

Virginia State University
MS-4 Permit: VAR040119
July 1, 2014 - June 30, 2015 Annual Report



Prepared for
Virginia State University
Capital Outlay & Facilities Management
PO Box 9414
Virginia State University, VA 23806

October 1, 2015

Prepared by: Timmons Group
1001 Boulders Parkway, Suite 300
Richmond, VA 23225
(804) 200-6500



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Appendices & Documentation

SC: Chesapeake Bay TMDL Action Plan provided under separate cover

MCM1: VSU Annual Standards and Specifications for E&S Control Notification
Stormwater Fact Sheet Notification
Dumpster Fact Sheet Notification

MCM2: Tree Dedication and Award Ceremony Documentation
Tree Campus USA Program Documentation
Storm Drain Markers Documentation
Classroom Guest Speakers Documentation

MCM3: Completed Stormwater Outfall Inspection Forms

MCM4: 2015 Land Disturbance Report Summary
ESC Inspection Report Samples

MCM5: Completed BMP Inspection Forms
BMP Maintenance Photos

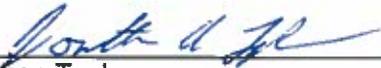
MCM6: Standard Operating Procedures Training Documentation



1.0 Background Information

(1) Name and permit number of the program; (2) Annual report permit year; (3) Modifications to any operator's department's roles and responsibilities; (4) Number of new MS4 outfalls and associated acreage by HUC added during the permit year; (5) Signed certification in accordance with 9VAC25-870-370.

- Name and permit number of the program submitting the annual report.
*Virginia State University
Permit # VAR040119*
- The annual report permit year.
This serves as the annual report for permit year two of the 2013-2018 General Permit term. This annual report covers a time period from approximately July 2014 – June 2015.
- Modifications to any operator's department's roles and responsibilities.
The operator's roles and responsibilities have been provided in the Program Plan and are not considered to be modified for the purposes of this report.
- Number of new MS4 outfalls and associated acreage by HUC added during the permit year
No new outfalls were added during the permit year. One outfall was removed and the associated discharge was rerouted to the next outfall in the system.
- Signed certification in accordance with 9VAC25-870-370
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Jonathan Taylor

Director for Capital Outlay

9-30-15
Date

For questions about the annual report submittal or VSU's MS4 Program Plan, please contact:

*Jonathan Taylor
Director for Capital Outlay
Virginia State University
Physical Plant Building
2916 Myster Macklin Street
PO Box 9414, Suite 25
Virginia State University, VA 23806
Tel: (804) 504-7500
jataylor@vsu.edu*



2.0 Status of Permit Condition Compliance

The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures.

2.1. Assessment of BMP Appropriateness/Self Audit

The Program Plan elements and BMPs are considered to be appropriate based on the 2013-2018 General Permit requirements.

2.2. Measurable Goals Progress

MCM 1: Public Education and Outreach

Annual Reporting Requirement 1: Provide a list of the education and outreach activities conducted during the reporting period for each high-priority water quality issue, the estimated number of people reached, and an estimated percentage of the target audience or audiences that will be reached.

VSU conducted the following education and outreach activities for each of the three high-priority water quality issues described in the 2013-2018 Program Plan:

High-Priority Water Quality Issue	Education/Outreach Activity	Materials Used	Distribution Methods	Estimated Population Reached	Estimated % of Target Audience that will be Reached
Poor Quality Receiving Waters	Email sent to all firms with active developments on campus at the time	Annual Specifications for Erosion and Sediment Control and Stormwater Management; Campus Design Guidelines	Availability on website, plus email distribution to all A/E firms performing planning and designs on campus	Three firms	100%
Student and Faculty Stormwater Education and Outreach	Email sent to all students, staff and faculty	Stormwater fact sheets and/or general stormwater education presentations	Email stormwater fact sheets and/or conduct general stormwater presentations at a minimum of once per year	6,318 students, staff, and faculty	100%
Dumpster and Litter Management on campus	Email sent to all students, staff, and faculty	Dumpster best practices fact sheet	Email fact sheets on an annual basis.	6,318 students, staff, and faculty	100%

VSU elected to distribute the Stormwater Fact Sheet and Dumpster Fact Sheet to all students and faculty via email in lieu of at campus Town Hall Meetings and during staff training sessions in order to reach a much wider audience.



Annual Reporting Requirement 2: A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people that will be reached, and an estimated percentage of the target audience or audiences that will be reached.

Provided in the 2013-2018 Program Plan.

MCM 2: Public Involvement and Participation

Annual Reporting Requirement 1: Provide a web link to the MS4 Program Plan and Annual Report

The MS4 Program Plan and Annual Report are available for public review at the following website: <http://www.vsu.edu/about/administrative-offices/admin-finance/capital-outlay-and-facilities/capital-outlay/programs-resources-procedures.php>.

Annual Reporting Requirement 2: Documentation of compliance with the public participation requirements.

VSU identified and participated in the following four local events/activities provided in the 2013-2018 Program Plan to address public involvement with stormwater and environmental activities:

- 1. Promote and support Ft. Lee's Annual Earth Day Event. This year VSU planted and dedicated a tree in Dr. Martin Luther King's honor in celebration of Arbor Day in lieu of supporting the Ft. Lee Annual Earth Day Event (refer to MCM2 for documentation of this event).*
- 2. Seek Tree Campus USA Program Designation. VSU formed a joint Tree Campus USA and Stormwater Committee and has received the Tree Campus USA designation. The committee meets on a regular basis and works to maintain this designation for the University. Refer to MCM 2 for documentation of this activity.*
- 3. Seek partnership opportunities for public involvement and participation with other local MS4 programs. VSU partnered with Chesterfield County to install storm drain placards on all storm drain inlets on campus. This is a multi-year project. Refer to MCM2 for documentation of this activity.*
- 4. Seek classroom guest speakers that focus on stormwater. Timmons Group gave presentations about the University's MS4 program and stormwater management on March 11th and 16th to two VSU Environmental Science Labs. Refer to MCM2 for documentation of this activity.*



MCM3: Illicit Discharge Detection and Elimination

Annual Reporting Requirement 1: A list of any written notifications of physical interconnection given by the operator to other MS4s.

During the 2014 annual outfall IDDE screenings it was discovered that the VSU MS4 is interconnected with VDOT's MS4 along Chesterfield Avenue. A copy of the notification letter sent to VDOT was included in Appendix MCM3 of the 2013-2014 Annual Report.

No additional physical interconnections between the VSU MS4 system and adjacent MS4 systems have been identified during this reporting period and as such no notifications were provided during this reporting period.

Annual Reporting Requirement 2: The total number of outfalls screened during the reporting period, the screening results, and detail of any follow-up actions necessitated by the screening results.

21 outfalls were screened during the reporting period resulting in no illicit discharge follow-up actions. Refer to Appendix MCM 3 for outfall screening results. Note, one outfall was removed from the system as noted earlier in the report, resulting in one less screening this year.

Annual Reporting Requirement 3: A summary of each investigation conducted by the operator of any suspected illicit discharge. The summary must include: (i) the date that the suspected discharge was observed, reported, or both; (ii) how the investigation was resolved, including any follow-up, and (iii) resolution of the investigation and the date the investigation was closed.

No illicit discharges were reported during the reporting period.

Annual Reporting Requirement 4: Outfall mapping & Database Table

The required outfall mapping and database table are provided in the Program Plan. Note that the Outfall Map has been updated to include the newly constructed Athletic Truck Line.

MCM 4: Construction Site Stormwater Runoff Control

Annual Reporting Requirement 1: Total number of regulated land-disturbing activities

Six regulated land disturbing activities occurred within the reporting period. Refer to Appendix MCM 4 for documentation.

Annual Reporting Requirement 2: Total number of acres disturbed.

Approximately 53.92 acres of area were disturbed for this reporting period. Refer to Appendix MCM 4 for documentation.



Annual Reporting Requirement 3: Total number of inspections conducted

Approximately 27 inspections were conducted within this reporting period. 19 were performed by University staff and 8 were performed by outside contractors. The University is working to improve on the frequency and consistency of the inspections. Refer to Appendix MCM 4 for representative inspection report documentation.

Annual Reporting Requirement 4: A summary of the enforcement actions taken, including the total number and type of enforcement actions taken during the reporting period.

No enforcement actions were taken beyond typical compliance requirements provided on erosion and sediment control inspection forms.

MCM5: Post Construction Stormwater Management in New Development and Development on Prior Developed Lands

Annual Reporting Requirement 1: The operator shall maintain an updated electronic database of all known operator-owned and privately-owned stormwater management facilities that discharge into the MS4.

The required stormwater management facility database is provided in the Program Plan.

Annual Reporting Requirement 2: The operator shall submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year with the appropriate annual report.

No new stormwater management facilities were brought online during the reporting period. The most up to date stormwater management facility database is provided in the Program Plan. Three facilities that had previously been combined in the database were separated, resulting in the apparent addition of three facilities.

Annual Reporting Requirement 3: VSU provides post-construction inspections and maintenance of operator-owned post-construction stormwater management facilities in accordance with the Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management provided in Appendix MCM 4 of the Program Plan.

Annual facility inspection reports are provided in Appendix MCM 5 for documentation purposes.

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

Annual Reporting Requirement 1: A summary report on the development and implementation of the daily operational procedures

Daily operational procedures have been developed and are included in the Program Plan.



Annual Reporting Requirement 2: A summary report on the development and implementation of the required SWPPPs .

Locations and facilities requiring SWPPPs have been identified in the Program Plan as required by the timeframes in the 2013-2018 General Permit. SWPPPs will be prepared, planned to be developed, and implemented by permit year 4 as required by the 2013-2018 General Permit.

Annual Reporting Requirement 3: A summary report on the development and implementation of the turf and landscape nutrient management plans that includes:

1. The total acreage of lands where turf and landscape nutrient management plans are required

Turf and landscape nutrient management plans are required by the MS4 permit on approximately 96 acres of campus.

2. The acreage of lands upon which turf and landscape nutrient management plans have been implemented

A Nutrient Management Plan has been developed for approximately 96 acres of campus and is provided in the Program Plan.

A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training

Documentation of training event completed during the 2014-2015 reporting period is included in Appendix MCM6.

3.0 Results of Collected Data

Results of information collected and analyzed, including monitoring data, if any, during the reporting period.

Virginia State University was not required to collect and analyze any formal monitoring data during this reporting period.

4.0 Future Stormwater Activities

A summary of the stormwater activities the operator plans to undertake during the next reporting cycle.

- *Implement Chesapeake Bay TMDL Action Plan*
- *Implement Standard Operating Procedures*
- *Implement Training Program as developed in the 2013-2018 Program Plan*
- *Implement Public Education and Outreach Program as proposed in the 2013-2018 Program Plan*



- *Implement Public Involvement and Participation Program as identified in the 2013-2018 Program Plan*
- *Implement IDDE Program as identified in the 2013-2018 Program Plan*
- *Implement Construction Site Stormwater Runoff Control Program as identified in the 2013-2018 Program Plan*
- *Implement the Post-Construction Stormwater Management Program as identified in the 2013-2018 Program Plan*
- *Implement the Pollution Prevention/Good Housekeeping for Municipal Operations Program as identified in the 2013-2018 Program Plan*

5.0 Changes in BMPs and Minimum Control Measures

A change in any identified best management practices or measurable goals for any of the minimum control measures including steps taken to address deficiencies.

5.1. Changes in BMPs

No existing BMPs were changed during the reporting period. MCM 6 has been updated to reflect nutrient management plans and Standard Operating Procedures that were prepared during the reporting period.

5.2. Changes in Measurable Goals

The following measureable goals were changed during the reporting period as described below. An updated version of the program plan that includes these changes has been provided for review and reference.

MCM 1 – The number of A/E firms performing planning and designs on campus decreased during this annual reporting year and the Program Plan was updated to reflect that. VSU still intends to reach 100% of active firms once each year.

VSU elected to distribute educational materials to all faculty and staff via email instead of only at University Town Hall meetings and staff training sessions in order to ensure delivery to a wider audience. This increased the target audience population size from approximately 50 students and 100 staff to approximately 5,000 students and 1,200 staff.

MCM 5 – The documentation protocol for BMP inspections was updated to allow for flexibility in the type of documentation acceptable for record keeping purposes.

6.0 Government Reliance for Permit Obligations

Notice that the operator is relying on another government entity to satisfy some of the permit obligations (if applicable).

Not applicable at this time.



7.0 Section II C Program Status

The approval status of any programs pursuant to Section II C (if appropriate), or the progress towards achieving full approval of these programs

Not applicable at this time.

8.0 TMDL Special Conditions Contained in Section I

Information required for any applicable TMDL special condition contained in Section I

- *VSU has not been assigned any Waste Load Allocations in any TMDLs as of the preparation of this report.*
- *The Program Plan has been updated to reflect the special condition requirements for the Chesapeake Bay TMDL. A Chesapeake Bay TMDL Action Plan has been prepared and submitted under separate cover.*

Appendix MCM 1

Matthew Webb

From: Jonathan A. Taylor <jataylor@vsu.edu>
Sent: Tuesday, June 09, 2015 2:25 PM
To: Ken Pope; Carrie Langelotti; Mitch Rowland; James Peace; William J. Pipp
Cc: Amelia Wehunt; Jane S. Harris; Gilbert Hanzlik; Debra C. Albert
Subject: VSU Annual Standards and Specifications for Erosion and Sediment Control & Stormwater Management

To all of our Term Contract holders,

VSU has developed and implemented our own Annual Standards and Specifications for Erosion and Sediment Control & Stormwater Management. They are located on the VSU website for your use and for distribution to your Consultants at <http://www.vsu.edu/about/administrative-offices/admin-finance/capital-outlay-and-facilities/programs-resources-procedures.php>. These standards are updated on an annual basis, so please confirm that you are using the correct version at the outset of your projects.

These standards shall apply to all land disturbance projects exceeding 2,500 square feet of disturbance unless otherwise exempt. Please familiarize yourself with these guidelines. If you have any questions or suggestions, please email me at jataylor@vsu.edu.

Thanks You

Jonathan A Taylor
Virginia State University
Director of Capital Outlay
Physical Plant Building
2916 Myster Macklin Street
PO Box 9414, Suite 25
Virginia State University, VA 23806
804 504 7500 office
804 524 5383 fax
jataylor@vsu.edu

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Matthew Webb

From: Jane S. Harris <jsharris@vsu.edu>
Sent: Friday, March 27, 2015 1:18 PM
To: Faculty; Staff; All Students
Cc: Amelia Wehunt
Subject: Environmental Stewardship at VSU
Attachments: Stormwater Fact Sheet.pdf

Do you know that Virginia State University owns and operates a network of storm water inlets, pipes, ditches, and storm water management ponds known as a Municipal Separate Storm Sewer System (MS4)? The attached fact sheet tells you a bit more about storm water management and what you can do to make sure that campus is safe and clean for today and tomorrow's VSU community!

Jane Harris
Virginia State University
AVP for Capital Outlay and Facilities
Physical Plant Building
2916 Myster Macklin Street
Virginia State University, VA 23806
(W) (804) 524-6239
(C) (804) 218-3225
(F) (804) 524-5383
jsharris@vsu.edu

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MINIMIZING STORMWATER POLLUTION

Stormwater is water from rain or melting snow that does not soak into the ground but runs off into waterways. It flows from rooftops, bare soil and paved areas and lawns. It picks up a variety of contaminants (pet waste, fertilizers, oil, grease) along the way. These enter our lakes, streams, wetland and rivers and can harm fish, wildlife, vegetation. It can also foul your drinking water.

PRACTICES TO REDUCE STORMWATER POLLUTION INCLUDE CONTAINING AND COVERING GARBAGE, WASTE MATERIALS, AND DEBRIS. EVEN THE SIMPLE PRACTICE OF KEEPING A TRASH CAN LID CLOSED CAN BE A VERY EFFECTIVE POLLUTION PREVENTION MEASURE. OTHER EASY WAYS TO PREVENT STORMWATER POLLUTION INCLUDE: WASHING YOUR CAR OVER LAWN OR GRAVEL; USING LAWN CHEMICALS SPARINGLY, AND CLEANING UP PET WASTE.



To report illegal dumping on the VSU campus, call (804) 524-5451.

Matthew Webb

From: Jane S. Harris <jsharris@vsu.edu>
Sent: Thursday, April 09, 2015 11:23 PM
To: All Students; Faculty; Staff
Cc: Amelia Wehunt
Subject: Environmental Stewardship at VSU
Attachments: Dumpster Fact Sheet.pdf

As the semester draws to a close and some of us prepare to leave campus, please be mindful that our actions can have a direct impact on the rivers and streams we share. Using Best Management Practices when discarding trash will help prevent pollution from entering drains and into our rivers and streams. Please read the attached fact sheet to see how you can help keep our campus and the Appomattox River clean for generations of Trojans to come.

Jane Harris
Virginia State University
AVP for Capital Outlay and Facilities
Physical Plant Building
2916 Myster Macklin Street
Virginia State University, VA 23806
(W) (804) 524-6239
(C) (804) 218-3225
(F) (804) 524-5383
jsharris@vsu.edu

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TRASH BEST MANAGEMENT PRACTICES

Don't Let Trash End Up in Our Rivers and Streams

Keep dumpsters, trash cans and recycling bins covered, except when filling or emptying. Schedule pickup frequency to keep trash from holding the cover open. Open lids allow contact with stormwater, which dissolves and transports contaminants into the stormwater system. Open lids also invite pests to spread trash around.

Do not put liquids or greases in the trash containers. They should go down the sanitary sewer or be discarded in a grease barrel. Liquids may be accepted by the local sanitary sewer district, check prior to discharging any liquid into the sewer line.

Check that the dumpsters or trash cans are in good condition, with no holes or accumulation of grime. Trash containers should be leak-free. When necessary, call the sanitation company to replace or clean the containers.

Regularly inspect the trash enclosure and general area for problems such as trash not in the container and accumulation of grease or food on the ground. Clean the trash enclosure as needed to remove any accumulations of grime and/or general trash.

Clean trash cans in a designated area with a connection to the sanitary sewer such as mop sink or floor drain. Do not use a drain without knowing whether it flows to the sanitation sewer, storm drain or self-contained internal sump. Confirm before using drains to ensure proper disposal. Never discharge wash-water to storm drains or offsite.

Designate an area for trash collection away from storm drains. This allows problems at the trash container to be corrected before reaching the storm drain or flow offsite.

All of our actions within our watersheds have a direct impact on the rivers and streams we share. The Best Management Practices shown at left help prevent pollution from going down the drains and into our rivers and streams.



To report illegal dumping on the VSU campus, call (804) 524-5451.



Appendix MCM 2



ARBOR DAY

Tree Dedication and Award Ceremony

2:00 P.M. • APRIL 24, 2015

In celebration of Arbor Day, the Sycamore tree planted today on the campus of Virginia State University pays homage to Dr. Martin Luther King Jr. and others who gathered in 1965 beneath a Sycamore tree in preparation for the historic, freedom march from Selma to Montgomery, Alabama, to register black voters.

Having met standards established by the national Arbor Day Foundation, VSU has been distinguished by the organization as a member of its Tree Campus USA, which helps colleges and universities establish and maintain healthy community forests.

Remarks by:

- Rev. Delano Douglas
- Jewel Hairston, Ph.D., *Dean/1890 Administrator,
VSU College of Agriculture*

Presentation of Tree Campus USA Award:

- Antonia Noreika, *Eastern Region State Forester*

Special appearance by Smokey the Bear.

The Sycamore tree was generously donated by
Colesville Nursery and
Arborcare Professional Tree Services



Matthew Webb

From: Amelia Wehunt
Sent: Wednesday, August 26, 2015 1:42 PM
To: Matthew Webb
Subject: FW: Tree Dedication and Award Ceremony 2PM Friday April 24
Attachments: ArborDayDedication_April24.pdf; ATT00001.htm

Follow Up Flag: Follow up
Flag Status: Flagged

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com
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Office: 804.200.6544 | Fax: 804.560.1438
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LinkedIn: www.linkedin.com/in/ameliawehunt
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#).

From: Jane S. Harris [mailto:jsharris@vsu.edu]
Sent: Sunday, April 26, 2015 3:28 PM
To: Amelia Wehunt
Subject: Fwd: Tree Dedication and Award Ceremony 2PM Friday April 24

Didn't know whether you received this, but thought you should know it took place.

Sent from my iPad

Begin forwarded message:

From: Announcements <announcements@vsu.edu>
Date: April 23, 2015 12:07:37 PM EDT
To: Faculty <Faculty@vsu.edu>, Staff <Staff@vsu.edu>
Subject: **Tree Dedication and Award Ceremony 2PM Friday April 24**

ARBOR DAY CELEBRATION

Tree Dedication and Award Ceremony

2:00 p.m. • April 24, 2015
Martin Luther King Drive
The event will take place near the parking area (Lot 30)

In celebration of Arbor Day, the Sycamore tree to be planted on the campus of Virginia State University pays homage to Dr. Martin Luther King Jr. and others who gathered in 1965 beneath a Sycamore tree in preparation for the historic, freedom march from Selma to Montgomery, Alabama, to register black voters.

Having met standards established by the national Arbor Day Foundation, VSU has been distinguished by the organization as a member of its Tree Campus USA, which helps colleges and universities establish and maintain healthy community forests.

Remarks by:

-

Rev. Delano Douglas

-

Jewel Hairston, Ph.D., *Dean/1890 Administrator, VSU College of Agriculture*

Presentation of Tree Campus USA Award:

-

Antonia Noreika, *Eastern Region State Forester*

Special appearance by Smokey the Bear.

Lesha L. Berkel

Graphic Designer | Marketing & Communications
Virginia State University | College of Agriculture

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Matthew Webb

From: Joel Koci <jkoci@vsu.edu>
Sent: Thursday, March 05, 2015 11:37 AM
To: Amelia Wehunt
Cc: Marcus Comer
Subject: your request
Attachments: TreeCampusUSAApplicationSummary (1).pdf

Ms. Wehunt,

Per your request for a copy of the Tree Campus application, (from a while ago) here it is.

I would love to discuss with you the possibility of doing some research on the new plantings that will be going in here on campus. This is the perfect opportunity to carry out some research on state of the art installation of plant material in a construction site, and spec writing for the installation. Thanks very much.

JKoci

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General Information

Your Contact Information

- **College or University Name:** Virginia State University
- **Name:** Joel Koci
- **Title:** Urban Forestry Exten. Assoc
- **Address:**
 - 1 Hayden street
 - Petersburg VA 23806
- **Phone:** 804-524-5758

Communications Office Contact

- **Name:** Michell Olgers
- **Title:** Director of Marketing
- **Phone:** 804-524-6964
- **Email:** molgers@vsu.edu

President/Chancellor's Office

- **Name:** Pamela Hammond
- **Title:** President VSU
- **Address:**
 - 1 Hayden ave. Virginia Hall
 - Petersburg VA 23806
- **Email:** phamond@vsu.edu

Referrer

- **How did you hear about the Tree Campus USA program?:**
 - mid atlantic chapter of I S A

Recognition Event Date

- **Recognition Event:** April 24, 2014
-

Standard 1

Committee Dates

- **Date Committee Was Established:** Mar 13, 2014
- **Meeting Dates for Application Year:**
 - Dec 11, 2014
 - Jun 19, 2014
 - Mar 13, 2014

Committee Members

- **Student:**
 - Angela Baker, Grad student andelabaker@live.com
 - **Faculty:**
 - Christopher Catanzaro, Ag dept. Head ccatanzaro@vsu.edu
 - **Facility:**
 - Jane Harris, Facilities Mangmt. jsharris@vsu.edu
 - **Community:**
 - Richard Reuse, VDOF Cty. Forester richard.reuse@dof.virginia.gov
 - Heather Barrar, resident barrah@chesterfield.gov
-

Standard 2

Campus Tree Care Plan Establishment

- **Date the Campus Tree Care Plan Was Established:** Dec 12, 2014
 - **Campus Tree Care Plan:**
 - [file Campus Tree Care Plan 1](#)
 - **Status of Plan Goals & Tagets**
-

Standard 3

Expenditures Calculation

- **Tree Planting and Initial Care Costs:** \$50000
- **Campus Tree Management Costs:** \$11700
- **Volunteer Time from Students and Civic Organizations:** 96
- **Other Costs:** \$0
- **Other Cost Description:** 0
- **Total Calculated Costs:** \$63864.8

Additional Campus Details

- **Number of Trees Planted:** 48
 - **Number of Trees Removed:** 32
 - **Reason for Tree Removal:** Road widening and new building construction.
 - **Number of Trees Pruned:** 80
 - **Tree Canopy Cover Percent:** 15%
 - **Campus Population:** 5,045
-

Standard 4

Observance Details

- **Date of the Event:** Apr 25, 2014
- **Short Summary of the Event:**

Ettrick Elementary had its first ever Arborday cellabration on 4/25/14. One "Amelanchier borea" Serviceberry ,donated by the Virginia Dept. of Forestry, was planted with the help of

second graders from Ettrick Elem. Along with the serviceberry 6 seedling Oaks were installed in the parking area.

- **Documents:**

- [file Arbor Day Observance 1](#)
-

Standard 5

Service Learning Project Details

- **Date of Service Learning Project:** Sep 26, 2014
- **Short Summary of the Event:**

The Community Outreach Board sponsored the second annual Appomattox River clean up. This scenic river runs adjacent to campus and is an ecotourism draw in our area. The goal was to remove litter and trash from the bank area and clear the paths of fallen debris. The volunteers enjoyed the work and gain an appreciation of the once major traveled and historic waterway.

- **Number of Students Involved:** 24
 - [file Service Learning Project 1](#)
-

Matthew Webb

From: Joel Koci <jkoci@vsu.edu>
Sent: Wednesday, March 11, 2015 9:18 AM
To: Marcus Comer; Jewel E. Hairston; Jane S. Harris; William J. Pipp
Cc: Christopher J. Catanzaro; Michelle Olgers; Amelia Wehunt; pwiseman@vt.edu; Paula H. McCapes; Reuse, Richard D. (DOF) (Richard.Reuse@dof.virginia.gov); kristina saltsman (trees4me@me.com)
Subject: Tree campus

Great News,

I received word today that we earned Tree Campus USA from the National Arborday Foundation. They are getting the signage to me so we can have it when we commemorate the MLK tree. We need to find a suitable site for the MLK tree .
Thanks

Joel Koci

**Urban Forestry
Extension Associate
Virginia State University**

"Everything in Nature is interdependent . . . everything! I have to emphasize this again and again."

- Rudolph Steiner

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Matthew Webb

From: Amelia Wehunt
Sent: Wednesday, August 26, 2015 1:41 PM
To: Matthew Webb
Subject: FW: Chesterfield Stormwater Education Contact

Follow Up Flag: Follow up
Flag Status: Flagged

Amelia Wehunt, PE

Project Manager

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From: Jonathan A. Taylor [<mailto:jataylor@vsu.edu>]
Sent: Wednesday, March 04, 2015 10:14 AM
To: Field, Lorne; Amelia Wehunt; Barrar, Heather
Cc: Aislinn Creel; Jason S. MacDonald; George W. Bowles
Subject: RE: Chesterfield Stormwater Education Contact

Thanks Lorne

I will have Bubba Bowles from VSU pick up the markers.

Jonathan

From: Field, Lorne [<mailto:FieldL@chesterfield.gov>]
Sent: Wednesday, March 04, 2015 9:56 AM
To: Amelia Wehunt; Barrar, Heather
Cc: Aislinn Creel; Jonathan A. Taylor; Jason S. MacDonald
Subject: RE: Chesterfield Stormwater Education Contact

Hi Amelia,

I can leave them at the front desk of my department for someone to pick up if you want them soon.

Community Development Building
9800 Government Center Parkway
Environmental Engineering, third floor
Chesterfield, VA 23832

Otherwise I can drop them off at the college sometime next week.

Lorne

From: Amelia Wehunt [<mailto:amelia.wehunt@timmons.com>]
Sent: Tuesday, March 03, 2015 11:38 AM
To: Field, Lorne; Barrar, Heather
Cc: Aislinn Creel; Jonathan A. Taylor; Jason S. MacDonald (jmacdonald@vsu.edu)
Subject: RE: Chesterfield Stormwater Education Contact

Thanks Lorne!

Chesterfield County should contact the VSU work order desk at 804 524 5451. That number is monitored 24 hrs. / day. and they will contact the appropriate staff person.

What makes sense as the next step to obtain the markers?

Amelia

Amelia Wehunt, PE
Project Manager

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From: Field, Lorne [<mailto:FieldL@chesterfield.gov>]
Sent: Friday, February 13, 2015 5:11 PM
To: Amelia Wehunt; Barrar, Heather
Cc: Aislinn Creel; Jonathan A. Taylor; Jason S. MacDonald (jmacdonald@vsu.edu)
Subject: RE: Chesterfield Stormwater Education Contact

Ameila,

We would be glad to provide the markers.

However, our markers display our illicit discharge hotline number. Since VSU is an MS4 authority we would have no enforcement jurisdiction if there were a spill on campus. If we receive a call on our hotline we would have to turn it over to the proper VSU contact. Can we get the contact information for the personnel that handle enforcement/spill response at VSU in case there is an incident?

Thanks!

Lorne Field
Chesterfield County Environmental Engineering

From: Amelia Wehunt [<mailto:amelia.wehunt@timmons.com>]
Sent: Friday, February 13, 2015 3:55 PM
To: Field, Lorne; Barrar, Heather

Cc: Aislinn Creel; Jonathan A. Taylor; Jason S. MacDonald (jmacdonald@vsu.edu)

Subject: RE: Chesterfield Stormwater Education Contact

Hi Heather and Lorne,

I wanted to reach back out to you all regarding the storm drain markers for VSU's inlets and storm structures. There are roughly 500 structures on campus. Is Chesterfield still willing to provide the markers in furtherance of both MS4 Programs?

I have included Jonathan Taylor and Jason MacDonald from VSU's program on the email for reference. Please let us know what the next steps are if we proceed.

Thank you and have a great weekend!

Amelia

Amelia Wehunt, PE

Project Manager

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From: Amelia Wehunt

Sent: Thursday, May 08, 2014 12:41 PM

To: Field, Lorne; 'Barrar, Heather'

Cc: Aislinn Creel

Subject: RE: Chesterfield Stormwater Education Contact

Lorne and Heather,

Thank you so much for your follow up regarding the VSU MS4 program. Aislinn and I are in the process of working through follow up tasks with VSU and will be in touch regarding next steps.

Thanks again,

Amelia

Amelia Wehunt, PE

Project Manager

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From: Barrar, Heather [<mailto:BarrarH@chesterfield.gov>]
Sent: Wednesday, May 07, 2014 3:54 PM
To: 'jataylor@vsu.edu'; Aislinn Creel; Field, Lorne; 'ghanzlik@vsu.edu'
Cc: 'Gregory E. Frey'; Amelia Wehunt
Subject: Chesterfield Stormwater Education Contact

Jonathan, Gil & Aislinn,

As promised, I'm connecting you with Lorne Field, the Environmental Outreach & Education Specialist who works under the county MS4 permit. He can work with you on storm drain marking, illicit discharge information and other programming that we discussed. Lorne would also be interested in connecting with the professors who are doing water quality testing with their students, as was mentioned yesterday. I've also attached a photo of the storm drain marking process as requested by Jonathan.

Please let me know if you need additional contacts – GIS was mentioned. Also, we've implemented a successful new waste contract and we separate food, recyclables and paper in the office – let me know if you'd like more information on that. I'm assisting with the Ettrick VSU Plan, so I'm also very interested in the stormwater study that Timmons is conducting for the rest of the watershed.

Also, I was just asked to serve on a VSU bicycle committee, so maybe I'll work with some of you on that committee as well!

Take care,

Heather

Heather Barrar |Senior Planner

Chesterfield County Planning Department
9800 Government Center Parkway| Chesterfield, Virginia 23832-0040

Phone: 804.748.1778 | Fax: 804.717.6295 | Email: barrarh@chesterfield.gov
www.Chesterfield.gov

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Matthew Webb

From: Glenn F. Chappell <gchappell@vsu.edu>
Sent: Thursday, March 19, 2015 11:34 AM
To: Amelia Wehunt
Subject: RE: Stormwater Classroom Guest Speaker Opportunity

Mrs. Wehunt,

I do appreciate you speaking to my two Environmental Science Labs about stormwater management over the past couple of weeks. The topic compliments many of the concepts they are learning in the class and allows them to observe the practices you mentioned as they travel around campus. Between the two labs, you opened the eyes of 37 student about the strategies that must be utilized to manage runoff in a way to protect our environment and health. Thanks you so much for your time and I look forward to utilizing your expertise in future classes if you have the time. Glenn

From: Amelia Wehunt [mailto:amelia.wehunt@timmons.com]
Sent: Tuesday, March 03, 2015 11:44 AM
To: Glenn F. Chappell
Cc: Jonathan A. Taylor; Jason S. MacDonald
Subject: RE: Stormwater Classroom Guest Speaker Opportunity

Yes, I can come on March 11th and 16th at 2:40pm. What room is it in the Agricultural engineering shop?

I will have the PowerPoint presentation. I can bring my laptop and/or a USB drive with the presentation. Is there a projector and screen available in your classroom? I can bring these also if needed, just let me know what is available in your room.

Looking forward to it!

Amelia

Amelia Wehunt, PE
Project Manager

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From: Glenn F. Chappell [mailto:gchappell@vsu.edu]
Sent: Tuesday, March 03, 2015 11:35 AM
To: Amelia Wehunt
Subject: RE: Stormwater Classroom Guest Speaker Opportunity

Would you be available March 16 and March 11th at 2:40 p.m. I have two environmental science labs that last 2 hrs each. What I am thinking is about a 45 minute presentation and then I will give them the questions either in lab or make it an assignment for them to complete by the next lab period. We have class in the Agricultural engineering shop located on the southeast side of campus near the physical plant administration building. If these dates work please let

me know what equipment you will need for the class. Thanks for your assistance and I am looking forward to hearing the information myself. Glenn

From: Amelia Wehunt [<mailto:amelia.wehunt@timmons.com>]
Sent: Monday, February 16, 2015 10:02 AM
To: Glenn F. Chappell
Cc: Jonathan A. Taylor; Jason S. MacDonald
Subject: RE: Stormwater Classroom Guest Speaker Opportunity

Glenn,

I have uploaded a copy of the presentation and some questions here: [Click to Retrieve File\(s\)](#) . If the link is not clickable, copy and paste the following URL into your browser: <https://www.sendthisfile.com/LW6OI92VgC6ciJ3DsiZHa9da>.

Please take a look and let me know if you want me to add or remove any content. Please also let me know what day/time you prefer.

Thanks so much! Looking forward to it.

Amelia

Amelia Wehunt, PE
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-----Original Message-----

From: Glenn F. Chappell [<mailto:gchappell@vsu.edu>]
Sent: Friday, February 13, 2015 10:24 PM
To: Amelia Wehunt
Subject: RE: Stormwater Classroom Guest Speaker Opportunity

I am interested. Please let me know what material you plan to cover and I can probably include it in my labs. I will need the content of the presentation and questions to give the students at the end of the presentation. Otherwise they will not listen. Thanks for the opportunity. Glenn _____

From: Amelia Wehunt [amelia.wehunt@timmons.com]
Sent: Friday, February 13, 2015 4:44 PM
To: Glenn F. Chappell
Cc: Jonathan A. Taylor; Jason S. MacDonald
Subject: Stormwater Classroom Guest Speaker Opportunity

Dear Dr. Chappell,

I'm reaching out to you on behalf of the University's stormwater program to see if there would be an opportunity to speak to your Introduction to Environmental Science course about stormwater management or a related topic this semester.

In previous semesters we spoke with one of Dr. Frey's classes and it seemed to complement his material while helping the University meet its stormwater program compliance goals.

We can make it as time specific as you prefer from either a quick 15 minutes or up to a whole lecture.

Please let me know if you are interested in this opportunity and we can discuss in further detail.

Thank you for your time,

Amelia

Amelia Wehunt, PE

Project Manager

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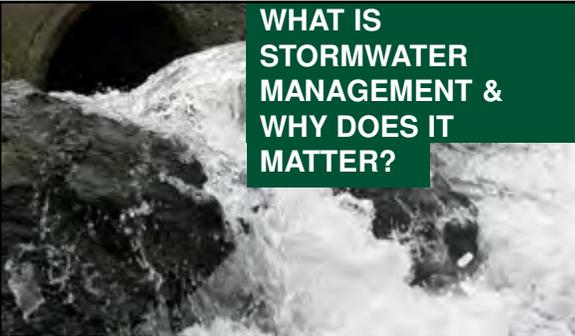
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"The information in this email and any attachments may be confidential and privileged. Access to this email by anyone other than the intended addressee is unauthorized. If you are not the intended recipient (or the employee or agent responsible for delivering this information to the intended recipient) please notify the sender by reply email and immediately delete this email and any copies from your computer and/or storage system. The sender does not authorize the use, distribution, disclosure or reproduction of this email (or any part of its contents) by anyone other than the intended recipient(s).

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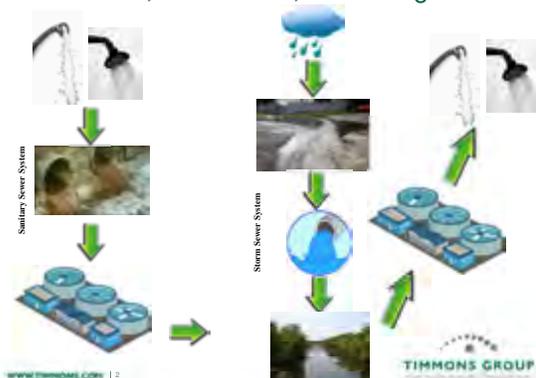
WHAT IS STORMWATER MANAGEMENT & WHY DOES IT MATTER?

Amelia Wehant, PE
March 11 & 16, 2015

www.timmons.com

Wastewater, Stormwater, & Drinking Water

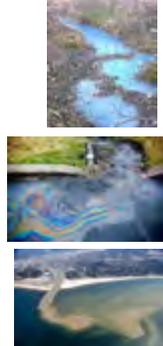




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Pollutants in Stormwater

- ✓ Polluted stormwater runoff has many adverse effects on plants, fish, animals, and people!
- ✓ Common Stormwater Pollutants:
 - Sediment
 - Excess nutrients from fertilizers (nitrogen & phosphorus)
 - Bacteria
 - Debris and trash
 - Hazardous wastes such as pesticides or herbicides
 - Petroleum products from vehicles and parking lots
 - Deicing materials
 - Thermal pollution





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What is an MS4?

- ✓ Municipal separate storm sewer system
- ✓ Storm sewer pipes are not connected to sanitary sewer pipes
- ✓ An MS4 can be:
 - Cities or counties
 - Colleges or Universities
 - Correctional facilities
 - Hospitals
 - Military Bases



VSU is an MS4!



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Example of an MS4







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What Does an MS4 Operator Do?

- Public Outreach and Education
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff
- Post-Construction Stormwater Management
- Pollution Prevention/Good Housekeeping





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MCM 1: Public Outreach and Education

- ✓ This MCM requires regulated small MS4s to develop and implement a program that promotes awareness of pollution prevention techniques and engagement with local watershed quality.

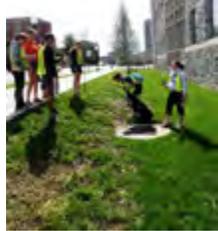


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MCM 2: Public Involvement/Participation

- ✓ This MCM requires regulated small MS4s provide opportunities for the public to play an active role in both in both the development and implementation of the program.



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MCM 3: Illicit Discharge Detection & Elimination

- ✓ Illicit discharges enter the system through two avenues:
 - Direct Connections
 - Wastewater piping either mistakenly or deliberately connected to the storm drains
 - Indirect Connections
 - Infiltration into the MS4 from cracked or damaged sanitary systems
 - Spills collected by drain inlets
 - Paint, used oil, or other pollutants dumped directly into a drain
- ✓ Once an illicit discharge is identified and/or detected, the source must be eliminated!




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MCM 4: Construction Site Stormwater Runoff Control

- ✓ Ensures that sediment and pollutants from construction activities do no enter the storm sewer system
- ✓ Examples:
 - Construction entrance
 - Silt fence
 - Matting/Mulching
 - Storm drain inlet protection





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MCM 5: Post-Construction Stormwater Management

- ✓ Requires the operator of the regulated small MS4 to develop, implement, and enforce a program to enforce a program to reduce post-construction runoff to their storm sewer
- ✓ Includes a combination of structural and non-structural BMPs
- ✓ Some common structure BMPs include:
 - Detention ponds
 - Retention ponds
 - Bioretention
 - Green parking
 - Proprietary BMPs




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MCM 6: Pollution Prevention & Good Housekeeping

- ✓ Requires the small MS4 operator to examine and alter their own actions to help ensure reduction in the amount and type of pollutant that:
 - Collect on streets, parking lots, open spaces, and storage and vehicle maintenance areas
 - Results from actions such as environmentally damaging land development and flood management practices
- ✓ Common pollution prevention & good housekeeping practices:
 - Street sweeping
 - Maintaining storm inlets
 - Protecting equipment
 - Disposing of waste




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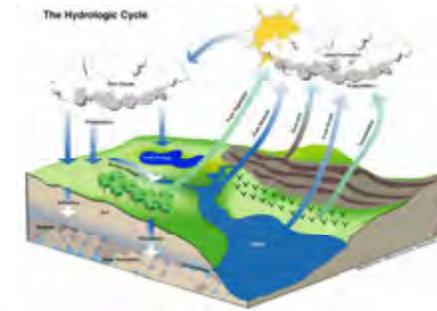
How does an MS4 Program Impact Water Quality?



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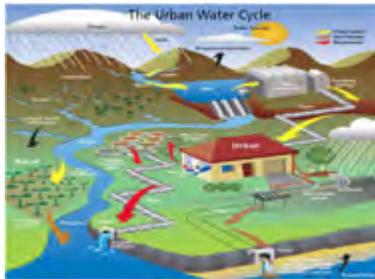
The Hydrologic Cycle



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Development & Urbanization Affect the Hydrologic Cycle!



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What Can We Do About Protecting Our Waters?

- ✓ Responsible water use and waste disposal
- ✓ Education of others on the importance of water quality
- ✓ Best Management Practices (BMPs)



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Did you know?

There is a retention basin BMP located behind the Jesse B. Bolling Building



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Before Construction of the Retention Pond



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Appendix MCM 3



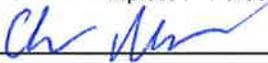
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 PO Box 9414
 Virginia State University, VA 23806
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 Fax: (804)524-5383

**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>1</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>311, 312</u>
Outfall Description	End of Pipe Diameter: <u>32"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <u>N</u>	Flow Present? <u>Y</u> <u>N</u>	
	If yes, (Circle):	Width of Water Surface <u>.58'</u>	
	Water:	Approximate Depth of Water (ft.): <u>.02'</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>2</u>	
	Partially	Approximate Flow Rate (cfs): <u>.0232</u>	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	<input checked="" type="checkbox"/> Clear		
Partially	Muddy		
Debris Around Outfall (Check all that apply):	Milky		
None <input checked="" type="checkbox"/>	Sheen		
Sediment	Soapy Foam		
Trash	Other: _____		
Other: _____	Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):	
	None <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/>	
	Sediment	Petroleum	
	Trash	Sewage	
	Other: _____	Other: _____	
Visual Observations (Circle)		Floatables	<u>Y</u> <u>N</u>
		Deposits/Stains	<u>Y</u> <u>N</u>
Describe			
Vegetation Condition (Circle)		Excessive	Inhibited
Describe		<u>None</u>	
Pipe Condition (Circle)		<u>Good</u>	Fair Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleets Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 1 - #311



Outfall 1 - #312



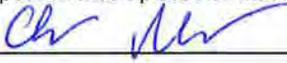
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>2</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>Chris Nelson Erin Gallagher</u>	Photo #'s: <u>313</u>
Outfall Description	End of Pipe Diameter: <u>16"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	Concrete	
	<input type="checkbox"/> Elliptical	PVC	
	<input type="checkbox"/> Box	Steel	
	<input type="checkbox"/> Other:	Other: <u>HDPE</u>	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	Visual Observations
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	Flow Present? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	Width of Water Surface _____ Approximate Depth of Water (ft.): _____ Approximate Flow Velocity (ft./s): _____ Approximate Flow Rate (cfs): _____ Flow Color/Clarity (Check all that apply): <input type="checkbox"/> Clear <input type="checkbox"/> Muddy <input type="checkbox"/> Milky <input type="checkbox"/> Sheen <input type="checkbox"/> Soapy Foam Other: _____ Flow Odor (Check all that apply): <input type="checkbox"/> None <input type="checkbox"/> Petroleum <input type="checkbox"/> Sewage Other: _____
	If yes, (Circle): Water: <input type="checkbox"/> Fully <input type="checkbox"/> Partially		
	Sediment: <input type="checkbox"/> Fully <input type="checkbox"/> Partially		
	Debris Around Outfall (Check all that apply): <input type="checkbox"/> None <input checked="" type="checkbox"/> <input type="checkbox"/> Sediment <input type="checkbox"/> Trash Other: _____		
	Debris in Pipe (Check all that apply): <input type="checkbox"/> None <input checked="" type="checkbox"/> <input type="checkbox"/> Sediment <input type="checkbox"/> Trash Other: _____		
	Visual Observations (Circle)	Floatables	
	Deposits/Stains	<input checked="" type="radio"/> <u>N</u>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe	<u>None</u>		
Pipe Condition (Circle)	<input checked="" type="radio"/> <u>Good</u>	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 2 – #313



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>3</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nilson</u>	Photo #'s: <u>316, 317</u>
Outfall Description	End of Pipe Diameter: <u>60"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other:	Other:	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Flow Present? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	If yes, (Circle): Water:	Width of Water Surface <u>40"</u>	
	<input checked="" type="checkbox"/> Fully <input checked="" type="checkbox"/> Partially	Approximate Depth of Water (ft.): <u>7"</u>	
	Sediment:	Approximate Flow Velocity (ft./s): <u>.1"/s</u>	
	<input checked="" type="checkbox"/> Fully <input checked="" type="checkbox"/> Partially	Approximate Flow Rate (cfs): <u>.016</u>	
	Debris Around Outfall (Check all that apply):	Flow Color/Clarity (Check all that apply):	
None <input type="checkbox"/>	<input checked="" type="checkbox"/> Clear		
Sediment <input type="checkbox"/>	Muddy <input type="checkbox"/>		
Trash <input type="checkbox"/>	Milky <input type="checkbox"/>		
Other: _____	Soapy Foam <input type="checkbox"/>		
Debris in Pipe (Check all that apply):	Other: _____		
None <input type="checkbox"/>	Flow Odor (Check all that apply):		
Sediment <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/>		
Trash <input type="checkbox"/>	Petroleum <input type="checkbox"/>		
Other: _____	Sewage <input type="checkbox"/>		
	Other: _____		
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> Y/N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y/N	
Describe	<u>Sediment @ bottom</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe	<u>None</u>		
Pipe Condition (Circle)	<input checked="" type="checkbox"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 3 – #316



Outfall 3 - #317



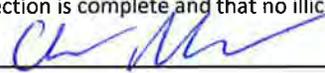
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>4</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>314</u>
Outfall Description	End of Pipe Diameter: <u>54"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input type="checkbox"/> Steel	
	Other: _____	Other: _____	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> N	Flow Present? <input checked="" type="radio"/> Y <input type="radio"/> N	
	If yes, (Circle):	Width of Water Surface <u>.5'</u>	
	Water:	Approximate Depth of Water (ft.): <u>.25"</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>.5 ft/s</u>	
	Partially	Approximate Flow Rate (cfs): <u>.005</u>	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	<input checked="" type="checkbox"/> Clear		
Partially	<input type="checkbox"/> Muddy		
Debris Around Outfall (Check all that apply):	<input type="checkbox"/> Milky		
None <input checked="" type="checkbox"/>	<input type="checkbox"/> Sheen		
Sediment <input type="checkbox"/>	<input type="checkbox"/> Soapy Foam		
Trash <input type="checkbox"/>	Other: _____		
Other: _____	Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):	
None <input checked="" type="checkbox"/>	<input type="checkbox"/> None	<input checked="" type="checkbox"/>	
Sediment <input type="checkbox"/>	<input type="checkbox"/> Petroleum	<input type="checkbox"/>	
Trash <input type="checkbox"/>	<input type="checkbox"/> Sewage	<input type="checkbox"/>	
Other: _____	Other: _____		
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe	<u>None</u>		
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	<input type="radio"/> Fair	<input type="radio"/> Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  _____ Signature of Inspector </p> <p> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ Signature of Inspector </p> <p> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 4 – #314



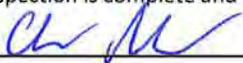
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>5</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>318, 319</u>
Outfall Description	End of Pipe Diameter: <u>37"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall: <u>3/20/2015</u>	Quantity of Last Rainfall (in.): <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> N	Flow Present? <input checked="" type="radio"/> Y <input type="radio"/> N	
	If yes, (Circle):	Width of Water Surface: <u>2.5"</u>	
	Water:	Approximate Depth of Water (ft.): <u>.5"</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>.01 ft/s</u>	
	Partially	Approximate Flow Rate (cfs): <u>.0009</u>	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	<input checked="" type="checkbox"/> Clear		
Partially	<input type="checkbox"/> Muddy		
Debris Around Outfall (Check all that apply):	<input type="checkbox"/> Milky		
None	<input checked="" type="checkbox"/> Sheen		
Sediment	<input type="checkbox"/> Soapy Foam		
Trash	Other: _____		
Other: _____	Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):	
None	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> None	
Sediment	<input type="checkbox"/> Sediment	<input type="checkbox"/> Petroleum	
Trash	<input type="checkbox"/> Trash	<input type="checkbox"/> Sewage	
Other: _____	Other: _____	Other: _____	
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Describe	<u>Algae</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe	<u>Some</u>		
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:	Algae			
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  _____ Signature of Inspector </p> <p> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ Signature of Inspector </p> <p> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 5 – #318



Outfall 5 - #319



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>6</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>320, 321</u>
Outfall Description	End of Pipe Diameter: <u>30"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other:	Other:	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If yes, (Circle):	Flow Present? <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Width of Water Surface <u>19"</u>
	Water:	Approximate Depth of Water (ft.): <u>1"</u>	Approximate Flow Velocity (ft./s): <u>1 ft/s</u>
	Fully	Approximate Flow Rate (cfs): <u>0.132</u>	Flow Color/Clarity (Check all that apply):
	<input checked="" type="checkbox"/> Partially	Flow Color/Clarity (Check all that apply):	<input checked="" type="checkbox"/> Clear
	Sediment:	<input checked="" type="checkbox"/> Clear	Muddy
	Fully	Milky	Soapy Foam
	<input checked="" type="checkbox"/> Partially	Other:	Other:
	Debris Around Outfall (Check all that apply):	Flow Odor (Check all that apply):	<input checked="" type="checkbox"/>
None	None		
Sediment	<input checked="" type="checkbox"/> Petroleum		
Trash	Sewage		
Other:	Other:		
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Describe	<u>Some stains</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="checkbox"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 6 – #320



Outfall 6 - #321



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>7</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>326</u>
Outfall Description	End of Pipe Diameter: <u>6"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	Concrete	
	<input type="checkbox"/> Elliptical	PVC	
	<input type="checkbox"/> Box	Steel	
	Other: _____	Other: <u>HDPE</u>	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	Flow Present? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	
	If yes, (Circle): Water:	Width of Water Surface	
	Fully	Approximate Depth of Water (ft.): _____	
	Partially	Approximate Flow Velocity (ft./s): _____	
	Sediment:	Approximate Flow Rate (cfs): _____	
	Fully	Flow Color/Clarity (Check all that apply):	
Partially	Clear		
Debris Around Outfall (Check all that apply):	Muddy		
None <input checked="" type="checkbox"/>	Milky		
Sediment <input type="checkbox"/>	Sheen		
Trash <input type="checkbox"/>	Soapy Foam		
Other: <u>Leaves</u>	Other: _____		
Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):		
None <input checked="" type="checkbox"/>	None		
Sediment <input type="checkbox"/>	Petroleum		
Trash <input type="checkbox"/>	Sewage		
Other: <u>Leaves</u>	Other: _____		
Visual Observations (Circle)	Floatables	<u>Y/N</u>	
	Deposits/Stains	<u>Y/N</u>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<u>Good</u>	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:	Leaves			
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
Certification:				
If no action is required, certify the following:				
"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."				
 _____ Signature of Inspector		3/23/2015 _____ Date		
If illicit discharge investigation is required, provide a time frame for investigation completion: _____				
Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.				
Upon illicit discharge elimination, re-inspect and certify the following:				
"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."				
_____ Signature of Inspector		_____ Date		
Next inspection date: _____				



Outfall 7 – #326



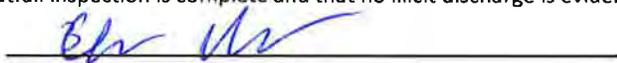
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # 8	Inspection Date: 3/23/2015	Inspector: E. Gallagher C. Nelson	Photo #'s: 323
Outfall Description	End of Pipe Diameter: 21"	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input type="checkbox"/> Steel	
	Other:	Other: _____	
Date of Last Rainfall 3/20/2015	Quantity of Last Rainfall (in.) 0.74	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <input checked="" type="radio"/> Y <input type="radio"/> N	Flow Present? <input type="radio"/> Y <input checked="" type="radio"/> N	
	If yes, (Circle):	Width of Water Surface 11"	
	Water:	Approximate Depth of Water (ft.): 1"	
	<input type="checkbox"/> Fully	Approximate Flow Velocity (ft./s): 0	
	<input checked="" type="checkbox"/> Partially	Approximate Flow Rate (cfs): 0	
	Sediment:	Flow Color/Clarity (Check all that apply):	
<input type="checkbox"/> Fully	<input checked="" type="checkbox"/> Clear		
<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> Muddy		
Debris Around Outfall (Check all that apply):	<input type="checkbox"/> Milky		
None	<input type="checkbox"/> Sheen		
Sediment	<input checked="" type="checkbox"/> Soapy Foam		
Trash	Other: _____		
Other: _____	Flow Odor (Check all that apply):		
Debris in Pipe (Check all that apply):	<input type="checkbox"/> None		
None	<input checked="" type="checkbox"/> Petroleum		
Sediment	<input type="checkbox"/> Sewage		
Trash	Other: _____		
Other: _____			
Visual Observations (Circle)	Floatables	<input checked="" type="radio"/> Y <input type="radio"/> N	
	Deposits/Stains	<input checked="" type="radio"/> Y <input type="radio"/> N	
Describe	Sediment in pipe		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe	Some		
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	<input type="radio"/> Fair	<input type="radio"/> Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:	Plants			
Receiving Stream Name	Fleets Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  3/23/2015 </p> <p style="text-align: center;"> Signature of Inspector Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ _____ </p> <p style="text-align: center;"> Signature of Inspector Date </p> <p>Next inspection date: _____</p>				



Outfall 8 – #323



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>9</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>322</u>
Outfall Description	End of Pipe Diameter: <u>37"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other:	Other:	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	Flow Present? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	
	If yes, (Circle): Water:	Width of Water Surface	
	Fully	Approximate Depth of Water (ft.):	
	Partially	Approximate Flow Velocity (ft./s):	
	Sediment:	Approximate Flow Rate (cfs):	
	Fully	Flow Color/Clarity (Check all that apply):	
Partially	Clear		
Debris Around Outfall (Check all that apply):	Muddy		
None	Milky		
Sediment	Sheen		
Trash	Soapy Foam		
Other:	Other:		
Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):		
None	None	<input checked="" type="checkbox"/>	
Sediment	Petroleum		
Trash	Sewage		
Other:	Other:		
Visual Observations (Circle)	Floatables	<u>Y</u> <input checked="" type="radio"/> <u>N</u>	
	Deposits/Stains	<u>Y</u> <input checked="" type="radio"/> <u>N</u>	
Describe	<u>Trash downstream</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<u>Good</u>	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleet's Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>3/13/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 9 – #322



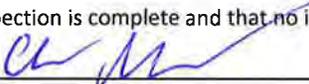
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>10</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>328, 329</u>
Outfall Description	End of Pipe Diameter: <u>30"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input type="checkbox"/> Steel	
	Other: _____	Other: _____	
Date of Last Rainfall	Quantity of Last Rainfall (in.)	Estimated Discharge Rate	Visual Observations
<u>3/20/2015</u>	<u>0.74</u>		
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Flow Present? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
	If yes, (Circle):	Width of Water Surface	
	Water:	Approximate Depth of Water (ft.): _____	
	Fully	Approximate Flow Velocity (ft./s): _____	
	Partially	Approximate Flow Rate (cfs): _____	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	Clear		
Partially	Muddy		
Debris Around Outfall (Check all that apply):	Milky		
None <input checked="" type="checkbox"/>	Sheen		
Sediment <input type="checkbox"/>	Soapy Foam		
Trash <input type="checkbox"/>	Other: _____		
Other: _____			
Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):		
None <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/>		
Sediment <input type="checkbox"/>	Petroleum <input type="checkbox"/>		
Trash <input type="checkbox"/>	Sewage <input type="checkbox"/>		
Other: _____	Other: _____		
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> Y/N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y/N	
Describe	<u>Some Stains</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="checkbox"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleets Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p style="text-align: center;">3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 10 – #328



Outfall 10 - #329



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>11</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>330, 331</u>
Outfall Description	End of Pipe Diameter: <u>37'</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall: <u>3/20/2015</u>	Quantity of Last Rainfall (in.): <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <input checked="" type="radio"/> Y <input type="radio"/> N	Flow Present? <input checked="" type="radio"/> Y <input type="radio"/> N	
	If yes, (Circle):	Width of Water Surface: <u>31"</u>	
	Water:	Approximate Depth of Water (ft.): <u>8"</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>.25 ft/s</u>	
	<input checked="" type="radio"/> Partially	Approximate Flow Rate (cfs): <u>.43</u>	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	<input checked="" type="checkbox"/> Clear		
<input checked="" type="radio"/> Partially	<input type="checkbox"/> Muddy		
Debris Around Outfall (Check all that apply):	<input type="checkbox"/> Milky		
None <input checked="" type="checkbox"/>	<input type="checkbox"/> Sheen		
Sediment <input type="checkbox"/>	<input type="checkbox"/> Soapy Foam		
Trash <input type="checkbox"/>	Other: _____		
Other: _____	Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):	
	None <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/>	
	Sediment <input checked="" type="checkbox"/>	Petroleum <input type="checkbox"/>	
	Trash <input type="checkbox"/>	Sewage <input type="checkbox"/>	
	Other: _____	Other: _____	
Visual Observations (Circle)	Floatables	<input type="checkbox"/> Y/N	
	Deposits/Stains	<input checked="" type="checkbox"/> Y/N	
Describe	<u>Sediment deposits</u>		
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	Good	<u>Fair</u>	Poor
Describe	Crack		
Notable Biology (animals, insects, plants, etc.) Describe:			
Receiving Stream Name	Fleets Branch		
Notes/Necessary Action:			
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  _____ Signature of Inspector </p> <p> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ Signature of Inspector </p> <p> _____ Date </p> <p>Next inspection date: _____</p>			



Outfall 11 - #330



Outfall 11 - #331



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>12</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>332, 333</u>
Outfall Description	End of Pipe Diameter: <u>30"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input type="checkbox"/> Steel	
	Other: _____	Other: _____	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> N	Flow Present? <u>Y</u> <input checked="" type="radio"/> N	
	If yes, (Circle): Water: Fully Partially	Width of Water Surface Approximate Depth of Water (ft.): _____ Approximate Flow Velocity (ft./s): _____ Approximate Flow Rate (cfs): _____	
	Sediment: Fully Partially	Flow Color/Clarity (Check all that apply): Clear Muddy Milky	
	Debris Around Outfall (Check all that apply): None <input checked="" type="checkbox"/> Sediment <input type="checkbox"/> Trash <input type="checkbox"/> Other: _____	Sheen Soapy Foam Other: _____	
	Debris in Pipe (Check all that apply): None <input checked="" type="checkbox"/> Sediment <input type="checkbox"/> Trash <input type="checkbox"/> Other: _____	Flow Odor (Check all that apply): None <input type="checkbox"/> Petroleum <input type="checkbox"/> Sewage <input type="checkbox"/> Other: _____	
	Visual Observations (Circle)	Floatables <input type="checkbox"/>	<input checked="" type="checkbox"/> Y/N
	Deposits/Stains <input type="checkbox"/>	<input checked="" type="checkbox"/> Y/N	
Describe	<u>Stains in pipe</u>		
Vegetation Condition (Circle)	Excessive <input type="checkbox"/>	Inhibited <input type="checkbox"/>	
Describe			
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	Fair <input type="checkbox"/>	Poor <input type="checkbox"/>
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Fleets Branch			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 12 - #332



Outfall 12 - #333



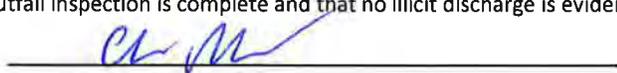
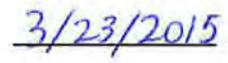
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>13</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>334</u>
Outfall Description	End of Pipe Diameter: <u>16"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other:	Other:	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	Visual Observations
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? <u>Y</u> <u>(N)</u>	Flow Present? <u>Y</u> <u>(N)</u>	Visual Observations
	If yes, (Circle):	Width of Water Surface	
	Water:	Approximate Depth of Water (ft.):	
	Fully	Approximate Flow Velocity (ft./s):	
	Partially	Approximate Flow Rate (cfs):	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	Clear		
Partially	Muddy		
Debris Around Outfall (Check all that apply):	Milky		
None <input checked="" type="checkbox"/>	Sheen		
Sediment	Soapy Foam		
Trash	Other:		
Other:	Flow Odor (Check all that apply):		
Debris in Pipe (Check all that apply):	None <input checked="" type="checkbox"/>		
None <input checked="" type="checkbox"/>	Petroleum		
Sediment	Sewage		
Trash	Other:		
Other:			
Visual Observations (Circle)	Floatables	<u>Y/N</u>	
	Deposits/Stains	<u>Y/N</u>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	Good	<u>Fair</u>	Poor
Describe			



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Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>   Signature of Inspector Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p>   Signature of Inspector Date </p> <p>Next inspection date: _____</p>				



Outfall 13 – #334



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>14</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>335, 336</u>
Outfall Description	End of Pipe Diameter: <u>18"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input type="checkbox"/> Steel	
	<input type="checkbox"/> Other:	Other: _____	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	Visual Observations
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Flow Present? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
	If yes, (Circle):	Width of Water Surface	
	Water:	Approximate Depth of Water (ft.): _____	
	Fully	Approximate Flow Velocity (ft./s): _____	
	Partially	Approximate Flow Rate (cfs): _____	
	Sediment:	Flow Color/Clarity (Check all that apply):	
Fully	Clear		
Partially	Muddy		
Debris Around Outfall (Check all that apply):	Milky		
None <input type="checkbox"/>	Sheen <input checked="" type="checkbox"/>		
Sediment <input type="checkbox"/>	Soapy Foam <input type="checkbox"/>		
Trash <input type="checkbox"/>	Other: _____		
Other: _____	Flow Odor (Check all that apply):		
Debris in Pipe (Check all that apply):	None <input checked="" type="checkbox"/>		
None <input type="checkbox"/>	Petroleum <input type="checkbox"/>		
Sediment <input type="checkbox"/>	Sewage <input type="checkbox"/>		
Trash <input type="checkbox"/>	Other: _____		
Other: _____			
Visual Observations (Circle)	Floatables	Y/N <input checked="" type="checkbox"/>	
	Deposits/Stains	Y/N <input checked="" type="checkbox"/>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="checkbox"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 14 – #335



Outfall 14 - #336



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>16</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>337, 338, 339</u>
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Outfall Description	End of Pipe Diameter: <u>9"</u>	Pipe Material
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> PVC
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> Steel
	<input type="checkbox"/> Box	Other: _____
	<input type="checkbox"/> Other: _____	

Date of Last Rainfall: <u>3/20/2015</u>	Quantity of Last Rainfall (in.): <u>0.74</u>	Estimated Discharge Rate
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Weather Information Can Be Found @:
<http://www.wunderground.com/history/airport/KRIC/2014>

Findings	Outfall Submerged? <input checked="" type="radio"/> Y <input type="radio"/> N	Flow Present? <input checked="" type="radio"/> Y <input type="radio"/> N
	If yes, (Circle): Water: <u>Partially</u>	Width of Water Surface: <u>1"</u>
	Sediment: <u>Partially</u>	Approximate Depth of Water (ft.): <u>.1"</u>
	Debris Around Outfall (Check all that apply): None <input type="checkbox"/> Sediment <input type="checkbox"/> Trash <input checked="" type="checkbox"/> Other: _____	Approximate Flow Velocity (ft./s): <u>.5 ft/s</u>
	Debris in Pipe (Check all that apply): None <input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Trash <input type="checkbox"/> Other: _____	Approximate Flow Rate (cfs): <u>.0003</u>
		Flow Color/Clarity (Check all that apply): <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Muddy <input type="checkbox"/> Milky <input type="checkbox"/> Soapy Foam Other: _____

Visual Observations (Circle)	Floatables	<input checked="" type="radio"/> Y <input type="radio"/> N
	Deposits/Stains	<input checked="" type="radio"/> Y <input type="radio"/> N

Describe	<u>Half underground</u>	
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Vegetation Condition (Circle)	<input checked="" type="radio"/> Excessive	<input type="radio"/> Inhibited
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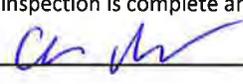
Describe	<u>Roots</u>	
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Pipe Condition (Circle)	<input checked="" type="radio"/> Good	<input type="radio"/> Fair	<input type="radio"/> Poor
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Describe	
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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  3/23/2015 _____ Signature of Inspector Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ Signature of Inspector Date </p> <p>Next inspection date: _____</p>				



Outfall 16 – #337



Outfall 16 - #338



Outfall 16 - #339



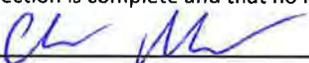
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>17</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>340</u>
Outfall Description	End of Pipe Diameter: <u>9" Dual</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	<input type="checkbox"/> PVC	
	Box	<input type="checkbox"/> Steel	
	Other: _____	Other: _____	
Date of Last Rainfall	Quantity of Last Rainfall (in.)	Estimated Discharge Rate	
<u>3/20/2015</u>	<u>0.74</u>		
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? Y <u>(N)</u>	Flow Present? Y <u>(N)</u>	
	If yes, (Circle):	Width of Water Surface	
	Water:	Approximate Depth of Water (ft.): _____	
	Fully	Approximate Flow Velocity (ft./s): _____	
	Partially	Approximate Flow Rate (cfs): _____	
	Sediment:	Flow Color/Clarity (Check all that apply):	
	Fully	Clear	
	Partially	Muddy	
Debris Around Outfall (Check all that apply):	Milky		
None	Sheen		
Sediment	<input checked="" type="checkbox"/> Soapy Foam		
Trash	Other: _____		
Other: _____			
Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):		
None	None		
Sediment	<input checked="" type="checkbox"/> Petroleum		
Trash	<input checked="" type="checkbox"/> Sewage		
Other: _____	Other: _____		
Visual Observations (Circle)	Floatables	<u>(N)</u>	
	Deposits/Stains	<u>(N)</u>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<u>(Good)</u>	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  <u>3/23/2015</u> </p> <p style="text-align: center;"> Signature of Inspector Date </p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ _____ </p> <p style="text-align: center;"> Signature of Inspector Date </p> <p>Next inspection date: _____</p>				



Outfall 17 – #340



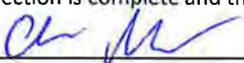
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID #	18	Inspection Date:	3/23/2015	Inspector:	E. Gallagher C. Nelson	Photo #'s:	341, 342, 343
Outfall Description	End of Pipe Diameter: 30"		Pipe Material				
	<input checked="" type="checkbox"/> Circular		<input checked="" type="checkbox"/> Concrete				
	<input type="checkbox"/> Elliptical		<input type="checkbox"/> PVC				
	<input type="checkbox"/> Box		<input type="checkbox"/> Steel				
	Other:		Other:				
Date of Last Rainfall	3/20/2015	Quantity of Last Rainfall (in.)	0.74	Estimated Discharge Rate			
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014				Visual Observations			
Findings	Outfall Submerged? <input checked="" type="radio"/> Y <input type="radio"/> N		Flow Present? <input checked="" type="radio"/> Y <input type="radio"/> N				
	If yes, (Circle): Water:		Width of Water Surface				
	Fully		Approximate Depth of Water (ft.):				
	<input checked="" type="radio"/> Partially		Approximate Flow Velocity (ft./s):				
	Sediment:		Approximate Flow Rate (cfs):				
	Fully		Flow Color/Clarity (Check all that apply):				
<input checked="" type="radio"/> Partially		<input checked="" type="checkbox"/> Clear					
Debris Around Outfall (Check all that apply):		<input type="checkbox"/> Milky					
<input type="checkbox"/> None		<input type="checkbox"/> Sheen					
<input type="checkbox"/> Sediment		<input checked="" type="checkbox"/> Soapy Foam					
<input type="checkbox"/> Trash		Other:					
Other:		Debris in Pipe (Check all that apply):					
<input type="checkbox"/> None		Flow Odor (Check all that apply):					
<input checked="" type="checkbox"/> Sediment		<input type="checkbox"/> None					
<input type="checkbox"/> Trash		<input checked="" type="checkbox"/> Petroleum					
Other:		<input type="checkbox"/> Sewage					
Other:		Other:					
Visual Observations (Circle)		Floatables		<input checked="" type="radio"/> Y <input type="radio"/> N			
		Deposits/Stains		<input checked="" type="radio"/> Y <input type="radio"/> N			
Describe		Broken, Under Tree					
Vegetation Condition (Circle)		<input checked="" type="radio"/> Excessive		<input type="radio"/> Inhibited			
Describe		Under Tree					
Pipe Condition (Circle)		<input type="radio"/> Good		<input type="radio"/> Fair		<input checked="" type="radio"/> Poor	
Describe							



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Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:	Tree			
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
Certification:				
If no action is required, certify the following:				
"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."				
 _____ Signature of Inspector			3/23/2015 _____ Date	
If illicit discharge investigation is required, provide a time frame for investigation completion: _____				
Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.				
Upon illicit discharge elimination, re-inspect and certify the following:				
"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."				
_____ Signature of Inspector			_____ Date	
Next inspection date: _____				



Outfall 18 – #341



Outfall 18 – #342



Outfall 18 – #343



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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>19</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nilsen</u>	Photo #'s: <u>357, 358, 359</u>
Outfall Description	End of Pipe Diameter: <u>12"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall <u>3/20/2015</u>	Quantity of Last Rainfall (in.) <u>0.74</u>	Estimated Discharge Rate	Visual Observations
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? <input checked="" type="radio"/> Y <input type="radio"/> N	Flow Present? <input type="radio"/> Y <input checked="" type="radio"/> N	Width of Water Surface _____ Approximate Depth of Water (ft.): _____ Approximate Flow Velocity (ft./s): _____ Approximate Flow Rate (cfs): _____ Flow Color/Clarity (Check all that apply): <input type="checkbox"/> Clear <input type="checkbox"/> Muddy <input type="checkbox"/> Milky <input type="checkbox"/> Sheen <input type="checkbox"/> Soapy Foam Other: _____ Flow Odor (Check all that apply): <input type="checkbox"/> None <input type="checkbox"/> Petroleum <input type="checkbox"/> Sewage Other: _____
	If yes, (Circle): Water: Fully Partially		
	Sediment: Fully <input checked="" type="radio"/> Partially		
	Debris Around Outfall (Check all that apply): None Sediment <input checked="" type="checkbox"/> Trash <input checked="" type="checkbox"/> Other: _____		
	Debris in Pipe (Check all that apply): None Sediment <input checked="" type="checkbox"/> Trash Other: _____		
	Visual Observations (Circle)	Floatables <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Describe			
Vegetation Condition (Circle)	Excessive	<input checked="" type="radio"/> Inhibited	
Describe			
Pipe Condition (Circle)	Good	Fair	<input checked="" type="radio"/> Poor
Describe			



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Structure Condition (Circle)	Good	Fair	Poor
Describe			
Notable Biology (animals, insects, plants, etc.) Describe:			
Receiving Stream Name	Appomattox River		
Notes/Necessary Action:			
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p>  _____ Signature of Inspector </p> <p> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p> _____ Signature of Inspector </p> <p> _____ Date </p> <p>Next inspection date: _____</p>			



Outfall 19 – #357



Outfall 19 – #358



Outfall 19 – #359



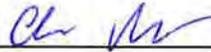
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>20</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>361</u>
Outfall Description	End of Pipe Diameter: <u>5"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input type="checkbox"/> Concrete	
	<input type="checkbox"/> Elliptical	<input type="checkbox"/> PVC	
	<input type="checkbox"/> Box	<input checked="" type="checkbox"/> Steel	
	Other: _____	Other: _____	
Date of Last Rainfall: <u>3/20/2015</u>	Quantity of Last Rainfall (in.): <u>0.74</u>	Estimated Discharge Rate	Visual Observations
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			
Findings	Outfall Submerged? Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Flow Present? Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	Width of Water Surface
	If yes, (Circle):	Approximate Depth of Water (ft.): _____	Approximate Flow Velocity (ft./s): _____
	Water:	Approximate Flow Rate (cfs): _____	Flow Color/Clarity (Check all that apply):
	Fully	Clear	Muddy
	Partially	Milky	Sheen
	Sediment:	Soapy Foam	Other: _____
Fully	Other: _____	Flow Odor (Check all that apply):	
Partially	Debris Around Outfall (Check all that apply):	None <input checked="" type="checkbox"/>	Petroleum _____
None <input checked="" type="checkbox"/>	None _____	Sewage _____	Other: _____
Sediment _____	Debris in Pipe (Check all that apply):	Other: _____	
Trash <input checked="" type="checkbox"/>	None <input checked="" type="checkbox"/>		
Other: _____	Sediment _____		
	Trash _____		
	Other: _____		
Visual Observations (Circle)	Floatables	Y/N <input checked="" type="radio"/>	
	Deposits/Stains	Y/N <input checked="" type="radio"/>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="radio"/> Good	Fair	Poor
Describe			



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Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
<p>Certification:</p> <p>If no action is required, certify the following:</p> <p>"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."</p> <p style="text-align: center;">  _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>3/23/2015</p> <p>If illicit discharge investigation is required, provide a time frame for investigation completion: _____</p> <p>Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.</p> <p>Upon illicit discharge elimination, re-inspect and certify the following:</p> <p>"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."</p> <p style="text-align: center;"> _____ Signature of Inspector </p> <p style="text-align: center;"> _____ Date </p> <p>Next inspection date: _____</p>				



Outfall 20 – #361



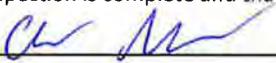
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**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>21</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>363</u>
Outfall Description	End of Pipe Diameter: <u>18"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall	Quantity of Last Rainfall (in.)	Estimated Discharge Rate	
<u>3/20/2015</u>	<u>0.74</u>		
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? <u>Y</u> <input checked="" type="radio"/> <u>N</u>	Flow Present? <input checked="" type="radio"/> <u>Y</u> <input type="radio"/> <u>N</u>	
	If yes, (Circle):	Width of Water Surface	
	Water:	Approximate Depth of Water (ft.): <u>.1"</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>Trickle</u>	
	Partially	Approximate Flow Rate (cfs):	
	Sediment:	Flow Color/Clarity (Check all that apply):	
	Fully	<input checked="" type="checkbox"/> <u>Clear</u>	
	Partially	<input type="checkbox"/> Muddy	
Debris Around Outfall (Check all that apply):	<input type="checkbox"/> Milky		
None <input checked="" type="checkbox"/>	<input type="checkbox"/> Sheen		
Sediment <input type="checkbox"/>	<input type="checkbox"/> Soapy Foam		
Trash <input type="checkbox"/>	Other: _____		
Other: _____			
Debris in Pipe (Check all that apply):	Flow Odor (Check all that apply):		
None <input checked="" type="checkbox"/>	<input type="checkbox"/> None <input checked="" type="checkbox"/>		
Sediment <input type="checkbox"/>	<input type="checkbox"/> Petroleum <input type="checkbox"/>		
Trash <input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/>		
Other: _____	Other: _____		
Visual Observations (Circle)	Floatables	<input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u>	
	Deposits/Stains	<input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>N</u>	
Describe			
Vegetation Condition (Circle)	Excessive	Inhibited	
Describe			
Pipe Condition (Circle)	<input checked="" type="radio"/> <u>Good</u>	Fair	Poor
Describe			



Capital Outlay Facilities
 PO Box 9414
 Virginia State University, VA 23806
 Phone: (804)524-3971
 Fax: (804)524-5383

Structure Condition (Circle)	<u>Good</u>	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
Certification:				
If no action is required, certify the following:				
"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."				
 _____ Signature of Inspector		3/23/2015 _____ Date		
If illicit discharge investigation is required, provide a time frame for investigation completion: _____				
Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.				
Upon illicit discharge elimination, re-inspect and certify the following:				
"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."				
_____ Signature of Inspector		_____ Date		
Next inspection date: _____				



Outfall 21 – #363



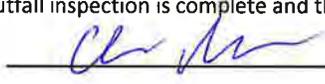
Capital Outlay Facilities
 PO Box 9414
 Virginia State University, VA 23806
 Phone: (804)524-3971
 Fax: (804)524-5383

**Virginia State University
 Stormwater Outfall Inspection Form**

Outfall ID # <u>22</u>	Inspection Date: <u>3/23/2015</u>	Inspector: <u>E. Gallagher C. Nelson</u>	Photo #'s: <u>365</u>
Outfall Description	End of Pipe Diameter: <u>18"</u>	Pipe Material	
	<input checked="" type="checkbox"/> Circular	<input checked="" type="checkbox"/> Concrete	
	Elliptical	PVC	
	Box	Steel	
	Other: _____	Other: _____	
Date of Last Rainfall	Quantity of Last Rainfall (in.)	Estimated Discharge Rate	
<u>3/20/2015</u>	<u>0.79</u>		
Weather Information Can Be Found @: http://www.wunderground.com/history/airport/KRIC/2014			Visual Observations
Findings	Outfall Submerged? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Flow Present? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
	If yes, (Circle):	Width of Water Surface <u>7"</u>	
	Water:	Approximate Depth of Water (ft.): <u>.5"</u>	
	Fully	Approximate Flow Velocity (ft./s): <u>2 ft/s</u>	
	Partially	Approximate Flow Rate (cfs): <u>.049</u>	
	Sediment:	Flow Color/Clarity (Check all that apply):	
	Fully	<input checked="" type="checkbox"/> Clear	
	Partially	<input type="checkbox"/> Muddy	
Debris Around Outfall (Check all that apply):		<input type="checkbox"/> Milky	
None	<input checked="" type="checkbox"/>	<input type="checkbox"/> Sheen	
Sediment	<input type="checkbox"/>	<input type="checkbox"/> Soapy Foam	
Trash	<input type="checkbox"/>	Other: _____	
Other: _____			
Debris in Pipe (Check all that apply):		Flow Odor (Check all that apply):	
None	<input checked="" type="checkbox"/>	<input type="checkbox"/> None	
Sediment	<input type="checkbox"/>	<input type="checkbox"/> Petroleum	
Trash	<input type="checkbox"/>	<input type="checkbox"/> Sewage	
Other: _____		Other: _____	
Visual Observations (Circle)		Floatables	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
		Deposits/Stains	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Describe		<u>Some stains</u>	
Vegetation Condition (Circle)		Excessive	Inhibited
Describe			
Pipe Condition (Circle)		<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair <input type="checkbox"/> Poor
Describe			



Capital Outlay Facilities
PO Box 9414
Virginia State University, VA 23806
Phone: (804)524-3971
Fax: (804)524-5383

Structure Condition (Circle)	Good	Fair	Poor	
Describe				
Notable Biology (animals, insects, plants, etc.) Describe:				
Receiving Stream Name	Appomattox River			
Notes/Necessary Action:				
Certification:				
If no action is required, certify the following:				
"I certify that the outfall inspection is complete and that no illicit discharge is evident at this time."				
		3/23/2015		
Signature of Inspector		Date		
If illicit discharge investigation is required, provide a time frame for investigation completion: _____				
Document all steps utilized to eliminate the illicit discharge to include date, time, and actions. Intermittent discharges require three separate investigation with the appropriate documentation.				
Upon illicit discharge elimination, re-inspect and certify the following:				
"I certify that the illicit discharge has been eliminated, documented, and that no additional action is necessary at this time."				
_____		_____		
Signature of Inspector		Date		
Next inspection date: _____				



Outfall 22 – #365

Appendix MCM 4

Matthew Webb

From: Amelia Wehunt
Sent: Wednesday, August 26, 2015 1:57 PM
To: Matthew Webb
Subject: FW: VSU Annual Standards for ESC & SW

Follow Up Flag: Follow up
Flag Status: Flagged

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
Office: 804.200.6544 | Fax: 804.560.1438
Mobile: 804.517.4996 | amelia.wehunt@timmons.com
LinkedIn: www.linkedin.com/in/ameliawehunt
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#).

From: Gavan, Larry (DEQ) [mailto:Larry.Gavan@deq.virginia.gov]
Sent: Tuesday, June 30, 2015 8:31 AM
To: Amelia Wehunt
Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)
Subject: RE: VSU Annual Standards for ESC & SW

Due to the ongoing changes effecting erosion and sediment control (ESC) and stormwater management (SWM), the Department will be administratively extending your previously approved Annual Standards and Specifications till 12/31/15. On the right side of the webpage found at this link please find the Statutory and Regulatory Crosswalks:

<http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>

These Crosswalks were developed to assist those navigating our changing ESC and SWM environment.

Please continue to notify the DEQ with the required project information as per the approved Annual Standards and Specifications prior to initiating land-disturbance.

Hope this helps.

If you should have any questions please do not hesitate to contact me.

Thank you.

Regards,

Larry Gavan

Virginia Department of Environmental Quality
(804) 698-4040

From: Amelia Wehunt [mailto:amelia.wehunt@timmons.com]
Sent: Tuesday, June 30, 2015 8:20 AM
To: Gavan, Larry (DEQ)
Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)
Subject: RE: VSU Annual Standards for ESC & SW

Thanks Larry—please provide the extension documentation needed to show that VSU is in compliance.

We will plan to re0submit in the late fall.

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
Office: 804.200.6544 | Fax: 804.560.1438
Mobile: 804.517.4996 | amelia.wehunt@timmons.com
LinkedIn: www.linkedin.com/in/ameliawehunt
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To send me files greater than 20MB [click here](#).

From: Gavan, Larry (DEQ) [mailto:Larry.Gavan@deq.virginia.gov]
Sent: Tuesday, June 30, 2015 7:34 AM
To: Amelia Wehunt
Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)
Subject: RE: VSU Annual Standards for ESC & SW

P.S. there is no charge for the extension.

Thx
Larry
804 698-4040

From: Gavan, Larry (DEQ)
Sent: Wednesday, June 24, 2015 6:57 AM
To: 'Amelia Wehunt'
Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)
Subject: RE: VSU Annual Standards for ESC & SW

Hi Amelia,
DEQ is extending previously approved Ann. Stds. and Specs. till [12/31/15](#).
Please submit an e-request for an extension.
Thx
L

From: Amelia Wehunt [mailto:amelia.wehunt@timmons.com]
Sent: Tuesday, June 23, 2015 5:19 PM
To: Gavan, Larry (DEQ)
Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)
Subject: RE: VSU Annual Standards for ESC & SW

Larry,

Attached please find VSU's 2015 Combined Annual Standards and Specifications for ESC & SW for your review.

Please let us know if you have any comments or upon approval.

Thanks,

Amelia

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com

1001 Boulders Parkway, Suite 300 | Richmond, VA 23225

Office: 804.200.6544 | Fax: 804.560.1438

Mobile: 804.517.4996 | amelia.wehunt@timmons.com

LinkedIn: www.linkedin.com/in/ameliawehunt

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To send me files greater than 20MB [click here](#).

From: Gavan, Larry (DEQ) [<mailto:Larry.Gavan@deq.virginia.gov>]

Sent: Thursday, April 16, 2015 2:38 PM

To: Amelia Wehunt

Cc: Jonathan A. Taylor; McCutcheon, John (DEQ); Westermann, Pantea (DEQ)

Subject: RE: VSU Annual Standards for ESC & SW

Hi Amelia,

Due to the ongoing changes effecting erosion and sediment control (ESC) and stormwater management (SWM), the Department will be administratively extending your previously approved Annual Standards and Specifications till 7/1/15. On the right side of the webpage found at this link please find the Statutory and Regulatory Crosswalks:

<http://www.deq.virginia.gov/Programs/Water/StormwaterManagement.aspx>

These Crosswalks were developed to assist those navigating our changing ESC and SWM environment.

Please continue to notify the DEQ with the required project information as per the approved Annual Standards and Specifications prior to initiating land-disturbance.

Hope this helps.

If you should have any questions please do not hesitate to contact me.

Thank you.

Regards,

Larry Gavan

Virginia Department of Environmental Quality

(804) 698-4040

From: Amelia Wehunt [<mailto:amelia.wehunt@timmons.com>]

Sent: Thursday, April 16, 2015 2:33 PM

To: Gavan, Larry (DEQ)

Cc: Jonathan A. Taylor

Subject: RE: VSU Annual Standards for ESC & SW 2015-Submittal

Hi Larry,

Per our discussion, please grant VSU an extension of their current 2014 Combined Annual Standards and Specifications for ESC & SW through June 20, 2015, and we will resubmit the 2015 standards for review on/around June 1, 2015 for review and approval.

Thank you,

Amelia

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com

1001 Boulders Parkway, Suite 300 | Richmond, VA 23225

Office: 804.200.6544 | Fax: 804.560.1438

Mobile: 804.517.4996 | amelia.wehunt@timmons.com

LinkedIn: www.linkedin.com/in/ameliawehunt

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To send me files greater than 20MB [click here](#).

From: Amelia Wehunt

Sent: Thursday, April 16, 2015 2:11 PM

To: larry.gavan@deq.virginia.gov

Cc: Jonathan A. Taylor

Subject: VSU Annual Standards for ESC & SW 2015-Submittal

Larry,

Attached please find VSU's 2015 Combined Annual Standards and Specifications for ESC & SW for your review.

Please let us know if you have any comments or upon approval.

Thanks,

Amelia

Amelia Wehunt, PE

Project Manager

TIMMONS GROUP | www.timmons.com

1001 Boulders Parkway, Suite 300 | Richmond, VA 23225

Office: 804.200.6544 | Fax: 804.560.1438

Mobile: 804.517.4996 | amelia.wehunt@timmons.com

LinkedIn: www.linkedin.com/in/ameliawehunt

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2015 Land Disturbing Activities

(*) Indicates activity started within 2014-2015 Annual Reporting Period.

Project Name	Project Location	Project Description	Estimated Disturbed Area Acreage	Approximate Start Date	Approximate Completion Date	On-site Project Manager Name	On-site Project Manager Contact Information	Responsible Land Disturber Permit Number	Operator Name	VAR10 Registration Number
* Dupuy Parking Lot	VSU 475 Dupuy Avenue	Construct a new 150 space parking lot northeast of the new Gateway II Residence Hall	2.5	May 1, 2015	December 31, 2015	W M Jordan	TBD	TBD	W M Jordan	VAR10C-306
* Multipurpose Center	Ettrick Village	Construct a new 168,000 convocation center and associated parking	50	January 1, 2014	January 1, 2016	Doug Sauer	site (804)479-3152 main (804)343-3433	39518 and 40874	S B Ballard	VAR10C-339
Drainage Improvements/ Stormwater Master Plan	VSU Campus	Install drainage improvements and water quality improvements proposed in the Stormwater Master Plan and related to the implementation of the Campus Master Plan 20/20 Vision	276.7	July 1, 2012	June 30, 2019, with renewal anticipated	As noted by project below	As noted below by project	As noted by project below	Jonathan Taylor 804-524-5534	New VAR10-9268 Old VAR10-13-100047
Athletic Trunk Line	VSU Campus	Install a new 60 inch storm line from Fleets Branch Creek to the Multipurpose Center to improve drainage at the Athletic Fields	2.59	May 1, 2014	June 1, 2015	Mark Eanes	804-658-7128	39525	Dickerson Construction	Has coverage under: New VAR10-9268 Old VAR10-13-100047
* Lockett Hall Renovation	Myster Macklin Street	Perform a complete renovation to the existing Lockett Hall Academic Building	1.42	February 1, 2015	February 1, 2016	W M Jordan	TBD	TBD	W M Jordan	Has coverage under: New VAR10-9268 Old VAR10-13-100047

Project Name	Project Location	Project Description	Estimated Disturbed Area Acreage	Approximate Start Date	Approximate Completion Date	On-site Project Manager Name	On-site Project Manager Contact Information	Responsible Land Disturber Permit Number	Operator Name	VAR10 Registration Number
Matoaca Water Tank and Pump Station	3001 River Road	Install a new water tank and pump station	1.73	May 1, 2014	November 1, 2015	TBD	TBD	TBD	TBD	VAR10D-331
Gateway Dining and Events Hardscape	Gateway Dining & Events Center	Install hardscape improvements at the Gateway Dining and Events Center	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Will have coverage under: New VAR10-9268 Old VAR10-13-100047
Gateway Dining and Events BMP Conversion	Gateway Dining & Events Center	Convert existing surface BMP to an underground detention facility behind VSU dining and events center.	0.70	TBD	TBD	TBD	TBD	TBD	TBD	Will have coverage under: New VAR10-9268 Old VAR10-13-100047
Trunk Storm Extension Phase III & IV	VSU Campus	Install a new storm line from Barnes Street north of Trinkle Hall to Daniel's Gym where the line will tie into the Phase I&2 Trunk Line.	3.56	TBD	TBD	TBD	TBD	TBD	TBD	Will have coverage under: New VAR10-9268 Old VAR10-13-100047



INSPECTION REPORT

Project Name: Randolph Farm Greenhouse Addition Project Authority: Jonathan Taylor/Director C.O.
 RLD Name: Jason Porterfield RLD No.: 39962
 Project Location: VSU Randolph Farm Greenhouse Project No: 212-A2212-010
 Inspector Name: Jason MacDonald Inspection Date: 09/11/14 Time: 11:15 p.m.

Previous violation(s) been corrected: YES or NO

STAGE OF CONSTRUCTION

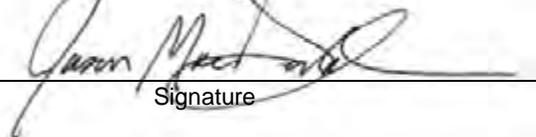
Pre-Construction Conference Building Construction Construction of SWM Facilities
 Clearing & Grubbing Finish Grading Maintenance of SWM Facilities
 Rough Grading Final Stabilization Other _____

Item#	State/Local Regulation ⁽¹⁾	Violation		Description and Location of Problem/Violation ⁽²⁾ , Required or Recommended Corrective Actions, and Other Comments/Notes
		Initial	Repeat	
1	MS-3	N/A		Recommend continued watering of areas where EC mat has been recently placed to achieve germination and maintain stands of grass.
2	MS-18	N/A		Remove the section of silt fence along the and south side of the building at the foot of the slope. Touch up the grade and apply final seed to this area if needed after the silt fence is removed.
3	Spec 3.20	X		Revise the two (2) water quality check damns along the east side of the building to match the Rip Rap Water Quality Check Dam detail on sheet C3.1. 6" lower in the center than the sides.

- Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (9VAC25-840), Virginia Stormwater Management Permit Regulations (9VAC25-870), or Annual Standards and Specifications for ESC
- Note whether or not off-site damage resulting from the problem/violation was evident during the inspection.

REQUIRED CORRECTIVE ACTION DEADLINE DATE: N/A Re-inspection Date: 09/26/14
 (DD/MM/YY) (DD/MM/YY)

The required corrective action deadline date applies to all violations noted on this report. If listed violation(s) currently constitute non-compliance and/or required corrective actions are not completed by the deadline, a **NOTICE TO COMPLY, STOP WORK ORDER**, and/or other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector:  Signature 09/11/14 Date

Acknowledgement of on-site report receipt: _____
 Print Name Signature Date

This report will be provided to the following parties via mail, fax, or e-mail within 24 hours of inspection:



SITE INSPECTION PHOTOS



Fig. 1 – Check dam along east side of building that requires shaping revisions (view-east).



Fig. 2 – Check dam along east side of building that requires shaping revisions (view-east).



Fig. 3 – Recommend cutting tall grass around the greenhouse addition (view-south).



Fig. 4 – Continue to water areas where new EC mat has been installed around the building (view-east).



EROSION & SEDIMENT CONTROL INSPECTION REPORT

Project Name: Lockett Hall Renovation
 Project Code: 212-17511-000
 Project Authority: Jonathan Taylor/Director CO
 RLD Name/No: Mark P Perkinson RLD No:38308
 Inspector Name: Debra Albert
 Inspection Date: 04/14/15 Time: 3:30pm

RAINFALL

Date of Rain	Amount (inches)	Initials
4/14/2015	0.20"	DCA

Previous violation(s) been corrected: YES NO

STAGE OF CONSTRUCTION

Pre-Construction Conference Building Construction Construction of SWM Facilities
 Clearing & Grubbing Finish Grading Maintenance of SWM Facilities
 Rough Grading Final Stabilization Other: Waterproofing

Item#	State/Local Regulation(1)	Violation		Description and Location of Problem/Violation(2), Required or Recommended Corrective Actions, and Other Comments/Notes
		Initial	Repeat	
1	Spec 3.05		X	Add silt fence where excavation work is proceeding. Fig 1 thru Fig 4
2	Spec 3.07		X	Complete the storm drain inlet protection. Silt fence was installed, sediment filter shall be added Fig 5
3	MS17		X	Is the transport of soil and mud onto public roadways properly controlled? NO, there is soil on the asphalt and sidewalks. Fig 6 and Fig 7. Area was not cleaned
4				
5				

- Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (9VAC25-840), Virginia Stormwater Management Permit Regulations (9VAC25-870), or Annual Standards and Specifications for ESC.
- Note whether or not off-site damage resulting from the problem/violation was evident during the inspection.

REQUIRED CORRECTIVE ACTION DEADLINE DATE: 04/14/2015 COB Re-inspection Date: 04/15/2015
 (DD/MM/YY) (DD/MM/YY)

The required corrective action deadline date applies to all violations noted on this report. If listed violation(s) currently constitute non-compliance and/or required corrective actions are not completed by the deadline, a **NOTICE TO COMPLY, STOP WORK ORDER**, and/or other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector: Debra C Albert 04/14/2015

Acknowledgement of on-site report receipt: <u>Charlie Bradley</u> <small>Print Name</small>	_____ <small>Signature</small>	_____ <small>Date</small>
This report will be provided to the following parties via mail, fax, or e-mail within 24 hours of inspection: Beth Heath Brubaker Jake Parsons		



SITE INSPECTION PHOTOS

REPEAT VIOATIONS



Fig 1 – Spec 3.05 West side of building



Fig 2 – Spec 3.05 West side of building



Fig 3 – Spec 3.05 East side of building



Fig 4 – Spec 3.05 North side of building.



Fig 5 Spec 3.07 West side of building



Fig 6 MS17 East side of building



Fig 7 MS17 East side of building

VIOATIONS THAT WERE CORRECTED 4/13/15



CORRECTED: Fig 1 – Spec 3.05.A-East side of building



CORRECTED: Fig 2 – Spec 3.05.A-North side of building



CORRECTED: Fig 3 – Spec 3.05.A-South side of building.



CORRECTED: Fig 4 – Spec 3.05.B-East side of building.



CORRECTED: Fig 5 – Spec 3.05.B-East side of building



CORRECTED Fig 8 – MS17-North side of building

STORMWATER INSPECTIONS FOR VSMP GENERAL PERMIT LAND DISTURBING ACTIVITIES

PROJECT: Lockett Hall Renovation and Elevator Addition
MONITORING FOR THE WEEK BEGINNING: April 6, 2015

RAINFALL:

Date of Rain	Amount (inches)	Initials
4/7/2015	0.11	DCA

By this signature, I certify that this report is accurate and complete to the best of my knowledge:

(Signature of Permittee or Designee)

EROSION AND SEIDMENTATION CONTROL FACILITIES INSPECTED: (At least once [twice, if on 303(d) listed stream for construction related parameters*] per 14 calendar days Or within 48 hours of a runoff producing rainfall event)

Facility Identification	Date of Inspection	Operating Properly (Y/N)	Describe corrective actions taken (may need to attach additional information)
	4/8/2015	Y	5:29pm – 1) Follow Up inspection on the perimeter silt fencing, accompanied by Steve Pancham (PM/MBP). WM Jordan had corrected areas of damaged silt fence from 6-13-11 report.
			2) Inlet protection outside of fenced in area OK. 3) Construction clean

OBSERVATION OF RUNOFF AT STORMWATER DISCHARGE OUTFALLS: (At least once [twice, if on 303(d) listed stream for construction related parameters*] per 14 calendar days Or within 48 hours of a runoff producing rainfall event)

Stormwater Discharge Outfall Identification	Date	Clarity	Floating Solids	Suspended Solids	Oil Sheen	Other obvious indicators of stormwater pollution (list & describe)	Visible sediment leaving the site? (Y/N)	If yes, describe actions taken to prevent future releases (may need to attach additional information)	Describe measures taken to clean up sediment outside of the disturbed limits (may need to attach additional information)

Clarity: Choose the number which best describes the clarity of the discharge where 1 is clear and 10 is very cloudy.

Floating Solids: Choose the number which best describes the amount of floating solids in the discharge where 1 is no solids and 10 the surface is covered in floating solids.

Suspended Solids: Choose the number which best describes the amount of suspended solids in the discharge where 1 is no solids and 10 is extremely muddy.

Oil Sheen: Is there an oil sheen in the stormwater discharge? Y or N



SITE INSPECTION PHOTOS



Remove buckets from next to inlet

 <p>Remove buckets from next to inlet</p>	



EROSION & SEDIMENT CONTROL AND STORMWATER MANAGEMENT INSPECTION REPORT

Project Name: Multipurpose Center
 Project Code: 212-17665-000
 Project Authority: Jonathan Taylor/ Direction CO
 RLD Name/No: Doug Sauer RLD No: 39518
 Inspector Name: Erin Gallagher
 Inspection Date: 6/4/15 Time: 10:30 P.M.

RAINFALL

Date of Rain	Amount (inches)	Initials
6/3/15	0.04	EEG
6/4/15	0.17	EEG

Previous violation(s) been corrected: YES NO

STAGE OF CONSTRUCTION

- | | | |
|--|---|---|
| Pre-Construction Conference <input type="checkbox"/> | Building Construction <input checked="" type="checkbox"/> | Construction of SWM Facilities <input type="checkbox"/> |
| Clearing & Grubbing <input type="checkbox"/> | Finish Grading <input type="checkbox"/> | Maintenance of SWM Facilities <input type="checkbox"/> |
| Rough Grading <input type="checkbox"/> | Final Stabilization <input type="checkbox"/> | Other: _____ <input type="checkbox"/> |

Item#	State/Local Regulation(1)	Violation		Description and Location of Problem/Violation(2), Required or Recommended Corrective Actions, and Other Comments/Notes
		Initial	Repeat	
1	MS10		X	Inlet protection at storm sewers need clean out/maintenance; some storm sewers need inlet protection
2	SPEC 3.05		X	Silt fence repairs needed.
3	SPEC 3.14	X		Slopes of basin need to be stabilized
4				
5				

- Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (9VAC25-840), Virginia Stormwater Management Permit Regulations (9VAC25-870), or Annual Standards and Specifications for ESC.
- Note whether or not off-site damage resulting from the problem/violation was evident during the inspection.

REQUIRED CORRECTIVE ACTION DEADLINE DATE: 6/11/15 Re-inspection Date: 6/11/15
 (DD/MM/YY) (DD/MM/YY)

The required corrective action deadline date applies to all violations noted on this report. If listed violation(s) currently constitute non-compliance and/or required corrective actions are not completed by the deadline, a **NOTICE TO COMPLY, STOP WORK ORDER**, and/or other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector: Erin Gallagher 06/04/2015

Acknowledgement of on-site report receipt: _____
Print Name Signature Date

This report will be provided to the following parties via mail, fax, or e-mail within 24 hours of inspection:



SITE INSPECTION PHOTOS



Dirt needs to be behind silt fence



Clean out inlet protection



Stabilization needed



Inlet protection needs clean out and retrenched



Clean out and repair inlet protection



Trash and debris (concrete supplies) must be disposed of properly

Appendix MCM 5

Matthew Webb

From: Amelia Wehunt
Sent: Wednesday, August 26, 2015 2:06 PM
To: Matthew Webb
Subject: FW: Campus Filterra Map and Conditions for Cleanup Day
Attachments: Filterra Bioretention Systems O&M Manual.pdf; Gateway II Filterra Map.pdf; Quad II Filterra Map.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Amelia Wehunt, PE
Project Manager

TIMMONS GROUP | www.timmons.com
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
Office: 804.200.6544 | Fax: 804.560.1438
Mobile: 804.517.4996 | amelia.wehunt@timmons.com
LinkedIn: www.linkedin.com/in/ameliawehunt
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#).

From: Jane S. Harris [mailto:jsharris@vsu.edu]
Sent: Thursday, April 09, 2015 10:24 AM
To: Amelia Wehunt
Cc: Joel Koci
Subject: FW: Campus Filterra Map and Conditions for Cleanup Day

From: Brian M. Haskins
Sent: Wednesday, April 08, 2015 10:06 AM
To: Jane S. Harris
Cc: Jonathan A. Taylor; Gilbert Hanzlik
Subject: Campus Filterra Map and Conditions for Cleanup Day

Jane,

Please see attached for the locations of the Filterras around the Quad II and Gateway II residence halls. After reviewing the conditions, there appear to be a few of them with missing trees or trees that are dead. In addition to those items, a lot of the Filterras in the parking lots have trash and a lot of sand in them from the snow removal operations. This may require some addition tools such as a shovel during cleanup.

In addition to the map, I have included the O&M manual for the units. This includes interesting facts around how the Filterra works, inspection and maintenance procedures, and maintenance reports.

Should we perform this cleanup on campus, I figured I can volunteer for four hours in the morning to help get things going.

Let me know if you have any questions.

Brian M. Haskins, EIT, PSP, LEED AP BD+C
VSU Capital Outlay Department
(804)-524-2514 (Office)
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Filterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <u>A. Williams</u>	Type: Inlet / <u>Roof</u>	Size: <u>1200</u>
BMP ID #: <u>1</u>	Date/Time: <u>10/20/15</u>	
Component	(Circle Y/N)	Comments

Initial Observations

Standing Water?	Y	<u>N</u>	
Damage to Box Structure?	Y	<u>N</u>	
Damage to Grate?	Y	<u>N</u>	
Is Bypass Clear?	<u>Y</u>	N	

Waste

Silt/Clay?	Y	<u>N</u>	
Cups/Bags/Trash?	Y	<u>N</u>	
Leaves?	Y	<u>N</u>	
Other?	Y	<u>N</u>	

Erosion Control

Netting in Need of Replacement?	Y	<u>N</u>	NA	
Stones in Need of Replacement?	Y	<u>N</u>	NA	

Mulch

Depth from Top of Sub to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):		10"	Mulch depth appropriate based on visual inspection. Continue to monitor during future inspections.
Allowed range (in.):	16" - 18"	23" - 25"	

Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved.
 If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media.
 Do not overfill unit with mulch,
 for inlet units, mulch should not exceed bottom of inlet throat, and
 for roof units, mulch should not impede bypass piping or splash blocks.

Amount of Mulch to be Added or Replaced	<u>0</u>
Type of Mulch to be Added or Replaced	<u>NA</u>
Date Mulch Added or Replaced:	<u>NA</u>

Plantings

Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.

Plant Information	#1	#2	Health of plant(s)	#1	#2
Height Above Grate (ft.):	<u>6'</u>	<u>NA</u>	Health of plant(s)	<u>Alive</u> / Dead	Alive / Dead
Stem Diameter/Caliper (in.):	<u>1"</u>	<u>NA</u>	Damage to plant(s)?	Y / <u>N</u>	Y / N
Width at Widest Point (ft.):	<u>3</u>	<u>NA</u>	Plant(s) replaced?	Y / <u>N</u>	Y / N



BMP ID #:	Date/Time: 4/30/15
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Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector	Date

If maintenance is required, provide a time frame for maintenance completion:

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

<i>Cynthia W. Hunt</i>	<i>6/30/15</i>
Signature of Inspector	Date

Next inspection date: Fall 2015



BMP #1-6 and #16-21: Roof Filterra (typical)



BMP #1-6 and #16-21: Roof Filterra (typical)

Note: These photos are representative of all roof Filterras on campus. As such, photos of every roof Filterra are not included.



**Filterra BMPs
 Inspection & Maintenance Checklist**

Inspector Name: <u>J. J. Alexander</u>	Type: Inlet / <u>Roof</u>	Size: <u>4' x 6'</u>
BMP ID #: <u>2</u>	Date/Time: <u>4/3/15</u>	
Component	(Circle Y/N)	Comments

Initial Observations

Standing Water?	Y	<input type="radio"/> N	
Damage to Box Structure?	Y	<input type="radio"/> N	
Damage to Grate?	Y	<input type="radio"/> N	
Is Bypass Clear?	<input checked="" type="radio"/> Y	N	
Waste			
Silt/Clay?	Y	<input type="radio"/> N	
Cups/Bags/Trash?	Y	<input type="radio"/> N	
Leaves?	Y	<input type="radio"/> N	
Other?	Y	<input type="radio"/> N	

Erosion Control

Netting in Need of Replacement?	Y	<input type="radio"/> N	NA	
Stakes in Need of Replacement?	Y	<input type="radio"/> N	NA	

Mulch

Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):		16"	Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.
Allowed range (in.):	16" - 18"	23" - 25"	

Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch.
 for inlet units, mulch should not exceed bottom of inlet throat, and
 for roof units, mulch should not impede bypass piping or splash blocks.

Amount of Mulch to be Added or Replaced:	NA
Type of Mulch to be Added or Replaced:	NA
Date Mulch Added or Replaced:	NA

Plantings

Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.

Plant Information	#1	#2	Health of plant(s)	#1	#2
Height Above Grate (ft.):	6'	NA		<input checked="" type="radio"/> Alive / <input type="radio"/> Dead	Alive / <input type="radio"/> Dead
Stem Diameter/Culiper (in.):	1"	NA	Damage to plant(s)?	Y / <input checked="" type="radio"/> N	Y / <input type="radio"/> N
Width at Widest Point (ft.):	3.5'	NA	Plant(s) replaced?	Y / <input checked="" type="radio"/> N	Y / <input type="radio"/> N



**Filterra BMPs
 Inspection & Maintenance Checklist**

Inspector Name: <u>A. Williams</u>		Type: Inlet / <u>Roof</u>		Size: <u>12</u>	
BMP ID #: <u>1</u>		Date/Time: <u>11/11/11</u>			
Component	(Circle Y/N)		Comments		
Initial Observations					
Standing Water?	Y	<u>N</u>			
Damage to Box Structure?	Y	<u>N</u>			
Damage to Grate?	Y	<u>N</u>			
Is Bypass Clear?	<u>Y</u>	N			
Waste					
Silt/Clay?	Y	<u>N</u>			
Cups/Bags/Trash?	Y	<u>N</u>			
Leaves?	Y	<u>N</u>			
Other?	Y	<u>N</u>			
Erosion Control					
Netting in Need of Replacement?	Y	<u>N</u>	NA		
Stones in Need of Replacement?	Y	<u>N</u>	NA		
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.)			Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.		
Allowed range (in.)	10" - 18"	23" - 25"			
Note: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks					
Amount of Mulch to be Added or Replaced.	NA				
Type of Mulch to be Added or Replaced.	NA				
Date Mulch Added or Replaced.	NA				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2	#1	#2	
Height Above Grate (ft.)	<u>0</u>	NA	Health of plant(s)	<u>Alive</u> / Dead	Alive / Dead
Stem Diameter/Culper (in.)		NA	Damage to plant(s)?	Y / <u>N</u>	Y / N
Width at Widest Point (ft.)		NA	Plant(s) replaced?	Y / <u>N</u>	Y / N



BMP ID #: 2

Date/Time: 1/30/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion:
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelia Wickham 4/24/15

 Signature of Inspector

 Date

Next inspection date May 2015



Filterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <u>W. W. W. W.</u>		Type: <u>Inlet / (Roof)</u>		Size: <u>4' x 6'</u>	
BMP ID #: <u>0</u>		Date/Time: <u>4/22/15</u>			
Component	(Circle Y/N)	Comments			
Initial Observations					
Standing Water?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Damage to Box Structure?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Damage to Grate?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Is Bypass Clear?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
Waste					
Silt/Clay?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Cups/Bags/Trash?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Unwired?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Other?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>				
Erosion Control					
Netting in Need of Replacement?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	NA			
Stones in Need of Replacement?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	NA			
Mulch					
Depth from Top of Sub to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):		<u>19"</u>	Mulch depth was appropriate based on visual inspection. (Continue to monitor during future inspections)		
Allowed range (in.):	16" - 18"	23" - 25"			
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch: for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or catch blocks.					
Amount of Mulch to be Added or Replaced:	<u>NA</u>				
Type of Mulch to be Added or Replaced:	<u>NA</u>				
Date Mulch Added or Replaced:	<u>NA</u>				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	R1	R2		R3	R2
Height Above Grate (ft.):	<u>6'</u>	<u>NA</u>	Health of plant(s)	Alive / Dead	Alive / Dead
Stem Diameter/Caliper (in.):	<u>1"</u>	<u>NA</u>	Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	<u>3</u>	<u>NA</u>	Plant(s) replaced?	Y / N	Y / N



BMP ID #: 41

Date/Time: 4/30/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelia Wehner 4/30/15

Signature of Inspector

Date

Next inspection date: Feb 2015



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <u>A. Wehant</u>		Type: Inlet / <u>Roof</u>		Size: <u>5' x 7'</u>	
BMP ID #: <u>6</u>		Date/Time: <u>4/30/15</u>			
Component	(Circle Y/N)		Comments		
Initial Observations					
Standing Water?	Y	<u>N</u>			
Damage to Box Structure?	Y	<u>N</u>			
Damage to Grate?	Y	<u>N</u>			
Is Bypass Clear?	<u>Y</u>	N			
Waste					
Silt/Clay?	Y	<u>N</u>			
Cups/Bags/Trash?	Y	<u>N</u>			
Leaves?	Y	<u>N</u>			
Other?	Y	<u>N</u>			
Erosion Control					
Netting in Need of Replacement?	Y	<u>N</u>	NA		
Stones in Need of Replacement?	Y	<u>N</u>	NA		
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):			<u>NA - to be provided during fall inspection.</u>		
Allowed range (in.):	16" - 18"	23" - 25"	<u>(with tree replacement)</u>		
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.					
Amount of Mulch to be Added or Replaced:	<u>NA</u>				
Type of Mulch to be Added or Replaced:	<u>NA</u>				
Date Mulch Added or Replaced:	<u>NA</u>				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2		#1	#2
Height Above Grate (ft.):	<u>NA</u>	<u>NA</u>	Health of plant(s)	Alive / <u>Dead</u>	Alive / Dead
Stem Diameter/Caliper (in.):	<u>NA</u>	<u>NA</u>	Damage to plant(s)?	<u>Y</u> / N	Y / N
Width at Widest Point (ft.):	<u>NA</u>	<u>NA</u>	Plant(s) replaced?	Y / <u>N</u>	Y / N



Filtterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <u>A. DeShaw</u>		Type: <u>Inlet / Roof</u>		Size: <u>1' x 1'</u>	
BMP ID #: <u>10</u>		Date/Time: <u>11/2/17</u>			
Component	(Circle Y/N)		Comments		
Initial Observations					
Standing Water?	Y	<u>N</u>			
Damage to Box Structure?	Y	<u>N</u>			
Damage to Grate?	Y	<u>N</u>			
Is Bypass Clear?	<u>Y</u>	N			
Waste					
Silt/Clay?	Y	<u>N</u>			
Cups/Bags/Trash?	Y	<u>N</u>			
Leaves?	Y	<u>N</u>			
Other?	Y	<u>N</u>			
Erosion Control					
Netting in Need of Replacement?	Y	<u>N</u>	NA		
Stones in Need of Replacement?	Y	<u>N</u>	NA		
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filtterra	Roof Filtterra	Comments		
Measured (in.):			<u>Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</u>		
Allowed range (in.):	16" - 18"	23" - 25"			
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.					
Amount of Mulch to be Added or Replaced:	<u>NA</u>				
Type of Mulch to be Added or Replaced:	<u>NA</u>				
Date Mulch Added or Replaced:	<u>NA</u>				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2		#1	#2
Height Above Grate (ft.):	<u>5"</u>		Health of plant(s)	<u>Alive / Dead</u>	Alive / Dead
Stem Diameter/Caliper (in.):	<u>1.5"</u>		Damage to plant(s)?	<u>Y / N</u>	Y / N
Width at Widest Point (ft.):	<u>-</u>		Plant(s) replaced?	<u>Y / N</u>	Y / N



Filterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <u>A. S. [unclear]</u>		Type: Inlet / <u>Roof</u>	Size: <u>2</u>		
BMP ID #: <u>17</u>		Date/Time: <u>11/30/15</u>			
Component	(Circle Y/N)	Comments			
Initial Observations					
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Is Bypass Clear?	Y <input checked="" type="radio"/> N <input type="radio"/>				
Waste					
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Erosion Control					
Netting in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA			
Stones in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA			
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):		19"	Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.		
Allowed range (in.):	16" - 18"	23" - 25"			
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch. for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks					
Amount of Mulch to be Added or Replaced:	NA				
Type of Mulch to be Added or Replaced:	NA				
Date Mulch Added or Replaced:	NA				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant information	#1	#2		#1	#2
Height Above Grate (ft.):	1'		Health of plant(s)	Active / Dead	Active / Dead
Stem Diameter/Caliper (in.):	1.5"		Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	4.5'		Plant(s) replaced?	Y / N	Y / N



BMP ID #: _____

Date/Time: _____

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion.
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Carmelita Workent 10/30/15

 Signature of Inspector

 Date

Next inspection date: 6/1/16



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Smith</i>		Type: Inlet / <u>Roof</u>	Size: <i>4' x 6'</i>		
BMP ID #: <i>10</i>		Date/Time: <i>10/10/17</i>			
Component	(Circle Y/N)	Comments			
Initial Observations					
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>				
% Bypass Clear?	<input checked="" type="radio"/> Y <input type="radio"/> N				
Waste					
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>				
Erosion Control					
Netting in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA			
Stakes in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA			
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):		<i>23"</i>	<i>Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</i>		
Allowed range (in.):	16" - 18"	23" - 25"			
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.					
Amount of Mulch to be Added or Replaced:	<i>NA</i>				
Type of Mulch to be Added or Replaced:	<i>NA</i>				
Date Mulch Added or Replaced:	<i>NA</i>				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2		#1	#2
Height Above Grate (ft.):			Health of plant(s)	<input checked="" type="radio"/> Alive / <input type="radio"/> Dead	Alive / <input type="radio"/> Dead
Stem Diameter/Caliper (in.):			Damage to plant(s)?	Y / <input checked="" type="radio"/> N	Y / <input type="radio"/> N
Width at Widest Point (ft.):			Plant(s) replaced?	Y / <input checked="" type="radio"/> N	Y / <input type="radio"/> N



BMP ID #: 116 Date/Time: 4/24/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelias Wehner 4/24/15
 Signature of Inspector Date

Next inspect on date: 5/1/2015



BMP ID #:

Date/Time: 4/24/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirements indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Completed 4/30/15

Signature of Inspector

Date

Next inspection date: 5/15/2016



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>[Handwritten]</i>		Type: Inlet / <u>Roof</u>	Size: <u>4' x 6'</u>
BMP ID #: <u>10</u>		Date/Time: <u>4/2/2017</u>	
Component	(Circle Y/N)	Comments	
Initial Observations			
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Is Bypass Clear?	<input checked="" type="radio"/> Y <input type="radio"/> N		
Waste			
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Erosion Control			
Netting in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Stones in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Mulch			
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in):		<u>16"</u>	Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.
Allowed range (in):	16" - 18"	23" - 25"	
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch. for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.			
Amount of Mulch to be Added or Replaced:	<u>NA</u>		
Type of Mulch to be Added or Replaced:	<u>NA</u>		
Date Mulch Added or Replaced:	<u>NA</u>		
Plantings			
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.			
Plant Information	#1	#2	#1 #2
Height Above Grate (ft.):	<u>5</u>		Health of plant(s) <u>Alive / Dead</u> <u>Alive / Dead</u>
Stem Diameter/Caliper (in.):	<u>1.5</u>		Damage to plant(s)? <u>Y / N</u> <u>Y / N</u>
Width at Widest Point (ft.):	<u>5</u>		Plant(s) replaced? <u>Y / N</u> <u>Y / N</u>



Filterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <i>A. Wright</i>		Type: Inlet / <u>Roof</u>	Size: <i>12' x 12'</i>
BMP ID #: <i>21</i>		Date/Time: <i>4/20/11</i>	
Component	(Circle Y/N)	Comments	
Initial Observations			
Standing Water?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Damage to Box Structure?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Damage to Grate?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Is Bypass Clear?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N		
Waste			
Silt/Clay?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Cups/Bags/Trash?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Leaves?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Other?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
Erosion Control			
Netting in Need of Replacement?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	NA	
Stones in Need of Replacement?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	NA	
Mulch			
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):		<i>22"</i>	<i>Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</i>
Allowed range (in.):	16" - 18"	23" - 25"	
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks			
Amount of Mulch to be Added or Replaced:			
Type of Mulch to be Added or Replaced:			
Date Mulch Added or Replaced:			
Plantings			
Note: Column #1 is the plant to the left when facing the throat of the inlet; and column #2 is the plant to the right when facing the throat of the inlet.			
Plant Information	#1	#2	
Height Above Grate (ft.):	<i>6"</i>	<i>NA</i>	Health of plant(s): <input checked="" type="checkbox"/> Alive / <input type="checkbox"/> Dead <input type="checkbox"/> Alive / <input type="checkbox"/> Dead
Stem Diameter/Caliper (in.):	<i>1 1/2"</i>	<i>NA</i>	Damage to plant(s)? Y / <input checked="" type="checkbox"/> N Y / <input type="checkbox"/> N
Width at Widest Point (ft.):	<i>4"</i>	<i>NA</i>	Plant(s) replaced? Y / <input checked="" type="checkbox"/> N Y / <input type="checkbox"/> N



Filterra BMPs
Inspection & Maintenance Checklist

Inspector Name: <i>AS</i>		Type: <u>Inlet</u> / Roof	Size: <i>12' x 7'</i>		
BMP ID #: <i>1</i>		Date/Time:			
Component	(Circle Y/N)	Comments			
Initial Observations					
Standing Water?	Y <u>N</u>				
Damage to Box Structure?	Y <u>N</u>				
Damage to Grate?	Y <u>N</u>				
Is Bypass Clear?	<u>Y</u> N				
Waste					
Silt/Clay?	Y <u>N</u>				
Cups/Bags/Trash?	Y <u>N</u>				
Leaves?	Y <u>N</u>				
Other?	Y <u>N</u>				
Erosion Control					
Netting in Need of Replacement?	Y <u>N</u>	NA			
Stones in Need of Replacement?	Y <u>N</u>	NA			
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):	12"				
Allowed range (in.):	16" - 18"	23" - 25"			
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not over-fertilize with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks					
Amount of Mulch to be Added or Replaced:	NA				
Type of Mulch to be Added or Replaced:	NA				
Date Mulch Added or Replaced:	NA				
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2		#1	#2
Height Above Grate (ft.):	7'	NA	Health of plant(s)	Alive / Dead	Alive / Dead
Stem Diameter/Caliper (in.):	1 1/2"	NA	Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	7'	NA	Plant(s) replaced?	Y / N	Y / N



BMP ID #: _____

Date/Time: 4/24/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion:

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelia Womack

4/24/15

 Signature of Inspector

 Date

Next inspection date: Full 2015



BMP #7-13: Inlet Filterra (typical)



BMP #7-13: Inlet Filterra (typical)

Note: These photos are representative of all inlet Filterras on campus. As such, photos of every inlet Filterra are not included.



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. [unclear]</i>		Type: <u>Inlet</u> / Roof		Size: <u>9 in</u>	
BMP ID #: <u>2</u>		Date/Time: <u>2.25.15</u>			
Component	(Circle Y/N)		Comments		
Initial Observations					
Standing Water?	Y	<u>N</u>			
Damage to Box Structure?	Y	<u>N</u>			
Damage to Grate?	Y	<u>N</u>			
Is Bypass Clear?	<u>Y</u>	N			
Waste					
Silt/Clay?	Y	<u>N</u>			
Cups/Bags/Trash?	Y	<u>N</u>			
Leaves?	Y	<u>N</u>			
Dirt?	Y	<u>N</u>			
Erosion Control					
Netting in Need of Replacement?	Y	<u>N</u>	NA		
Stones in Need of Replacement?	Y	<u>N</u>	NA		
Mulch					
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments		
Measured (in.):	<u>19"</u>		<u>mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</u>		
Allowed range (in.):	<u>16" - 18"</u>	<u>23" - 25"</u>			
<p>Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch.</p> <p style="margin-left: 40px;">for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.</p>					
Amount of Mulch to be Added or Replaced:	<u>19" - 25" during full maintenance.</u>				
Type of Mulch to be Added or Replaced:					
Date Mulch Added or Replaced:					
Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2	h1	h2	
Height Above Grate (ft.):	<u>2' 0"</u>		Height of plant(s)	Alive / Dead	Alive / Dead
Stem Diameter/Caliper (in.):	<u>1"</u>		Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	<u>3' 3"</u>		Plant(s) replaced?	Y / N	Y / N



BMP ID #: _____

Date/Time: _____

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.
 Add two bags of mulch during full maintenance.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelia Wehert 4/30/15

 Signature of Inspector

 Date

Next inspection date: Fall 2015



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: A. Nelson Type: Inlet / Roof Size: 8' x 6'
 BMP ID #: 9 Date/Time: 4/30/16

Component (Circle Y/N) Comments

Initial Observations

Standing Water?	Y	<input checked="" type="radio"/> N	
Damage to Box Structure?	Y	<input checked="" type="radio"/> N	
Damage to Grate?	Y	<input checked="" type="radio"/> N	
Is Bypass Clear?	<input checked="" type="radio"/> Y	N	

Waste

Silt/Clay?	Y	<input checked="" type="radio"/> N	
Cups/Bags/Trash?	Y	<input checked="" type="radio"/> N	
Leaves?	Y	<input checked="" type="radio"/> N	
Other?	Y	<input checked="" type="radio"/> N	

Erosion Control

Netting in Need of Replacement?	Y	<input checked="" type="radio"/> N	NA
Stones in Need of Replacement?	Y	<input checked="" type="radio"/> N	NA

Mulch

Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):	11"	11"	Mulch depth was appropriate during visual inspection. Continue to monitor during future inspections.
Allowed range (in.):	16" - 18"	23" - 25"	

Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved.
 If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media.
 Do not overfill unit with mulch;
 for inlet units, mulch should not exceed bottom of inlet throat, and
 for roof units, mulch should not impede bypass piping or splash blocks.

Amount of Mulch to be Added or Replaced: NA
 Type of Mulch to be Added or Replaced: NA
 Date Mulch Added or Replaced: NA

Plantings

Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.

Plant Information	#1	#2	Health of plant(s)	#1	#2
				Alive / Dead	Alive / Dead
Height Above Grate (ft.):	3'	NA			
Stem Diameter/Caliper (in.):	1"	NA	Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	1'	NA	Plant(s) replaced?	Y / N	Y / N



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <u>A. Williams</u>		Type: <u>Inlet</u> / Roof	Size: <u>2' x 1'</u>
BMP ID #: <u>10</u>		Date/Time: <u>4/2/10</u>	
Component	(Circle Y/N)	Comments	
Initial Observations			
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Is Bypass Clear?	<input checked="" type="radio"/> Y <input type="radio"/> N		
Waste			
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Erosion Control			
Mirting in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Stones in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Mulch			
Depth from Top of S ab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):	<u>11"</u>		<u>Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</u>
Allowed range (in.):	<u>16" - 18"</u>	<u>23" - 25"</u>	
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.			
Amount of Mulch to be Added or Replaced:			
Type of Mulch to be Added or Replaced:			
Date Mulch Added or Replaced:			
Plantings			
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.			
Plant Information	#1	#2	
Height Above Grate (ft.):	<u>8"</u>	<u>8"</u>	Health of plant(s) Alive / Dead <input checked="" type="radio"/> Alive / <input type="radio"/> Dead
Stem Diameter/Caliper (in.):	<u>2"</u>	<u>3"</u>	Damage to plant(s)? Y / N Y / <input checked="" type="radio"/> N
Width at Widest Point (ft.)	<u>9"</u>	<u>6"</u>	Plant(s) replaced? Y / N Y / <input checked="" type="radio"/> N



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <u>A. Wehner</u>		Type: <u>(Inlet) / Roof</u>	Size: <u>12' x 4'</u>
BMP ID #: <u>11</u>		Date/Time: <u>2/13/19</u>	
Component	(Circle Y/N)	Comments	
Initial Observations			
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Is Bypass Clear?	<input checked="" type="radio"/> Y <input type="radio"/> N		
Waste			
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>		
Erosion Control			
Netting in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Stakes in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA	
Mulch			
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.)	12'		Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.
Allowed range (in.)	16" - 18"	23" - 25"	
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks			
Amount of Mulch to be Added or Replaced	NA		
Type of Mulch to be Added or Replaced	NA		
Date Mulch Added or Replaced:	NA		
Plantings			
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet			
Plant Information	#1	#2	#1 #2
Height Above Grate (ft.):	6'2"	6'5"	Health of plant(s) <input checked="" type="radio"/> Alive / <input type="radio"/> Dead <input checked="" type="radio"/> Alive / <input type="radio"/> Dead
Stem Diameter/Caliper (in.):	1"	1"	Damage to plant(s)? Y / <input checked="" type="radio"/> N Y / <input checked="" type="radio"/> N
Width at Widest Point (ft.):	2'1"	2'8"	Plant(s) replaced? <input checked="" type="radio"/> Y / <input type="radio"/> N <input checked="" type="radio"/> Y / <input type="radio"/> N



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: PL [unclear] Type: (Inlet) / Roof Size: 6' x 7'
 BMP ID #: 17 Date/Time: 11/30/15

Component	(Circle Y/N)	Comments
Initial Observations		
Standing Water?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Damage to Box Structure?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Damage to Grate?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Is Bypass Clear?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Waste		
Silt/Clay?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Cups/Bags/Trash?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Leaves?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Other?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	

Erosion Control		
Netting in Need of Replacement?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	NA
Stones in Need of Replacement?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	NA

Mulch			
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments
Measured (in.):	20"		Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.
Allowed range (in.):	16" - 18"	23" - 25"	

Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved.
 If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media.
 Do not overfill unit with mulch:
 for inlet units, mulch should not exceed bottom of inlet throat, and
 for roof units, mulch should not impede bypass piping or splash blocks.

Amount of Mulch to be Added or Replaced: 14.5 bags during fall maintenance.

Type of Mulch to be Added or Replaced:

Date Mulch Added or Replaced:

Plantings					
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.					
Plant Information	#1	#2		#1	#2
Height Above Grate (ft.):	1'	NA	Health of plant(s)	Alive / Dead	Alive / Dead
Stem Diameter/Caliper (in.):	1"	NA	Damage to plant(s)?	Y / N	Y / N
Width at Widest Point (ft.):	1'	NA	Plant(s) replaced?	Y / N	Y / N



BMP ID #: 12

Date/Time: 4/23/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Add 3-4 bags of mulch during fall maintenance.

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no actions necessary at this time."

Signature of Inspector

Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Amelia Whitcomb 6/20/15

Signature of Inspector

Date

Next inspection date: 5-1-2015



Filterra BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wickert</i>		Type: <i>Inlet</i> / Roof	Size: <i>6 x 11'</i>	
BMP ID #: <i>13</i>		Date/Time: <i>4/30/19</i>		
Component	(Circle Y/N)	Comments		
Initial Observations				
Standing Water?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Damage to Box Structure?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Damage to Grate?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Is Bypass Clear?	Y <input checked="" type="radio"/> N <input type="radio"/>			
Waste				
Silt/Clay?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Cups/Bags/Trash?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Leaves?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Other?	Y <input type="radio"/> N <input checked="" type="radio"/>			
Erosion Control				
Mulch in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA		
Stones in Need of Replacement?	Y <input type="radio"/> N <input checked="" type="radio"/>	NA		
Mulch				
Depth from Top of Slab to Surface of Mulch	Inlet Filterra	Roof Filterra	Comments	
Measured (in.):	<i>12"</i>		<i>Mulch depth was appropriate based on visual inspection. Continue to monitor during future inspections.</i>	
Allowed range (in.):	16" - 18"	23" - 25"		
Notes: If measured depth exceeds the allowed range, add mulch until the allowed range is achieved. If there is evidence of ponding water, remove and replace all mulch. Remove any accumulated silt that may also be clogging the filter media. Do not overfill unit with mulch; for inlet units, mulch should not exceed bottom of inlet throat, and for roof units, mulch should not impede bypass piping or splash blocks.				
Amount of Mulch to be Added or Replaced:	<i>NA</i>			
Type of Mulch to be Added or Replaced:	<i>NA</i>			
Date Mulch Added or Replaced:	<i>NA</i>			
Plantings				
Note: Column #1 is the plant to the left when facing the throat of the inlet and column #2 is the plant to the right when facing the throat of the inlet.				
Plant Information	#1	#2	#1	#2
Height Above Grate (ft.):	<i>8'</i>	<i>NA</i>	Health of plant(s)	<i>Alive / Dead</i> <i>Alive / Dead</i>
Stem Diameter/Caliper (in.):	<i>3"</i>	<i>NA</i>	Damage to plant(s)?	<i>Y / N</i> <i>Y / N</i>
Width at Widest Point (ft.):	<i>5'</i>	<i>NA</i>	Plant(s) replaced?	<i>Y / N</i> <i>Y / N</i>



BMP ID #: 13

Date/Time: 4/30/15

Notes:

Maintenance was performed on this unit on April 24th, 2015.
 This fulfills the maintenance requirement indicated on the previous report.

Certification:

If no maintenance is required, certify the following:

I certify that the inspection is complete and that no action is necessary at this time.

 Signature of Inspector

 Date

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

I certify that all recommended maintenance is complete and no additional action is necessary at this time.

America Wickert

Signature of Inspector

4/30/15

Date

Next inspection date: Jul 2015



Detention, Retention, & Impoundment BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehunt / M. Webb</i>			Type of BMP: <i>Enhanced Extended Detention Basin</i>	
BMP ID #: <i>14</i>			Date/Time: <i>6/18/15 1317</i>	
Component	Yes	No	N/A	Comments
I. Embankment				
A. Top				
1. Visual settlement		✓		
2. Misalignment		✓		
3. Cracking		✓		
B. Upstream Slope				
1. Erosion		✓		
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation	✓			
4. Cracks, settlements, or bulges		✓		
5. Rodent holes	✓			
C. Downstream Slope				
1. Erosion	✓			<i>Very minor amount of erosion</i>
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation		✓		
4. Cracks, settlements, or bulges		✓		
5. Rodent holes		✓		
E. Drainage/seepage control				
1. Internal drains flowing			✓	
2. Seepage at toe		✓		
II. Emergency Spillway				
1. Eroding or backcutting			✓	
2. Obstruction			✓	
3. Leaking			✓	
4. Operational			✓	



BMP ID #: 14		Date/Time: 6/18/15 1317		
Component	Yes	No	N/A	Comments
III. Principal Spillway Barrel				
1. Seepage into pipe		✓		Groundhog living under riser top.
2. Debris present		✓		
3. Displaced or offset joints		✓		
IV. Outlet Protection/Stilling Basin				
1. Obstruction		✓		
2. Adequate riprap	✓			
3. Undercutting at the outlet		✓		
4. Outlet channel scour		✓		
V. Internal Basin Area				
A. Low Flow Channel*				
1. Erosion		✓		
2. Adequate vegetation	✓			
3. Obstruction		✓		
B. Basin Bottom & Side Slopes				
1. Erosion		✓		Heavy brush along sideslopes needs to be cut back.
2. Adequate stabilization	✓			
3. Sediment accumulation		✓		
4. Floating debris		✓		
5. High water marks		✓		
6. Shoreline protection	✓			
C. Inflow Channels/Pipes				
1. Erosion		✓		Heavy brush within west inlet rip-rap needs to be cut back.
2. Adequate stabilization	✓			
3. Undercutting		✓		
4. Obstruction		✓		
D. Sediment Forebay				
1. Sediment accumulation		✓	✓	
2. Stable overflow into basin			✓	
E. Upland Landscaping				
			✓	
F. Aquatic Landscaping				
			✓	
*Only applies to Extended Detention Facilities				



BMP ID #: 14			Date/Time: 6/18/15 1317	
Component	Yes	No	N/A	Comments

Notes: This facility is scheduled to be replaced. Continue to monitor groundhog hole at riser outlet to ensure that it doesn't become a concern prior to facility replacement.

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time." — due to impending facility replacement

Signature of Inspector Date

Amelie Wehunt 6/30/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector Date

Next inspection date: Fall 2015



BMP #14: Gateway Extended Detention



BMP #14: Gateway Extended Detention - Outlet



Detention, Retention, & Impoundment BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehnt / M. Webb</i>				Type of BMP: <i>Extended Detention Basin</i>
BMP ID #: <i>29</i>				Date/Time: <i>6/18/15 0836</i>
Component	Yes	No	N/A	Comments
I. Embankment				
A. Top				
1. Visual settlement		✓		Very small amount of erosion at NE corner of embankment that may need to be stabilized.
2. Misalignment		✓		
3. Cracking		✓		
B. Upstream Slope				
1. Erosion		✓		
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation	✓			
4. Cracks, settlements, or bulges		✓		
5. Rodent holes		✓		
C. Downstream Slope				
1. Erosion		✓		High brush along downstream shoulder needs to be cut back.
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation	✓			
4. Cracks, settlements, or bulges		✓		
5. Rodent holes		✓		
E. Drainage/seepage control				
1. Internal drains flowing		✓		
2. Seepage at toe		✓		
II. Emergency Spillway				
1. Eroding or backcutting			✓	
2. Obstruction			✓	
3. Leaking			✓	
4. Operational			✓	



BMP ID #: 29			Date/Time: 6/18/15 0836	
Component	Yes	No	N/A	Comments
III. Principal Spillway Barrel				
1. Seepage into pipe		✓		
2. Debris present		✓		
3. Displaced or offset joints		✓		
IV. Outlet Protection/Stilling Basin				
1. Obstruction		✓		
2. Adequate riprap	✓			
3. Undercutting at the outlet		✓		
4. Outlet channel scour		✓		
V. Internal Basin Area				
A. Low Flow Channel*				
1. Erosion		✓		
2. Adequate vegetation	✓			
3. Obstruction		✓		
B. Basin Bottom & Side Slopes				
1. Erosion		✓		High brush along East and South side slopes needs to be cut back.
2. Adequate stabilization	✓			
3. Sediment accumulation		✓		
4. Floating debris		✓		
5. High water marks		✓		
6. Shoreline protection	✓			
C. Inflow Channels/Pipes				
1. Erosion		✓		
2. Adequate stabilization	✓			
3. Undercutting		✓		
4. Obstruction		✓		
D. Sediment Forebay				
1. Sediment accumulation			✓	
2. Stable overflow into basin			✓	
E. Upland Landscaping				
F. Aquatic Landscaping				
*Only applies to Extended Detention Facilities				



BMP ID #: 29		Date/Time: 6/18/15 0836		
Component	Yes	No	N/A	Comments

Notes:
 Several high brush areas that need to be cleared.

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector _____ Date _____

If maintenance is required, provide a time frame for maintenance completion: by next inspection
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector _____ Date _____

Next inspection date: Fall 2015



BMP #29: Physical Plant Extended Detention Basin



BMP #29: Physical Plant Extended Detention Basin



BMP #29: Physical Plant Extended Detention Basin – Downstream Embankment



BMP #29: Physical Plant Extended Detention Basin - Outlet



Detention, Retention, & Impoundment BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>			Type of BMP: <i>Retention Basin II</i>	
BMP ID #: <i>30</i>			Date/Time: <i>6/18/15 1409</i>	
Component	Yes	No	N/A	Comments
I. Embankment				
A. Top				
1. Visual settlement		✓		<i>Need to clear brush and overgrowth, currently unable to access all of embankment.</i>
2. Misalignment		✓		
3. Cracking		✓		
B. Upstream Slope				
1. Erosion		✓		
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation	✓			
4. Cracks, settlements, or bulges		✓		
5. Rodent holes		✓		
C. Downstream Slope				
1. Erosion		✓		<i>Need to remove brush and overgrowth.</i>
2. Adequate groundcover	✓			
3. Trees, shrubs, or other vegetation	✓			
4. Cracks, settlements, or bulges		✓		
5. Rodent holes		✓		
E. Drainage/seepage control				
1. Internal drains flowing	✓			
2. Seepage at toe		✓		
II. Emergency Spillway				
1. Eroding or backcutting		✓		<i>Need to remove brush and overgrowth.</i>
2. Obstruction		✓		
3. Leaking		✓		
4. Operational		✓		



BMP ID #: 30		Date/Time: 6/18/15 1409		
Component	Yes	No	N/A	Comments
III. Principal Spillway Barrel				
1. Seepage into pipe		✓		
2. Debris present		✓		
3. Displaced or offset joints		✓		
IV. Outlet Protection/Stilling Basin				
1. Obstruction		✓		
2. Adequate riprap	✓			
3. Undercutting at the outlet		✓		
4. Outlet channel scour		✓		
V. Internal Basin Area				
A. Low Flow Channel*				
1. Erosion		✓		Need to clear brush
2. Adequate vegetation	✓			
3. Obstruction		✓		
B. Basin Bottom & Side Slopes				
1. Erosion		✓		Need to clear brush
2. Adequate stabilization	✓			
3. Sediment accumulation		✓		
4. Floating debris		✓		
5. High water marks		✓		
6. Shoreline protection			✓	
C. Inflow Channels/Pipes				
1. Erosion	✓			Minor erosion along channel and slight scouring along around headwell.
2. Adequate stabilization	✓			
3. Undercutting	✓			
4. Obstruction		✓		
D. Sediment Forebay				
1. Sediment accumulation		✓		
2. Stable overflow into basin	✓			
E. Upland Landscaping				
	✓			
F. Aquatic Landscaping				
	✓			
*Only applies to Extended Detention Facilities				



BMP ID #: 30		Date/Time: 6/18/15 1409		
Component	Yes	No	N/A	Comments

Notes:
 Need to clear brush and overgrowth from several areas.
 Minor damage to a small section of fence on East side of pond.
 Unable to walk around entirety of top of basin due to overgrowth.

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector _____ Date _____

If maintenance is required, provide a time frame for maintenance completion: by next inspection
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector _____ Date _____

Next inspection date: Fall 2015



BMP #30: ROTC Retention Basin – Inflow Channel



BMP #30: ROTC Retention Basin – Forebay



BMP #30: ROTC Retention Basin



BMP #30: ROTC Retention Basin – Emergency Spillway



**Underground Detention Systems
 (Water Quantity)**

Inspection & Maintenance Checklist

Inspector Name: <u>A. Wehant / M. Webb</u>			Type of BMP: <u>Underground Storage Vault</u>
BMP ID #: <u>15</u>			Date/Time: <u>6/18/15 0935</u>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<u>Y</u>	<u>N</u>	<u>< 4", inlets/outlets clear</u>
B. Trash/debris present?	<u>Y</u>	<u>N</u>	<u>minimal</u>
C. Separation of joints, cracks, breaks, or deterioration of structure?	<u>N</u>	<u>N</u>	
D. Algal growth present?	<u>N</u>	<u>N</u>	
E. Evidence of seepage, leakage, or rust?	<u>N</u>	<u>N</u>	
F. Evidence of pollutants?	<u>N</u>	<u>N</u>	
Inlet & Outlet Piping (1305)			
A. Inspection manhole functioning properly?	<u>Y</u>	<u>N</u>	
B. Clogging of inflow pipes?	<u>N</u>	<u>N</u>	
C. Clogging of outflow pipes?	<u>N</u>	<u>N</u>	
D. Obstruction?	<u>N</u>	<u>N</u>	



BMP ID #: 15			Date/Time: 6/18/15 0935
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
E. Adequate riprap (if applicable)?	Y	N	Some trash/debris caught in rip-rap.
F. Undercutting at the outlet?	N	N	
G. Outlet channel scour?	N	N	

Notes:
 Continue to remove trash from outlet as part of routine maintenance.

Certification:
 If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Wick Date: 6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: Fall 2015



BMP #15: Gateway II Underground Storage Vault



BMP #15: Gateway II Underground Storage Vault - Outfall



**Underground Detention Systems
 (Water Quantity)**

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>			Type of BMP: <i>Underground Irrigation Vault</i>
BMP ID #: <i>24</i>			Date/Time: <i>6/18/15 1013</i>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>N</i>	<i>N</i>	
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>NA</i>	<i>NA</i>	



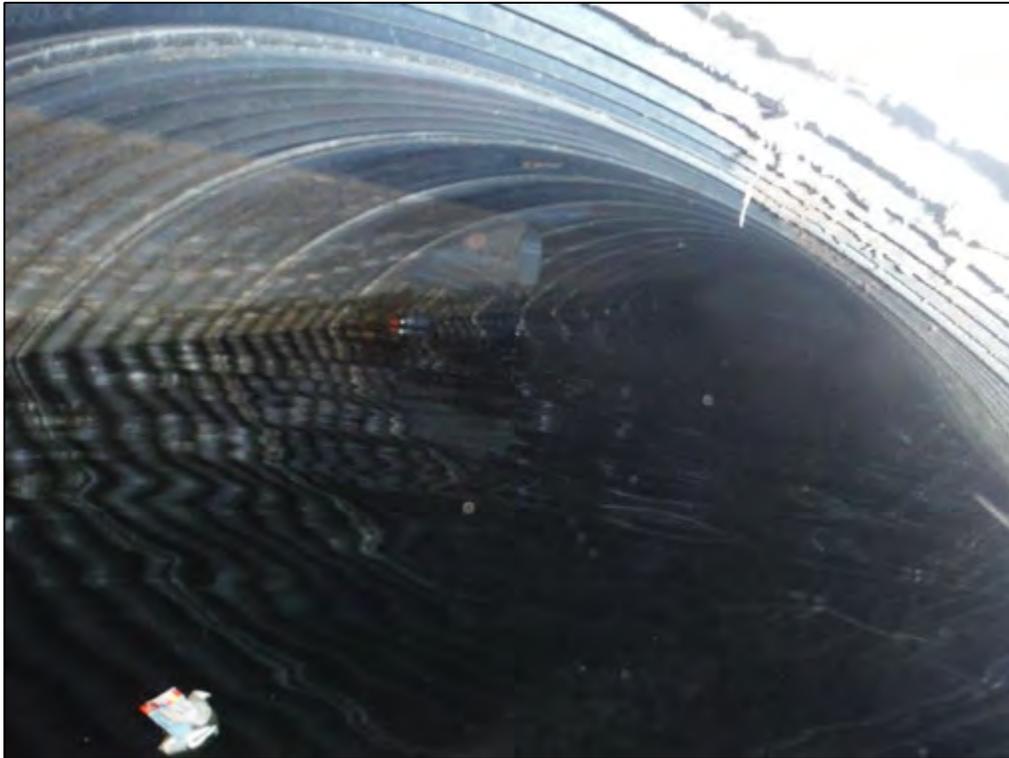
BMP ID #: 24			Date/Time: 6/18/15 1013
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	NA	NA	
E. Adequate riprap (if applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:
 Floats freely operating.
 Visible inlet/outlet pipes clear.

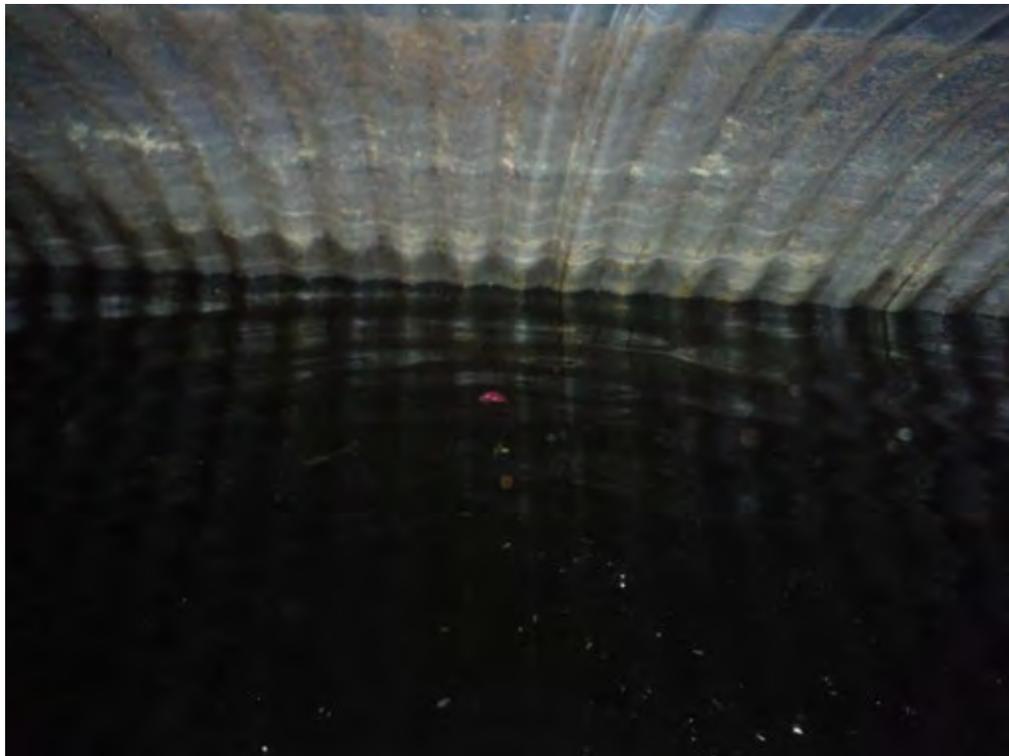
Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Weber Date: 6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: Fall 2015



BMP #24: Howard Quad II Irrigation



BMP #24: Howard Quad II Irrigation



**Underground Detention Systems
 (Water Quantity)**

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>			Type of BMP: <i>Underground Detention</i>
BMP ID #: <i>25</i>			Date/Time: <i>6/18/15 1103</i>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>Y</i>	<i>N</i>	<i>5-10" of sediment at upper end.</i>
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>Y</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 25			Date/Time: 6/18/15 1103
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:
 4"-12" of water in pipe due to possible sag point or accumulated sediment. Continue to monitor in future inspections.

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Webb Date: 6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: Fall 2015



BMP #25: Howard Quad II Underground CMP Detention (Pond 1A)



BMP #25: Howard Quad II Underground CMP Detention (Pond 1A)



**Underground Detention Systems
 (Water Quantity)**

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehnt / M. Webb</i>			Type of BMP: <i>Underground Detention</i>
BMP ID #: <i>26</i>			Date/Time: <i>6/18/15 1115</i>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>N</i>	<i>N</i>	
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 26			Date/Time: 6/18/15 1115
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector

Date

Mattie Well

6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Fall 2015



BMP #26: Howard Quad II Underground CMP Detention (Pond 1B)



BMP #26: Howard Quad II Underground CMP Detention (Pond 1B)



**Underground Detention Systems
 (Water Quantity)**

Inspection & Maintenance Checklist

Inspector Name: <i>M. Webb / A. Wehnt</i>			Type of BMP: <i>Underground Detention w/Sand Filter</i>
BMP ID #: <i>27</i>			Date/Time: <i>6/18/15 1028</i>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>N</i>	<i>N</i>	
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 27			Date/Time: 6/18/15 1028
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:
 39" of water

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Wells Date: 6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: Fall 2015



BMP #27: Quad I Sand Filter – Sediment Chamber



BMP # 27: Quad I Sand Filter



**Underground Detention Systems
 (Water Quantity)
 Inspection & Maintenance Checklist**

Inspector Name: <i>A. Wehvat / M. Webb</i>			Type of BMP: <i>Underground Irrigation Vault</i>
BMP ID #: <i>28</i>			Date/Time: <i>6/18/15 1038</i>
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>N</i>	<i>N</i>	
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deteriorization of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 28			Date/Time: 6/18/15 1038
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (if applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:
 39" of water

Certification:
 If no maintenance is required, certify the following:
 "I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Wells Date: 6/23/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:
 "I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: Fall 2015



BMP #28: Quad I Sand Filter – Irrigation Vault



BMP #28: Quad I Irrigation Vault Inlet From Sand Filter



StormFilter BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehnt / M. Webb</i>				Type of BMP: <i>Concrete Stormfilter</i>		
BMP ID #: <i>22 (concrete area)</i>				Date/Time: <i>6/18/15 1357</i>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
I. Below Ground Vault						
Sediment accumulation top of cartridge		✓	Sediment depth exceeds 0.25 inches		✓	
Sediment accumulation in vault	✓		Sediment depth exceeds 4 inches in the first chamber	✓		<i>70.7' sediment</i>
Submerged cartridges	✓		More than 4" of static water in the cartridge bay 24 hours after last rainfall event	✓		<i>> 1' water</i>
Trash/debris accumulation		✓	Trash and debris accumulated on compost filter bed		✓	
Sediment in drain pipes or cleanouts		✓	Drain pipes and/or clean outs are full of sediment and/or debris		✓	
Damaged pipes		✓	Any part of any pipe crushed or damaged due to corrosion and/or settlement		✓	
Access cover damaged/not working		✓	Cover cannot be opened; one person cannot open the cover using normal lifting pressure; corrosion/deformation of cover		✓	
Vault structure includes cracks in wall or bottom; damage to the frame and/or top slab		✓	Cracks wider than 1/2 inch or evidence of soil particles entering the structure through cracks; determination that the vault is not structurally sound		✓	
			Cracks wider than 1/2 inch at the joint of any inlet/outlet pipe or evidence of soil particles entering through the cracks		✓	
Baffles	<i>NA</i>		Baffles corroding, cracking, warping, and/or showing signs of failure	<i>NA</i>		
Access ladder damaged		✓	Ladder is corroded or deteriorated, not functioning properly, not securely secured to the structure wall and/or missing rungs; cracks; misalignment		✓	



BMP #22: Howard Quad II Stormfilter



StormFilter BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>				Type of BMP: <i>Contech storm filter</i>		
BMP ID #: <i>23 (grass area)</i>				Date/Time: <i>6/18/15 1355</i>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
I. Below Ground Vault						
Sediment accumulation top of cartridge		✓	Sediment depth exceeds 0.25 inches		✓	
Sediment accumulation in vault	✓		Sediment depth exceeds 4 inches in the first chamber	✓		<i>> 0.5'</i>
Submerged cartridges	✓		More than 4" of static water in the cartridge bay 24 hours after last rainfall event	✓		<i>> 1'</i>
Trash/debris accumulation		✓	Trash and debris accumulated on compost filter bed		✓	
Sediment in drain pipes or cleanouts	✓		Drain pipes and/or clean outs are full of sediment and/or debris	✓		
Damaged pipes		✓	Any part of any pipe crushed or damaged due to corrosion and/or settlement		✓	
Access cover damaged/not working		✓	Cover cannot be opened; one person cannot open the cover using normal lifting pressure; corrosion/deformation of cover		✓	
Vault structure includes cracks in wall or bottom; damage to the frame and/or top slab		✓	Cracks wider than 1/8 inch or evidence of soil particles entering the structure through cracks; determination that the vault is not structurally sound		✓	
			Cracks wider than 1/8 inch at the joint of any inlet/outlet pipe or evidence of soil particles entering through the cracks		✓	
Baffles	<i>NA</i>		Baffles corroding, cracking, warping, and/or showing signs of failure	<i>NA</i>		
Access ladder damaged		✓	Ladder is corroded or deteriorated, not functioning properly, not securely secured to the structure wall and/or missing rungs; cracks; misalignment		✓	



BMP #23: Howard Quad Courtyard Stormfilter



**StormFilter BMPs
 Inspection & Maintenance Checklist**

Inspector Name: <i>A. Wehnt / M. Webb</i>				Type of BMP: <i>Contech Stormfilter</i>		
BMP ID #: <i>35</i>				Date/Time: <i>6/18/15 1420</i>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
I. Below Ground Vault						
Sediment accumulation top of cartridge		✓	Sediment depth exceeds 0.25 inches		✓	
Sediment accumulation in vault		✓	Sediment depth exceeds 4 inches in the first chamber		✓	
Submerged cartridges		✓	More than 4" of static water in the cartridge bay 24 hours after last rainfall event		✓	
Trash/debris accumulation		✓	Trash and debris accumulated on compost filter bed		✓	
Sediment in drain pipes or cleanouts		✓	Drain pipes and/or clean outs are full of sediment and/or debris		✓	
Damaged pipes		✓	Any part of any pipe crushed or damaged due to corrosion and/or settlement		✓	
Access cover damaged/not working		✓	Cover cannot be opened; one person cannot open the cover using normal lifting pressure; corrosion/deformation of cover		✓	
Vault structure includes cracks in wall or bottom; damage to the frame and/or top slab		✓	Cracks wider than 1/2 inch or evidence of soil particles entering the structure through cracks; determination that the vault is not structurally sound		✓	
			Cracks wider than 1/2 inch at the joint of any inlet/outlet pipe or evidence of soil particles entering through the cracks		✓	
Baffles		✓	Baffles corroding, cracking, warping, and/or showing signs of failure		✓	
Access ladder damaged		✓	Ladder is corroded or deteriorated, not functioning properly, not securely secured to the structure wall and/or missing rungs; cracks; misalignment		✓	



BMP #35: Bookstore Stormfilter



Intermittent Sand Filter

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>			Type of BMP: <i>Deleware Sand Filter</i>	
BMP ID #: <i>31</i>			Date/Time: <i>6/18/15 0951</i>	
Component	Yes	No	N/A	Comments
I. Debris Cleanout				
A. Contributing areas clean of debris	✓			
B. Filtration Facility clean of debris		✓		
C. Inlets and outlets clear of debris	✓			
II. Vegetation in Contributing Drainage Area				
A. Stabilized	✓			
B. Active evidence of erosion		✓		
C. Area mowed and clippings removed	✓			
III. Oil & Grease				
A. Evidence of filter surface clogging		✓		
B. Activities in drainage area to minimize oil & grease entry	✓			
IV. Water retention where required				
A. Water holding chambers at normal pool	✓			
B. Evidence of leakage		✓		
V. Sediment Deposition				
A. Filtration chambers clean of sediment		✓		
B. Water chambers not more than ½ full of sediment		✓		
VI. Structural Components				
A. Evidence of structural deterioration		✓		
B. Grates are in good condition			✓	
C. Evidence of spalling or cracking of structural parts		✓		



BMP #31: Delaware Sand Filter - Sedimentation Chamber



BMP #31: Delaware Sand Filter - Sand Filter Chamber



Sorbitive Filter BMPs

Inspection & Maintenance Checklist

Inspector Name: <u>M. Webb / A. Wehant</u>				Type of BMP: <u>Sorbitive Filter 2c</u>		
BMP ID #: <u>32</u>				Date/Time: <u>6/18/15 1335</u>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
The access manhole or access doors are functioning properly and are structurally sound	✓				✓	
Sediment and oil are present (provide depths)	✓				✓	1"
Floatable pollutant accumulation is present in the Pre-treatment Bay		✓			✓	
The Cartridge Bay is visually inspected for sediment depth (provide depth)*(If sediment depth is greater than 6 inches, maintenance is required)	✓				✓	1"
Proper draindown is occurring in the Cartridge Bay *(If at least 40 hours of dry weather have elapsed, since the most recent runoff event and the Bay contains more than 3 inches of water above the sediment layer, the Sorbtive BRICKs required cleaning or replacement)	✓				✓	
The internal components show no signs of damage	✓				✓	



Notes:

[Empty box for notes]

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Matthew Welch

Signature of Inspector

6/23/15

Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Fall 2015



BMP #32: Lot #36 Sorbtive Filter – Sedimentation Chamber



BMP #32: Lot #36 Sorbtive Filter –Trash Guard and Filter



Sorbative Filter BMPs

Inspection & Maintenance Checklist

Inspector Name: <i>A. Wehant / M. Webb</i>				Type of BMP: <i>Sorbative Filter 1C</i>		
BMP ID #: <i>33</i>				Date/Time: <i>6/18/15 1342</i>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
The access manhole or access doors are functioning properly and are structurally sound	✓				✓	
Sediment and oil are present (provide depths)		✓			✓	
Floatable pollutant accumulation is present in the Pre-treatment Bay		✓			✓	
The Cartridge Bay is visually inspected for sediment depth (provide depth)*(if sediment depth is greater than 6 inches, maintenance is required)	✓				✓	<i>0.5"</i>
Proper draindown is occurring in the Cartridge Bay *(if at least 40 hours of dry weather have elapsed, since the most recent runoff event and the Bay contains more than 3 inches of water above the sediment layer, the Sorbtive BRICKs required cleaning or replacement)	✓				✓	
The internal components show no signs of damage	✓				✓	



Notes:

Certification:

If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Matthew Wall

Signature of Inspector

6/23/15

Date

If maintenance is required, provide a time frame for maintenance completion: _____

Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector

Date

Next inspection date: Fall 2015



BMP #33: Lot #37 Sorbtive Filter – Sedimentation Chamber



BMP #33: Lot 37 Sorbtive Filter – Filters



Sorbitive Filter BMPs Inspection & Maintenance Checklist

Inspector Name: <i>M. Webb / A. Wehnt</i>				Type of BMP: <i>Sorbitive Filter 10L</i>		
BMP ID #: <i>34</i>				Date/Time: <i>6/18/15 1350</i>		
				Maintenance required?		
Component:	Yes	No	Conditions When Maintenance is Needed	Yes	No	Comments:
The access manhole or access doors are functioning properly and are structurally sound	✓				✓	
Sediment and oil are present (provide depths)	✓				✓	<i>0.5" of sediment (no oil observed)</i>
Floatable pollutant accumulation is present in the Pre-treatment Bay	✓			✓		<i>Remove accumulated trash and debris.</i>
The Cartridge Bay is visually inspected for sediment depth (provide depth)*(If sediment depth is greater than 6 inches, maintenance is required)	✓				✓	<i>0.5"</i>
Proper draindown is occurring in the Cartridge Bay *(If at least 40 hours of dry weather have elapsed, since the most recent runoff event and the Bay contains more than 3 inches of water above the sediment layer, the Sorbitive BRICKs required cleaning or replacement)	✓				✓	
The internal components show no signs of damage	✓				✓	



BMP #34: Lot #21 Sorbtive Filter



BMP #34: Lot #21 Sorbtive Filter – Sedimentation Chamber



**Underground Detention Systems
 (Water Quantity)
 Inspection & Maintenance Checklist**

Inspector Name: <i>M. Webb</i>		Type of BMP: <i>Rain tank</i>	
BMP ID #: <i>36 (Bookstore)</i>		Date/Time: <i>7/17/15 810</i>	
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>Y</i>	<i>N</i>	<i>Unable to tell depth of sediment, no baseline.</i>
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?	<i>N</i>	<i>N</i>	
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 36			Date/Time: 7/17/15 810
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	N	N	
G. Outlet channel scour?	NA	NA	

Notes:
 Port #1: Depth to sediment = 101.0" Depth to water = 82.0" Depth of water = 19.0"
 Port #2: D+S = 99.5" D+W = 80.5" DOW = 19.0"
 Port #3: D+S = 94.75" D+W = 77.5" DOW = 17.25"
 Note: Depth to bottom of raintank is unknown for all ports.
 Depth to sediment from previous inspection is unknown for all ports.

Certification:
 If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Well Date: 7/20/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: _____



BMP #36: University Bookstore Rain Tank (Inspection Ports)



BMP #36: University Bookstore Rain Tank (Yard Inlet 1)



BMP #36: University Bookstore Rain Tank (Yard Inlet 1 - Sump)



BMP #36: Inspection Port #1



BMP #36: University Bookstore Rain Tank (Yard Inlet 2)



BMP #36: University Bookstore Rain Tank (Yard Inlet 2 - Sump)



BMP #36: Inspection Port #2



BMP #36: Inspection Port #3



**Underground Detention Systems
 (Water Quantity)
 Inspection & Maintenance Checklist**

Inspector Name: M. Webb		Type of BMP: Rain tank	
BMP ID #: 40 (Lee St. Parking Lot #21)		Date/Time: 7/17/15 847	
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	N	N	
B. Trash/debris present?	N	N	
C. Separation of joints, cracks, breaks, or deterioration of structure?			
D. Algal growth present?	N	N	
E. Evidence of seepage, leakage, or rust?	N	N	
F. Evidence of pollutants?	N	N	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	Y	N	
B. Clogging of inflow pipes?	N	N	
C. Clogging of outflow pipes?	N	N	



BMP ID #: 40			Date/Time: 7/17/15
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:

Dry.

Depth to bottom of inspection port = 6 1/8"

Certification:
 If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."

Signature of Inspector: Matthew Wall Date: 7/20/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

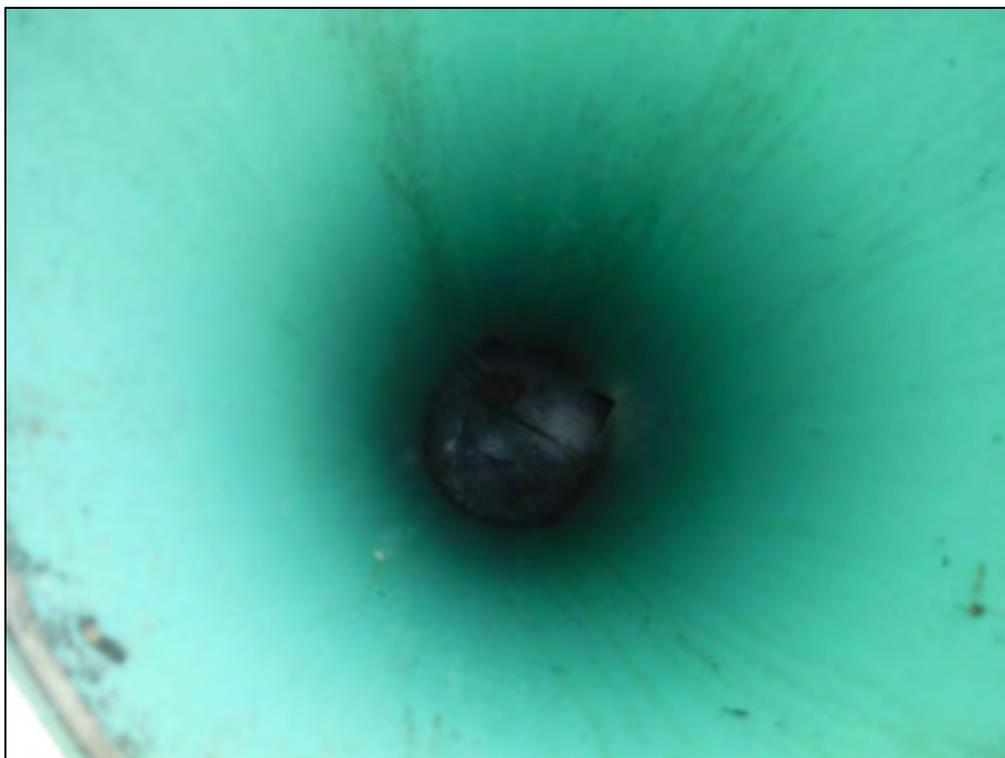
"I certify that all recommended maintenance is complete and no additional action is necessary at this time."

Signature of Inspector: _____ Date: _____

Next inspection date: _____



BMP #40: Parking Lot #21 (Lee St.) Rain Tank



BMP #40: Parking Lot #21 (Lee St.) Rain Tank



**Underground Detention Systems
 (Water Quantity)
 Inspection & Maintenance Checklist**

Inspector Name: <i>M. Webb</i>		Type of BMP: <i>Rain Tank</i>	
BMP ID #: <i>41 (Boisseau St. Parking Lot #36)</i>		Date/Time: <i>7/17/15 855</i>	
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	<i>Y</i>	<i>N</i>	<i>Minimal amount</i>
B. Trash/debris present?	<i>N</i>	<i>N</i>	
C. Separation of joints, cracks, breaks, or deterioration of structure?			
D. Algal growth present?	<i>N</i>	<i>N</i>	
E. Evidence of seepage, leakage, or rust?	<i>N</i>	<i>N</i>	
F. Evidence of pollutants?	<i>N</i>	<i>N</i>	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	<i>Y</i>	<i>N</i>	
B. Clogging of inflow pipes?	<i>N</i>	<i>N</i>	
C. Clogging of outflow pipes?	<i>N</i>	<i>N</i>	



BMP ID #: 41			Date/Time: 7/17/15 855
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:

Dry.
 Depth to bottom of inspection port = 54"
 Some sediment on bottom but does not seem very thick because the notches at the bottom end of inspection pipe port are visible.

Certification:
 If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Wash Date: 7/20/15

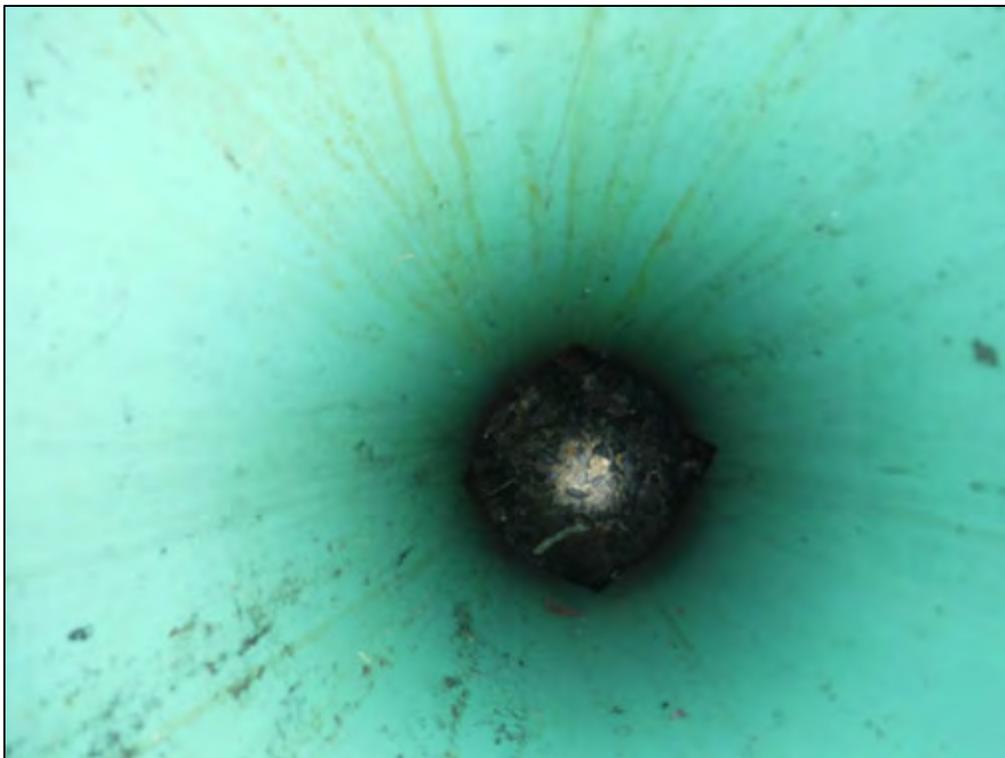
If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: _____



BMP #41: Parking Lot #36 (Boisseau St.) Rain Tank



BMP #41: Parking Lot #36 (Boisseau St.) Rain Tank



**Underground Detention Systems
 (Water Quantity)
 Inspection & Maintenance Checklist**

Inspector Name: M. Webb		Type of BMP: Rain Tank	
BMP ID #: 42 (Boisseau St. Parking Lot #37)		Date/Time: 7/17/15 904	
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
I. Internal Storage Area			
A. Sediment present?	Y	N	Minimal amount
B. Trash/debris present?	N	N	
C. Separation of joints, cracks, breaks, or deterioration of structure?			
D. Algal growth present?	N	N	
E. Evidence of seepage, leakage, or rust?	N	N	
F. Evidence of pollutants?	N	N	
Inlet & Outlet Piping			
A. Inspection manhole functioning properly?	Y	Y	
B. Clogging of inflow pipes?	N	N	
C. Clogging of outflow pipes?	N	N	



BMP ID #: 42			Date/Time: 7/17/15 904
Inspection Finding	Y/N	Maintenance Required Y/N	Comments
D. Obstruction?	N	N	
E. Adequate riprap (If applicable)?	NA	NA	
F. Undercutting at the outlet?	NA	NA	
G. Outlet channel scour?	NA	NA	

Notes:
 Dry.
 Depth to bottom of inspection port = 60.25"
 Not enough sediment to cover bottom of inspection port.

Certification:
 If no maintenance is required, certify the following:

"I certify that the inspection is complete and that no action is necessary at this time."
 Signature of Inspector: Matthew Wal Date: 7/20/15

If maintenance is required, provide a time frame for maintenance completion: _____
 Upon maintenance completion, re-inspect and certify the following:

"I certify that all recommended maintenance is complete and no additional action is necessary at this time."
 Signature of Inspector: _____ Date: _____

Next inspection date: _____



BMP #42: Parking Lot #37 (Boisseau St.) Rain Tank



BMP #42: Parking Lot #37 (Boisseau St.) Rain Tank



Atlas Industrial Services performed maintenance on two Stormfilters on July 17, 2015. For each storm filter, standing water and accumulated sediment was vacuumed out of the manhole. Then, the cover to each Stormfilter was removed and the clogged filter media was vacuumed out. Once the filter was cleaned out it, was removed from the manhole to be returned to the distributor for refurbishing. Any residual water and/or sediment still remaining in the manhole was then vacuumed out and a new Stormfilter with clean filter media was installed. The maintenance procedure for each Stormfilter was identical and the following photos show steps of the process.



BMP #22: Howard Hall Quad II Courtyard (Contect Stormfilter 1)
Vacuming out clogged filter media



BMP #22: Howard Hall Quad II Courtyard (Contect Stormfilter 1)



BMP #22: Howard Hall Quad II Courtyard (Contect Stormfilter 1)



BMP #22: Howard Hall Quad II Courtyard (Contect Stormfilter 1)
Removed filter housing



BMP #22: Howard Hall Quad II Courtyard (Contect Stormfilter 1)
Lowering new filter



BMP #23: Howard Hall Quad II Courtyard (Contect Stormfilter 2)
Standing water



BMP #23: Howard Hall Quad II Courtyard (Contect Stormfilter 2)



BMP #23: Howard Hall Quad II Courtyard (Contect Stormfilter 2)
Removing accumulated sediment

Appendix MCM 6

Matthew Webb

From: Matthew Webb
Sent: Thursday, September 24, 2015 2:58 PM
To: Matthew Webb
Subject: FW: Training Records for MS4 Reporting
Attachments: Spill Training Sign In Sheet.pdf; OPCP SPCC Training.pptx

From: David Weddle [<mailto:dweddle@vsu.edu>]
Sent: Thursday, September 24, 2015 2:05 PM
To: Amelia Wehunt
Subject: RE: Training Records for MS4 Reporting

I have attached the spill training presentation and the attendance sheet. We also conducted a drill at the time of the training. The spill training covers the ODCP and SPCC as they are both covering similar topics. I will send the 2015 updated hazardous waste training shortly.

From: Amelia Wehunt [<mailto:amelia.wehunt@timmons.com>]
Sent: Thursday, September 24, 2015 9:56 AM
To: David Weddle <dweddle@vsu.edu>
Subject: Training Records for MS4 Reporting
Importance: High

Hi David,

Would you please send me your power point and training records from last fall? I need them for the MS4 Annual Report.

Thanks for your help,

Amelia

Amelia Wehunt, PE
Project Manager

TIMMONS GROUP | www.timmons.com
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
Office: 804.200.6544 | Fax: 804.560.1438
Mobile: 804.517.4996 | amelia.wehunt@timmons.com
LinkedIn: www.linkedin.com/in/ameliawehunt
Your Vision Achieved Through Ours

To send me files greater than 20MB [click here](#).

ODCP and SPCC Training

VSU Facilities Department

Background

Comply with VADEQ Aboveground Storage Tank Regulations

Aggregate aboveground storage capacity above 25,000 gallons

Tanks under 660 gallons are excluded from the total storage amount

Five aboveground storage tanks with an aggregate capacity of 41,000 gallons

VSU AST Summary

Virginia State University Regulated ASTs			
Table 1			
Tank Type	Maximum Storage Capacity (gallons)	Contents	Location and Identification Number
Double-Walled Horizontal AST	10,000	# 6 Oil (Bunker oil)	Heating Plant AST-1
Double-Walled Horizontal AST	10,000	# 6 Oil (Bunker oil)	Heating Plant AST-2
Double-Walled Horizontal AST	10,000	# 6 Oil (Bunker oil)	Heating Plant AST-3
Double-Walled Horizontal AST	10,000	# 6 Oil (Bunker oil)	Heating Plant AST-4
Double-Walled Horizontal ConVault AST	1,000	# 2 Oil (Diesel Fuel)	Jones Dining Hall

Heating Plant ASTs



Heating Plant AST Bunker



Fuel Transfer and Inventory Control

- ASTs are equipped with high visibility liquid level gauges and audible overfill alarms
- Filling stations are located in a shed that is locked at all times; spill kits are located in the filling station and in the heating plant
- Fuel delivery checklist is used when filling tanks
- Heating plant staff member present at ALL times during fill up

Fuel Refill Station



Spill Kit



Fuel Oil Delivery Checklist

Fuel Oil Delivery Checklist

Product: _____ Delivery Date: _____

Quantity: _____ Storage Tank No.(s) _____

Vendor/Transporter Name: _____

Prior to starting the delivery process, verify the following:

1. Material being delivered agrees with the type of fuel needed for that tank and equipment (#6 oil for the heating plant and #2 oil (Diesel fuel) for Emergency Generators). (must be <0.5% sulfur for #6 oil for the heating plant, must be <0.0015% by weight (<15ppmw) sulfur for the generators).
2. Check the level gage on the tank that is being filled to ensure that there is sufficient capacity in the tank to safely accept the quantity of fuel being delivered.
3. Check flexible hoses for integrity, deterioration or leaks.
4. Check the unloading area for integrity, deterioration or leaks.
5. Check for improper deployment and location of portable/temporary containment devices (i.e. booms to block nearby storm drains)

Tank Inspections

- Tanks are checked daily and official tank inspection reports are conducted weekly

WEEKLY TANK INSPECTION CHECKLIST

Check tanks weekly and fill out the Weekly Inspection Log

Registration of the Above Ground Fuel Storage Tanks with the DEQ requires that all ASTs be inspected weekly.

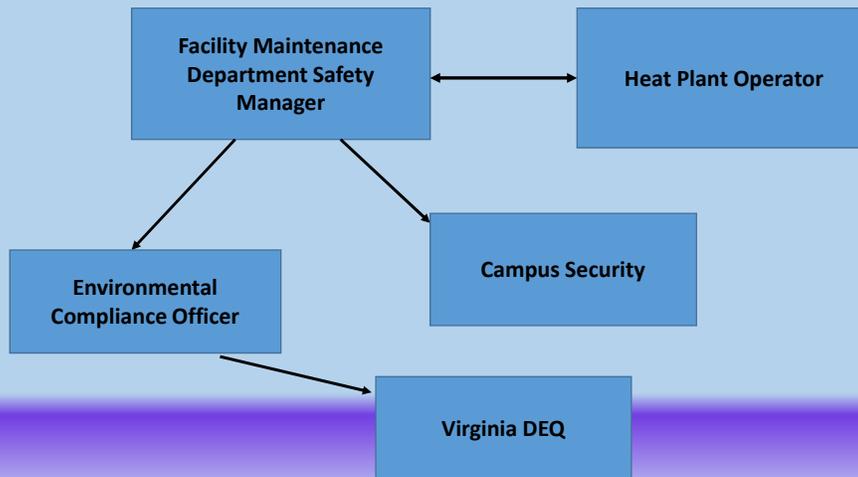
AST-1	#6 oil	AST-6	#2 diesel
AST-2	#6 oil	Generator Tank	#2 diesel
AST-3	#6 oil		
AST-4	#6 oil		

1. Check AST-4 and the fuel storage room containment.

• Are drip marks apparent?	Yes [] No []
• Is there apparent discoloration?	Yes [] No []
• Is there any visible corrosion?	Yes [] No []
• Are there any visible cracks?	Yes [] No []
• Are there any puddles containing material?	Yes [] No []
2. Check Containment for The Following:

• Are there any visible cracks?	Yes [] No []
• Is there any apparent discoloration?	Yes [] No []
• Are there puddles containing stored material?	Yes [] No []
• Do the tanks show signs of settling?	Yes [] No []
• Are there any gaps between the tank and the foundation?	Yes [] No []
• Is pipe bowing between supports?	Yes [] No []
• Is there evidence of mixed material on valves or seals?	Yes [] No []

Spill Procedures - Notifications



Regulatory Notifications

- Virginia DEQ notified if the spill exceeds 25 gallons
- Notify National Response Center if the spill exceeds 1,000 gallons
- In the case of larger spills, the Environmental Compliance Officer will contact a spill response vendor to assist with mitigation activities (Clean Harbors, Potomac Environmental, etc.)
- Remediation activities will be coordinated by Environmental Compliance Officer in concert with Virginia DEQ for larger spills