The College of William & Mary

CY 2013

Annual Standards and Specifications

for

Erosion and Sediment Control

March 2013
INTRODUCTION

The College of William and Mary (College) Erosion and Sediment Control Program is an integral component of the design, construction, maintenance, and management of the College’s facilities. The College’s Annual Standards and Specifications for Erosion and Sediment Control submittal have been developed to provide information regarding the implementation of this program in accordance with Virginia’s Erosion and Sediment Control Law (COV 10.1-560 et. seq.) and regulations as related to municipal separate storm sewer systems (MS4) and construction activities. The Annual Standards and Specifications apply to the College at Williamsburg and campuses at the Virginia Institute of Marine Science at Gloucester Point and Ash Lawn-Highlands in Albemarle County.

These Annual Standards and Specifications for Erosion and Sediment Control shall apply to all planning, design, construction and maintenance activities undertaken by the College, either by its internal workforce or, if contracted to external entities, where such activities are regulated by the Virginia Erosion and Sediment Control Law. As such, this submittal should be made available and utilized as an operational guidance by all appropriate College and Department of Conservation and Recreation personnel. During any inspections of the College’s land disturbing activities by Department of Conservation and Recreation, Environmental Protection Agency and other such environmental agencies, compliance with the approved College of William and Mary Annual Standards and Specifications for Erosion and Sediment Control (and all parts thereof) will be expected.

The College’s Annual Standards and Specifications for Erosion and Sediment Control will be submitted to the DCR for review and approval on an annual basis. This submittal constitutes the College’s commitment to execute all provisions contained herein on our regulated land disturbing activities and land development projects.

ABREVIATIONS / ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ALH</td>
<td>Ash Lawn Highland</td>
</tr>
<tr>
<td>ASESC</td>
<td>Annual Standards and Specifications for Erosion and Sediment Control</td>
</tr>
<tr>
<td>CWM</td>
<td>The College of William and Mary</td>
</tr>
<tr>
<td>DCR</td>
<td>Virginia Department of Conservation and Recreation</td>
</tr>
<tr>
<td>ESC</td>
<td>Erosion and Sediment Control</td>
</tr>
<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>RBC</td>
<td>Richard Bland College</td>
</tr>
<tr>
<td>RLD</td>
<td>Registered Land Disturber</td>
</tr>
<tr>
<td>VIMS</td>
<td>Virginia Institute of Marine Science</td>
</tr>
</tbody>
</table>
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## APPENDICES

- Appendix - A: ESC Plan Reviewer's Checklists
- Appendix - B: ESC Inspection Forms
- Appendix - C: Variance Request Form
- Appendix - D: Proposed and Current Land-Disturbing Activities
- Appendix - E: Approved Pump Discharge Excavation Dewatering Methods

## REFERENCE DOCUMENTS

- College of William and Mary, Stormwater Master Plan (July 2004) by Clough Harbor Associates, L.L.P.
The College of William and Mary

Annual Standard and Specifications for Erosion and Sediment Control

1.0 PROGRAM ADMINISTRATION

All projects involving land-disturbing activity subject to the Virginia Erosion and Sediment Control law (§10.1-560 et seq. as amended) and the Virginia Erosion and Sediment Control Regulations (4VAC50-30 et seq. as amended) shall be bound by CWM Annual Standards and Specifications for Erosion and Sediment Control.

1.1 The general specifications for ESC that apply to all land-disturbing activities include the following by reference:

1.1.1 Virginia Erosion and Sediment Control Law (Title 10.1, Chapter 5, Article 4, §10.1-560 – 10.1-571 et seq. as amended);

1.1.2 Virginia Erosion and Sediment Control Regulations (4VAC50-30 et seq. as amended);

1.1.3 Virginia Erosion and Sediment Control Certification Regulations (4VAC50-50 et seq. as amended);

1.1.4 Virginia Erosion and Sediment Control Handbook, 1992;

1.1.5 ESC Technical Bulletins, as amended, on DCR web site at http://www.dcr.virginia.gov/soiland_water/e&s.shtml#pubs).

1.2 Any land-disturbing activity carried out in a locality with a local ESC program with more stringent regulations than the those of the state program shall be consistent with the requirements of the local program.

1.3 Any revisions to the approved CWM ASESC shall be reviewed and approved by DCR prior to implementation by CWM. Such review and approval shall be coordinated by the CWM ESC Program Administrator.

1.4 Site-Specific ESC Plans shall be prepared for all projects involving a regulated land disturbing activity as defined in §10.1-560. Site-specific ESC plans shall be submitted to CWM Plan Reviewer for review. Checklists that summarize the required components of the ESC Plans are included in Appendix A. Prior to starting a land disturbing project, as defined in §10.1-560, the project must have written approval issued by CWM ESC Program Administrator.

1.5 A Responsible land Disturber (RLD) shall be designated by the contractor prior to initiating the land disturbing activity.

1.6 Where determined necessary to meet an individual project need, CWM may request DCR to grant a project specific variance to the approved CWM ASESC. All requested variances are to be considered unapproved until written approval from DCR is received. Refer to Section 6.0 for more information on variances.
2.0 PROGRAM PERSONNEL

CWM Facilities Management Department shall be the plan approving authority for CWM Projects. The following is a listing of titles and associated responsibilities related to the program. Responsibilities may be combined in terms of staffing resources only if the person responsible for the task(s) is qualified per Section 1.1.3. The following titles are designated to ensure compliance with erosion and sediment control regulations on all CWM projects.

2.1 ESC Program Administrator - Shall have overall program management and coordination responsibilities for The College of William and Mary's Erosion and Sediment Control Program. This position will be assigned at Director Level within CWM Facilities Management Department and shall be a DCR certified program administrator. The Director of Facilities Planning, Design and Construction is currently assigned as the ESC Program Administrator.

2.2 ESC Plan Reviewer(s) - Shall be responsible for reviewing plans to insure compliance with CWM ASESC and applicable ESC laws. The Plan Reviewer must state in writing the reason(s) for disapproval of an ESC Plan and specify the modification, terms, and conditions necessary for plan approval. This person shall be DCR certified as a plan reviewer. This position will reside within the CWM Code Review Team.

2.3 ESC Inspector(s) - Shall have the responsibility for inspecting erosion and sediment control practices to evaluate compliance with the approved ESC plan and associated laws, regulations, and CWM ASESC. This position shall be a DCR certified inspector from Facilities Management Planning, Design and Construction or the respective Facilities Management staffs at Richard Bland College and the Virginia Institute of Marine Science.

2.4 Certifications shall be in accordance with Virginia Erosion and Sediment Control Certification Regulations (4VAC50-50 et seq. as amended).

3.0 PROGRAM IMPLEMENTATION

ESC plans shall comply with CWM ASESC, Virginia’s Erosion and Sediment Control Law (§10.1-560 et. seq.), and associated ESC regulations. Refer to Section 1.1 for more information on general specifications.

3.1 Submittals

ESC drawings and narratives (ESC plans) shall be submitted to CWM ESC Plan Reviewer for review and approval prior to any land-disturbing activities. The plan reviewer shall have 30 days to review the plan and provide written comments to the submitting project manager and the ESC Program Administrator. Prior to commencement of a land-disturbing project, the project must have received written approval for the plan(s) from CWM ECS Program Administrator. The formal approval letter will be attached to the project building permit.

3.2 Plan Reviews

Plan reviews shall be conducted by qualified personnel. Plan reviews shall ensure compliance with CWM ASECS. Plan reviewers shall use the Plan Review Checklist provided in Appendix A for ESC plans.
3.3 Inspections and Enforcement

The ESC Inspector(s) is responsible for ensuring that the implementation of the project is in accordance with the project specific erosion and sediment control plans and associated ESC laws and regulations. Refer to Section 5.0 for more information on inspections and enforcement procedures.

3.4 Changes and Amendments

An approved plan may be changed by the CWM Facilities Management Department in the following cases:

- Where inspection has revealed the plan is inadequate to satisfy applicable regulations; or
- Where the person responsible for carrying out the approved plan finds that the approved plan cannot be effectively carried out because of changed circumstances or other reasons. Amendments may be proposed to the plan consistent with the requirements of this article to ensure an effective and compliant plan.

Proposed revisions to an approved ESC plan will be submitted by the Project Manager to CWM Program Administrator for review. Revisions shall not be considered approved until written notice is provided. Revisions must comply with CWM ASESC.

4.0 CONSTRUCTION PLAN REQUIREMENTS

- Complete erosion and sediment control plans shall be provided in the construction plans.
- Minimum standards 1 through 19 (4VAC50-30-40) shall be addressed in the construction plans.
- Construction sequence of operations shall be defined on the construction plans with staged implementation of erosion and sediment control measures for each phase. The area which may be disturbed in each phase shall be set forth in the construction plans.
- Construction plans shall provide information on the maintenance of the erosion and sediment control measures or reference the narrative section that contains the information.
- Construction plans shall contain a summary which includes the amount of disturbed area per phase and proposed net change in impervious area (4VAC50-30-40).
- Land disturbing activity occurring at a separate location must be included in the project plan or a separate approved plan must be provided for the separate location.
- A copy of the completed plan checklist (see Appendix A) must be included in the construction documents indicating the location such as a specific plan sheet or narrative section where the requirement is addressed.

5.0 INSPECTIONS AND ENFORCEMENT

5.1 Erosion and Sediment Control Inspections

Periodic inspections shall be conducted, at a minimum, as follows:

- Every two weeks and within 48 hours of a rainfall event producing runoff.
- During or immediately following initial installation of erosion and sediment controls.
- At the completion of the project.
The inspection report provided in Appendix B is designed to be used on each site inspection visit. All measures shown on the plan shall be inspected. All problems and violations shall be documented on the inspection report. A copy of the inspection report will be provided to the contractor, the ESC Program Administrator and the Director, Facilities Planning Design and Construction.

5.2 Enforcement

When violations noted on written inspection reports remain during subsequent inspections, a Notice to Comply will be issued by the CWM Program Administrator. The Notice to Comply will contain specific measures or corrections that need to be made and specify deadlines for completion. Stop Work Orders will be issued by the CWM Program Administrator when:

- Land disturbing activities commenced without an approved plan; or
- The project has failed to meet the prescribed deadlines in a Notice to Comply; or
- Violations are causing or are in imminent danger or causing harmful erosion.

The stop work order will be lifted once the required ESC measures are in place and verified by the ESC Inspector.

5.3 Other Investigations

ESC Inspectors will also be responsible for responding in a timely manner to reports of alleged violations reported by College staff, students, adjacent property owners, or others (§10.1-569.1). Corrective measures, if warranted, will follow standard procedures as outlined for ESC inspections.

6.0 VARIANCES

Variances to regulations must ensure off-site properties and resources are protected from damage. Economic hardship is not sufficient reason to grant a variance or an exception from the requirements of the CWM ASESC.

For a variance to become part of the approved project specific ESC plans, a written variance request must be submitted for approval by DCR. This request should include a detailed description of the alternative ESC practice and justification that the practice meets the intent of the Minimum Standard for which a variance is sought. (Ref. 4VAC50-30-50)

Project Variance:

- All requests for project specific variances to CWM ASESC shall be sent by the design professional by way of the Project Manager to the CWM ESC Program Administrator and shall be accompanied by complete details and documentation, including justification for the requested variance and impacts associated with the variance request. The design professional shall complete the form included in Appendix C.
- If determined to be appropriate by CWM Program Administrator and the Plan Reviewer, then CWM ESC Program Administrator shall coordinate the review and approval of the requested variance with DCR's Tappahannock Regional Office and Virginia Erosion and Sediment Control Program Manager.
- All requested variances to be considered unapproved until written approval from the CWM AS ESC Program Administrator is received.
- All approved variances shall be listed in the General Notes section of the ESC plans for land disturbing activities and included in the Narrative.
7.0 LAND-DISTURBING ACTIVITIES

7.1 Current Land-disturbing activities:

A list of completed and on-going regulated land-disturbing activities either under contract or terminated during the previously referenced time period are included in Appendix D. The list includes project location, project start and completion date, and actual disturbed area.

7.2 Proposed Land-disturbing activities:

A list of regulated land-disturbing activities expected to be under contract during the referenced time period are included in Appendix D. The list includes project location, estimated disturbed acreage by watershed, and Biennium for each project.

7.3 Project Tracking and Notification

• CWM shall use GIS to track regulated land-disturbing activities.

• CWM land-disturbing GIS will be updated as necessary to keep current with existing projects as related to ESC.

• The GIS will be accessible through Microsoft Windows Explorer to DCR.

8.0 PROGRAM REVIEW and EVALUATION

8.1 DCR’S RESPONSIBILITIES

• DCR shall have sixty days in which to comment on any erosion and sediment control specifications submitted to it for review, and its comments shall be binding on CWM and any private business hired by CWM(§10.1-564.D).

• DCR shall perform random site inspections to assure compliance with the Erosion and Sediment Control Law.

8.2 CWM’s RESPONSIBILITIES

• CWM shall ensure compliance with the approved plan and annual standards and specifications (§10.1-564.F).

• Upon request by the DCR, CWM shall provide a copy of the approved plan sheets and narrative for each regulated land-disturbing activity as outlined in Section 1.1.
Appendix A

ESC Checklists
EROSION AND SEDIMENT CONTROL - PLAN REVIEW CHECKLIST

PROJECT:____________________________________________________________________

PLAN PREPARER AND DATE:___________________________________________________________

REVIEWER AND DATE:______________________________________________________________

_____1. Vicinity map.
_____2. Soils map and table of data (additions as needed).
_____3. Narrative describing the project.
_____4. Narrative describing existing site conditions.
_____5. Narrative describes adjacent areas and impacts on them.

_____6. Proposed erosion and sediment controls shown on a base map which provides topographic data. Map scale is such that the entire site is shown on as few sheets as possible. The plan:
   a) _____ Shows the limits of clearing and grading.
   b) _____ Shows the locations and dimensions of proposed control measures, including stormwater conveyance channels.
   c) _____ Provides all design data (drainage areas, Qs, velocities, etc.)
   d) _____ Provides details of structural and non-structural controls.
   e) _____ Narrative emphasizes phasing (minimize area of land in disturbed condition at any one time), sequence of work, short times of exposure.
   f) _____ Cost estimates include quantities, unit costs, total costs, etc. Area of seeding must be based on total area to be disturbed regardless of proposed use.

_____7. Chesapeake Bay Preservation Act - Narrative statement. Delineate where applicable.

_____8. Wetlands - Narrative on presence, need for permits.

_____9. Streams - Narrative specifies whether any work will directly affect perennial streams and/or streams with drainage areas of 3200 acres or more and whether any permits are needed.

_____10. Shows appropriate flood data, including panel #, zones and, if applicable, locations. For approximate (zone A, no numbers) zones, use of Regional Overbank Flow formula, HEC-2, etc. will be decided on a case by case basis.

_____11. Work within flood zones other than Zone C will be in accordance with all flood related regulations.
EROSION AND SEDIMENT CONTROL - PLAN REVIEW CHECKLIST

12. Complies with the following MINIMUM STANDARDS (4VAC50-30-40, 1-19.):

<table>
<thead>
<tr>
<th>Minimum Standard</th>
<th>Dwg Sheet/Doc Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS-1. Soil stabilization within 7 days.</td>
<td></td>
</tr>
<tr>
<td>MS-2. Soil stock piles, stabilization and protection.</td>
<td></td>
</tr>
<tr>
<td>MS-3. Permanent stabilization.</td>
<td></td>
</tr>
<tr>
<td>MS-4. Structural controls to be first.</td>
<td></td>
</tr>
<tr>
<td>MS-5. Immediate stabilization of earthen controls.</td>
<td></td>
</tr>
<tr>
<td>MS-6. Sediment basins where runoff is from 3 or more disturbed acres.</td>
<td></td>
</tr>
<tr>
<td>MS-7. Minimize erosion of cut and fill slopes.</td>
<td></td>
</tr>
<tr>
<td>MS-8. Slopes, conveyance of concentrated flows.</td>
<td></td>
</tr>
<tr>
<td>MS-9. Seepage areas on slopes, drained or protected.</td>
<td></td>
</tr>
<tr>
<td>MS-10. Inlet protection.</td>
<td></td>
</tr>
<tr>
<td>MS-11. New channels, adequate lining and outlet.</td>
<td></td>
</tr>
<tr>
<td>MS-12. Adequate measurers for work in live watercourses.</td>
<td></td>
</tr>
<tr>
<td>MS-14. Live watercourses, work complies with all regulations.</td>
<td></td>
</tr>
<tr>
<td>MS-15. Watercourses stabilized immediately after work.</td>
<td></td>
</tr>
<tr>
<td>MS-16. Underground utility lines, items a, b, c, d, e.</td>
<td></td>
</tr>
<tr>
<td>MS-17. Minimize transport of sediment to paved surfaces</td>
<td></td>
</tr>
<tr>
<td>MS-18. E &amp; S controls removed w/i 30 days after final stabilization.</td>
<td></td>
</tr>
<tr>
<td>MS-19. Adequacy of off-site receiving channels.</td>
<td></td>
</tr>
</tbody>
</table>

a) _____ Documents adequate channels (capacity and velocity) based on storm duration of 24 hours. If development plans have been approved for off-site drainage areas, calculations should assume the planned land use is the predevelopment condition.

b) _____ Documents proposals if channels are inadequate.

c) _____ Narrative summary.

d) _____ Shows all relevant calculations.

e) _____ Drawings which clearly show design features of proposed structures.

f) _____ Maintenance plan for detention structures.

g) _____ Maintenance agreement for detention structures.

h) _____ Copies of applicable easements, deed restrictions and covenants.

i) _____ Ponds - see additional checklist.

13. Total area (in square feet) to be disturbed is:

_____ < 2,500 _____ < 10,000 _____ 10,000 or >

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Appendix B

ESC Inspection Forms
**College of William & Mary**  
Erosion and Sediment Control  
Inspection Report

Reply to: Facilities Planning, Design and Construction, 115 Grigsby Drive, Williamsburg, VA 23185

**INSPECTION REPORT**

- **Project Name:**
- **Project Authority:**
- **RLD Name:**
- **RLD Number:**
- **Project Location:**
- **Project Number:**
- **Inspector Name:**
- **Inspection Date/Time:**

**STAGE OF CONSTRUCTION**

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

<table>
<thead>
<tr>
<th>Item #</th>
<th>State/Local Regulation</th>
<th>Violation</th>
<th>Description and Location of Problem/Violation&lt;sup&gt;(2)&lt;/sup&gt;, Required or Recommended Corrective Actions, and Other Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Initial</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repeat</td>
<td></td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (4VAC50-30), Virginia Stormwater Management Permit Regulations (4VAC50-60), or local ESC/SWM ordinance.

<sup>(2)</sup> Note whether or not off-site damage resulting from the problem/violation was evident during the inspection.

**REQUIRED CORRECTIVE ACTION DEADLINE DATE:** ____________________  
**RE-INSPECTION DATE:** ____________________

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: ____________________  
Date: ____________________

**ACKNOWLEDGEMENT OF REPORT RECEIPT**

- **Printed Name:** ____________________  
- **Signature:** ____________________  
- **Date:** ____________________

This report will be provided to the following parties within 24 hours of inspection: ____________________

______________________________
______________________________
______________________________
### INSPECTION REPORT CONTINUATION PAGE

<table>
<thead>
<tr>
<th>Item#</th>
<th>State/Local Regulation(1)</th>
<th>Violation</th>
<th>Description and Location of Problem/Violation(2), Required or Recommended Corrective Actions, and Other Comments/Notes</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>Initial</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Repeat</td>
<td></td>
</tr>
</tbody>
</table>

(1) Refers to applicable regulation found in the most recent publication of the *Virginia Erosion and Sediment Control Regulations (4VAC50-30)*, *Virginia Stormwater Management Permit Regulations (4VAC50-60)*, or local ESC/SWM ordinance.

(2) Note whether or not off-site damage resulting from the problem/violation was evident during the inspections.

Sheet _____ of _______
College of William & Mary  
Erosion and Sediment Control  
Inspection Report

STAGE OF CONSTRUCTION

____Pre-Construction Conference  ___Rough Grading  ___Finish Grading  
____Clearing and Grubbing  ___Building Construction  ___Final Stabilization

INSPECTION CHECKLIST

Yes  No  NA

*MS-1  Have all denuded areas requiring temporary or permanent stabilization been stabilized?
Seeded? Yes / No  Mulched? Yes / No  Graveled? Yes / No

MS-2  Are soil stockpiles adequately stabilized with seeding and/or sediment trapping measures?

MS-3  Does permanent vegetation provide 'adequate stabilization?

MS-4  Have sediment trapping facilities been constructed as a first step in LDA?

MS-5  For perimeter sediment trapping measures, are earthen structures stabilized?

MS-6  Are sediment basins installed where needed?

MS-7  Are finished cut and fill slopes adequately stabilized?

MS-8&9  Are on-site channels and outlets adequately stabilized?

MS-10  Do all operational storm sewer inlets have adequate inlet protection?

MS-11  Are stormwater conveyance channels adequately stabilized with channel lining and/or outlet protection?

MS-12  Is in-stream construction conducted using measures to minimize channel damage?

MS-13  Are temporary stream crossings of non-erodible material installed where applicable?

MS-15  Is necessary re-stabilization of in-stream construction complete?

MS-16  Are utility trenches stabilized properly?

MS-17  Are soil and mud kept off public roadways at intersections with site access roads?

MS-18  Have all temporary control structures that are no longer needed been removed?

MS-19  Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increase in peak stormwater runoff?

* Refers to the minimum standards of the Virginia Erosion and Sediment Control Regulations (VI 625-02-00).

Comments: ________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Verbal/Written notification given to: ____________________________________________

Report by: _________________________________________________________________
Appendix C

Variance Request Form
VARIANCE REQUEST

Requested by: ________________________________  Date: ________________________

Street Address: ____________________________________________________________________

City/Town/Zip: ____________________________________________________________________

Telephone No: __________________ Fax No: ________________________

E-Mail Address: ____________________________________________________________________

Project Name/Location: __________________________________________________________________

Project Description: ____________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

Variance Requested (state appropriate minimum standard and requirement): ________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

Reasons and Justification for Variance Request: __________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

Signature of Applicant: ________________________________  Date: ________________________
Appendix D

Current and Proposed
Land-Disturbing Activities
<table>
<thead>
<tr>
<th>Capital Projects</th>
<th>In-Progress</th>
<th>Planned</th>
<th>Planned</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2012 - 2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve: Historic Campus Utilities, Ph 2</td>
<td>X</td>
<td></td>
<td></td>
<td>Steam/chilled water distribution to 16 bldgs.</td>
</tr>
<tr>
<td>Renovate: Brafferton and Brafferton Kitchen</td>
<td>X</td>
<td></td>
<td></td>
<td>Lay back soil to waterproof foundation</td>
</tr>
<tr>
<td>Construct: New Fraternities Complex</td>
<td>X</td>
<td></td>
<td></td>
<td>115 car parking lot + 11 frats + community bldg.</td>
</tr>
<tr>
<td>Renovate: Tucker Hall</td>
<td>X</td>
<td></td>
<td></td>
<td>Lay back soil to waterproof foundation</td>
</tr>
<tr>
<td>Construct: Sadler Center Dining Expansion</td>
<td>X</td>
<td></td>
<td></td>
<td>Provide 11,810 sf expansion and 7,000 renovation.</td>
</tr>
<tr>
<td>Improve: Accessibility Infrastructure (Start 5/13)</td>
<td>X</td>
<td></td>
<td></td>
<td>Selected ADA pathway/access ramp projects</td>
</tr>
<tr>
<td>Improve: Campus Storm Water Infrastructure (Start 5/13)</td>
<td>X</td>
<td></td>
<td></td>
<td>Retrofit/construct BMPs for SW compliance</td>
</tr>
<tr>
<td>Renovate: Chandler Hall (Start 5/13)</td>
<td>X</td>
<td></td>
<td></td>
<td>Gut renovation of facility + addition of ADA ramps</td>
</tr>
<tr>
<td>Improve: Lake Matoaka Dam Spillway (Start 9/13)</td>
<td>X</td>
<td></td>
<td></td>
<td>Clear abutments/armor down stream face.</td>
</tr>
<tr>
<td>Construct: Integrated Science Center, Ph 3 (Start 12/13)</td>
<td>X</td>
<td></td>
<td></td>
<td>Final 113,000 sf wing of ISC complex</td>
</tr>
<tr>
<td>Renovate: Tyler Hall (Start 2/14)</td>
<td>X</td>
<td></td>
<td></td>
<td>Lay back soil to construct ADA ramps</td>
</tr>
<tr>
<td>Construct: Reno + Addition to Zable Stadium (Start 12/14)</td>
<td>X</td>
<td></td>
<td></td>
<td>3300 seat addition + reno of west stands</td>
</tr>
<tr>
<td>Construct: Law School Additions &amp; Renovation (Start 5/14)</td>
<td>X</td>
<td></td>
<td></td>
<td>Proposed 52,300 gsf addition + 47,615 gsf reno</td>
</tr>
<tr>
<td><strong>2014 - 2016</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construct: Arts Complex Phase 1</td>
<td>X</td>
<td></td>
<td></td>
<td>Renovation/addition of Phi Beta Kappa Hall</td>
</tr>
<tr>
<td>Construct: West Campus Utility Plant</td>
<td>X</td>
<td></td>
<td></td>
<td>Sitework, utilities and bldg constr for CW/HW plant</td>
</tr>
<tr>
<td>Construct: IT Data Center</td>
<td>X</td>
<td></td>
<td></td>
<td>12,500 gsf machine room + 1,500 gsf remote opns</td>
</tr>
<tr>
<td>Construct: Population Lab</td>
<td>X</td>
<td></td>
<td></td>
<td>Construction of 12,400 sf replacement aviary</td>
</tr>
<tr>
<td><strong>Maintenance Reserve Projects (2012 - 2014)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair: Sorority Water Lines</td>
<td>X</td>
<td></td>
<td></td>
<td>Domestic water supply distribution replacement</td>
</tr>
<tr>
<td><strong>Project Permit Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate House Demolition</td>
<td>X</td>
<td></td>
<td></td>
<td>Demolish condemned structure</td>
</tr>
<tr>
<td>Yates Hall Storm Water Mitigation</td>
<td>X</td>
<td></td>
<td></td>
<td>Collection/routing of SW flow on west face</td>
</tr>
<tr>
<td>Capital Projects</td>
<td>CY 2013</td>
<td>Planned</td>
<td>Planned</td>
<td>Remarks</td>
</tr>
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<td>-------------------------------------------------------</td>
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<tr>
<td><em>2012 - 2014</em></td>
<td></td>
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<tr>
<td>Construct: Replace Seaside Hall</td>
<td>X</td>
<td></td>
<td></td>
<td>Bids opened on 12/7/11</td>
</tr>
<tr>
<td>Construct: Facilities Management Maintenance Facility</td>
<td>X</td>
<td></td>
<td></td>
<td>New 15,000 gsf maintenance structure</td>
</tr>
<tr>
<td>Construct: Marine Advisory, Research &amp; Support Facility</td>
<td>X</td>
<td></td>
<td></td>
<td>New 32,000 gsf research building</td>
</tr>
<tr>
<td>Construct: New Oyster Hatchery</td>
<td>X</td>
<td></td>
<td></td>
<td>New 22,000 gsf hatchery complex</td>
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<td></td>
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<tr>
<td><em>2014 - 2016</em></td>
<td></td>
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<tr>
<td>Construct: Eastern Shore Admin &amp; Education Complex</td>
<td>X</td>
<td></td>
<td></td>
<td>New 10,200 gsf admin, classroom &amp; maint shop</td>
</tr>
<tr>
<td>Construct: Addition to Fisheries Science Building</td>
<td>X</td>
<td></td>
<td></td>
<td>10,000 gsf addition including labs &amp; office space</td>
</tr>
<tr>
<td>Expand/Renovate: Waterman's Hall</td>
<td>X</td>
<td></td>
<td></td>
<td>Reno of existing labs, classrooms, research library and addition of 10,000 gsf education center</td>
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<tr>
<td><em>Maintenance Reserve (2010-2012)</em></td>
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<tr>
<td>None at this time.</td>
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<tr>
<td><em>Project Permit Projects</em></td>
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<tr>
<td>None at this time</td>
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</tbody>
</table>
Appendix E
Approved Pump Discharge
Excavation Dewatering Methods*
*Note – Approved methods are in addition to options contained in the Virginia Erosion and Sediment Control Handbook Standard and Specification 3.26 for Dewatering Structures at page III-238.
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