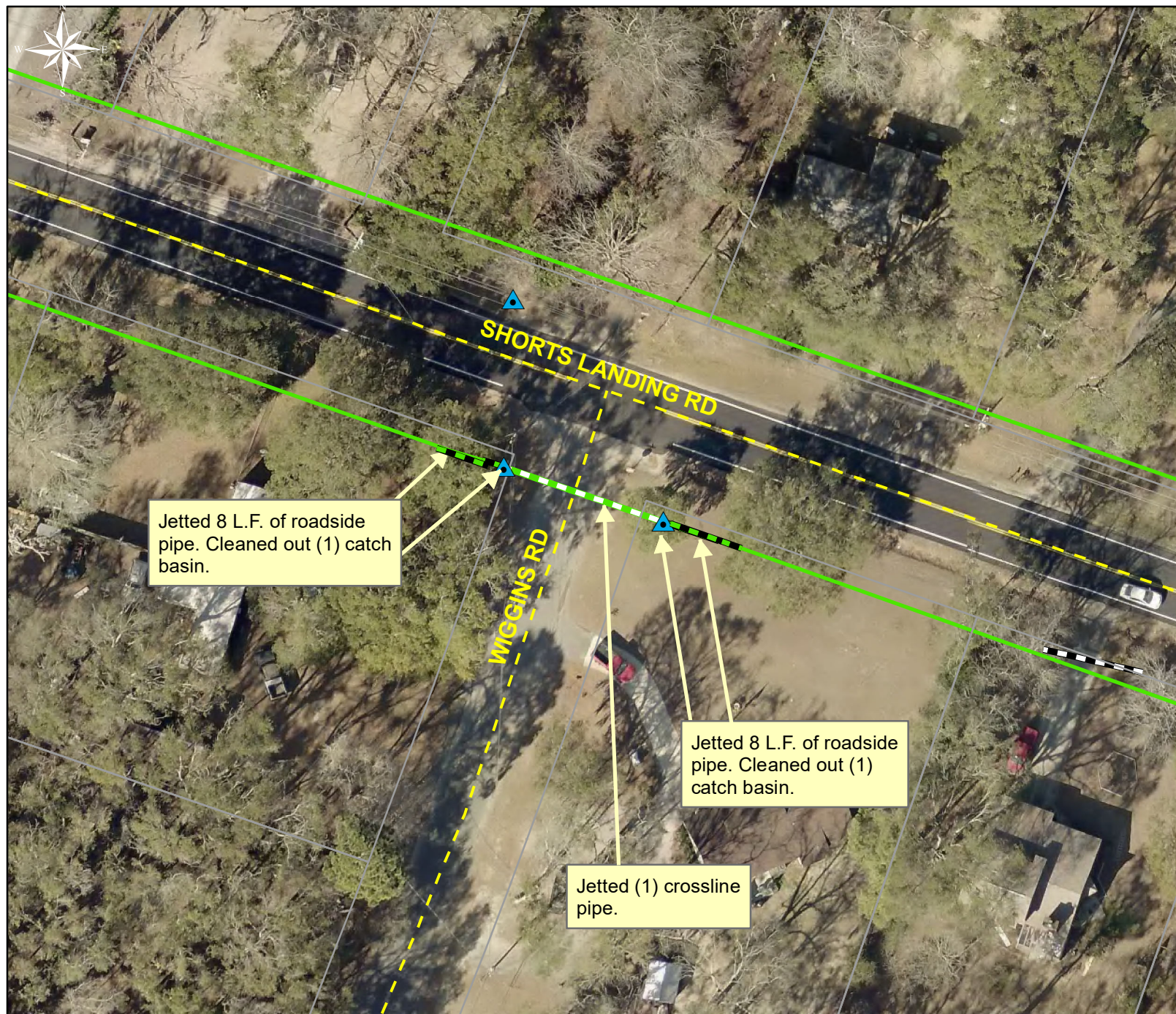
Project: Shorts
Landing Road
and Wiggins
Road Map #21

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 10 20 40 60 80
Feet

1 inch = 50 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Shorts Landing Road and Wiggins Road Map #21_2019-307A



Project: Shorts
Landing Road
Map #22

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 5 10 20 30 40
Feet

1 inch = 33 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Shorts Landing Road Map #22_2019-307A

Project: Miller Drive E Map #23

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

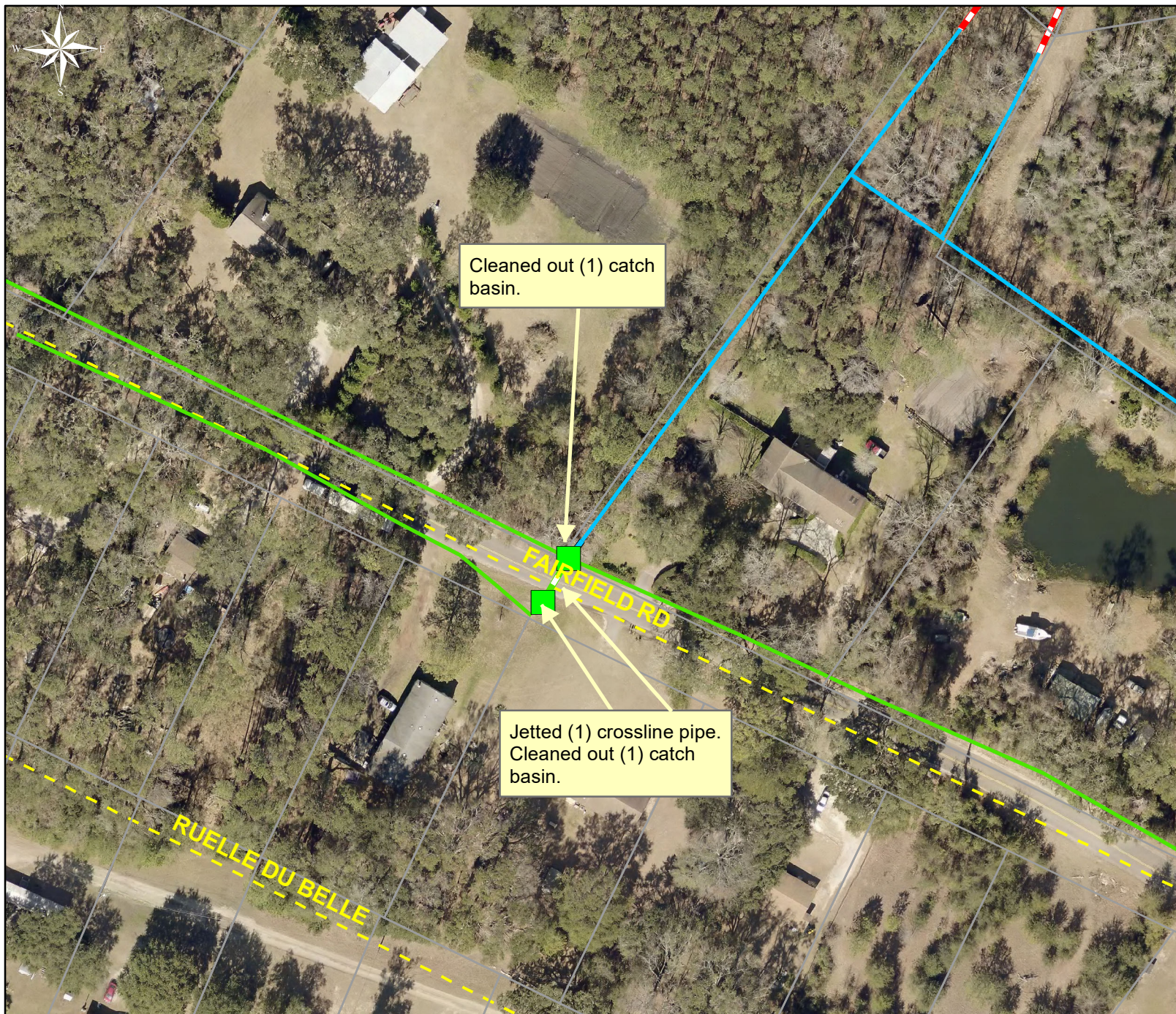
0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Miller Drive E Map #23_2019-307A



Project: Fairfield Road Map #24

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Fairfield Road Map #24_2019-307A



Project: Faculty
Drive Map #25

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Faculty Drive Map #25_2019-307A

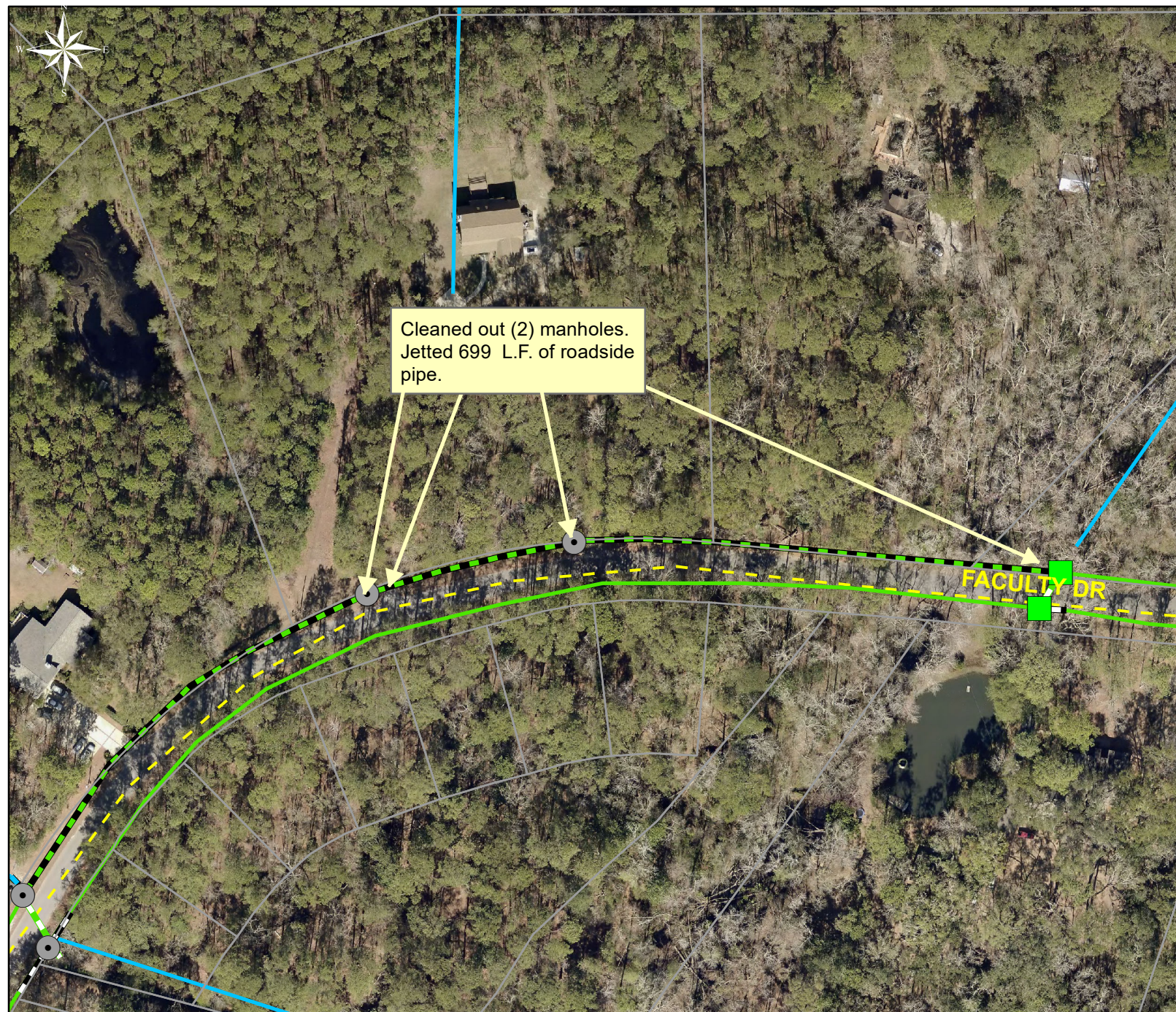
Project: Faculty
Drive Map #26

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

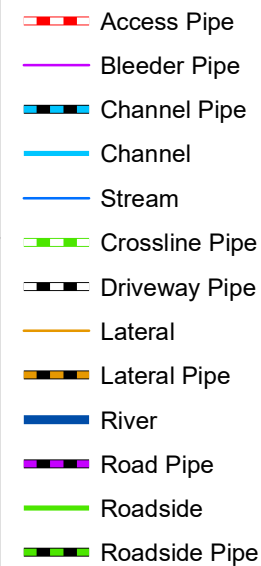
1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Faculty Drive Map #26_2019-307A

Completed:
June 2019



Prepared By: BC Stormwater Management Utility
Date Print:08/15/19
File:C:\project summaries map\Rue Du Bois Map #27_2019-307A

Project: Dore Drive
Map #28

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19
File: C:\project summaries map\Dore Drive Map #28_2019-307A

Project: Dore Drive
Map #29

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

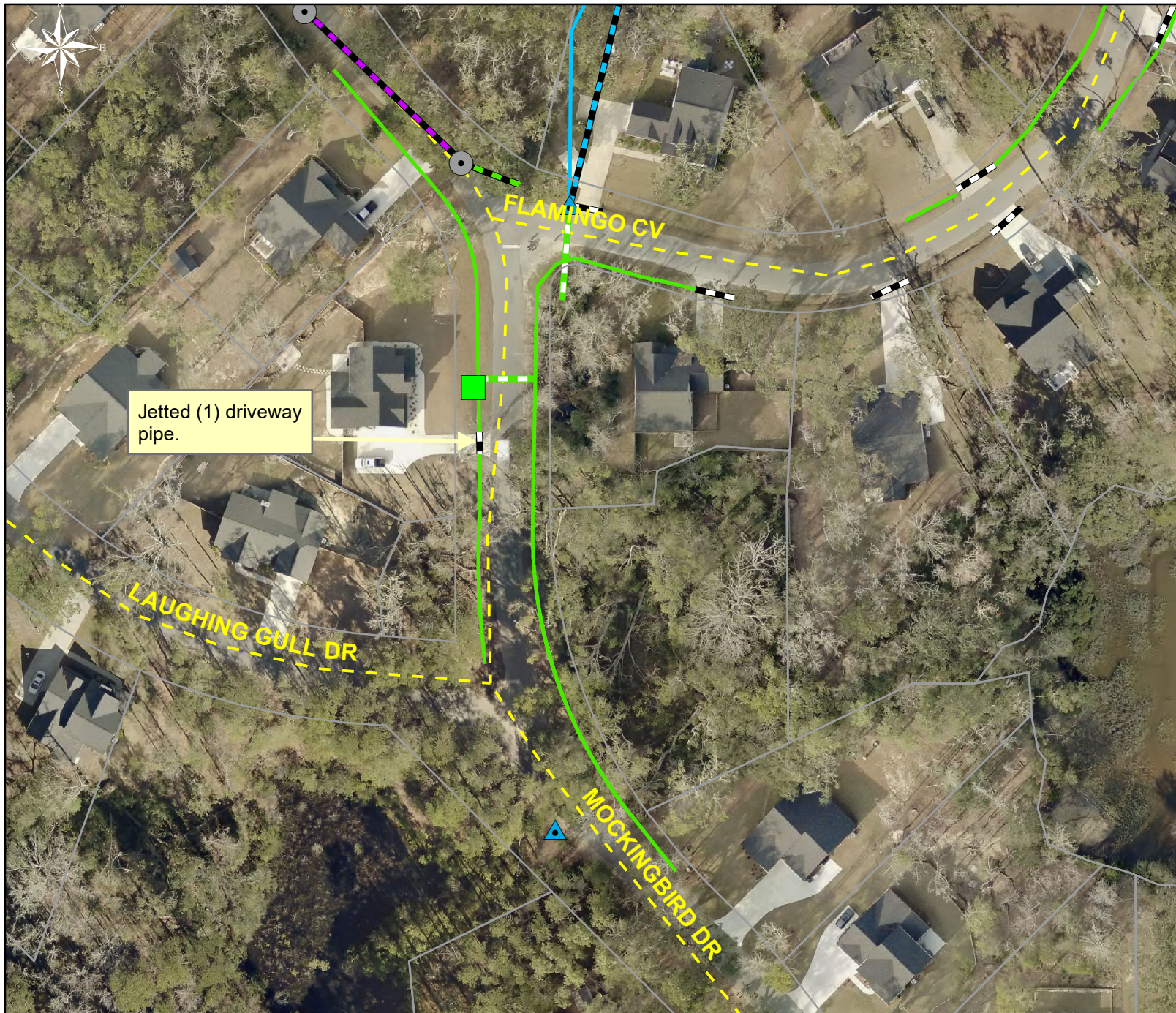


0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19

File: C:\project summaries map\Dore Drive Map #29_2019-307A



Project:
Mockingbird Drive
Map #30

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

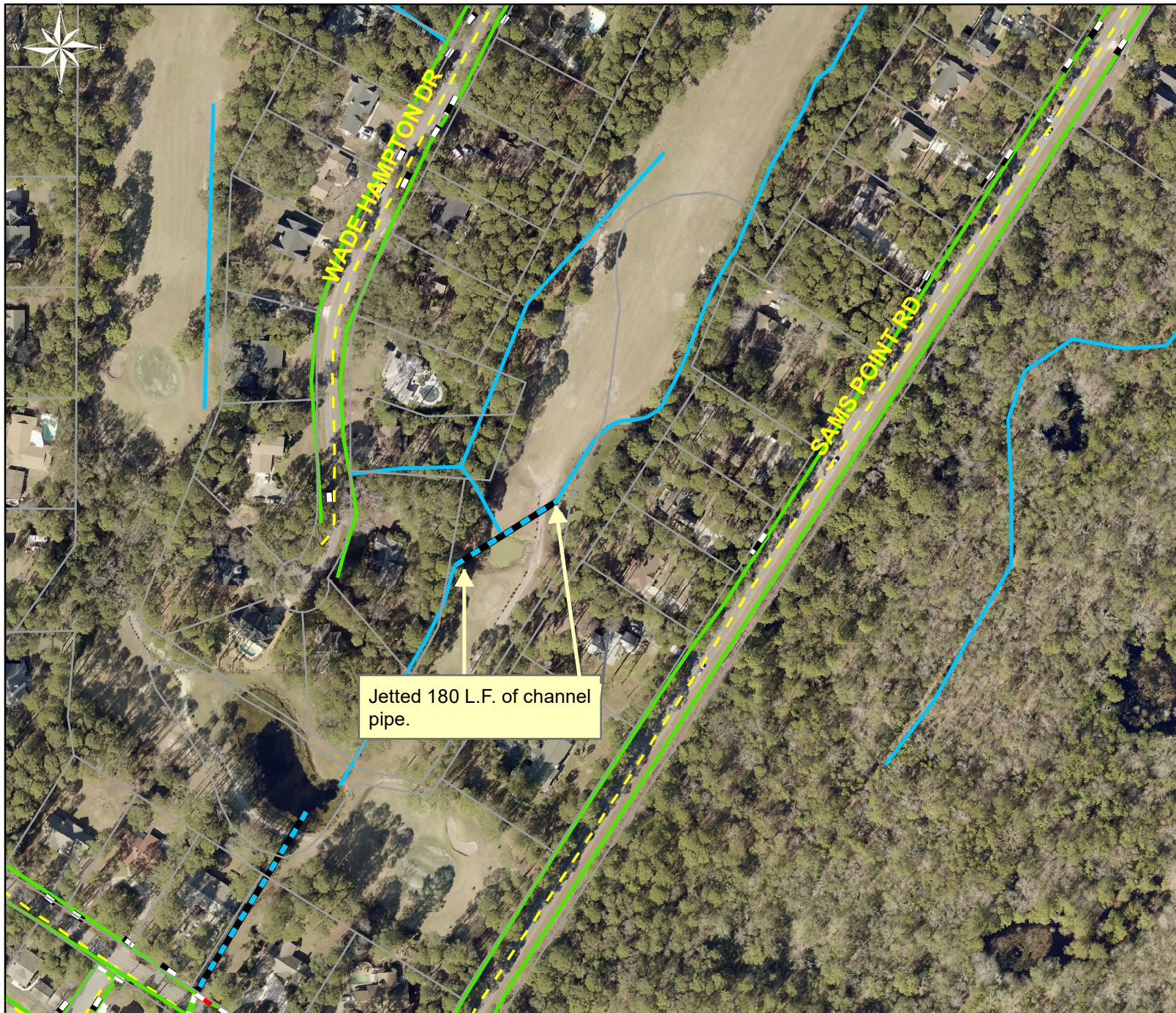
0 20 40 80 120 160
Feet

1 inch = 89 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Mockingbird Drive Map #30_2019-307A



Project: Wade Hampton Drive Map #31

Activity: Routine/ Preventive Maintenance

Project #: 2019-307A

Township/SW Dist: Lady's Island/7

Completed: June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400 Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Wade Hampton Drive Map #31_2019-307A



Project:
Meadowlark Street
Map #32

Activity: Routine/
Preventive
Maintenance














Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

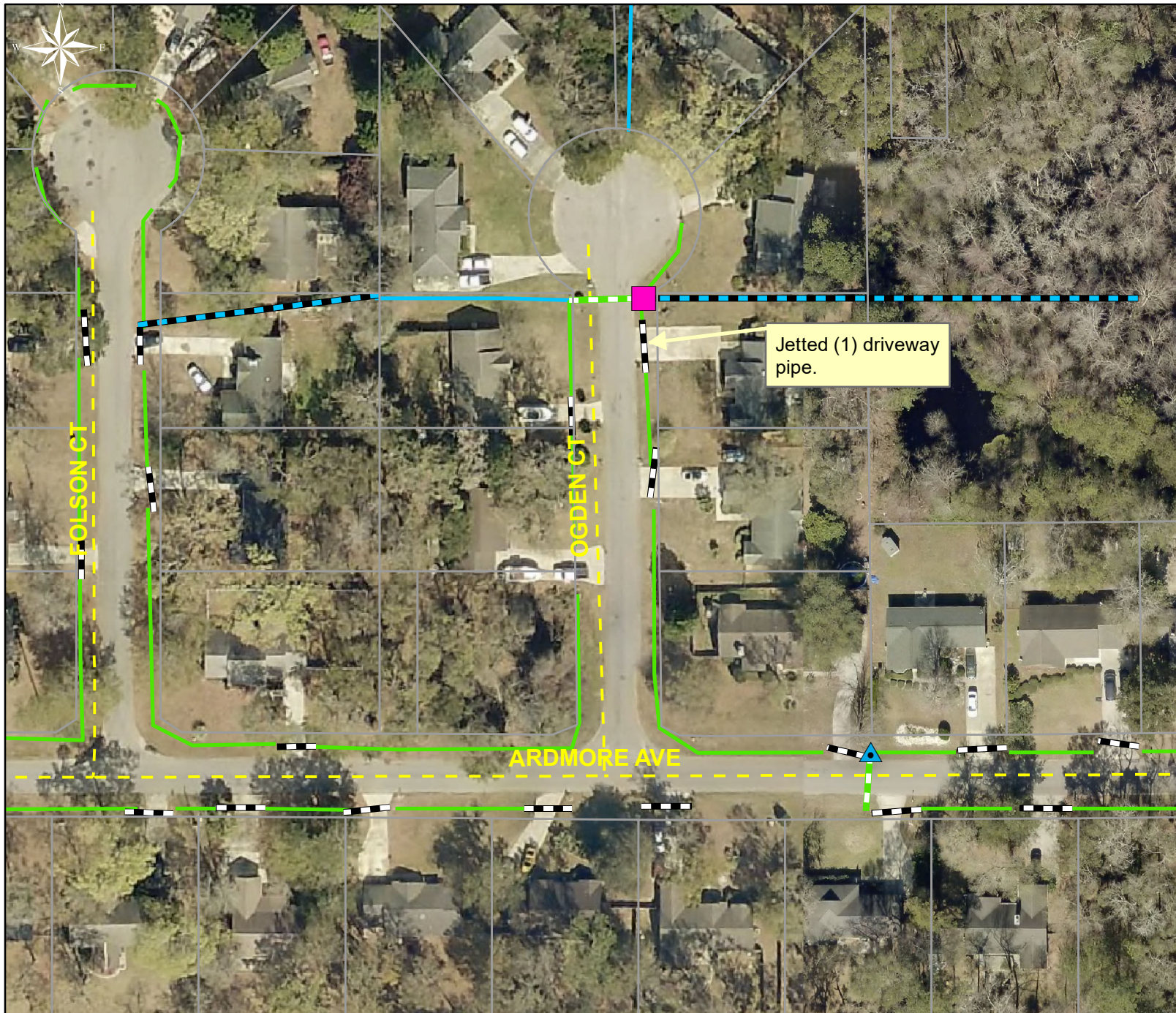
Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19
File: C:\project summaries map\Meadowlark Street Map #32_2019-307A



Project: Ogden
Court Map #33

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/19

File: C:\project summaries map\Ogden Court Map #33_2019-307A

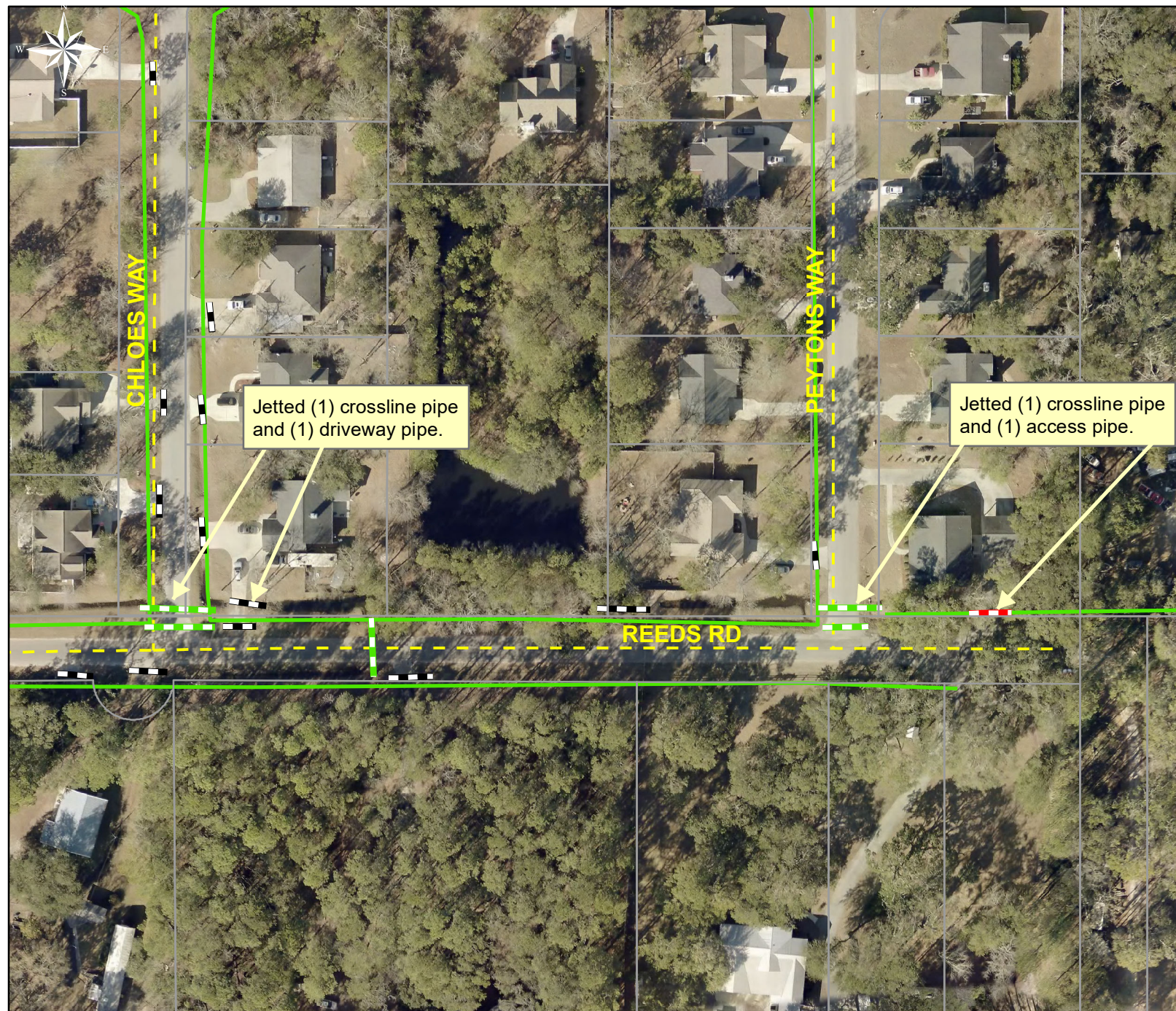
Project: Reeds
Road Map #34

Activity: Routine/
Preventive
Maintenance

Project #:
2019-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2019



Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility
Date Print: 08/15/19
File: C:\project summaries map\Reeds Road Map #34_2019-307A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pond Maintenance

Burton Wells Complex, Turtle Lane, Bluffton Parkway
 Highway 170, Mill Creek, Beaufort County Admin Pond

Activity: Pond Maintenance

Duration: 07/25/19-08/21/19

Narrative Description of Project:

Removed debris from perimeter of pond. Cleaned out (1) catch basin. Dewatered pond to safe elevation. Handseeded for erosion control.

2020-321 / Pond Maintenance

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
HAND / HANDSEEDED	10.0	\$229.90	\$141.60	\$174.09	\$0.00	\$0.00	\$545.59
HAUL / Hauling	50.0	\$1,086.07	\$664.52	\$157.32	\$0.00	\$467.46	\$2,375.37
PM / Ponds - Maintenance	234.0	\$5,855.58	\$1,452.65	\$463.03	\$0.00	\$1,968.80	\$9,740.06
2020-321 / Pond Maintenance Sub Total	295.0	\$7,193.34	\$2,258.77	\$794.44	\$0.00	\$2,436.26	\$12,682.80
Grand Total	295.0	\$7,193.34	\$2,258.77	\$794.44	\$0.00	\$2,436.26	\$12,682.80

Before

During

After

(No Picture Available)





Project: Pond Maintenance-
Burton Wells Complex
Map #1

Activity: Pond Maintenance

Project #:
2020-321

Township/SW Dist:
Port Royal Island/9

Completed:
August 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 110 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/03/20

File: C:\project summaries map\Pond Maintenance- Burton Wells Complex Map #1_2020-321



Project: Pond
Maintenance-
Turtle Lane
Map #2

Activity: Pond
Maintenance

Project #:
2020-321

Township/SW Dist:
Lady's Island/7

Completed:
August 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 94 feet

Prepared By: BC Stormwater Management Utility

Date Print:02/03/20

File:C:\project summaries map/Pond Maintenance- Turtle Lane Map #2_2020-321



Project: Pond Maintenance-
Bluffton Parkway
Pond
Map #3

Activity: Pond
Maintenance

Project #:
2020-321

Township/SW Dist:
Bluffton/4

Completed:
August 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print:02/03/20

File:C:\project summaries map/Pond Maintenance- Bluffton Parkway Pond Map #3_2020-321



Project: Pond
Maintenance-
Highway 170 Pond
Map #4

Activity: Pond
Maintenance

Project #:
2020-321

Township/SW Dist:
Bluffton/4

Completed:
August 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/03/20

File: C:\project summaries map\Pond Maintenance- Highway 170 Pond Map #4_2020-321



Project: Pond
Maintenance-
Mill Creek Pond
Map #5

Activity: Pond
Maintenance

Project #:
2020-321

Township/SW Dist:
Bluffton/4

Completed:
August 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/03/20

File: C:\project summaries map\Pond Maintenance- Mill Creek Pond Map #5_2020-321



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Broad River Drive

Activity: Routine/Preventive Maintenance

Duration: 10/21/19-11/25/19

Narrative Description of Project:

Project improved 700 L.F. of drainage system. Cleaned out 313 L.F. of roadside ditch and 95 L.F. of channel. Jetted 292 L.F. of roadside pipe and (2) crossline pipes. Replaced (1) and repaired (1) catch basin lid. Hydrdosed for erosion control.

2020-020 / Broad River Drive

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$32.69	\$0.00	\$0.00	\$0.00	\$0.00	\$32.69
CBLR / Catch Basin Lid - Replaced	28.0	\$617.75	\$109.29	\$579.95	\$0.00	\$207.90	\$1,514.89
CBLREP / Catch Basin Lid - Repaired	12.0	\$261.04	\$28.80	\$31.97	\$0.00	\$118.80	\$440.61
HAUL / Hauling	20.0	\$445.40	\$283.20	\$294.46	\$0.00	\$288.40	\$1,311.46
HYDR / Hydroseeding	10.0	\$202.75	\$55.32	\$869.73	\$0.00	\$66.15	\$1,193.95
RSDCL / Roadside Ditch - Cleanout	100.0	\$2,096.00	\$370.30	\$108.40	\$0.00	\$396.90	\$2,971.60
RSPJ / Roadside Pipe - Jetted	10.0	\$222.80	\$191.60	\$44.90	\$0.00	\$143.40	\$602.70
UTLOC / Utility locates	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
2020-020 / Broad River Drive Sub Total	182.5	\$3,900.22	\$1,038.51	\$1,929.41	\$0.00	\$1,221.55	\$8,089.69
Grand Total	182.5	\$3,900.22	\$1,038.51	\$1,929.41	\$0.00	\$1,221.55	\$8,089.69

Before

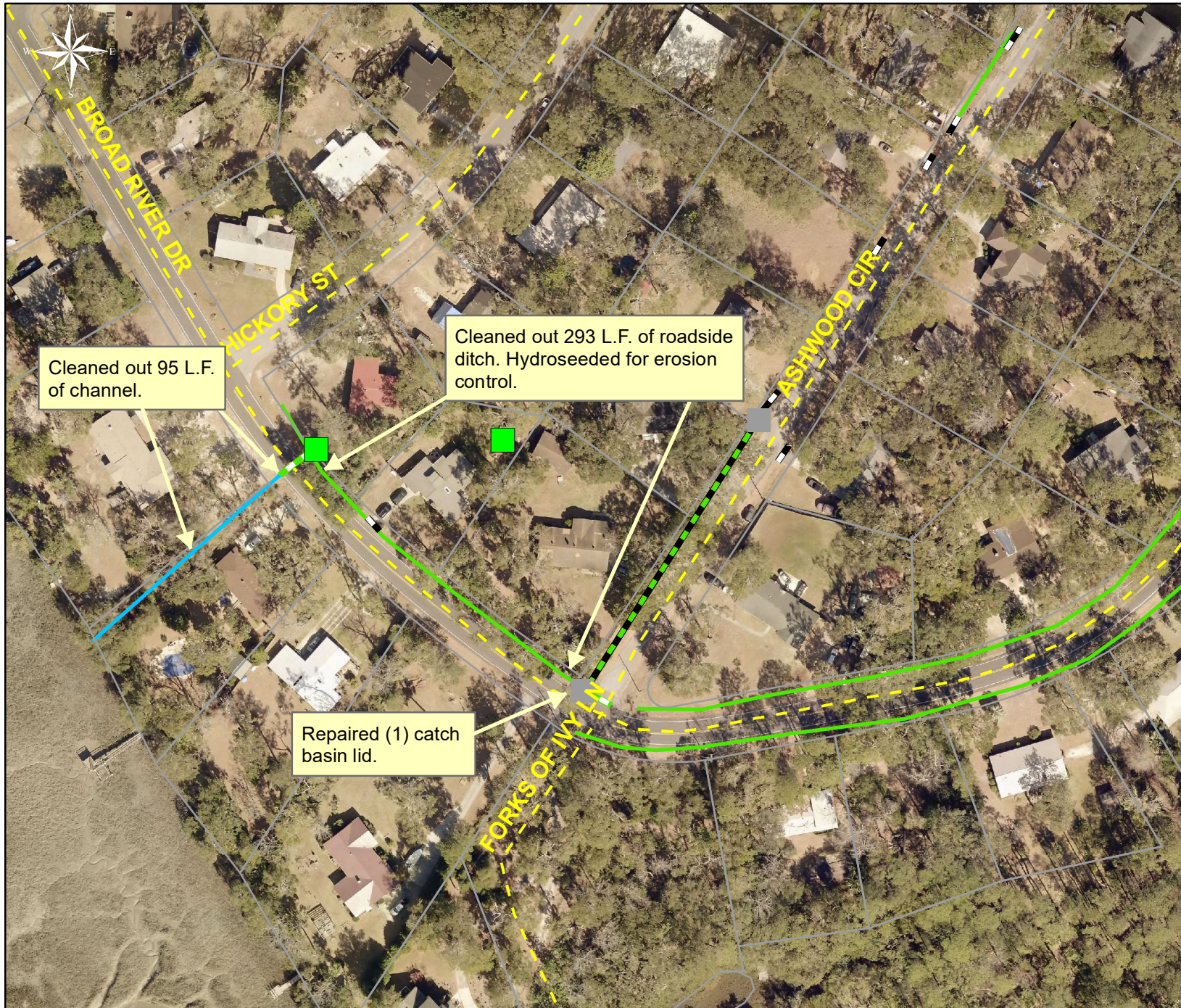


During



After





Project: Broad
River Drive
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2020-020

Township/SW Dist:
Port Royal Island/9

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

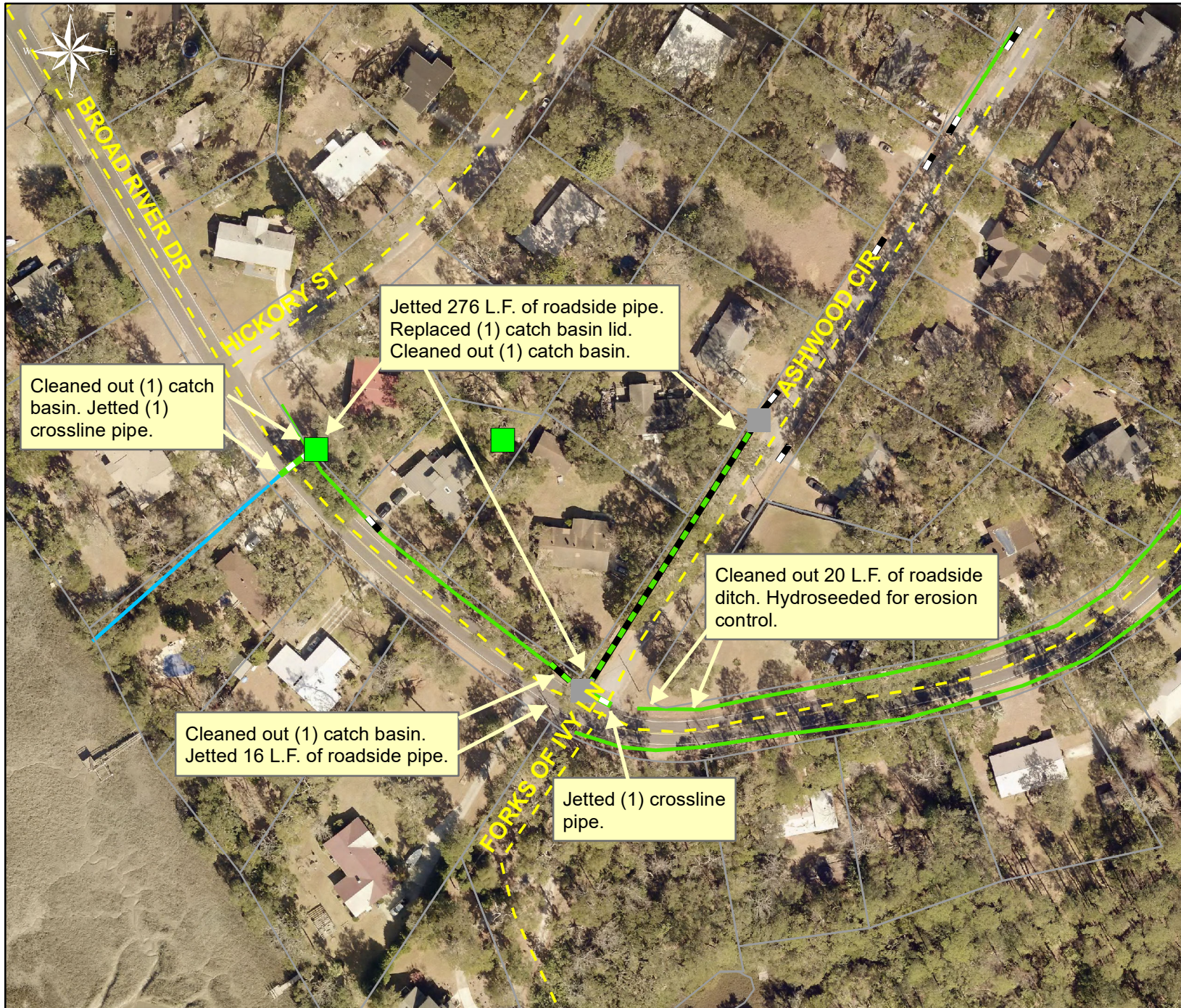
0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/14/20

File: C:\project summaries map\Broad River Drive Map #1_2020-020



Project: Broad
River Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2020-020

Township/SW Dist:
Port Royal Island/9

Completed:
November 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 30 60 120 180 240
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/14/20

File: C:\project summaries map\Broad River Drive Map #2_2020-020



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Vacuum Truck

Gadwall Drive E, Brickyard Hills Drive, Brickman Way, Wade Hampton Drive, Cedar Crest Circle, Dog Creek Road, Thomas Sumter Street, Old Distant Island Road, Ethel Grant Lane, Needlerush Court, Paul Heyward Drive, Airport Circle, Tuscarora Avenue, Holly Hall Road

Activity: Routine/Preventive Maintenance

Duration: 08/27/19-12/17/19

Narrative Description of Project:

Project improved 78 L.F. of drainage system. Cleaned out (14) catch basins. Jetted (4) driveway pipes, (1) access pipe, (12) crossline pipes and 78 L. F. of channel pipe.

2020-307 / Ladys Island Vacuum Truck

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$32.69	\$0.00	\$0.00	\$0.00	\$0.00	\$32.69
CBCO / Catch basin - clean out	24.0	\$534.72	\$459.84	\$86.54	\$0.00	\$344.16	\$1,425.26
CLPJT / Crossline Pipe - Jetted	62.0	\$1,381.36	\$713.68	\$227.98	\$0.00	\$889.08	\$3,212.10
CPJ / Channel Pipe - Jetted	10.0	\$222.80	\$191.60	\$53.70	\$0.00	\$143.40	\$611.50
DPJT / Driveway Pipe - Jetted	16.0	\$356.48	\$306.56	\$87.61	\$0.00	\$229.44	\$980.09
STBY / Stand By	10.0	\$222.80	\$43.40	\$11.55	\$0.00	\$143.40	\$421.15
2020-307 / Ladys Island Vacuum Truck Sub Total	123.5	\$2,750.85	\$1,715.08	\$467.38	\$0.00	\$1,749.48	\$6,682.78
Grand Total	123.5	\$2,750.85	\$1,715.08	\$467.38	\$0.00	\$1,749.48	\$6,682.78

Before



During



After





Project: Lady's
Island Vacuum
Truck- Gadwall
Drive E
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

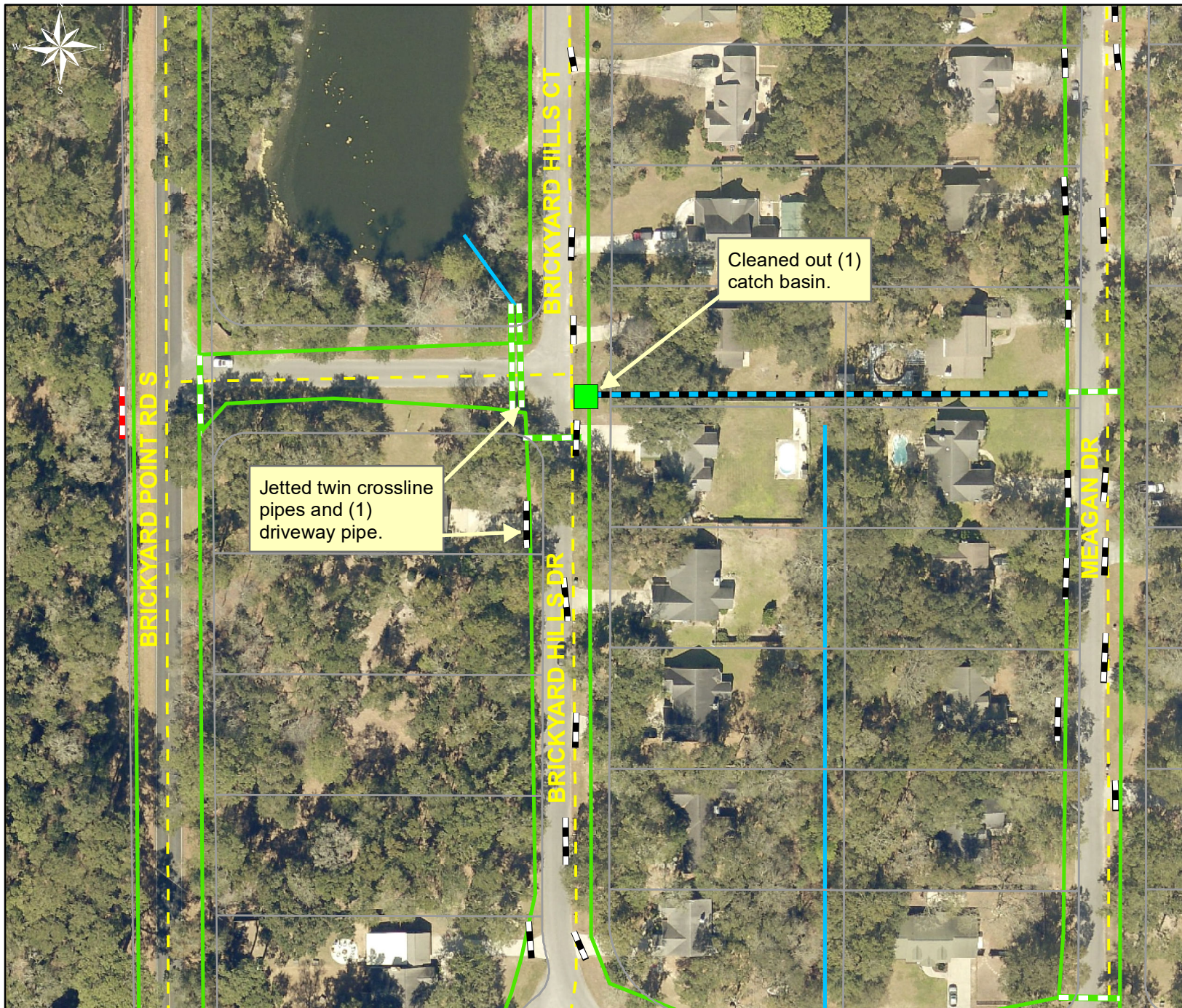
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Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Gadwall Dr. E Map #1_2020-307



Project: Lady's
Island Vacuum
Truck- Brickyard
Hills Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print:01/22/20

File:C:\project summaries map\Lady's Island Vac Truck-Brickyard Hills Dr Map #2_2020-307



Project: Lady's
Island Vacuum
Truck- Brickman
Way
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Brickman Way Map #3_2020-307



Project: Lady's
Island Vacuum
Truck- Wade
Hampton Drive
Map #4

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

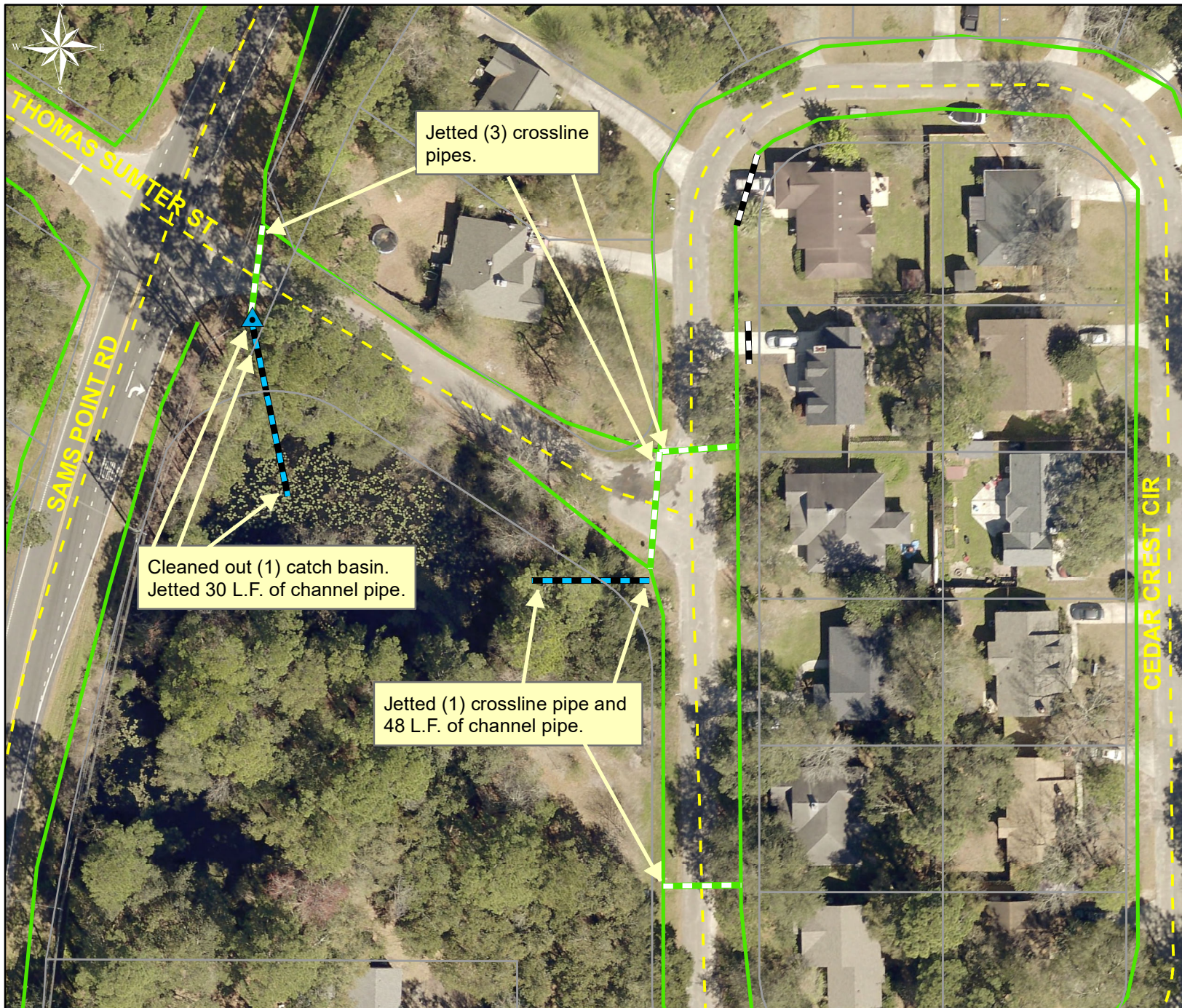
0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Wade Hampton Drive Map #4_2020-307



Project: Lady's
Island Vacuum
Truck- Cedar
Crest Circle
Map #5

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Cedar Crest Circle Map #5_2020-307



Project: Lady's
Island Vacuum
Truck- Thomas
Sumter Street
Map #6

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

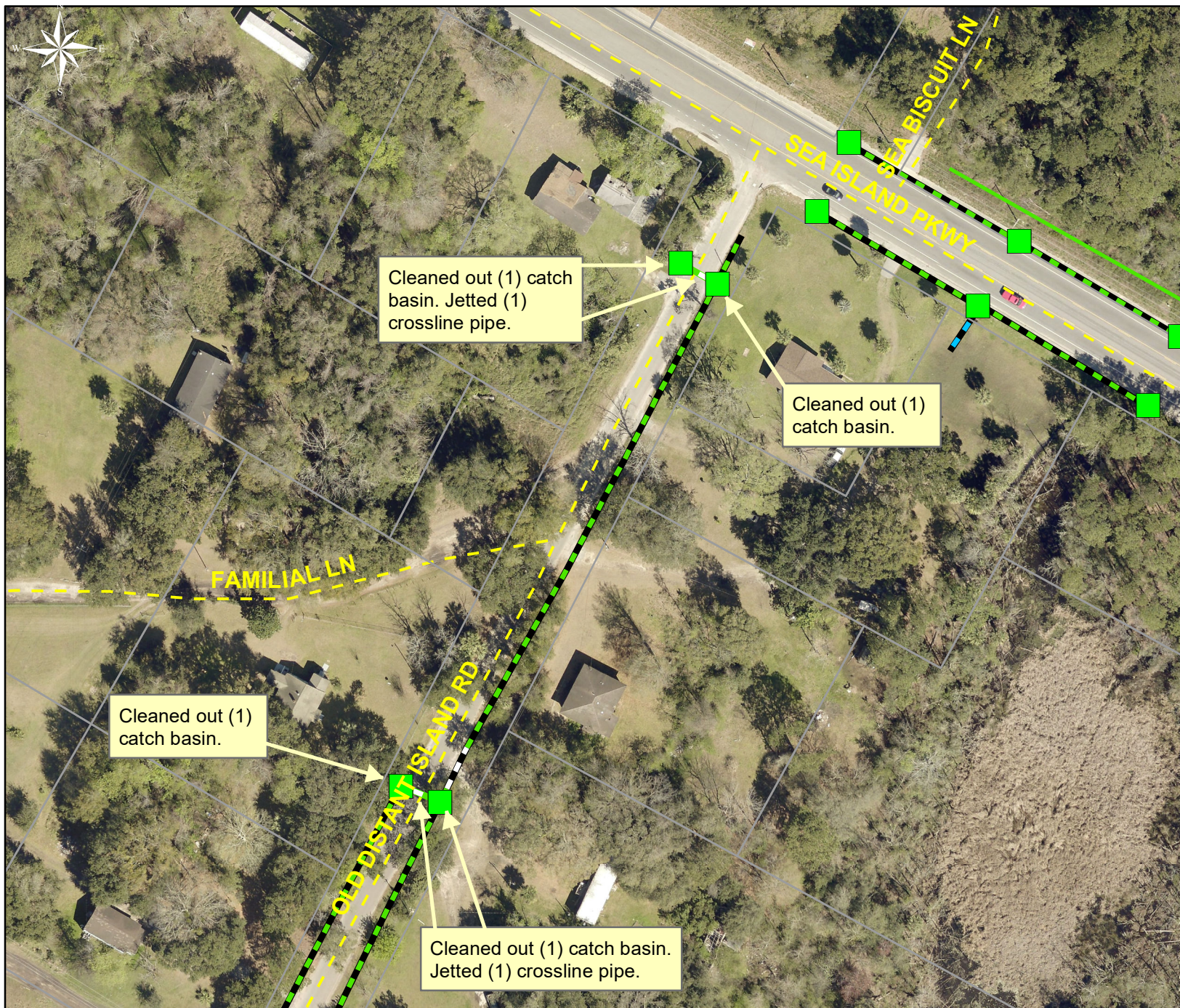
0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print:01/22/20

File:C:\project summaries map\Lady's Island Vac Truck-Thomas Sumter St Map #6_2020-307



Project: Lady's
Island Vacuum
Truck- Old Distant
Island Road
Map #7

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Old Distant Island Rd Map #7_2020-307



Project: Lady's
Island Vacuum
Truck- Dog Creek
Road
Map #8

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print:01/22/20

File:C:\project summaries map/Lady's Island Vac Truck-Dog Creek Rd Map #8_2020-307



Project: Lady's
Island Vacuum
Truck- Ethel Grant
Lane
Map #9

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 10 20 40 60 80
Feet

1 inch = 42 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Ethel Grant Lane Map #9_2020-307



Project: Lady's
Island Vacuum
Truck- Needlerush
Court
Map #10

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 12.525 50 75 100
Feet

1 inch = 62 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Needlerush Court Map #10_2020-307



Project: Lady's Island Vacuum Truck- Paul Heyward Drive Map #11

Activity: Routine/ Preventive Maintenance

Project #: 2020-307

Township/SW Dist: Lady's Island/7

Completed: December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 10 20 40 60 80 Feet

1 inch = 42 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Paul Heyward Dr Map #11_2020-307



Project: Lady's
Island Vacuum
Truck- Airport
Circle
Map #12

Activity: Routine/
Preventive
Maintenance

Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Airport Circle Map #12_2020-307



Project: Lady's
Island Vacuum
Truck- Tuscarora
Avenue
Map #13

Activity: Routine/
Preventive
Maintenance














Project #:
2020-307

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Tuscarora Avenue Map #13_2020-307



Project: Lady's Island Vacuum Truck- Holly Hall Road Map #14

Activity: Routine/ Preventive Maintenance

Project #: 2020-307

Township/SW Dist: Lady's Island/7

Completed: December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400 Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 01/22/20

File: C:\project summaries map\Lady's Island Vac Truck-Holly Hall Road Map #14_2020-307



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bradley Circle

Activity: Routine/Preventive Maintenance

Duration: 10/29/19-12/04/19

Narrative Description of Project:

Project improved 500 L.F. of drainage system. Cleaned out 500 L.F. of roadside ditch. Jetted (3) driveway pipes and (1) crossline pipe.

2020-022 / Bradley Circle

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	\$32.69	\$0.00	\$0.00	\$0.00	\$0.00	\$32.69
DPJT / Driveway Pipe - Jetted	20.0	\$445.60	\$383.20	\$72.18	\$0.00	\$286.80	\$1,187.78
HAUL / Hauling	20.0	\$459.80	\$283.20	\$92.40	\$0.00	\$0.00	\$835.40
HYDR / Hydroseeding	15.0	\$431.40	\$60.27	\$896.29	\$0.00	\$133.35	\$1,521.31
RSDCL / Roadside Ditch - Cleanout	60.0	\$1,725.60	\$228.28	\$130.17	\$0.00	\$533.40	\$2,617.45
UTLOC / Utility locates	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
2020-022 / Bradley Circle Sub Total	117.0	\$3,105.98	\$954.95	\$1,191.04	\$0.00	\$953.55	\$6,205.52
Grand Total	117.0	\$3,105.98	\$954.95	\$1,191.04	\$0.00	\$953.55	\$6,205.52

Before

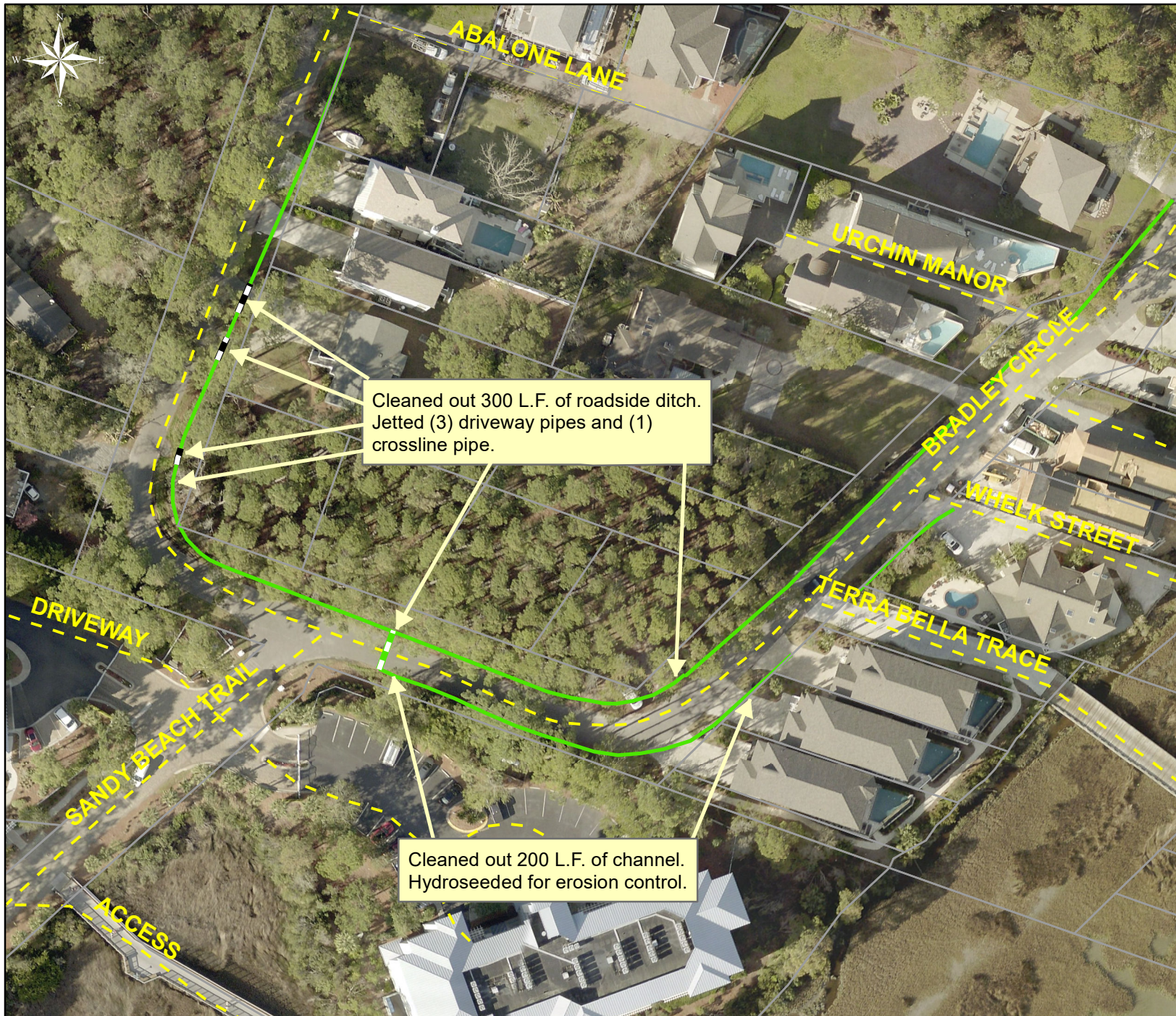


During



After

(No Picture Available)



Project: Bradley Circle

Activity: Routine/
Preventive
Maintenance

Project #:
2020-022

Township/SW Dist:
Hilton Head
Island/3

Completed:
December 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility
Date Print: 01/29/20
File: C:\project summaries map\Bailey Circle_2020-016



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Chowan Creek Bluff

Activity: Routine/Preventive Maintenance

Duration: 11/07/19-12/10/19

Narrative Description of Project:

Project improved 875 L.F. of drainage system. Cleaned out 875 L.F. of channel.

2020-024 / Chowan Creek Bluff	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CCO / Channel - cleaned out	85.0	\$1,711.60	\$624.16	\$166.32	\$0.00	\$463.05	\$2,965.13
HAUL / Hauling	42.0	\$947.58	\$594.72	\$211.58	\$0.00	\$360.50	\$2,114.38
PL / Project Layout	15.0	\$314.10	\$88.80	\$34.65	\$0.00	\$138.25	\$575.80
2020-024 / Chowan Creek Bluff Sub Total	143.0	\$2,995.07	\$1,307.68	\$412.55	\$0.00	\$961.80	\$5,677.10
Grand Total	143.0	\$2,995.07	\$1,307.68	\$412.55	\$0.00	\$961.80	\$5,677.10

Before

(No Pictures Available)

During



After





Project: Chowan
Creek Bluff

Activity: Routine/
Preventive
Maintenance














Project #:
2020-024

Township/SW Dist:
Lady's Island/7

Completed:
December 2019

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 100 200 400 600 800
Feet

1 inch = 420 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/20/20

File: C:\project summaries map\Chowan Creek Bluff_2020-024



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: ToHHI Vacuum Truck
Chisholm Place and Wexford Drive

Activity: Routine/Preventive Maintenance

Duration: 07/17/19-10/08/19

Narrative Description of Project:

Project improved 8 L.F. of drainage system. Cleaned out (4) catch basins. Jetted (1) crossline pipe and 8 L.F. of channel pipe.

2020-311 / To HHI Vacuum Truck	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CBCO / Catch basin - clean out	14.0	\$311.92	\$268.24	\$76.20	\$0.00	\$200.76	\$857.12
CLPJT / Crossline Pipe - Jetted	10.0	\$222.80	\$191.60	\$44.14	\$0.00	\$143.40	\$601.94
SD / Soft Digging	40.0	\$1,381.70	\$122.80	\$69.40	\$0.00	\$576.00	\$2,149.90
2020-311 / To HHI Vacuum Truck Sub Total	65.0	\$1,938.21	\$582.64	\$189.74	\$0.00	\$920.16	\$3,630.75
Grand Total	65.0	\$1,938.21	\$582.64	\$189.74	\$0.00	\$920.16	\$3,630.75

(No Pictures Available)



Project: ToHHI
Vacuum Truck-
Chisholm Place
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2020-311

Township/SW Dist:
Hilton Head Island/3

Completed:
October 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 01/14/20

File: C:\project summaries map\ToHHI Vac Truck- Chisholm Place_2020-311



Project: ToHHI
Vacuum Truck-
Wexford Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2020-311

Township/SW Dist:
Hilton Head Island/3

Completed:
October 2019

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility
Date Print: 01/14/20

File: C:\project summaries map\ToHHI Vac Truck- Wexford Drive Map #2_2020-311

**Beaufort County Stormwater Utility
Proposed Budget for FY2020**

Unaudited Projected Revenue

	FY2020 Budget	FY2021 Proposed Budget
Revenue		
Admin SWU Fees	1,022,876	903,126
Unincorp/CWI SWU Fees	5,759,669	6,100,193
Total Revenue from SWU Fees	6,782,545	7,003,319
Reimbursable Projects	-	-
Interest	125,000	112,500
Gain on Sale of Capital Assets	-	-
Other	-	11,175
Cost-Share for Joint Efforts	12,914	-
Bond	-	-
Reserve Utilization		
Utility's Cash Balance	-	-
Capital Improvement Fund	1,508,119	2,918,262
Projected Revenue Total	8,428,578	10,045,256

425,550 - Admin budget
C/S for monitoring (\$120K) & PE/O (\$90K)
COB - \$35,579
ToB - \$56,865
ToHHI - \$151,933
ToPR - \$22,158
Unincorp BC \$369,014
Additional Unincorp BC \$267,576

County SW Admin Fees & SWU Fees - \$5,592,644
CWI Fees - \$860,593
Admin fees from municipalities - \$266,535
Proposed admin fee reduction from \$19 to \$14
resulting is a rate decrease from \$100 to \$95

Interest on County investments
allocated to SW

SW Permits

May approach CoB or ToPR for Cost-share if
litigation of delinquent fees is necessary.

Efforts (Expenses)

	FY2020	FY2021
Administration	444,291	575,550
Utility Activities		
UA/Annual Maintenance	4,193,868	4,732,884
UA/Public Information/Outreach		
UA/Drainage Enhancement	20,000	10,000
UA/Additional Studies	20,000	-
Utility Activities Subtotal	4,233,868	4,742,884
Regulation		
UA/Control Reg	794,840	872,789
UA/WQ Monitoring	185,000	120,000
UA/Public Information/Outreach	95,000	95,000
Regulation Subtotal	1,074,840	1,087,789
Reserve Utilization		
Del Webb Agreement Fund		
Capital Improvement Fund		
Brewer Memorial Demo Pond	462,000	600,000
Factory Creek Phase I	-	327
Factory Creek Phase II	-	20,550
Salt Creek South	248,496	248,496
Shanklin Road	341,820	341,820
Mossy Oaks	205,000	205,000
Camp St. Mary	342,000	342,000
Evergreen	317,322	840,000
Graves/Pepper Hall		500,000
Rock Springs Creek		43,052
Reserve Utilization Subtotal	1,916,638	3,141,245
Utility Operating Fund		
Capital Assets New Purchases	758,940	497,788
Efforts Total	8,428,578	10,045,256

Personnel
SW Manager; Business Mngr; GIS/MS4 Data Mngr; Admin
Tech - .5 FTE; Fiscal Tech - .1 FTE; Asst SW Mngr - .2 FTE
\$150K Professional Services for litigation of delinquent SW
fees (not included in the portion of the admin budget that
is cost-shared with the municipalities.)

Personnel
Superintendent; Admin Superintendent; (2) Foremen;
(38) crew & support; (2) Infrastruc Inspec Tech; Fiscal
Tech - .2 FTE; Asst SW Mngr - .4FTE
Professional Services
\$15K - Survey
\$60K - Engineering Services
Non-Professional Services
\$370K - major failures repaired by contractor (Oak
Marsh, Bluffton Flyover, and contingency)
Other
\$129K - Interest on bond

Personnel
MS4 Coord/Inspector; (3) Inspectors; SW Plan
Reviewer/Inspector; Admin Tech- .5 FTE; Fiscal Tech-
.1 FTE; Asst SW Mngr - .4 FTE (Removed one
inspector position)
Professional Services
\$238K - MS4 Consultant

\$120K - USCB Lab

\$90K - Carolina Clear

\$5K - Website Maintenance

Construction

ROW

ROW

Cost-Share w/ CoB

Design

Construction

County share for design & construction per the JDA

Design

Regulatory

\$10,519 -Cost-Share for Plotter/Scanner

Infrastructure

\$220,000 - Truck Mounted Camera System

\$41K - Replace Pickup Truck

\$41,750- SUV for Asst SW Mngr

\$124K - Replace Excavator

\$50K - Land Acquisition



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, April 8, 2020
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
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 – March 11, 2020 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Neil Desai ([backup](#))
 - B. Monitoring Update – Neil Desai ([backup](#))
 - C. Stormwater Implementation Committee Report – Neil Desai ([backup](#))
 - D. Stormwater Related Projects – Neil Desai ([backup](#))
 - E. Upcoming Professional Contracts Report – Neil Desai ([backup](#))
 - F. Regional Coordination – Neil Desai ([backup](#))
 - G. Municipal Reports – Neil Desai ([backup](#))
 - H. MS4 Update – Neil Desai ([backup](#))
 - I. Maintenance Projects Report – Matthew Rausch ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. May 13, 2020 ([backup](#))
9. ADJOURNMENT