Annual Standards and Specifications

For Erosion and Sediment Control and Stormwater Management

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List of Abbreviations

Title	Abbreviation
Annual Standards and Specifications	AS&S
Best Management Practice	BMP
Chesapeake Bay Preservation Area	CBPA
Clean Water Act	CWA
Construction General Permit	CGP
Virginia Department of Conservation and Recreation	DCR
Division of Engineering & Buildings	DEB
Virginia Department of Environmental Quality	DEQ
Engineer of Record	EOR
Environmental Protection Agency	EPA
Erosion and Sediment Control	ESC
Land-Disturbing Activity	LDA
Municipal Separate Storm Sewer System	MS4
Old Dominion University	ODU
Responsible Land Disturber	RLD
Stormwater Management	SWM
Stormwater Pollution Prevention Program	SWPPP
Total Maximum Daily Load	TMDL
Vanasse Hangen Brustlin	VHB
Virginia Administrative Code	VAC
Virginia Pollution Discharge Elimination System	VDPES
Virginia Stormwater Management Handbook	VSMH
Virginia Stormwater Management Program	VSMP
Water Quality Act	WQA

Definitions

"*Applicant*" means person or persons providing submission for land-disturbing projects on the Old Dominion University campus.

"*Board*" means the State Water Control Board.

"*Certified Personnel*" person or persons who hold a certificate of competence is accordance with 9VAC25-850 issued by the board. See Section 2: Annual Standards and Specifications Personnel for more information.

"*Contractor*" means the operator of the regulated land-disturbing activities

"*Department*" means the Department of Environmental Quality

"*Operator*" means the permittee to which a local permit or state permit for regulated land-disturbing activities is issued.

"*Permit*" or "*VSMP authority permit*" means an approval to conduct a land-disturbing activity issued by the VSMP authority for the initiation of a land-disturbing activity after evidence of state VSMP construction general permit coverage has been provided where applicable.

"*Permittee*" means the person to which a local permit or Construction General Permit for regulated land-disturbing activities is issued.

"*Virginia Erosion and Sediment Control Program authority*" or "*VESCP authority*" means a locality that is approved by the Board to operate a Virginia Erosion and Sediment Control Program in accordance with Article 2.4 (§ 62.1-44.15:51 et seq.). Only a locality for which the Department administered a Virginia Stormwater Management Program as of July 1, 2017, is authorized to choose to operate a VESCP pursuant to Article 2.4 (§ 62.1-44.15:51 et seq.).

"*Virginia Stormwater Management Program authority*" or "*VSMP authority*" means an authority approved by the Board after September 13, 2011, to operate a Virginia Stormwater Management Program or the Department. An authority may include a locality; state entity, including the Department; federal entity; or, for linear projects subject to annual standards and specifications in accordance with subsection B of § 62.1-44.15:31, electric, natural gas, and telephone utility companies, interstate and intrastate natural gas pipeline companies, railroad companies, or authorities created pursuant to § 15.2-5102.

1. Introduction

The Annual Standards and Specifications (AS&S) Program for Old Dominion University (ODU) has been developed in accordance with §62.1-44.15:31 of the State Water Control Law and section 9VAC25-870-170 of the Virginia Administrative Code. The ODU AS&S incorporates the following regulations, laws, and codes by reference:

- Virginia Stormwater Management Act (§62.1-44.15:24 et seq. as amended)
- Virginia Stormwater Management Program Regulations (9VAC25-870 et seq. as amended)
- Virginia Pollutant Discharge and Elimination System General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880 et seq. as amended)
- Virginia Pollutant Discharge and Elimination System General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (9VAC25-890 et seq. as amended)
- Virginia Erosion and Sediment Control Law (§62.1-44et seq. as amended)
- Virginia Erosion and Sediment Control Regulations (9VAC25-840 et seq. as amended)
- Virginia Erosion and Sediment Control and Stormwater Management Certification Requirements (9VAC25-850 et seq. as amended)
- Chesapeake Bay Preservation Act (§62.1-44.15.67 et seq. as amended)
- Chesapeake Bay Preservation Act Area Designation and Management Regulations (9VAC25-830 et seg. as amended)
- Technical Bulletins, as amended, on the Virginia DEQ website at www.deq.virginia.gov/
- Memos, as amended, on the Virginia DEQ website at www.deq.virginia.gov/

The ODU AS&S shall be applicable to all land-disturbing activities on the ODU campus as described by Virginia ESC Law and Virginia SWM Act, and shall be submitted to the Virginia Department of Environmental Quality (DEQ) annually for review and approval (9VAC25-870-170, §62.1-44.15:55.D). The Old Dominion University Director of Environmental Health and Safety shall administer and enforce the ODU AS&S and will ensure that appropriate faculty and staff obtain required DEQ certifications as necessary as specified in the Virginia ESC and SWM Certification Requirements (9VAC25-850). Certifications are required for AS&S entities that could potentially include, but are not limited to Program Administrator, Plan Reviewer, and Inspector. ODU may enter into agreements or contracts with soil and water conservation districts, adjacent localities, or other public or private entities to carry out or assist with the responsibilities of their AS&S.

The purpose of the ODU AS&S is to provide standard methods for guiding land-disturbing projects on the ODU campus through planning, design, approval, construction, and post-construction. The AS&S describe how land-disturbing activities shall be conducted and includes the following:

- Provisions for the preparation of SWM and ESC plans that comply with locality requirements and VSMP regulations.
- Provisions for long term maintenance of SWM facilities, devices, and other post construction best management practices (BMPs). Provisions include inspection procedures and timelines.
- Provisions for ESC and SWM program administration including plan design, plan review, plan approval, construction inspections, and enforcement.
- Provisions to ensure that appropriate personnel obtain DEQ certifications for ESC and SWM.
- Means and methods to provide tracking and notification of land-disturbing activities.
- Means and methods to document plan changes and to ensure that they comply with ESC and SWM regulations.

2. Annual Standards and Specifications Personnel

The following is a breakdown in responsibilities and titles regarding the ODU AS&S for ESC and SWM. Responsibilities may be combined in terms of staffing resources only if the person responsible for the task(s) satisfies the designation of certified personnel. The Director of Environmental Health and Safety shall be the program administrator. The following titles are designated to ensure compliance with erosion and sediment control and stormwater management regulations on all ODU projects

1. "Certified ESC Inspector" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the area of project inspection; or, (ii) is enrolled in the Board's training program for project inspection and successfully completes such program within one year after enrollment; and (iii) shall be responsible to inspect as mandated by the VESCL&R erosion and sediment control measures to ensure proper installation in accordance with the approved plan and record the state and effectiveness of such measures in an effort to minimize site erosion and sediment control.
2. "Certified SWM Inspector" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the classification of project inspector in the area of SWM; or, (ii) is enrolled in the Board's training program for project inspector and successfully completes such program within one year after enrollment; and, (iii) shall be responsible to inspect construction sites for SWPPP compliance.
3. "Certified ESC Plan Reviewer" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the area of plan review; (ii) is enrolled in the Board's training program for plan review and successfully completes such program within one year after enrollment; or (iii) is licensed as a professional engineer, architect, certified landscape architect, or land surveyor pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia; or (iv) is a professional soil scientist as defined in Chapter 22 (§ 54.1-2200 et seq.) of Title 54.1 of the Code of Virginia.
4. "Certified SWM Plan Reviewer" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the classification of plan reviewer in the area of SWM; or, (ii) is enrolled in the Board's training program for plan reviewer and successfully completes such program within one year after enrollment.
5. "Certified ESC Program Administrator" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the

Board in the area of program administration; or, (ii) is enrolled in the Board's training program for program administration and successfully completes such program within one year after enrollment. The certification for Certified ESC Program Administrator cannot be contracted out and must be fulfilled by the AS&S holder.

6. "Certified SWM Program Administrator" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the classification of program administration in the area of SWM; or, (ii) is enrolled in the Board's training program for program administration and successfully completes such program within one year after enrollment. The certification for Certified SWM Program Administrator cannot be contracted out and must be fulfilled by the AS&S holder.
7. "Certified ESC Combined Administrator" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the area of program administration, plan review and project inspection; or, (ii) is enrolled in the Board's training program for program administration, plan review and project inspection and successfully completes such program within one year after enrollment. The certification for Certified ESC Combined Program Administrator cannot be contracted out and must be fulfilled by the AS&S holder.
8. "Certified SWM Combined Administrator" means an employee or agent of Old Dominion University who: (i) holds a certificate of competence from the Board in the classification of program administration, plan reviewer and project inspector in the area of SWM; or, (ii) is enrolled in the Board's training program for program administration, plan reviewer, and project inspector and successfully completes such program within one year after enrollment. The certification for Certified SWM Combined Program Administrator cannot be contracted out and must be fulfilled by the AS&S holder.

Please note that any person who holds a valid and unexpired certificate of competence issued by the board in the classification of ESC or SWM, or who obtains such a certificate, and who later successfully obtains an additional certificate may surrender both certificates of competence to the board and request in writing issuance of a dual certificate showing certification in both classifications. Such a request must be made while both the ESC and SWM certificates of competence obtained are valid and unexpired.

3. Applicability

The ODU AS&S shall be applicable for land-disturbing activities on the ODU campus. Depending on the type of activity, the definition of a land-disturbing activity is subject to the ESC or SWM Laws and Regulations that govern ESC and SWM. However, any project disturbing 2,500 sf or greater will be subject to the ODU AS&S.

3.1 Erosion and Sediment Control

Per ESC Law (§62.1-44.15.51 et seq.), a land-disturbing activity is defined as "*any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediment into state waters or onto lands in the Commonwealth, including but not limited to, clearing, excavating, transportation, and filling of land.*" In addition, a land-disturbing activity is considered to be an area greater than 10,000 square feet in size or 2,500 square feet in size that is within an area designated as a Chesapeake Bay Protection Area (CBPA).

Exceptions to the ESC definition of land-disturbing activity that may be applicable to the ODU campus as defined by ESC Law include:

- Minor landscaping, repairs, and maintenance
- Individual service connections
- Installation, maintenance, or repair of underground public utility lines. The utility must be located under hardscape surfaces and the land-disturbance must disturb only hardscaped surfaces
- Installation of fences, posts, or poles
- Shoreline erosion control projects on tidal waters. All disturbing activities must be within regulatory and approved by local wetland boards, the Marine Resource Commission, or the United States Army Corps of Engineers.
- Emergency or life-saving repairs

3.2 Stormwater Management

Per the Virginia SWM Act (§62.1-44.15.24 et seq.) a land-disturbing activity is defined as "*a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation.*" In addition, a land-disturbing activity is considered to be an area greater than one acre in size or an area greater than 2,500 square feet in size that is within an area designated as a Chesapeake Bay Protection Area (CBPA).

Exemptions to the SWM definition of land-disturbing activity that may be applicable to the ODU campus as defined by the Virginia SWM Act include:

- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving

of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance if performed in accordance with §62.1-44.15.34 et seq; and

- Conducting land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, the VSMP authority shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements of subsection A is required within 30 days of commencing the land-disturbing activity

4. Technical Criteria

4.1 Stormwater Management

A SWM plan shall be designed in accordance with the SWM Act and the VSMP Regulations. The plan shall address the Construction General Permit plan requirements listed in 9VAC25-880-70 Part II.A.

Projects shall be designed per Technical Criteria Part IIB (9VAC25-870-62 et seq.) of the VSMP regulations. Water quantity (9VAC25-870-66) shall be met for channel and flood protection. The Runoff Reduction Method and Guidance Memo No. 16-2001 shall be utilized for water quality compliance and meet minimum design criteria and standards (9VAC25-870-63). Best management practices (BMPs), both structural and non-structural, shall be designed in accordance with the Virginia BMP Clearing House BMP Design Specifications (9VAC25-870-65). If water quality cannot be meet on site, offsite compliance options may be utilized if the criteria in 9VAC25-870-69 is met.

If the project is considered grandfathered it shall be designed per Technical Criteria Part IIC (9VAC25-870-93 et seq.) of the VSMP regulations if the criteria in 9VAC25-870-48 is met.

4.2 Erosion and Sediment Control

An ESC control plan shall be designed in accordance with the ESC Laws, ESC Regulations (9VAC25-840), and the latest edition of the Virginia Erosion and Sediment Control Handbook. The plan shall address the Construction General Permit plan requirements listed in 9VAC25-880-70 Part II.A.2 and the minimum standards described in 9VAC25-840-40.

4.3 Non-VESCH Control Measures

The use of Virginia Erosion and Sediment Control Handbook (VESCH), along with accompanying technical documents and guidance, control measures is strongly preferred. Non-VESCH control measures, best management practices (BMP), and specifications may be included in the Annual Standards and Specifications submission, but their use may be further reviewed and approved by the applicable DEQ Regional Office on a project-specific basis. For all non-VESCH and proprietary control measures, please include all applicable practical information including definition, purpose, conditions where practice applies, planning considerations, design criteria, construction specifications, design tables and plates, and maintenance and inspections. Non-VESCH and proprietary control measures shall be installed per

the manufacturer's instructions and with the intent of the VESCH specifications. Should non-VESCH control measures fail to effectively control soil erosion, sediment deposition, and non-agricultural runoff, then VESCH control measures shall be utilized

5. Plan Approval and Application Process

5.1 Plan Submission and Review Process

If the land-disturbing activity disturbs more than 2,500 sf, an ESC and SWM plan shall be submitted for review. The plans shall be reviewed and recommended for approval by the ODU Director of Environmental Health and Safety or an ODU representative of the Director that satisfies the designation of certified personnel. ESC and SWM plans shall comply with ODU Standards and Specifications for ESC and SWM, the Virginia and Erosion Sediment Control Law (§62.1-44 et seq.), the Virginia Stormwater Management Act (§62.1-44. et seq.), associated ESC and SWM regulations, and the Virginia Stormwater Management Program Permit regulations (9VAC25-870 et seq.). ODU state owned projects are located within the City of Norfolk and the locality requirements shall apply for all ESC and SWM submissions. Per 9VAC25-870-170. A.2. it shall be the responsibility of the state agency to demonstrate if the locality's VSMP authority's technical requirements are not practicable for the project under consideration. If the technical requirements are not practicable ODU shall include documentation including the reasons with the project records.

Once the plan and supporting documentation are deemed adequate, ODU or an approved representative will:

1. Stamp the plans and calculations
2. Forward an approval letter to the project manager and EOR
3. Review the SWPPP if general permit coverage is required

5.2 Construction General Permit Permitting Process

Land-disturbance activities equal to or greater than one acre will require a DEQ issued, General Virginia Pollution Discharge Elimination Systems Permit (VAR 10) for Discharges of Stormwater from Construction Activities. The contractor, operator, shall obtain a Construction General Permit prior to commencement of land-disturbance.

The Contractor shall submit the following documents to DEQ:

- ESC Plan Approval Letter
- SWM Plan Approval Letter
- Registration Statement for General Permit (VAR 10)
- Construction General Permit Fee Form and applicable fee

Land-disturbance of offsite areas for support activities that include, but are not limited to borrow areas, disposal areas, and laydown areas, may be permitted by the Construction General Permit provided the provisions in 9VAC25-880-30.C and 9VAC-25-840-80. D are met.

5.3 Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP shall be prepared in accordance with the requirements per Part II of 9VAC25-880-70. The SWPPP must be completed prior to the submission of a registration statement and implemented for the construction activity, including any support activity, covered by the Construction General Permit. The applicant shall use the appropriate Old Dominion University SWPPP template (Appendix C) for all projects disturbing more than 2,500 sf.

5.4 Approved Plan Modifications

If modifications exceed the limitation of a BMP, revised calculations are required. If the inspector requests the change, amendments to approved plans must be reviewed by the Director of Environmental Health and Safety, a representative of the Director, or EOR. Red lines must be checked and signed off by the DEQ-Certified Inspectors. Revisions shall not be considered approved until written notice is provided. The project SWPPP will need to be updated with approved changes and amendments. If a change will increase the land disturbance to a higher permit fee, the difference in fees will be paid to the DEQ.

5.5 Variances and Exceptions

Variance requests may be submitted by the applicant during the design process to become part of the approved ESC plans per 9VAC25-840-50. All variance requests shall be submitted to ODU and reviewed for completeness and will be forwarded to DEQ for review if appropriate. Variances will not be considered approved until written approval from DEQ has been received. Variance requests shall be a letter with an explanation for the reasons the ESC technical standards cannot be met and describe how the downstream properties will be protected from erosion, sedimentation and flooding.

Exception requests may be submitted by the applicant during the design process to become part of the approved SWM plans per 9VAC25-870-57. All Exception requests shall be submitted to ODU, be reviewed for completeness, and be forwarded to DEQ for review as appropriate. Exception requests will not be considered finalized until

written approval from DEQ has been received. Exception requests shall be a letter format, with an explanation why the SWM technical standards cannot be met.

Economic hardship alone is not a sufficient reason to request a Variance or Exception from the ESC and/or SWM requirements.

6. Construction and Inspections

All contractors performing land disturbing activities on campus property are required through contract documents to follow existing ESC requirements and obtain all applicable permits before construction activity commences. The CO-7 General Conditions of the Construction Contract requires that the contractor have a DEQ-certified responsible land disturber on- site. In addition to contract language, all work performed on ODU property is required to comply with the Construction and Professional Services Manual (CPSM) published by the DEB and ODU's Design Standards.

6.1 Project Tracking for Land-Disturbing Activities

A list of completed, current or expected land-disturbing activities to occur during this AS&S period are included in Appendix A. ODU is required to provide annual reporting for all ESC and SWM regulated land disturbing activities. Reporting to the DEQ will be provided October 1st each year for the previous year's activity. Reports should include the following information:

i. Project name or project number (any associated CGP permit #);
ii. Project location
iii. Brief project description
iv. Acreage of disturbance for project
v. Project start and finish date (status)
vi. Any variances/waivers/exemptions associated with this project.

6.2 Project E-Notification

ODU is required to notify the DEQ at least two weeks prior to initiating an ESC and SWM regulated LDA. E-notifications shall be sent to StandardsandSpecs@deq.virginia.gov (DEQ Central Office) and Noah.Hill@deq.virginia.gov (DEQ Tidewater Regional Office). The following information needs to be included in the e-notification:

i. Project name or project number (any associated CGP permit #);
ii. Project location (including nearest intersection, latitude and longitude, access point)
iii. On-site project manager name and contact info iv. Responsible Land Disturber (RLD) name and contact info
iv. Project description
v. Acreage of disturbance for project
vi. Project start and finish date viii. Any variances/waivers/exemptions associated with this project

6.3 Inspections

Old Dominion University is responsible for the implementation and oversight of the AS&S during construction. ODU, or ODU's representative, who is a Certified ESC or SWM inspector will perform periodic inspections for ESC and SWM for all land-disturbing activities. These inspections will occur in addition to the inspections required per the Construction General Permit (if required) and SWPPP. The Inspection Report Form provided in Appendix B shall be used for inspections and shall identify the inspector and note any issues or violations. The inspection form shall be provided to the Contractor within 48 hours of the inspection and shall note any required actions and deadlines to correct any noted violations. If a noted violation repetitively shows up on the inspection report a Notice to Comply will be issued by the ODU AS&S program administrator. Subsequently, a Stop Work Order will be issued if the violations have not been corrected by the specified deadline on the Notice to Comply (Refer to ODU Enforcement below). The inspection requirements are as follows:

a. ESC Inspection Requirements (9VAC25-840-60, § 62.1-44.15:58). Periodic inspections are required on all projects by ODU. ODU shall:
    i. Provide for an inspection during or immediately following initial installation of erosion and sediment controls,
    ii. At least once in every two-week period, within 48 hours following any runoff producing storm event, and
    iii. At the completion of the project prior to the release of any performance bonds.
b. SWM Inspection Requirements (§ 62.1-44.15:37) ODU:
    i. Shall provide for periodic inspections of the installation of stormwater management measures at the beginning of the project and monthly during construction,
    ii. Shall provide for inspections of SWPPPs (General information, ESC plan, SWM plan, pollution prevention plan, TMDL requirements), at the beginning of the project and at least once every four business days or at least once every five business days and no later than 24-hours following a measurable storm event.
    iii. May require monitoring and reports from the person responsible for meeting the permit conditions to ensure compliance with the permit and to determine whether the measures required in the permit provide effective stormwater management, and
    iv. Shall conduct such investigations and perform such other actions as are necessary to carry out the provisions of this article.
c. The position, agency, department, or other party responsible for conducting inspections should be identified.
d. Inspections of land disturbing activities shall be conducted by a DEQ-certified inspector (ESC and/or SWM).

ODU, or ODU's representative, shall inspect the land-disturbing activity periodically during construction for (9VAC25-870-114):

1. Compliance with the approved erosion and sediment control plan
2. Compliance with the approved stormwater management plan
3. Development, updating, and implementation of a pollution prevention plan; and
4. Development and implement of any additional control measures necessary to address a TMDL

ODU Enforcement:
The Inspection Report Form provided in Appendix B shall be used for inspections and shall identify the inspector and note any issues or violations including violation level:

- Green - Owner Inspection showed site in compliance with AS&S.
- Yellow - Owner Inspection included items of noncompliance to be addressed within the designated period.
- Red- Owner Inspection included items of noncompliance that were not corrected within the designated time frame or the site has observed or perceived offsite sediment or pollutant discharges.
- Black- Owner Inspection included items of noncompliance that were not corrected from the Red status or the site is in significant conflict with the OSU AS&S.

Site that obtains a Black status will be directed to the Director of Environmental. If the decision is made to issue a Stop Work Order, then all losses obtained from the Order will be the responsibility of the contractor.

6.4 Construction General Permit & SWPPP

The operator of the Construction General Permit (CGP) is responsible for maintaining and documentation of the SWPPP throughout construction. The operator must adhere to the requirements of 9VAC25-880-70 Part II-B. The operator can terminate the CGP coverage with DEQ in accordance with the criteria in 9VAC25-880-70. F.

6.5 Long-Term Maintenance Agreements

ODU is responsible for the long-term maintenance and inspections of the SWM facilities, and other techniques specified, to manage the quality and quantity of runoff per 9VAC25-870-112 & 200. Certified personnel shall conduct, at a minimum, annual inspections of the campus SWM facilities. ODU is responsible to ensure the following for all state maintenance agreements:

a. Responsibility for the operation and maintenance of SWM facilities shall remain with the state entity and shall pass to any successor or owner. If

portions of the land are to be sold, legally binding arrangements shall be made to pass the basic responsibility to successors in title. These arrangements shall designate for each state project the property owner, governmental agency, or other legally established entity to be permanently responsible for maintenance.

b. At a minimum, a SWM facility shall be inspected by the responsible state entity on an annual basis and after any storm which causes the capacity of the facility principal spillway to be exceeded.
c. During construction of the SWM facilities, the DEQ shall make inspections on a random basis.
d. The DEQ shall require inspections and reports from the state entity responsible for ensuring compliance with the state permit and to determine if the measures required in the state permit provide effective stormwater management.
e. Inspection reports shall be maintained as part of the land disturbance project file.
f. A draft maintenance agreement is required to be submitted at the time of plan submission. State maintenance agreements are required to be printed on the approved plan sheets. The following should be included:
    i. A description of the requirements for maintenance and maintenance inspection of the SWM facilities and a recommended schedule of maintenance inspection and maintenance.
    ii. The identification of a person or persons who will be responsible for inspections and maintenance.
    iii. The maintenance inspection schedule and maintenance requirements should be in accordance with the Virginia BMP Clearinghouse, the Virginia SWM Handbook, the MS4 permit (if applicable) and/or the manufacturer's specifications.
    iv. Please clearly depict the types of land cover on the site (i.e. different type of hatching for each land cover), including the acreage for each cover type. The acreage should be labeled in all the subareas and within a table that adds the land cover up by type on the sheet.
    v. Please draw metes and bounds all the way around any conserved open space.
    vi. Please label any conserved open space as "Runoff Reduction Compliance Forest / Open Space" vii. Please include the following note on the sheet: "The Runoff Reduction Compliance Forest/Open Space area shown here shall be maintained in a forest/open space manner until such time that an amended storm water management plan is approved by the VSMP Authority."

6.6 Record Keeping

ODU is responsible for providing the following information to DEQ by October 1st every year. The information provided below shall be for the fiscal year (July 1 to June 30).

- Information on each permanent SWM facility completed during the fiscal year to include type of SWM, geographic coordinates, acres treated, and the surface waters or karst features into which the SWM facility will discharge.
- Number and type of enforcement action during the fiscal year
- Number of variances/exceptions granted during the fiscal year.

ODU is responsible for keeping records in accordance with the following:

- Project records, including approved SWM plans, shall be kept for three years after Construction General Permit termination or project completion.
- SWM facility inspection records shall be documented and retained for at least five years from the date of inspection.
- Construction record drawings shall be maintained in perpetuity or until a stormwater management facility is removed.
- All registration statements submitted in accordance with 9VAC25-870-59 shall be documented and retained for at least three years from the date of project completion or Construction General Permit termination.
- ODU shall maintain a copy of the approved ESC plan and a record of inspections for each active land-disturbing activity.
- Approved ESC and SWM plans shall be kept on site and made available.

7. DEQ Oversight

7.1 Enforcement

SWM enforcement shall be administered by the Department and the Board where applicable in accordance with the provisions of §62.1-44.15:27.

ESC enforcement shall be administered by the Department and the Board where applicable in accordance with the provisions of §62.1-44.15:54. The Department and the Board, where applicable, shall provide project oversight and enforcement as necessary and comprehensive program compliance review and evaluation. Such standards and specifications shall be consistent with the requirements of §62.1-44.15:56 and associated regulations and the Stormwater Management Act (§62.1-44.15:24 et. seq) and associated regulations when applicable.

7.2 Complaints, Inspections and Fees

Per §62.1-44.15:31.C the Department shall perform random site inspections or inspections in response to a complaint to assure compliance with this article, the Erosion and Sediment Control Law (§62.1-44.15:51 et seq.), and regulations adopted thereunder. The Department may take enforcement actions in accordance with this article and related regulations.

Per §62.1-44.15:31.D the Department shall assess an administrative charge to cover the costs of services rendered associated with its responsibilities pursuant to this section.

Per §62.1-44.15:55.D the Board shall have the authority to enforce approved specifications and charge fees equal to the lower of (i) $1,000 or (ii) an amount sufficient to cover the costs associated with standard and specification review and approval, projection inspections, and compliance.

7.3 Discretionary Requirements

ODU may be required to provide the following at the discretion of the DEQ:

1. Inspection reports conducted by ODU as well as complaint logs and complaint responses may be required to be submitted to DEQ.
2. ODU may be required to provide weekly e-reporting to the department's applicable regional office:
    a. Inspection reports;
    b. Pictures;
    c. Complaint logs and complaint responses; and
    d. Other compliance documents.

Appendix A:
Land-Disturbance Activity and Project Tracking Sheet

Land-Disturbing Activities

Project Name	*Project Location*	*Project Description*	*Disturbed Area (acres)*	*Construction Start Date*	*Construction Completion Date*	*Variances/ Waivers/ Exemptions?*

Appendix B:
ESC/SWM Inspection Report Form

ESC/SWM Inspection Report

Project Information:

Project Name _____ Inspection Date/Time_____
Project No. _____ DEQ Certified Inspector_____
Project Manager _____
CGP Operator/Responsible Land Disturber _____

Weather Conditions:

Current Conditions _____ Current Temperature _____

Reason for Inspection:

Installation of ESC Measures
Two-Week Inspection
Post-Storm Event*
Project Completion
Other _____

*If selected, indicated date of storm event and approximate amount of rainfall.
Date _____ Rainfall ± (in) _____

Stage of Construction:

Installation of ESC Measures
Clearing & Grubbing
Rough Grading
Building Construction
Finish Grade
Final Stabilization
Construction of SWM Facilities
Maintenance of SWM Facilities
Other _____

Violations:

Item No.	State/Local Regulation	Violation		Description and Location of Problem/Violation. Required or Recommended Corrective Actions. Other Comments/Notes
		Initial	Repeat	

Additional Comments/Notes:

Required Corrective Action Deadline Date _____ Re-Inspection Date _____

Reports conducted by ODU or ODU's Representative will be provided to the Operator/Responsible Land Disturber within 48 hours.

Inspector's Name _____

Inspector's Signature _____ Date _____

General Inspection Checklist:

	Item	Yes	No	N/A	Comments/Notes
1	Permanent or temporary soil stabilization has been applied to denuded area?				
2	Soil stock piles and borrow areas have been stabilized or protected with sediment trapping measures?				
3	Permanent vegetation cover is stabilized?				
4	Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment have constructed as a first step during land disturbance?				
5	Stabilization has been applied to earthen structures such as dams, dikes and diversion immediately after installation?				
6	Sediment Basins and Traps provide adequate capacity for the receiving drainage area?				
7	Cut/Fill slopes have been stabilized?				
8	Temporary/permanent channel or drain has been provided for concentrated runoff for cut/fill slopes?				
9	Adequate drainage or other protection has been provided where water seeps from a slope face?				
10	Adequate inlet protection has been provided?				
11	Adequate outlet protection and/or temporary/permanent channel lining has been provided?				

12	Adequate precautions, sediment control measures and stabilization have been performed for work in a live watercourse?				
13	A temporary vehicular stream crossing has been provided for construction vehicles crossing a live watercourse more than twice in a six-month period?				
14	All applicable federal, state and local requirements pertaining to working in or crossing live watercourses have been met?				
15	Bed and banks of a watercourse have been stabilized immediately after work of the watercourse has been completed?				
16a	No more than 500 linear feet of utility trench opened?				
16b	Excavated material has been placed on the uphill side of the utility trench?				
16c	Dewatering operations for utility trenches have been filtered through an adequate sediment trapping device?				
16d	Utility trenches have been adequately stabilized?				
17	Public roads and paved intersection near the vehicular access routes are clear of sediment?				
18	Temporary ESC measures have been removed within 30 days after final site stabilization?				
19	Downstream properties and waterways have been adequately protected from erosion and sediment deposition?				

General Checklist:

Item	Yes	No	N/A	Comments/Notes
Signed copy of the completed SWPPP on-site and accessible? Information posted for public access to the SWPPP?				
DEQ notice of cover letter is posted?				
Copy of the Construction General Permit is posted?				
Copy of the signed registration statement is posted?				
Detailed site plan available?				
Approved ESC plan or agreement in lieu of a plan?				
Description and calculations for all post-construction stormwater management measures?				
SWPPP addresses TMDLs and impaired waters?				
SWPPP is actively being updated and amended?				
SWPPP inspections are being carried out by qualified personnel and at required frequency?				
SWPPP identifies contractor that will implement, update, and maintain each control measure?				

Inspection reports summarize the full scope of inspections and are included in the SWPPP?				
Dates of major grading activities are being recorded?				
Dates of construction activities temporarily or permanently ceasing on a portion of the site being recorded?				
Replaced or modified controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly and were modified have been documented?				
Record of areas that have reached final stabilization?				
Record of all properties that are no longer under the legal control of the operator and the dates which the operator no longer had legal control over each property?				
Dates of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release are being recorded?				
Record of measures taken to prevent the reoccurrence of any prohibited discharge?				

Pollution Prevention (PART II.B.4.e.1-9):

Item	Yes	No	N/A	Comments/Notes
Prevent and respond to leaks, spills, and other releases				
Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities				
Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including the clean-up of stucco, paint, form release oils, and curing compounds				
Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing				
Direct concrete wash water into a leak-proof container or leak-proof settling basin.				
Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes				
Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, waste concrete, and sanitary wastes				
Address any other discharge from the potential pollutant-generating activities not addressed above;				
Minimize the exposure of waste materials to precipitation by closing or covering waste containers during precipitation events and at the end of the business day or implementing other similarly effective practices.				

Appendix C:
Stormwater Pollution Prevention Plan Template

Virginia Stormwater Management Program-
Stormwater Pollution Prevention Plan (SWPPP)

Old Dominion University

[*Project Title*]

[*State Project Code (if applicable)*]

Norfolk, Virginia

PREPARED FOR

Old Dominion University
Hampton Boulevard
Norfolk, Virginia 22807

PREPARED BY

4500 Main Street, Suite 400
Virginia Beach, VA 23462
757.490.0132

[*Month XX, 20XX*]

OLD DOMINION UNIVERSITY

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I	Details of Best Management Practices
J	ESC & SWM Approval Letters
K	Site Plans (11" x 17" reductions)
L	Amendment Log

1

Introduction

Plan Purpose

This Storm Water Pollution Prevention Plan (SWPPP) has been developed in accordance with the requirements of the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities (Permit), as defined in General Permit No. VAR10 Effective Date: July 1, 2019 Expiration Date: June 30, 2024. The purpose of this SWPPP is to:

1. Identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the construction activity, and,
2. To describe and ensure the implementation of practices that will be used to minimize pollutants in storm water discharges from the construction site and to assure compliance with the terms and conditions of the Permit.

Implementation of the components of this SWPPP is required as a condition of the Permit (Appendix B). The Department of Environmental Quality (DEQ) has been granted authority to administer the VSMP program and is therefore the regulatory authority overseeing the implementation of this SWPPP.

Pursuant to VSMP Regulation, Section 56 (9 VAC 25-880-70), this SWPPP must meet the following requirements:

1. Minimize discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters. Wash waters must be treated prior to discharge;
2. Minimize exposure of all materials on site to precipitation and stormwater;
3. Minimize discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures;
4. Best management practices (BMPs) to prohibit wastewater from washout of concrete mixers and equipment, unless managed by appropriate control;
5. BMPs to prohibit wastewater from washout and cleanout of equipment containing stucco, paint, form release oils, curing compounds, and other construction materials;

6. BMPs to prohibit discharges of fuels, oils or other pollutants used in vehicle/equipment operation/ maintenance;
7. BMPs to prohibit discharges of soaps or solvents used in vehicle/equipment washing;
8. Discharges from dewatering activities are prohibited unless managed by appropriate controls.

Background – Construction General Permit

In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to make sure those rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the EPA to govern storm water discharges from construction sites. In 1990, the EPA promulgated rules establishing Phase I of the NPDES storm water program. Phase I addresses, among other discharges, discharges from large construction activities disturbing 5 acres or more of land. In 1998, the EPA published the final notice for General Permits for Storm Water Discharges from Construction Activities (63 Federal Register, February 14, 1998). The general permit includes provisions for development of a SWPPP to maximize the potential benefits of pollution prevention and erosion and sediment control measures at construction sites. Phase II of the NPDES storm water program covers small construction activities disturbing between 1 and 5 acres. Phase II became final on December 8, 1999 with small construction permit applications due by March 10, 2003. Specific compliance dates were to be set by the NPDES permitting authority in each State. The Virginia Department of Environmental Quality amended the General Virginia Pollution Discharge Elimination System (VPDES) Permit Regulations for Discharges of Storm Water from Construction Activities (9 VAC 25-180-10 et seq.) to conform with the EPA Phase II final rule and became effective December 4, 2002. The 2004 Virginia General Assembly passed House Bill 1177 transferring regulatory authority from the State Water Control Board to the Soil and Water Conservation Board and transferred oversight of the programs from the department of Environmental Quality to the Department of Conservation and Recreation. This transfer became effective January 29, 2005. Program oversight was transferred again from the Department of Conservation and Recreation to the Department of Environmental Quality effective July 1, 2013. The General Permit for Discharges of Stormwater from Construction Activities, in accordance with 9 VAC 25-880, is effective starting July 2019 and applies to all VSMP Permits for Discharge of Stormwater from Construction Activities issued after July 1, 2019.

The General Permit has a fixed term of 5 years from the effective date of July 1, 2019 and is required for all "Small Construction Activity" projects that will disturb 1 acre or greater and less than 5 acres of total land area, and for "Large Construction Activity" projects that disturb 5 acres or more of total land area. To obtain a Permit, operators must submit a Registration Statement (Appendix C) prior to the commencement of construction activities (clearing, grading, or other activities that result in soil disturbance).

The Permit authorizes the discharge of storm water from construction activities until the Permit's expiration date on June 30, 2024. The Permit also authorizes certain non-storm water discharges, provided the conditions contained in the Permit (Part I D.2) are met.

To terminate coverage under the General Permit, an accurate and complete Notice of Termination (Appendix C) must be submitted to the DEQ within 30 days of one of the following conditions:

1. Necessary post-construction control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization as defined in 9VAC22-880-1 has been achieved on all portions of the site for which the operator has operational controls;
2. Another operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the ongoing discharge;
3. Coverage under an alternative State or VSMP permit has been obtained; or
4. For individual lots in residential construction, only, final stabilization has been completed and the residence has been transferred to the homeowner.

Coverage under the Permit will be deemed terminated at midnight on the date the Notice of Termination is submitted.

2

SWPPP Coordinator and Duties

SWPPP Coordinator

The construction site SWPPP coordinator for the facility is the undersigned contractor representative. The contractor will be responsible for maintenance of and compliance with the SWPPP. The SWPPP coordinator duties include the following:

- Implement the SWPPP;
- Oversee maintenance practices identified in the SWPPP;
- Implement and oversee employee training;
- Conduct or provide for inspection and monitoring activities;
- Identify other potential pollutant sources and make sure they are added to this SWPPP;
- Identify any deficiencies in this SWPPP and make sure they are corrected; and
- Ensure that any changes in construction plans are addressed in this SWPPP.
- Ensure that the SWPPP is available for review in accordance with the Plan Administration requirements in Chapter 3.
- Respond to regulatory agency requests for information about the construction site as it relates to the SWPPP and coverage under this permit.

A qualified representative will be responsible for conducting inspections for quality control.

Contractor Agreement

_____ _____

Contractor Representative Name Signature

_____ _____

Title Date

3

SWPPP Administration

General Information

Incorporation of Other Plans

The Old Dominion University [*Project Title*] project incorporates by reference other plans developed for this construction activity. The construction plans comply with current City requirements regarding erosion and sediment control and storm water management and comply with State regulatory requirements as presented in the *Virginia Erosion and Sediment Control Handbook, Third Edition and Virginia Stormwater Management Handbook, First Edition*. All plans incorporated by reference into this SWPPP are enforceable under the Permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP, the operator must develop the missing elements and include them in the SWPPP.

Plan Availability

In accordance with Section II B of the Permit:

Copies of this SWPPP must be retained on site, or at another location easily accessible during normal business hours, from the date of commencement of construction activity to the date of final stabilization, along with copies of the registration statement, permit, and acknowledgement letter from the permit issuing authority.

Operators with day to day operational control over SWPPP implementation shall have a copy of the SWPPP available at a central location on-site for use by those identified as having responsibilities under the SWPPP. The SWPPP shall be made available to the DEQ, permit-issuing authority, and operator of the municipal separate storm sewer system (MS4) receiving discharges from the site for review at the time of an on-site inspection. If an on-site location is unavailable to store the SWPPP when no personnel are present, a sign must be posted near the main construction entrance indicating the SWPPP's location.

The Operator shall make the SWPPP and all updates available upon request to the DEQ, the permit-issuing authority, EPA, a state or local agency approving erosion and sediment control plans, grading plans, and stormwater management plans, local government officials, or the operator of a MS4 receiving discharges from the construction activity.

A sign must be posted near the main entrance of the construction site containing the following information:

- A copy of the permit coverage letter with the registration number for the construction activity;
- Internet address at which a copy of the SWPPP can be found or the location of the hard copy with a name and telephone number for arranging a viewing of the document during normal business hours.

Plan Updates

The Operator shall amend this SWPPP whenever there is a change in design, construction, operation, or maintenance of the construction site that has a significant effect on the potential for the discharge of pollutants to surface waters and that has not been addressed in the normal implementation of this SWPPP. The Operator must also update this SWPPP as soon as possible when determined necessary or whenever it is found to be ineffective in meeting the requirements of the Permit. The SWPPP shall be updated no later than 7 days following any modification to its implementation, unless approval by a VESCP authority, VSMP authority, or the department is necessary for the implementation of an additional or modified control measure.

If approval is required by the permit-issuing authority, revisions shall be made within 7 calendar days of approval. Implementation of these additional or modified control measures must be accomplished as described in Permit Section II D.3.b. Revisions to the SWPPP must be dated and signed in accordance with Permit Section III K.2, but are not required to be certified in accordance with Permit Section III K.4 The SWPPP must clearly identify the contractor(s) or subcontractor(s) that will implement and maintain each measure identified in the SWPPP. The SWPPP shall be revised to identify any new contractor that will implement a measure.

Contractor Responsibilities

The Contractor shall be responsible for executing the conditions of the VSMP Permit as defined in Section III (Appendix B) of the Permit. Specifically, the contractor shall be responsible for maintaining a complete record of monitoring, field reports and investigations, notices of noncompliance, etc.

Specific Requirements

Site Description

The proposed project, [*Project Title*], is located within [*Location*] on the Old Dominion University Campus in Norfolk, Virginia. The purpose of the proposed building project is [*Purpose and Description of Project*] on the Old Dominion University Campus.

The site is bound to the north by [*Boundary*], to the south by [*Boundary*], to the west by [*Boundary*], and to the east by [*Boundary*]. Adjacent land use is [*Adjacent Lane Use*].

A site location map is included as Appendix A. Plans showing the proposed scope of work are included in Appendix K. The project will disturb approximately [***X.XX***] acres as shown on plans in Appendix K. Existing site cover consists of [*Existing Site Cover and Vegetation*]. The site is located within the [*Lafayette or Elizabeth*] watershed, a tributary to the James River watershed, and a tributary to part of the larger Chesapeake Bay watershed. [*Description of Site Stormwater*]. The site is located in hydrologic unit code JL56.

The proposed site is relatively flat and principally drains through overland flow to site inlets or curb inlets on the adjacent street. The stormwater eventually outfalls into the [*Lafayette or Elizabeth*] River.

According to Natural Resource Conservation Service Soil Survey Maps, the predominant soil types located in the site area are [*Soil Types*]. This soil type is classified as [*Soil Type Class*].

Construction Sequence

[*Provide Sequence of Construction*]

General Project Phasing

Site development will occur in three overlapping stages:

1. Site Preparation,
2. Construction, and
3. Final grading and Stabilization.

Dates of major grading activities will be recorded on plans included in Appendix K.

Site Preparation Stage

Prior to beginning any construction activities, erosion control measures will be installed as shown on the attached project plans. The contractor shall use existing pavement to access the site, as indicated on the plans included in Appendix K.

The erosion control barriers will be inspected and maintained routinely throughout the duration of the project. Following the installation of erosion and sedimentation controls, the site clearing and grading activities will occur. Safety fence will also be installed around the site perimeter to prevent unwanted access to the site.

Construction Stage

The proposed [*Project Title*] will be constructed during this phase. Prior to construction of the [*Project Title*], demolition and disposal of the existing [*Site Features*] will occur. Immediately after the area has been cleared, construction will begin. General construction activities will consist of *[Construction Activities]*. Newly constructed and existing storm drain inlets will be protected with inlet protection and/or silt fence. Silt fence will also be placed around any stockpiles created from movement of extracted topsoil. All erosion and sediment control measures for the site will be constructed and maintained in accordance with current Virginia Erosion and Sedimentation Control Handbook. Potential pollutant sources anticipated during construction include [*Pollutant Sources*].

Final Grading and Stabilization Stage

Final site grading and stabilization will be completed as soon as practicable to minimize exposed soils and potential sources of erosion. Areas to be paved will be covered by bituminous pavement after final subgrades are established. All litter, as well as debris generated by construction activities, will be removed from the site and adjacent undeveloped areas.

Controls and Measures

The Permit requires the use of various types of controls and measures to control pollutants in storm water discharges from the project site. The Permit specifically requires the implementation of erosion and sediment control practices (both structural and non-structural), storm water management practices, and other specific controls to prevent pollutants from being discharged. In general, controls employed in this project were selected to meet and/or exceed State and local requirements and are detailed in the referenced design plans (Appendix K). The design plans for this project contain detailed information regarding various types of controls used in this project. Table 2 summarizes where the detailed information can be found in the design plans:

Table 2: Control Measures – Included in the Design Documents

Type of Control Measure	***Plan Sheet No.***
Stormwater Management Measures	[*Sheet Number*]
Stormwater Management Measures Details	[*Sheet Number*]
Stormwater Management Measures Details	[*Sheet Number*]
Erosion and Sediment Control Plan	[*Sheet Number*]
Erosion and Sediment Control Details	[*Sheet Number*]

Several requirements of the Permit relating to controls (Section II D.2.d, Appendix B) are not included in the referenced design plans. A description of these required items is presented below, along with how they are addressed in this SWPPP:

a) A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be maintained and included in Appendix E of this SWPPP.

b) Minimize the discharge of pollutants from storage, handling, and disposal of construction products. Materials, and wastes including building products such as roofing materials and concrete mixtures; pesticides, insecticides and fertilizers; and construction and domestic wastes such as packaging materials, scrap construction materials, masonry products, pipe and electrical cuttings and other trash building materials.

c) Inspections shall be held at least once every four business days or at least once every five business days and no later than 24 hours following a measurable storm event. These inspections shall be conducted by "qualified personnel". The inspection report should encompass the requirements detailed in Part II F.4.

In addition, Appendix I includes all Erosion and sediment control measures as detailed in the *Virginia Erosion and Sediment Control Handbook, Third Edition* as well as an additional measure for a concrete washout area. The contractor is responsible for recording all potential pollutants associated with construction activities and must submit the record to the owner for review and approval prior to proceeding with construction activities. This record is included in Appendix H: Water Quality Protection. Minimum Erosion and Sediment Control Measures are indicated on the site plans (Appendix K) and may include but are not limited to the following measures:

- Silt fencing
- Tree protection
- Construction site entrance
- Concrete washout area
- Dust control
- Safety fence
- Straw bales
- Storm Drain inlet protection
- Topsoiling
- Dewatering methods
- Temporary and permanent seeding
- Soil stabilization blanket matting

Soil stabilization shall be applied to denuded areas within 7 days after final grade is reached.

Maintenance

Maintenance of temporary and permanent erosion and sediment control facilities shall be carried out in accordance with Section 1.7 of the Virginia Erosion and Sediment Control Regulations (VR 625-02-00, Ref. 1) and Section II D.3 of the Permit (Appendix B). During the period that the project site is under construction, the contractor will be responsible for maintenance of the temporary erosion and sediment control facilities. The site contractor shall inspect the erosion and sediment control facilities on a regular basis, especially after periods of rainfall, and repair any damage immediately. Furthermore, a readily available supply of erosion and sediment control materials will be maintained by the contractor at all times. Detailed descriptions of the maintenance procedures are contained in the project design plans and are incorporated in this SWPPP by reference.

Inspections

The SWPPP Coordinator shall appoint appropriate personnel, who are familiar with all aspects of this SWPPP and the employed control practices, to perform regular inspections of the construction site. Inspections shall include the date and time of inspection and when applicable the date and rainfall amount of the last measurable storm event. Each inspection should record any discharges occurring at time of inspection and any land-disturbing activities that have occurred outside of the approved erosion and sediment control plan. Per Part II F.3, inspections should review of all disturbed areas, structural and non-structural control measures, material storage areas, and vehicular access points. Inspections are to be performed at least once every five business days, or at least once every 10 business days and no later than 24 hours following a measurable storm event. Construction activities that discharge to impaired waters, surface waters with a TMDL approved prior to the term of the Permit, and exceptional waters shall be inspected a minimum of once every 4 business days, or once every 5 business days and no later than 24 hours following a measurable storm event. Areas that already have been stabilized or where runoff is unlikely due to frozen or snow covered ground shall be inspected at least on a monthly basis.

Inspections are intended to identify areas where the pollutant control measures at the site are ineffective and are allowing pollutants to enter surface waters. Receiving waters shall be inspected to ascertain whether control measures are effective in preventing significant impacts. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

If as a result of the inspection, the site conditions and/or control measures are found to have changed, this SWPPP shall be updated within a period of 7 calendar days. If control measures need to be modified to assure effectiveness or if additional measures are

determined necessary, implementation shall be completed prior to the next anticipated. If implementation prior to the next anticipated measurable storm event is impracticable, then alternative control measures shall be implemented as soon as practicable, but no later than 7 days after discovery or a longer period as established by the VSMP authority. If adverse weather causes the safety of the inspection personnel to be in jeopardy, the SWPPP inspection may be delayed until the next business day on which it is safe to perform the inspection. Any time inspections are delayed due to adverse weather conditions, evidence of the adverse weather conditions must be included in the SWPPP with the dates of occurrence.

A report summarizing the inspections and the subsequent maintenance activities must be completed and maintained as part of this SWPPP. The inspection report must be added to the SWPPP no later than 4 days after the inspection is conducted. The inspection forms are included in Appendix F. Required elements include major observations (including information on control measure performance and incidents of non-compliance), and information on the inspecting personnel. If an inspection does not identify any incidents or non-compliance, then the certification statement contained in the inspection form will apply.

[*Site Inspector*] (phone number: [*123-456-7890*]), [*Site Inspector Title]*, will be responsible for conducting inspections for quality control.

Spill Prevention and Response Plan

All vehicles and equipment on-site shall be in a well-maintained condition. All vehicles and equipment including subcontractor vehicles will be checked for leaking oil and fluids. Vehicles leaking fluids will not be allowed on-site. Drip pans will be placed under all vehicles and equipment that are parked overnight. Hazardous materials will be stored in accordance with local and federal regulations. Spill kits will be within the materials storage area and concrete washout areas. All spills will be cleaned up immediately upon discovery and a spill report shall be filled out and retained by the Contractor. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal. Spills of 25 gallons or more or large enough to discharge to surface water will be reported to Old Dominion University Project Manager, [*ODU Project Manager*]. Material safety data sheets, a material inventory, and emergency contact information will be maintained at the on-site project trailer.

These spill prevention measures will be implemented once construction begins on-site. All personnel will be instructed, during tailgate training sessions, regarding the correct procedures for spill prevention and control. Notices that state these practices will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.

Concrete Washdown Areas

A designated temporary above-ground concrete washdown area will be constructed at the location depicted on-site. Volume shall be sufficient to contain all liquid and concrete waste generated by washout operations. The washout area shall be lined with plastic sheeting at least 10 mils thick and free of holes and tears. Signs will be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility.

Concrete pours will not be conducted during or before an anticipated storm event. All excess concrete and concrete washout slurries from the concrete mixer trucks and chutes will be discharged to the washout area or hauled off-site for disposal. When the temporary washout area is no longer needed for the project, the hardened concrete and materials used to construct the concrete washdown areas will be removed and disposed of in accordance with local and federal regulations. Washdown areas shall then be backfilled, graded, and stabilized with erosion control measures.

Portable Bathrooms

Portable bathrooms are to be located away from streets, gutters, waterways, and storm drains. Secondary containment techniques such as dikes, berms, curbing, or other containment methods shall be implemented to prevent spills from spreading and to protect groundwater and down grade storm inlets.

Storage/Staging and Waste Management Areas

Fuel containers are to be double-walled. The staging area for this project is to be located [*Staging Area Location*] with appropriate erosion and sedimentation control measures for protection along the perimeter. Paints, solvents, pesticides, fuels, oils, other hazardous materials, or building materials that have the potential to contaminate stormwater shall be stored indoors or have a cover provided for them. Secondary containment techniques such as dikes, berms, curbing, or other containment methods should be in place to prevent spills from spreading and to protect groundwater and down grade storm inlets.

Dumpsters shall be located away from streets, gutters, waterways, and storm drains. They should be covered to prevent precipitation from entering container. Liquids are not to be disposed of in dumpsters. Locations of the proposed dumpsters and liquid disposal areas will be coordinated between the contractor and Old Dominion University personnel and shown on an exhibit. A copy of the exhibit shall be incorporated into the SWPPP.

Non-Storm Water Discharges

All discharges for this Site will be comprised entirely of storm water associated with construction activity. At this time, non-storm water discharges are not part of this project. The contractor shall be responsible for notifying the DEQ of any non-storm water discharges other than those authorized in Section 1, D.2. If non-storm water discharges become part of the project, the SWPPP may be updated.

Water Quality Protection

The permittee must select, install, implement and maintain best management practices (BMPs) at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards, as presented in Section 1 H of the permit (Appendix B).

Post-Construction Stormwater Management Measures

[*Stormwater Management Controls and Descriptions*]

Offsite Nutrient Credits

[*Nutrient Offset Descriptions*]

Receiving Waters

This project discharges to Old Dominion University's Municipal Separate Storm Sewer System (MS4) and ultimately into the *[Lafayette River and/or Elizabeth River]* (HUC JL56) tributary of the James River watershed and is also part of the larger Chesapeake Bay watershed.

[*IF LAFAYETTE: The Lafayette River is a tidal body of water included in the 2018 Impaired Waters 303(d) List under cause category 4A for Dissolved Oxygen and Enterococcus. Category 4A indicates that a Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) has been established for stormwater discharges from a construction activity. In order to ensure that stormwater discharges are in conformance with the TMDL WLA, Virginia Erosion and Sediment Control Handbook Minimum Standards (MS-19) shall be adhered to throughout construction.*]

[IF ELIZABETH: *The Elizabeth River is a tidal body of water included in the 2018 Impaired Waters 303(d) List under cause category 5A for Estuarine Bioassessments and Dioxins. The Elizabeth River is also included in the 2016 Impaired Waters 303(d) list under cause category 4A for Dissolved Oxygen and Enterococcus. Category 5A indicates that a Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) has been established for stormwater discharges from a construction activity. In order to ensure that stormwater*

discharges are in conformance with the TMDL WLA, Virginia Erosion and Sediment Control Handbook Minimum Standards (MS-19) shall be adhered to throughout construction.]

Contractor Certification

All contractors and/or sub-contractors who have responsibility for implementing and maintaining the controls identified in this SWPPP must sign the certification statement contained in Appendix G. The person signing the certification must meet the signatory requirements, as presented in Permit Section III K (Appendix B). The certifications must be maintained as part of this SWPPP.

References

Virginia Erosion and Sediment Control Handbook. Third Edition. Virginia Department of Conservation and Recreation, 1992.

Site Plans titled [*Project Title*], dated [*Date*], prepared by [*Engineer*].

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Construction Operators' Cooperative Agreement

The cooperative agreement describes stormwater responsibilities for Old Dominion University and its undersigned contractor (Contractor) regarding the [*Project Title*] project. The construction operators below agree to abide by the following condition throughout the duration of the project, effective the date of signature.

This project is subject to the Virginia Stormwater Management Program (VSMP) General Permit for Storm Water Discharges Associated with Industrial Activity (Permit), as defined in General Permit No. VAR10 Effective Date: July 1, 2019 Expiration Date: June 30, 2024. The goal of this permit is to prevent the discharge of pollutants associated with construction activity from entering the storm drain system or surface waters. [*Engineer*] has developed a SWPPP for the [*Project Title*] project, and the SWPPP has been reviewed by Old Dominion University (Owner). The SWPPP is available for review at the construction site.

Owner Responsibilities:

- Complete periodic inspections of construction activities
- Be involved with any changes in the SWPPP

Contractor Responsibilities:

- Maintain SWPPP documentation
- Conduct and document inspections on a weekly basis and within 24 hours of the end of a storm event
- Provide copies of the inspection reports to owner within 24 hours of each inspection. Any non-compliances must be immediately reported to owner
- Maintain compliance with applicable section of the SWPPP, including installation of erosion and sediment controls. Any BMP changes that will require a change to the SWPPP must be communicated immediately to owner.
- Maintain erosion and sediment control BMPs in all areas of the site under its day-to-day control.
- (If applicable) Provide adequately designated concrete washout areas throughout the construction project and properly dispose of the concrete, mortar, grout, or other construction materials collected here.

- Maintain the cleanliness of the streets and storm drain inlet protection BMPs throughout the construction project. Sweep streets as needed, especially before rain events. Inspect and replace storm drain inlet protection BMPs as necessary.
- Follow Old Dominion University criteria for the storage of chemicals.
    - All chemicals must be stored on contaminant pads, which must be inspected weekly and approved by Old Dominion University personnel.
- Maintain a clean site. Trash and debris must be picked up and properly disposed of daily.
- Each operator is responsible for advising employees and subcontractors working on this project of the requirements of the SWPPP. Emphasis will be placed on ensuring employees and subcontractors do not damage BMPs and do not introduce pollutants into the storm drain system. All personnel working on-site should have stormwater training.

Agreement

The undersigned agree to abide by the terms and conditions of this cooperative agreement as described above.

Owner

_____	_____
Operator Name	Signature
_____	_____
Title	Date

Contractor

_____	_____
Operator Name	Signature
_____	_____
Title	Date

Delegation of Authority

In accordance with the General VPDES Permit for Discharges of Stormwater from Construction Activities, the individuals or positions with delegated authority to sign inspection reports and/or amend this SWPPP must be identified. If the individual or position identified on the Title Sheet of the SWPPP changes or additional individuals or positions are given this responsibility after the preconstruction meeting occurs, the changes/additions must be noted below.

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the VPDES "General Permit for Storm Water Discharges Associated with Construction Activity" (General Permit), at the

[*Project Site*] construction site.

Owner Signature: _____

Name of Operator: _____

Company: _____

Phone Number: _____

Owner Certification

"I acknowledge under the penalty of law that this document and all attachments were prepared on my behalf in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

Company: _____

Address: _____

Phone: _____

Name: _____
Printed Title

Signature: _____

Date: _____

Appendix A
Site Location Map

Appendix B
Stormwater General Permit

OLD DOMINION
UNIVERSITY

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

General Permit No.: VAR10

Effective Date: July 1, 2019

Expiration Date: June 30, 2024

GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA STORMWATER MANAGEMENT PROGRAM AND THE VIRGINIA STORMWATER MANAGEMENT ACT

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the Virginia Stormwater Management Act and regulations adopted pursuant thereto, operators of construction activities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in State Water Control Board regulations that prohibit such discharges.

The authorized discharge shall be in accordance with the registration statement filed with the Department of Environmental Quality, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - Stormwater Pollution Prevention Plan, and Part III - Conditions Applicable to All VPDES Permits as set forth in this general permit.

PART I

DISCHARGE AUTHORIZATION AND SPECIAL CONDITIONS

A. Coverage under this general permit.

1. During the period beginning with the date of coverage under this general permit and lasting until the general permit's expiration date, the operator is authorized to discharge stormwater from construction activities.

2. This general permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) located on-site or off-site provided that:

   a. The support activity is directly related to the construction activity that is required to have general permit coverage for discharges of stormwater from construction activities;

   b. The support activity is not a commercial operation, nor does it serve multiple unrelated construction activities by different operators;

   c. The support activity does not operate beyond the completion of the last construction activity it supports;

   d. The support activity is identified in the registration statement at the time of general permit coverage;

   e. Appropriate control measures are identified in a stormwater pollution prevention plan and implemented to address the discharges from the support activity areas; and

   f. All applicable state, federal, and local approvals are obtained for the support activity.

B. Limitations on coverage.

1. Post-construction discharges. This general permit does not authorize stormwater discharges that originate from the site after construction activities have been completed and the site, including any support activity sites covered under the general permit registration, has undergone final stabilization. Post-construction industrial stormwater discharges may need to be covered by a separate VPDES permit.

2. Discharges mixed with nonstormwater. This general permit does not authorize discharges that are mixed with sources of nonstormwater, other than those discharges that are identified in Part I E (Authorized nonstormwater discharges) and are in compliance with this general permit.

3. Discharges covered by another state permit. This general permit does not authorize discharges of stormwater from construction activities that have been covered under an individual permit or required to obtain coverage under an alternative general permit.

4. Impaired waters and total maximum daily load (TMDL) limitation.

    a. Nutrient and sediment impaired waters. Discharges of stormwater from construction activities to surface waters identified as impaired in the 2016 § 305(b)/303(d) Water Quality Assessment Integrated Report or for which a TMDL wasteload allocation has been established and approved prior to the term of this general permit for (i) sediment or a sediment-related parameter (i.e., total suspended solids or turbidity) or (ii) nutrients (i.e., nitrogen or phosphorus) are not eligible for coverage under this general permit unless the operator develops, implements, and maintains a stormwater pollution prevention plan (SWPPP) in accordance with Part II B 5 of this permit that minimizes the pollutants of concern and, when applicable, is consistent with the assumptions and requirements of the approved TMDL wasteload allocations and implements an inspection frequency consistent with Part II G 2 a.

    b. Polychlorinated biphenyl (PCB) impaired waters. Discharges of stormwater from construction activities that include the demolition of any structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980, to surface waters identified as impaired in the 2016 § 305(b)/303(d) Water Quality Assessment Integrated Report or for which a TMDL wasteload allocation has been established and approved prior to the term of this general permit for PCB are not eligible for coverage under this general permit unless the operator develops, implements, and maintains a SWPPP in accordance with Part II B 6 of this permit that minimizes the pollutants of concern and, when applicable, is consistent with the assumptions and requirements of the approved TMDL wasteload allocations, and implements an inspection frequency consistent with Part II G 2 a.

5. Exceptional waters limitation. Discharges of stormwater from construction activities not previously covered under the general permit effective on July 1, 2014, to exceptional waters identified in 9VAC25-260-30 A 3 c are not eligible for coverage under this general permit unless the operator develops, implements, and maintains a SWPPP in accordance with Part II B 7 of this permit and implements an inspection frequency consistent with Part II G 2 a.

6. There shall be no discharge of floating solids or visible foam in other than trace amounts.

C. Commingled discharges. Discharges authorized by this general permit may be commingled with other sources of stormwater that are not required to be covered under a state permit, so long as the commingled discharge is in compliance with this general permit. Discharges authorized by a separate state or VPDES permit may be commingled with discharges authorized by this general permit so long as all such discharges comply with all applicable state and VPDES permit requirements.

D. Prohibition of nonstormwater discharges. Except as provided in Parts I A 2, I C, and I E, all discharges covered by this general permit shall be composed entirely of stormwater associated with construction activities. All other discharges including the following are prohibited:

1. Wastewater from washout of concrete;

2. Wastewater from the washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;

3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

4. Oils, toxic substances, or hazardous substances from spills or other releases; and

5. Soaps, solvents, or detergents used in equipment and vehicle washing.

E. Authorized nonstormwater discharges. The following nonstormwater discharges from construction activities are authorized by this general permit when discharged in compliance with this general permit:

1. Discharges from firefighting activities;

2. Fire hydrant flushings;

3. Waters used to wash vehicles or equipment where soaps, solvents, or detergents have not been used and the wash water has been filtered, settled, or similarly treated prior to discharge;

4. Water used to control dust that has been filtered, settled, or similarly treated prior to discharge;

5. Potable water sources, including uncontaminated waterline flushings, managed in a manner to avoid an instream impact;

6. Routine external building wash down where soaps, solvents or detergents have not been used and the wash water has been filtered, settled, or similarly treated prior to discharge;

7. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (or where all spilled or leaked material has been removed prior to washing); where soaps, solvents, or detergents have not been used; and where the wash water has been filtered, settled, or similarly treated prior to discharge;

8. Uncontaminated air conditioning or compressor condensate;

9. Uncontaminated ground water or spring water;

10. Foundation or footing drains where flows are not contaminated with process materials such as solvents;

11. Uncontaminated excavation dewatering, including dewatering of trenches and excavations that have been filtered, settled, or similarly treated prior to discharge; and

12. Landscape irrigation.

F. Termination of general permit coverage.

1. The operator of the construction activity shall submit a notice of termination in accordance with 9VAC25-880-60, unless a registration statement was not required to be submitted in accordance with 9VAC25-880-50 A 1 c or A 2 b for single-family detached residential structures, to the VSMP authority after one or more of the following conditions have been met:

a. Necessary permanent control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization has been achieved on all portions of the site for which the operator has operational control. When applicable, long term responsibility and maintenance requirements for permanent control measures shall be recorded in the local land records prior to the submission of a complete and accurate notice of termination and the construction record drawing prepared;

b. Another operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the ongoing discharge;

c. Coverage under an alternative VPDES or state permit has been obtained; or

d. For individual lots in residential construction only, final stabilization as defined in 9VAC25-880-1 has been completed, including providing written notification to the homeowner and incorporating a copy of the notification and signed certification statement into the SWPPP, and the residence has been transferred to the homeowner.

2. The notice of termination shall be submitted no later than 30 days after one of the above conditions in subdivision 1 of this subsection is met.

3. Termination of authorization to discharge for the conditions set forth in subdivision 1 a of this subsection shall be effective upon notification from the department that the provisions of subdivision 1 a of this subsection have been met or 60 days after submittal of a complete and accurate notice of termination in accordance with 9VAC25-880-60 C, whichever occurs first.

4. Authorization to discharge terminates at midnight on the date that the notice of termination is submitted for the conditions set forth in subdivisions 1 b through 1 d of this subsection unless otherwise notified by the VSMP authority or department.

5. The notice of termination shall be signed in accordance with Part III K of this general permit.

G. Water quality protection.

1. The operator shall select, install, implement, and maintain control measures as identified in the SWPPP at the construction site that minimize pollutants in the discharge as necessary to ensure that the operator's discharge does not cause or contribute to an excursion above any applicable water quality standard.

2. If it is determined by the department that the operator's discharges are causing, have reasonable potential to cause, or are contributing to an excursion above any applicable water quality standard, the department, in consultation with the VSMP authority, may take appropriate enforcement action and require the operator to:

a. Modify or implement additional control measures in accordance with Part II C to adequately address the identified water quality concerns;

b. Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

c. Submit an individual permit application in accordance with 9VAC25-870-410 B 3.

All written responses required under this chapter shall include a signed certification consistent with Part III K.

PART II

STORMWATER POLLUTION PREVENTION PLAN

A. Stormwater pollution prevent plan.

1. A stormwater pollution prevention plan (SWPPP) shall be developed prior to the submission of a registration statement and implemented for the construction activity, including any support activity, covered by this general permit. SWPPPs shall be prepared in accordance with good engineering practices. Construction activities that are part of a larger common plan of development or sale and disturb less than one acre may utilize a SWPPP template provided by the department and need not provide a separate stormwater management plan if one has been prepared and implemented for the larger common plan of development or sale.

2. The SWPPP requirements of this general permit may be fulfilled by incorporating by reference other plans such as a spill prevention control and countermeasure (SPCC) plan developed for the site under § 311 of the federal Clean Water Act or best management practices (BMP) programs otherwise required for the facility provided that the incorporated plan meets or exceeds the SWPPP requirements of Part II B. All plans incorporated by reference into the SWPPP become enforceable under this general permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP, the operator shall develop the missing elements and include them in the SWPPP.

3. Any operator that was authorized to discharge under the general permit effective July 1, 2014, and that intends to continue coverage under this general permit, shall update its stormwater pollution prevention plan to comply with the requirements of this general permit no later than 60 days after the date of coverage under this general permit.

B. Contents. The SWPPP shall include the following items:

1. General information.

   a. A signed copy of the registration statement, if required, for coverage under the general VPDES permit for discharges of stormwater from construction activities;

   b. Upon receipt, a copy of the notice of coverage under the general VPDES permit for discharges of stormwater from construction activities (i.e., notice of coverage letter);

   c. Upon receipt, a copy of the general VPDES permit for discharges of stormwater from construction activities;

   d. A narrative description of the nature of the construction activity, including the function of the project (e.g., low density residential, shopping mall, highway, etc.);

   e. A legible site plan identifying:

(1) Directions of stormwater flow and approximate slopes anticipated after major grading activities;

(2) Limits of land disturbance including steep slopes and natural buffers around surface waters that will not be disturbed;

(3) Locations of major structural and nonstructural control measures, including sediment basins and traps, perimeter dikes, sediment barriers, and other measures intended to filter, settle, or similarly treat sediment, that will be installed between disturbed areas and the undisturbed vegetated areas in order to increase sediment removal and maximize stormwater infiltration;

(4) Locations of surface waters;

(5) Locations where concentrated stormwater is discharged;

(6) Locations of any support activities, including (i) areas where equipment and vehicle washing, wheel wash water, and other wash water is to occur; (ii) storage areas for chemicals such as acids, fuels, fertilizers, and other lawn care chemicals; (iii) concrete wash out areas; (iv) vehicle fueling and maintenance areas; (v) sanitary waste facilities, including those temporarily placed on the construction site; and (vi) construction waste storage; and

(7) When applicable, the location of the on-site rain gauge or the methodology established in consultation with the VSMP authority used to identify measurable storm events for inspection as allowed by Part II G 2 a (1) (ii) or Part II G 2 b (2).

2. Erosion and sediment control plan.

a. An erosion and sediment control plan designed and approved in accordance with the Virginia Erosion and Sediment Control Regulations (9VAC25-840), an "agreement in lieu of a plan" as defined in 9VAC25-840-10 from the VESCP authority, or an erosion and sediment control plan prepared in accordance with annual standards and specifications approved by the department.

b. All erosion and sediment control plans shall include a statement describing the maintenance responsibilities required for the erosion and sediment controls used.

c. An approved erosion and sediment control plan, "agreement in lieu of a plan," or erosion and sediment control plan prepared in accordance with department-approved annual standards and specifications, implemented to:

(1) Control the volume and velocity of stormwater runoff within the site to minimize soil erosion;

(2) Control stormwater discharges, including peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;

(3) Minimize the amount of soil exposed during the construction activity;

(4) Minimize the disturbance of steep slopes;

(5) Minimize sediment discharges from the site in a manner that addresses (i) the amount, frequency, intensity, and duration of precipitation; (ii) the nature of resulting stormwater runoff; and (iii) soil characteristics, including the range of soil particle sizes present on the site;

(6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal, and maximize stormwater infiltration, unless infeasible;

(7) Minimize soil compaction and, unless infeasible, preserve topsoil;

(8) Ensure initiation of stabilization activities, as defined in 9VAC25-880-1, of disturbed areas immediately whenever any clearing, grading, excavating, or other land-disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 days; and

(9) Utilize outlet structures that withdraw stormwater from the surface (i.e., above the permanent pool or wet storage water surface elevation), unless infeasible, when discharging from sediment basins or sediment traps.

3. Stormwater management plan.

   a. Except for those projects identified in Part II B 3 b, a stormwater management plan approved by the VSMP authority as authorized under the Virginia Stormwater Management Program (VSMP) Regulation (9VAC25-870), or an "agreement in lieu of a stormwater management plan" as defined in 9VAC25-870-10 from the VSMP authority, or a stormwater management plan prepared in accordance with annual standards and specifications approved by the department.

   b. For any operator meeting the conditions of 9VAC25-870-47 B of the VSMP regulation, an approved stormwater management plan is not required. In lieu of an approved stormwater management plan, the SWPPP shall include a description of, and all necessary calculations supporting, all post-construction stormwater management measures that will be installed prior to the completion of the construction process to control pollutants in stormwater discharges after construction operations have been completed. Structural measures should be placed on upland soils to the degree possible. Such measures must be designed and installed in accordance with applicable VESCP authority, VSMP authority, state, and federal requirements, and any necessary permits must be obtained.

4. Pollution prevention plan. A pollution prevention plan that addresses potential pollutant-generating activities that may reasonably be expected to affect the quality of stormwater discharges from the construction activity, including any support activity. The pollution prevention plan shall:

   a. Identify the potential pollutant-generating activities and the pollutant that is expected to be exposed to stormwater;

b. Describe the location where the potential pollutant-generating activities will occur, or if identified on the site plan, reference the site plan;

c. Identify all nonstormwater discharges, as authorized in Part I E of this general permit, that are or will be commingled with stormwater discharges from the construction activity, including any applicable support activity;

d. Identify the person responsible for implementing the pollution prevention practice or practices for each pollutant-generating activity (if other than the person listed as the qualified personnel);

e. Describe the pollution prevention practices and procedures that will be implemented to:

(1) Prevent and respond to leaks, spills, and other releases including (i) procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases; and (ii) procedures for reporting leaks, spills, and other releases in accordance with Part III G;

(2) Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities (e.g., providing secondary containment such as spill berms, decks, spill containment pallets, providing cover where appropriate, and having spill kits readily available);

(3) Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including the clean-up of stucco, paint, form release oils, and curing compounds (e.g., providing (i) cover (e.g., plastic sheeting or temporary roofs) to prevent contact with stormwater; (ii) collection and proper disposal in a manner to prevent contact with stormwater; and (iii) a similarly effective means designed to prevent discharge of these pollutants);

(4) Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing (e.g., locating activities away from surface waters and stormwater inlets or conveyance and directing wash waters to sediment basins or traps, using filtration devices such as filter bags or sand filters, or using similarly effective controls);

(5) Direct concrete wash water into a leak-proof container or leak-proof settling basin. The container or basin shall be designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters;

(6) Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes including (i) building products such as asphalt sealants, copper flashing, roofing materials, adhesives, and concrete admixtures; (ii) pesticides, herbicides, insecticides, fertilizers, and landscape

materials; and (iii) construction and domestic wastes such as packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, Styrofoam, concrete, and other trash or building materials;

(7) Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, waste concrete, and sanitary wastes;

(8) Address any other discharge from the potential pollutant-generating activities not addressed above;

(9) Minimize the exposure of waste materials to precipitation by closing or covering waste containers during precipitation events and at the end of the business day, or implementing other similarly effective practices. Minimization of exposure is not required in cases where the exposure to precipitation will not result in a discharge of pollutants; and

f. Describe procedures for providing pollution prevention awareness of all applicable wastes, including any wash water, disposal practices, and applicable disposal locations of such wastes, to personnel in order to comply with the conditions of this general permit. The operator shall implement the procedures described in the SWPPP.

5. SWPPP requirements for discharges to nutrient and sediment impaired waters. For discharges to surface waters (i) identified as impaired in the 2016 § 305(b)/303(d) Water Quality Assessment Integrated Report or (ii) with an applicable TMDL wasteload allocation established and approved prior to the term of this general permit for sediment for a sediment-related parameter (i.e., total suspended solids or turbidity) or nutrients (i.e., nitrogen or phosphorus), the operator shall:

   a. Identify the impaired waters, approved TMDLs, and pollutants of concern in the SWPPP; and

   b. Provide clear direction in the SWPPP that:

      (1) Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site;

      (2) Nutrients shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events; and

      (3) A modified inspection schedule shall be implemented in accordance with Part II G 2 a.

6. SWPPP requirements for discharges to polychlorinated biphenyl (PCB) impaired waters. For discharges from construction activities that include the demolition of any structure with at least 10,000 square feet of floor space built or renovated before January 1, 1980, to surface waters (i) identified as impaired in the 2016 § 305(b)/303(d) Water Quality Assessment Integrated Report or (ii) with an applicable TMDL wasteload allocation established and approved prior to the term of this general permit for PCB, the operator shall:

a. Identify the impaired waters, approved TMDLs, and pollutant of concern in the SWPPP;

b. Implement the approved erosion and sediment control plan in accordance with Part II B 2;

c. Dispose of waste materials in compliance with applicable state, federal, and local requirements; and

d. Implement a modified inspection schedule in accordance with Part II G 2 a.

7. SWPPP requirements for discharges to exceptional waters. For discharges to surface waters identified in 9VAC25-260-30 A 3 c as an exceptional water, the operator shall:

   a. Identify the exceptional surface waters in the SWPPP; and

   b. Provide clear direction in the SWPPP that:

      (1) Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site;

      (2) Nutrients shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events; and

      (3) A modified inspection schedule shall be implemented in accordance with Part II G 2 a.

8. Identification of qualified personnel. The name, phone number, and qualifications of the qualified personnel conducting inspections required by this general permit.

9. Delegation of authority. The individuals or positions with delegated authority, in accordance with Part III K, to sign inspection reports or modify the SWPPP.

10. SWPPP signature. The SWPPP shall be signed and dated in accordance with Part III K.

C. SWPPP amendments, modification, and updates.

1. The operator shall amend the SWPPP whenever there is a change in the design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to surface waters and that has not been previously addressed in the SWPPP.

2. The SWPPP shall be amended if, during inspections or investigations by the operator's qualified personnel, or by local, state, or federal officials, it is determined that the existing control measures are ineffective in minimizing pollutants in discharges from the construction activity. Revisions to the SWPPP shall include additional or modified control measures designed and implemented to correct problems identified. If approval by the VESCP authority, VSMP authority, or department is necessary for the control measure, revisions to the SWPPP shall be completed no later than seven calendar days following approval. Implementation of these additional or modified control measures shall be accomplished as described in Part II H.

3. The SWPPP shall clearly identify the contractors that will implement and maintain each control measure identified in the SWPPP. The SWPPP shall be amended to identify any new contractor that will implement and maintain a control measure.

4. The operator shall update the SWPPP as soon as possible but no later than seven days following any modification to its implementation. All modifications or updates to the SWPPP shall be noted and shall include the following items:

    a. A record of dates when:

        (1) Major grading activities occur;

        (2) Construction activities temporarily or permanently cease on a portion of the site; and

        (3) Stabilization measures are initiated;

    b. Documentation of replaced or modified controls where periodic inspections or other information have indicated that the controls have been used inappropriately or incorrectly and were modified;

    c. Areas that have reached final stabilization and where no further SWPPP or inspection requirements apply;

    d. All properties that are no longer under the legal control of the operator and the dates on which the operator no longer had legal control over each property;

    e. The date of any prohibited discharges, the discharge volume released, and what actions were taken to minimize the impact of the release;

    f. Measures taken to prevent the reoccurrence of any prohibited discharge; and

    g. Measures taken to address any evidence identified as a result of an inspection required under Part II G.

5. Amendments, modifications, or updates to the SWPPP shall be signed in accordance with Part III K.

D. Public notification. Upon commencement of land disturbance, the operator shall post conspicuously a copy of the notice of coverage letter near the main entrance of the construction activity. For linear projects, the operator shall post the notice of coverage letter at a publicly accessible location near an active part of the construction project (e.g., where a pipeline crosses a public road). The operator shall maintain the posted information until termination of general permit coverage as specified in Part I F.

E. SWPPP availability.

1. Operators with day-to-day operational control over SWPPP implementation shall have a copy of the SWPPP available at a central location on-site for use by those identified as having responsibilities under the SWPPP whenever they are on the construction site.

2. The operator shall make the SWPPP and all amendments, modifications, and updates available upon request to the department, the VSMP authority, the EPA, the VESCP authority, local government officials, or the operator of a municipal separate storm sewer system receiving discharges from the construction activity. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the SWPPP's location shall be posted near the main entrance of the construction site.

3. The operator shall make the SWPPP available for public review in an electronic format or in hard copy. Information for public access to the SWPPP shall be posted and maintained in accordance with Part II D. If not provided electronically, public access to the SWPPP may be arranged upon request at a time and at a publicly accessible location convenient to the operator or his designee but shall be no less than once per month and shall be during normal business hours. Information not required to be contained within the SWPPP by this general permit is not required to be released.

F. SWPPP implementation. The operator shall implement the SWPPP and subsequent amendments, modifications, and updates from commencement of land disturbance until termination of general permit coverage as specified in Part I F.

1. All control measures shall be properly maintained in effective operating condition in accordance with good engineering practices and, where applicable, manufacturer specifications. If a site inspection required by Part II G identifies a control measure that is not operating effectively, corrective actions shall be completed as soon as practicable, but no later than seven days after discovery or a longer period as established by the VSMP authority, to maintain the continued effectiveness of the control measures.

2. If site inspections required by Part II G identify an existing control measure that needs to be modified or if an additional or alternative control measure is necessary for any reason, implementation shall be completed prior to the next anticipated measurable storm event. If implementation prior to the next anticipated measurable storm event is impracticable, then additional or alternative control measures shall be implemented as soon as practicable, but no later than seven days after discovery or a longer period as established by the VSMP authority.

G. SWPPP Inspections.

1. Personnel responsible for on-site and off-site inspections. Inspections required by this general permit shall be conducted by the qualified personnel identified by the operator in the SWPPP. The operator is responsible for ensuring that the qualified personnel conduct the inspection.

2. Inspection schedule.

    a. For construction activities that discharge to a surface water identified in Part II B 5 and B 6 as impaired or having an approved TMDL or Part I B 7 as exceptional, the following inspection schedule requirements apply:

        (1) Inspections shall be conducted at a frequency of (i) at least once every four business days or (ii) at least once every five business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when

there are more than 24 hours between business days, the inspection shall be conducted on the next business day; and

(2) Representative inspections as authorized in Part II G 2 d shall not be allowed.

b. Except as specified in Part II G 2 a, inspections shall be conducted at a frequency of:

(1) At least once every five business days; or

(2) At least once every 10 business days and no later than 24 hours following a measurable storm event. In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted on the next business day.

c. Where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions and stormwater discharges are unlikely, the inspection frequency described in Part II G 2 a and 2 b may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, the operator shall immediately resume the regular inspection frequency.

d. Except as prohibited in Part II G 2 a (2), representative inspections may be utilized for utility line installation, pipeline construction, or other similar linear construction activities provided that:

(1) Temporary or permanent soil stabilization has been installed and vehicle access may compromise the temporary or permanent soil stabilization and potentially cause additional land disturbance increasing the potential for erosion;

(2) Inspections occur on the same frequency as other construction activities;

(3) Control measures are inspected along the construction site 0.25 miles above and below each access point (i.e., where a roadway, undisturbed right-of-way, or other similar feature intersects the construction activity and access does not compromise temporary or permanent soil stabilization); and

(4) Inspection locations are provided in the inspection report required by Part II G.

e. If adverse weather causes the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. Any time inspections are delayed due to adverse weather conditions, evidence of the adverse weather conditions shall be included in the SWPPP with the dates of occurrence.

3. Inspection requirements.

a. As part of the inspection, the qualified personnel shall:

(1) Record the date and time of the inspection and, when applicable, the date and rainfall amount of the last measurable storm event;

(2) Record the information and a description of any discharges occurring at the time of the inspection or evidence of discharges occurring prior to the inspection;

(3) Record any land-disturbing activities that have occurred outside of the approved erosion and sediment control plan;

(4) Inspect the following for installation in accordance with the approved erosion and sediment control plan, identification of any maintenance needs, and evaluation of effectiveness in minimizing sediment discharge, including whether the control has been inappropriately or incorrectly used:

(a) All perimeter erosion and sediment controls, such as silt fence;

(b) Soil stockpiles, when applicable, and borrow areas for stabilization or sediment trapping measures;

(c) Completed earthen structures, such as dams, dikes, ditches, and diversions for stabilization and effective impoundment or flow control;

(d) Cut and fill slopes;

(e) Sediment basins and traps, sediment barriers, and other measures installed to control sediment discharge from stormwater;

(f) Temporary or permanent channels, flumes, or other slope drain structures installed to convey concentrated runoff down cut and fill slopes;

(g) Storm inlets that have been made operational to ensure that sediment laden stormwater does not enter without first being filtered or similarly treated; and

(h) Construction vehicle access routes that intersect or access paved or public roads for minimizing sediment tracking;

(5) Inspect areas that have reached final grade or that will remain dormant for more than 14 days to ensure:

(a) Initiation of stabilization activities have occurred immediately, as defined in 9VAC25-880-1; and

(b) Stabilization activities have been completed within seven days of reaching grade or stopping work;

(6) Inspect for evidence that the approved erosion and sediment control plan, "agreement in lieu of a plan," or erosion and sediment control plan prepared in accordance with department-approved annual standards and specifications has not been properly implemented. This includes:

(a) Concentrated flows of stormwater in conveyances such as rills, rivulets, or channels that have not been filtered, settled, or similarly treated prior to discharge, or evidence thereof;

(b) Sediment laden or turbid flows of stormwater that have not been filtered or settled to remove sediments prior to discharge;

(c) Sediment deposition in areas that drain to unprotected stormwater inlets or catch basins that discharge to surface waters. Inlets and catch basins with failing sediment controls due to improper installation, lack of maintenance, or inadequate design are considered unprotected;

(d) Sediment deposition on any property (including public and private streets) outside of the construction activity covered by this general permit;

(e) Required stabilization has not been initiated or completed or is not effective on portions of the site;

(f) Sediment basins without adequate wet or dry storage volume or sediment basins that allow the discharge of stormwater from below the surface of the wet storage portion of the basin;

(g) Sediment traps without adequate wet or dry storage or sediment traps that allow the discharge of stormwater from below the surface of the wet storage portion of the trap; and

(h) Land disturbance or sediment deposition outside of the approved area to be disturbed;

(7) Inspect pollutant generating activities identified in the pollution prevention plan for the proper implementation, maintenance, and effectiveness of the procedures and practices;

(8) Identify any pollutant generating activities not identified in the pollution prevention plan; and

(9) Identify and document the presence of any evidence of the discharge of pollutants prohibited by this general permit.

4. Inspection report. Each inspection report shall include the following items:

a. The date and time of the inspection and, when applicable, the date and rainfall amount of the last measurable storm event;

b. Summarized findings of the inspection;

c. The locations of prohibited discharges;

d. The locations of control measures that require maintenance;

e. The locations of control measures that failed to operate as designed or proved inadequate or inappropriate for a particular location;

f. The locations where any evidence identified under Part II G 3 a (6) exists;

g. The locations where any additional control measure is needed;

h. A list of corrective actions required (including any changes to the SWPPP that are necessary) as a result of the inspection or to maintain permit compliance;

i. Documentation of any corrective actions required from a previous inspection that have not been implemented; and

j. The date and signature of the qualified personnel and the operator or its duly authorized representative.

5. The inspection report shall be included into the SWPPP no later than four business days after the inspection is complete.

6. The inspection report and any actions taken in accordance with Part II shall be retained by the operator as part of the SWPPP for at least three years from the date that general permit coverage expires or is terminated. The inspection report shall identify any incidents of noncompliance. Where an inspection report does not identify any incidents of noncompliance, the report shall contain a certification that the construction activity is in compliance with the SWPPP and this general permit. The report shall be signed in accordance with Part III K of this general permit.

H. Corrective actions.

1. The operator shall implement the corrective actions identified as a result of an inspection as soon as practicable but no later than seven days after discovery or a longer period as approved by the VSMP authority. If approval of a corrective action by a regulatory authority (e.g., VSMP authority, VESCP authority, or the department) is necessary, additional control measures shall be implemented to minimize pollutants in stormwater discharges until such approvals can be obtained.

2. The operator may be required to remove accumulated sediment deposits located outside of the construction activity covered by this general permit as soon as practicable in order to minimize environmental impacts. The operator shall notify the VSMP authority and the department as well as obtain all applicable federal, state, and local authorizations, approvals, and permits prior to the removal of sediments accumulated in surface waters including wetlands.

PART III

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

NOTE: Discharge monitoring is not required for this general permit. If the operator chooses to monitor stormwater discharges or control measures, the operator shall comply with the requirements of subsections A, B, and C, as appropriate.

A. Monitoring.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this general permit. Analyses performed according to test procedures approved under 40 CFR Part 136 shall be performed by an environmental laboratory certified under regulations adopted by the Department of General Services (1VAC30-45 or 1VAC30-46).

3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Monitoring records and reports shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individuals who performed the sampling or measurements;

   c. The dates and times analyses were performed;

   d. The individuals who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this general permit, and records of all data used to complete the registration statement for this general permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the board.

C. Reporting monitoring results.

1. The operator shall update the SWPPP to include the results of the monitoring as may be performed in accordance with this general permit, unless another reporting schedule is specified elsewhere in this general permit.

2. Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included.

3. If the operator monitors any pollutant specifically addressed by this general permit more frequently than required by this general permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this general permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this general permit.

D. Duty to provide information. The operator shall furnish, within a reasonable time, any information which the board may request to determine whether cause exists for terminating this general permit coverage or to determine compliance with this general permit. The board, department, EPA, or VSMP authority may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and the Virginia Stormwater Management Act. The operator shall also furnish to the board, department, EPA, or VSMP authority, upon request, copies of records required to be kept by this general permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this general permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized stormwater discharges. Pursuant to § 62.1-44.5 of the Code of Virginia, except in compliance with a state permit issued by the department, it shall be unlawful to cause a stormwater discharge from a construction activity.

G. Reports of unauthorized discharges. Any operator who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters, shall notify the Department of Environmental Quality of the discharge immediately upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department and the VSMP authority within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this general permit.

Discharges reportable to the department and the VSMP authority under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a "bypass" or "upset," as defined in this general permit, should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly notify, in no case later than within 24 hours, the department and the VSMP authority by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department and the VSMP authority within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service of some or all of the facilities; and

4. Flooding or other acts of nature.

I. Reports of noncompliance. The operator shall report any noncompliance which may adversely affect surface waters or may endanger public health.

1. An oral report to the department and the VSMP authority shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subdivision:

    a. Any unanticipated bypass; and

    b. Any upset that causes a discharge to surface waters.

2. A written report shall be submitted within five days and shall contain:

    a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The department may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on surface waters has been reported.

3. The operator shall report all instances of noncompliance not reported under Part III I 1 or 2 in writing as part of the SWPPP. The reports shall contain the information listed in Part III I 2.

NOTE: The reports required in Part III G, H and I shall be made to the department and the VSMP authority. Reports may be made by telephone, email, or by fax. For reports outside normal working hours, leaving a recorded message shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.

4. Where the operator becomes aware of a failure to submit any relevant facts, or submittal of incorrect information in any report, including a registration statement, to the department or the VSMP authority, the operator shall promptly submit such facts or correct information.

J. Notice of planned changes.

1. The operator shall give notice to the department and the VSMP authority as soon as possible of any planned physical alterations or additions to the permitted facility or activity. Notice is required only when:

a. The operator plans an alteration or addition to any building, structure, facility, or installation that may meet one of the criteria for determining whether a facility is a new source in 9VAC25-870-420;

b. The operator plans an alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this general permit; or

2. The operator shall give advance notice to the department and VSMP authority of any planned changes in the permitted facility or activity, which may result in noncompliance with state permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the

manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by this general permit, including SWPPPs, and other information requested by the board or the department shall be signed by a person described in Part III K 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Part III K 1;

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the operator. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

   c. The signed and dated written authorization is included in the SWPPP. A copy shall be provided to the department and VSMP authority, if requested.

3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the construction activity, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the VSMP authority as the administering entity for the board prior to or together with any reports or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part III K 1 or 2 shall make the following certification:

5. "I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

L. Duty to comply. The operator shall comply with all conditions of this general permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this general permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for state permit coverage, termination, revocation and reissuance, or modification; or denial of a state permit renewal application.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this general permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the operator wishes to continue an activity regulated by this general permit after the expiration date of this general permit, the operator shall submit a new registration statement at least 60 days before the expiration date of the existing general permit, unless permission for a later date has been granted by the board. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing general permit.

N. Effect of a state permit. This general permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this general permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in general permit conditions on "bypassing" (Part III U) and "upset" (Part III V), nothing in this general permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this general permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law or § 311 of the Clean Water Act.

Q. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the operator to achieve compliance with the conditions of this general permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this general permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering surface waters and in compliance with all applicable state and federal laws and regulations.

S. Duty to mitigate. The operator shall take all steps to minimize or prevent any discharge in violation of this general permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this general permit.

U. Bypass.

1. "Bypass," as defined in 9VAC25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part III U 2 and 3.

2. Notice.

    a. Anticipated bypass. If the operator knows in advance of the need for a bypass, the operator shall submit prior notice to the department, if possible at least 10 days before the date of the bypass.

    b. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Part III I.

3. Prohibition of bypass.

    a. Except as provided in Part III U 1, bypass is prohibited, and the board or department may take enforcement action against an operator for bypass unless:

        (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production;

        (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

        (3) The operator submitted notices as required under Part III U 2.

    b. The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three conditions listed in Part III U 3 a.

V. Upset.

1. An "upset," as defined in 9VAC25-870-10, means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based state permit effluent limitations if the requirements of Part III V 4 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

3. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

4. An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

    a. An upset occurred and that the operator can identify the cause of the upset;

    b. The permitted facility was at the time being properly operated;

    c. The operator submitted notice of the upset as required in Part III I; and

    d. The operator complied with any remedial measures required under Part III S.

5. In any enforcement proceeding, the operator seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The operator shall allow the department as the board's designee, the VSMP authority, EPA, or an authorized representative of either entity (including an authorized contractor), upon presentation of credentials and other documents as may be required by law to:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this general permit;

2. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this general permit;

3. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this general permit; and

4. Sample or monitor at reasonable times, for the purposes of ensuring state permit compliance or as otherwise authorized by the Clean Water Act or the Virginia Stormwater Management Act, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. State permit actions. State permit coverage may be modified, revoked and reissued, or terminated for cause. The filing of a request by the operator for a state permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any state permit condition.

Y. Transfer of state permit coverage.

1. State permits are not transferable to any person except after notice to the department. Except as provided in Part III Y 2, a state permit may be transferred by the operator to a new operator only if the state permit has been modified or revoked and reissued, or a minor modification made, to identify the new operator and incorporate such other requirements as may be necessary under the Virginia Stormwater Management Act and the Clean Water Act.

2. As an alternative to transfers under Part III Y 1, this state permit may be automatically transferred to a new operator if:

    a. The current operator notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;

    b. The notice includes a written agreement between the existing and new operators containing a specific date for transfer of state permit responsibility, coverage, and liability between them; and

    c. The department does not notify the existing operator and the proposed new operator of its intent to modify or revoke and reissue the state permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

3. For ongoing construction activity involving a change of operator, the new operator shall accept and maintain the existing SWPPP, or prepare and implement a new SWPPP prior to taking over operations at the site.

Z. Severability. The provisions of this general permit are severable, and if any provision of this general permit or the application of any provision of this state permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this general permit shall not be affected thereby.

Appendix C
Forms: Notice of Registration and Notice of Termination

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES (VAR10)
REGISTRATION STATEMENT 2019

PERMIT #: _____
PLAN/ID #: _____
TECHNICAL CRITERIA: **IIB** ☐ **IIC** ☐

Application type. (CHOOSE ONE)
☐ **NEW PERMIT ISSUANCE**
☐ **MODIFICATION WITH ACREAGE INCREASE**
☐ **MODIFICATION WITHOUT ACREAGE INCREASE**
☐ **EXISTING PERMIT RE-ISSUANCE**

Section I. Operator/Permittee Information.

A. Construction Activity Operator (Permittee). The person or entity that is applying for permit coverage and will have operational control over construction activities to ensure compliance with the general permit. A person with signatory authority for this operator must sign the certification in Section VI. (per Part III. K. of the VAR10 Permit).

Operator Name: _____
Contact person: _____
Address: _____
City, State Zip Code: _____
Phone Number: _____
Primary Email: _____
CC Email: _____

B. Billing Information (leave blank if same as the Operator identified in Section I. A. above). This entity will receive Annual Permit Maintenance and Permit Modification Fee invoices (if applicable).

Name: _____
Contact Person: _____
Address: _____
City, State Zip Code: _____
Phone Number: _____
Primary Email: _____
CC Email: _____

C. May we transmit correspondence electronically? You must choose **YES** and include a valid email in order to pay by credit card and to receive your permit coverage approval letter via email: **YES** ☐ **NO** ☐

Section II. Construction Activity Location Information. Project site information.

A. Include a site map showing the location of the existing or proposed land-disturbing activities, the limits of land disturbance, construction entrances and all water bodies receiving stormwater discharges from the site.

B. Construction Activity Name: _____

Address: _____

City and/or County and Zip Code: _____

Latitude and Longitude
(6-digit, decimal degrees format): _____

C. Construction Activity Entrance Location
(description, street address and/or
latitude/longitude in decimal degrees): _____

Section III. Offsite Support Activity Location Information. List all offsite support activities to be included under this permit registration. Enter additional areas on a separate page. Offsite areas not included on this registration will need to obtain coverage under a separate VPDES permit.

A. Offsite Activity Name: _____
Address: _____
City and/or County and Zip Code: _____
Latitude and Longitude
(6-digit, decimal degrees format): _____

B. Offsite Activity Entrance Location
(description, street address and/or
latitude/longitude in decimal degrees): _____

Section IV. Site Information.

A. Property Owner Status: **FEDERAL** ☐ **STATE** ☐ **PUBLIC** ☐ **PRIVATE** ☐

B. Nature of the Construction Activity Description (i.e. commercial, industrial, residential, agricultural, environmental): _____

C. Municipal Separate Storm Sewer System (MS4) name(s) (if the site is discharging to a MS4): _____

D. Acreage totals for all land-disturbing activities to be included under this permit coverage. Report to the nearest one-hundredth of an acre.	
Total land area of development (including the entire area to be disturbed as approved in the Stormwater Management Plan):	
Primary estimated area to be disturbed (portions with Erosion and Sediment Control Plan approval only):	
Offsite estimated area to be disturbed (if applicable):	

E. Estimated Project Dates (MM/DD/YYYY)	
Start date:	
Completion date:	

F. Is this construction activity part of a common plan of development or sale? **YES** ☐ **NO** ☐

G. 6th Order Hydrologic Unit Code (HUC) and Receiving Water Name(s). Attach a separate list if needed.

HUC	RECEIVING WATERBODY(S)

Section V. Other Information.

A. A stormwater pollution prevention plan (SWPPP) must be prepared in accordance with the requirements of the General VPDES Permit for Discharges of Stormwater from Construction Activities prior to submitting the Registration Statement. By signing the Registration Statement, the operator is certifying that the SWPPP has been prepared.

B. Has an Erosion and Sediment Control Plan been submitted to the VESC Authority for review? **YES** ☐ **NO** ☐
Erosion and Sediment Control Plan Approval Date (for estimated area to be disturbed).: _____

C. Has land disturbance has commenced? **YES** ☐ **NO** ☐

D. Annual Standards and Specifications. If this project is utilizing approved Annual Standards and Specifications (AS&S), attach the completed AS&S Entity Form.
AS&S Entity Name (if different from the Operator identified in Section II. A.): _____

Section VI. Certification. A person representing the operator as identified in Section I. A. and meeting the requirements of 9VAC25-880-70. Part III. K must physically sign this certification. A typed signature is not acceptable. Please note that operator is defined in 9VAC25-870-10 as follows:

"Operator" means the owner or operator of any facility or activity subject to the Act and this chapter. In the context of stormwater associated with a large or small construction activity, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other state permit or VSMP authority permit conditions (i.e., they are authorized to direct workers at a site to carry out activities required by the stormwater pollution prevention plan or comply with other permit conditions). In the context of stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the operator of the regulated MS4 system.

9VAC25-880-70. Part III. K. Signatory Requirements. *Registration Statement. All Registration Statements shall be signed as follows:*

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation; or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes: (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Certification: "I certify under penalty of law that I have read and understand this Registration Statement and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

Printed Name: _____

Signature (signed in ink): _____

Date Signed: _____

Section VII. Submittal Instructions. Submit this form to the VSMP Authority. If the locality is the VSMP Authority, please send your Registration Statement submittal directly to the locality; do NOT send this form to DEQ. A list of local VSMP Authorities is available here: VSMP Authorities.

If DEQ is the VSMP Authority, please send to:

Department of Environmental Quality
Office of Stormwater Management Suite 1400
PO Box 1105
Richmond VA 23218
constructiongp@deq.virginia.gov

If the locality is the VSMP Authority, please send to:

The Local VSMP Authority *(insert address below)*

CONSTRUCTION GENERAL PERMIT (VAR10) REGISTRATION STATEMENT 2019 INSTRUCTIONS

PLEASE DO NOT PRINT OR SUBMIT

This Registration Statement is for coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities. This form covers the following permit actions: new permit issuance, existing permit modification with an increase in acreage, existing permit modifications that result in a plan modification but do not result in an increase in disturbed acreage, and reissuance of an active permit coverage.

Application type. Select **NEW PERMIT ISSUANCE** to obtain a new permit coverage. Modifications are for modifying an existing, active permit coverage. Select **MODIFICATION WITH ACREAGE INCREASE** when the previously approved acreage(s) increases (permit modifications are not performed for decreases in acreage unless they result in plan changes – see Modification WITHOUT Acreage Increase). Select **MODIFICATION WITHOUT ACREAGE INCREASE** when there is a change to the site design resulting in a change to the approved plans with no increase in acreage(s). Select **EXISTING PERMIT REISSUANCE** to extend an expiring permit coverage for the next permit cycle.

Section I. Operator/Permittee Information.

A. Construction Activity Operator (Permittee). The person or entity that is applying for permit coverage and will have operational control over construction activities to ensure compliance with the general permit. For companies, use the complete, active, legal entity name as registered with a state corporation commission. Entities that are considered operators commonly consist of the property owner, developer of a project (the party with control of project plans and specifications), or general contractor (the party with day-to-day operational control of the activities at the project site that are necessary to ensure compliance with the general permit). If an individual person is listed as the operator, that person (or a legal representative of) must sign the certification in Section VI. An operator can be one of the following:

9VAC25-870-10. Definitions.

"Operator" means the owner or operator of any facility or activity subject to the Act and this chapter. In the context of stormwater associated with a large or small construction activity, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other state permit or VSMP authority permit conditions (i.e., they are authorized to direct workers at a site to carry out activities required by the stormwater pollution prevention plan or comply with other permit conditions). In the context of stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s), operator means the operator of the regulated MS4 system.

"Owner" means the Commonwealth or any of its political subdivisions including, but not limited to, sanitation district commissions and authorities, and any public or private institution, corporation, association, firm or company organized or existing under the laws of this or any other state or country, or any officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for any actual or potential discharge of sewage, industrial wastes, or other wastes or pollutants to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5 of the Code of Virginia, the Act and this chapter.

"Person" means any individual, corporation, partnership, association, state, municipality, commission, or political subdivision of a state, governmental body, including a federal, state, or local entity as applicable, any interstate body or any other legal entity.

B. Billing information. If the person or entity responsible for billing/invoicing is different from the operator, please complete this section. If they are the same, leave this section blank.

C. May we transmit correspondence electronically? If you choose **YES** to this question and provide an email address in Section I. A., all correspondence, forms, invoices and notifications will be transmitted by email to the operator. This will also give the operator the ability to pay by credit card and to receive permit coverage approval letters immediately upon approval.

Section II. Construction Activity Location Information. Location information related to the project site.

A. A site map indicating the location of the existing or proposed land-disturbing activities, the limits of land disturbance, construction entrances and all water bodies receiving stormwater discharges from the site must be included with the submittal of this form. Aerial imagery maps or topographic maps showing the required items are acceptable. Plan sheet sized site maps are not required. Please consult your VSMP authority if you have additional questions regarding site map requirements.

B. Construction Activity Name and location. Provide a descriptive project name (it is helpful to use the same naming convention as listed on the Stormwater Management plans), 911 street address (if available), city/county of the construction activity, and the 6-digit latitude and longitude in decimal degrees format for the centroid, main construction entrance or start and end points for linear projects (i.e. 37.1234N/-77.1234W).

C. Construction Activity Entrance Location. Provide an address or decimal degrees coordinates and a description of the main construction entrance where the permit coverage letter will be posted.

Section III. Offsite Support Activity Location Information.

This general permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) located on-site or off-site provided that (i) the support activity is directly related to a construction activity that is required to have general permit coverage; (ii) the support activity is not a commercial operation, nor does it serve multiple unrelated construction activities by different operators; (iii) the support activity does not operate beyond the completion of the construction activity it supports; (iv) the support activity is identified in the Registration Statement at the time of general permit coverage; (v) appropriate control measures are identified in a SWPPP and implemented to address the discharges from the support activity areas; and (vi) all applicable state, federal, and local approvals are obtained for the support activity.

If requesting permit coverage for offsite activities, please complete this section. List additional offsite areas to be included under this permit coverage on a separate page. Offsite areas not included on this registration will need to obtain coverage under a separate VPDES permit.

A. Offsite activity name and location information. Provide a descriptive offsite project name, 911 street address (if available) and city/county of all off-site support activities. Provide the 6-digit latitude and longitude in decimal degrees (i.e. 37.1234N,-77.1234W). Please note that off-site activities not covered under this permit may require separate permit coverage.

B. Offsite activity entrance location. Provide an address or decimal degrees coordinates and a description of the offsite construction entrance.

Section IV. Site Information.

A. Property owner status. The status of the construction activity property owner. Any property not owned by a government entity or agency (i.e. federal, state or local governments) is **PRIVATE**.

B. Nature of the construction activity description. Choose the designation that best describes the post-construction use of this project (you may choose more than one). (i.e. Residential, Commercial, Industrial, Agricultural, Environmental, Educational, Oil and Gas, Utility, Transportation, Institutional, etc.). Describe the post-construction use of the project (i.e. Commercial – one new office building and associated parking and utilities; Transportation – Roads, sidewalks and utilities; Agricultural – 3 Poultry Houses, etc.).

C. Municipal Separate Storm Sewer System (MS4) name(s) if discharging to a MS4. If stormwater is discharged through a MS4 (either partially or completely), provide the name of the MS4(s) that will be receiving water from this construction activity. The MS4 name is typically the town, city, county, institute or federal facility where the construction activity is located.

D. Acreage totals for all land-disturbing activities, on- and off-site, to be included under this permit. Acreages are to be reported to the nearest one-hundredth acre (two decimal places; i.e. 1.15 acres). Provide the total acreage of the primary development site as approved on the Stormwater Management Plans and the primary on-site estimated acreage to be disturbed by the construction activity as approved under the Erosion and Sediment Control Plans. The off-site estimated area to be disturbed is the sum of the disturbed acreages for all off-site support activities to be covered under this general permit. Do not include the off-site acreage totals in the primary, on-site total and estimated disturbed acreage totals. Permit fees are calculated based on your disturbed acreage total for all on- and off-site areas being disturbed under this permit coverage (the sum of all on-site and off-site disturbed acreages).

E. Estimated project dates. Provide the estimated project start date and completion date in Month/Day/Year or MM/DD/YYYY format (i.e. 07/30/2019).

F. Is this construction activity is part of a common plan of development or sale? "Common plan of development or sale" means a contiguous area where separate and distinct construction activities may be taking place at different times on different schedules per 9VAC25-870-10. Definitions. I.e. a subdivision, commercial development, business park, etc.

G. 6th Order Hydrologic Unit Code (HUC) and associated Receiving Water Name(s). Provide all 6th order HUCs and receiving waterbody names, for the primary site and any offsite areas included under this permit coverage, that could potentially receive stormwater runoff discharging from this activity. The HUC can be either a 12-digit number (i.e. 0208010101) or 2-letter, 2-number code (i.e. JL52). Include additional HUCs or receiving waters on a separate page. You may utilize DEQ's web-based GIS application, VEGIS, to obtain this information.

- VEGIS application link: DEQ's VEGIS Mapping Application
- Instructions for utilizing DEQ's VEGIS application link: CGP-GIS HUC Instructions

Section V. Other Information.

A. A stormwater pollution prevention plan (SWPPP) must be prepared prior to submitting the Registration Statement per 9VAC25-880. See 9VAC25-880-70. Part II. of the General Permit for the SWPPP requirements.

B. If the Erosion and Sediment Control Plan for the estimated area to be disturbed listed in Section IV. A. has been submitted to the VESC Authority for review and plan approval, choose **YES.** If you are submitting this application to reissue an existing permit coverage, please provide the date that the VESC Authority approved the Erosion and Sediment Control Plan for the estimated area to be disturbed.

C. If land disturbance has commenced, choose **YES.** "Land disturbance" or "land-disturbing activity" means a man-made change to the land surface that may result in soil erosion or has the potential to change its runoff characteristics, including construction activity such as the clearing, grading, excavating, or filling of land per §62.1-44.15:24. Definitions.

D. If this project is using approved Annual Standards and Specifications (AS&S), attach the completed AS&S Entity Form.
If the AS&S Entity is different from the operator identified in Section I. A., list the AS&S Entity Name. The AS&S entity is the entity or agency that holds the approved annual standards & specification. Please indicate if this project is also requesting a plan waiver.

- AS&S Entity Form link: Annual Standards and Specifications Entity Information Form

Section VI. Certification.

A properly authorized individual associated with the operator identified in Section I. A. of the Registration Statement is responsible for certifying and signing the Registration Statement. A person must physically sign the certification, a typed signature is unacceptable. State statutes provide for severe penalties for submitting false information on the Registration Statement. State regulations require that the Registration Statement be signed as follows per 9VAC25-880-70 Part III. K. 1.:

a. For a corporation: by a responsible corporate officer. For the purpose of this part, a responsible corporate officer means:
(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or
(ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this part, a principal executive officer of a public agency includes:
(i) The chief executive officer of the agency, or
(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Section VII. Submittal Instructions.

Submit this form to the VSMP Authority that has jurisdiction for your construction activity. The VSMP Authority may be either DEQ **or** your locality depending on the location and type of project. If your project is under the jurisdiction of a Local VSMP Authority, please contact the locality for additional submittal instructions. A blank area is provided for the Local VSMP Authority's mailing address.

Who is the VSMP Authority for my project? DEQ or the locality?

- **DEQ**: DEQ is the VSMP Authority and administers permit coverage for land-disturbing activities that are:
  - within a locality that is not a VSMP Authority;
  - owned by the State or Federal government; or
  - utilizing approved Annual Standards and Specifications.

- **The Locality**: The local government (locality) is the VSMP Authority and administers permit coverage for all other projects not covered by DEQ as listed above. For these projects, please submit permit forms directly to the Local VSMP Authority. A list of Local VSMP Authorities is available on DEQ's website here: Local VSMP Authority List.

DEQ'S CONSTRUCTION GENERAL PERMIT WEBSITE

http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES (VAR10)
NOTICE OF TERMINATION 2019

Permit Coverage Number (VAR10####): _____

Section I. Operator/Permittee Information. The person or entity that has active permit coverage approval and operational control over construction activities to ensure compliance with the general permit. A person with signatory authority for this operator must sign the certification in Section VII (per Part III. K. of the VAR10 Permit).

Construction Activity Operator Name: _____

Contact Person: _____

Address: _____

City, State, Zip Code: _____

Phone Number: _____

Primary Email: _____

CC Email: _____

Section II. Construction Activity Location Information. Project site information.

Construction Activity Name: _____

Address: _____

City and/or County and Zip Code: _____

Latitude and Longitude (6-digit, decimal degrees format): _____

Section III. Reason for Terminating Coverage under the General Permit. The operator shall submit a Notice of Termination within 30 days after meeting one or more of the following conditions (select one or more):

☐ **A.** Necessary permanent control measures included in the SWPPP for the site are in place and functioning effectively **and** final stabilization has been achieved on all portions of the site for which the operator is responsible. When applicable, long-term responsibility and maintenance requirements for permanent control measures shall be recorded in the local land records prior to the submission of a Notice of Termination;

☐ **B.** Another operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the ongoing discharge;

☐ **C.** Coverage under an alternative VPDES or state permit has been obtained; or

☐ **D.** For residential construction only, temporary soil stabilization has been completed, the operator has provided written notification to the homeowner about the importance of final stabilization and incorporating a copy of the notification and signed certification statement into the SWPPP, and the residence has been transferred to the homeowner.

Section IV. Participation in a Regional Stormwater Management Plan. If your site discharges to a regional stormwater management facility, provide information related to the regional stormwater management plan. Attach a separate list if discharging to multiple regional facilities.

Regional Stormwater Management Facility Type:	
Address:	
City and/or County and Zip Code:	
Latitude and Longitude (6-digit, decimal degrees format):	
Total Acres Treated by Regional Facility (report to one-hundredth of an acre):	
Impervious Acres Treated by Regional Facility (report to one-hundredth of an acre):	

Section V. Perpetual Nutrient Credits. If your site is utilizing nutrient credits, provide information related to the perpetual nutrient credits that were acquired in accordance with § 62.1-44.15:35 of the Code of Virginia. Attach a separate list if needed.

Nonpoint Nutrient Credit Generating Entity (Bank Name):	
Perpetual Nutrient Credits Acquired (pounds/acres/year):	

Include the affidavit of sale for all nutrient credits acquired. Is the affidavit of sale of nutrient credits attached? ☐**YES** ☐**NO**

Section VI. Permanent Control Measures. If applicable, list the post-development stormwater management facilities or best management practices (BMPs) that were constructed and installed as part of this activity to comply with the stormwater management technical criteria (structural and nonstructural, on-site and off-site). Attach a separate list if needed.

If you have permanent control measures, the following items are required to be included with this form in order to complete your Notice of Termination submittal:

☐ **A.** Engineer's Certification Statement
☐ **B.** As-built plans (construction record drawings) – digital
☐ **C.** As-built plans (construction record drawings) – full-sized, paper
☐ **D.** Stormwater Management Plans – digital
☐ **E.** BMP Maintenance Agreement – notarized original, for public and private projects under DEQ's VSMP Authority

Stormwater Management Facility Types *(please choose from the following bmp types):*

Bioretention 1
Bioretention 2
Bioretention basin
Bioretention filter
Constructed Wetland 1
Constructed Wetland 2
Constructed wetlands
Dry Swale 1
Dry Swale 2
Extended detention (2 x WQ Vol)
Extended Detention Pond 1
Extended Detention Pond 2
Extended detention-enhanced
Filtering Practice 1
Filtering Practice 2
Grass Channel
Grassed swale
Infiltration (1 x WQ Vol)
Infiltration (2 x WQ Vol)
Infiltration 1
Infiltration 2
Other IIB (manufactured treatment device, etc.)
Other IIC (manufactured treatment device, etc.)
Permeable Pavement 1
Permeable Pavement 2
Rainwater Harvesting
Retention basin I (3 x WQ Vol)
Retention basin II (4 x WQ Vol)
Retention basin III (4 x WQ Vol with aquatic bench)
Sand filter
Sheetflow to Vegetated Filter or Conserved Open Space 2
Soil Amendments
Urban Bioretention
Vegetated filter strip
Vegetated Roof 1
Vegetated Roof 2
Wet Pond 1
Wet Pond 2
Wet Swale 1
Wet Swale 2

Stormwater Management Facility #1 BMP Type:	
Date BMP Became Functional:	
Address (if available):	
City and/or County and Zip Code:	
Latitude and Longitude (6-digit, decimal degrees format):	
Receiving Water(s) (outfall discharge):	
Total Acres Treated (report to one-hundredth of an acre):	
Impervious Acres Treated (report to one-hundredth of an acre):	

Stormwater Management Facility #2 BMP Type:	
Date BMP Became Functional:	
Address (if available):	
City and/or County and Zip Code:	
Latitude and Longitude (6-digit, decimal degrees format):	
Receiving Water(s) (outfall discharge):	
Total Acres Treated (report to one-hundredth of an acre):	
Impervious Acres Treated (report to one-hundredth of an acre):	

Stormwater Management Facility #3 BMP Type:	
Date BMP Became Functional:	
Address (if available):	
City and/or County and Zip Code:	
Latitude and Longitude (6-digit, decimal degrees format):	
Receiving Water(s) (outfall discharge):	
Total Acres Treated (report to one-hundredth of an acre):	
Impervious Acres Treated (report to one-hundredth of an acre):	

Section VII. Certification. This Certification must be signed by a person representing the operator identified in Section I. and meeting the requirements of 9VAC25-880-70 Part III K.

Certification: "I certify under penalty of law that I have read and understand this Notice of Termination and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

Printed Name: _____

Signature (signed in ink): _____

Date: _____

Section VIII. Submittal Instructions. Please submit this form to the Virginia Stormwater Management Program (VSMP) Authority that has jurisdiction for your construction activity. If the locality is the VSMP Authority, please submit your form directly to the locality; do NOT send this form to DEQ. A list of local VSMP Authorities is available here: VSMP Authorities.

If DEQ is the VSMP Authority, please send to:

Department of Environmental Quality
Office of Stormwater Management Suite 1400
PO Box 1105
Richmond VA 23218
constructiongp@deq.virginia.gov

If the locality is the VSMP Authority, please send to:

The Local VSMP Authority *(insert address below)*

Permit terminations may be delayed if there are outstanding annual permit maintenance fee balances due.

A complete and accurate Notice of Termination is required for terminating coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities. Termination shall become effective upon notification from the department that the provisions of termination have been met or 60 days after submittal of a complete and accurate Notice of Termination, whichever occurs first.

Authorization to discharge terminates at midnight on the date that the Notice of Termination is submitted unless otherwise notified by the VSMP authority or the department.

Permit Coverage Number. Include your existing, active permit coverage number. Example: VAR10####.

Section I. Operator/Permittee Information. The construction activity operator (permittee). The permittee with active permit coverage and that has operational control over the construction activities to ensure compliance with the general permit. For companies, use the complete, active, legal entity name as registered with a state corporation commission. Entities that are considered operators commonly consist of the property owner, developer of a project (the party with control of project plans and specifications), or general contractor (the party with day-to-day operational control of the activities at the project site that are necessary to ensure compliance with the general permit). If an individual person is named as the operator, that person (or a representative of) must sign the certification in Section VII.

Section II. Construction Activity Location Information. Project site information. Complete this section with the same information as listed on the current registration statement. A list of active permits and corresponding location information is available on our website.

Section III. Reason for Terminating Coverage under the General Permit. The operator shall submit the Notice of Termination no later than 30 days after one or more of the termination conditions being met. Authorization to discharge terminates at midnight on the date that the Notice of Termination is submitted to the VSMP Authority, unless otherwise notified by the VSMP authority or the Department. Termination of authorizations to discharge for the conditions shall be effective upon notification from the Department that the provisions of termination have been met or 60 days after submittal of the Notice of Terminations, whichever occurs first.

The operator of the construction activity shall submit a Notice of Termination within 30 days after meeting one or more of the following conditions (you may select one or more of these conditions):

- **[A]** Necessary permanent control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization has been achieved on all portions of the site for which the operator is responsible has operational control. When applicable, long-term responsibility and maintenance requirements for permanent control measures shall be recorded in the local land records prior to the submission of a complete and accurate Notice of Termination;
- **[B]** Another operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the ongoing discharge;
- **[C]** Coverage under an alternative VPDES or state permit has been obtained; or
- **[D]** For individual lots in residential construction only, temporary soil final stabilization as defined in 9VAC25-880-1, has been completed and the residence has been transferred to the homeowner.

Section IV. Participation in a Regional Stormwater Management Plan. Where applicable, include information for each regional stormwater management facility to which this site contributes. If your site is contributing to more than one regional facility, please include the information for each facility in a separate list.

The following information shall be included for each regional stormwater management facility installed:

- the type stormwater management facility (see the list of facility types on page 2 of the Notice of Termination);
- the physical location of the facility, including city or county, and latitude and longitude in decimal degrees;
- the receiving water to which the regional facility is discharging; and
- the number of total and impervious acres treated by the regional stormwater management plan to the nearest one-hundredth of an acre. The total of the impervious acreage may equal but not exceed the total acreage.

Section V. Perpetual Nutrient Credits. If your site is utilizing nutrient credits, provide information related to all perpetual nutrient credits acquired in accordance with § 62.1-44.15:35 of the Code of Virginia. Attach a separate list if needed. Attach the affidavit(s) of sale for the purchase of all nutrient credits acquired for this activity.

Section VI. Permanent Control Measures. If applicable, list all post-development stormwater management facilities or best management practices (BMPs) that were constructed and installed as part of this activity to comply with the stormwater management technical criteria (structural and nonstructural, on-site and off-site). Choose the type from the list provided in the Notice of Termination form Section VI. If you have multiple BMPs, attach a separate list if needed.

The following information shall be included for each permanent control measure installed:

- the type of permanent control measure receiving the discharge (choose from list provided);
- the date that it became functional as a permanent control measure (MM/DD/YYYY);
- the location of the BMP, including city or county, and latitude and longitude in decimal degrees;
- the receiving water(s) to which the permanent control measure discharges; and
- the number of total and impervious acres treated by the permanent control measures to the nearest one-hundredth of an acre. The total of the impervious acreage may equal but not exceed the total acreage.

The following items are required to be submitted with the Notice of Termination if you have permanent control measures:

- Engineer's Certification Statement. Signed by a professional registered in the Commonwealth of Virginia, certifying that the stormwater management facilities were constructed in accordance with the approved plan.
- Construction record drawing(s) (as-built plan) in a format as specified by the VSMP authority for permanent stormwater management facilities in accordance with 9VAC25-870-55 D appropriately sealed and signed. One digital and one full-sized paper copy.
- Stormwater management plans (digital)
- BMP Maintenance Agreement. Submit an original, signed and notarized BMP Maintenance Agreement for all public and private permits where DEQ is the VSMP Authority. *Termination is not final until you submit the local court record of receipt to DEQ showing that the signed Stormwater Management Maintenance Agreement was recorded with the land deed.*

Section VII. Certification. This Certification must be signed by a person representing the operator identified in Section I. and meeting the requirements of 9VAC25-880-70. Part III. K.

Section VIII. Submittal Instructions. Submit this form to the VSMP Authority that has jurisdiction for your construction activity. The VSMP Authority may be either DEQ **or** your locality depending on the location and type of project. If your project is under the jurisdiction of a Local VSMP Authority, please contact the locality for additional submittal instructions. A blank area is provided for the Local VSMP Authority to include their mailing address.

Who is the VSMP Authority for my project? DEQ or the locality?

- **DEQ**: DEQ is the VSMP Authority and administers permit coverage for land-disturbing activities that are:
  - within a locality that is not a VSMP Authority;
  - owned by the State or Federal government; or
  - utilizing approved Annual Standards and Specifications.

- **The Locality**: The local government (locality) is the VSMP Authority and administers permit coverage for all other projects not covered by DEQ as listed above. For these projects, please submit permit forms directly to the Local VSMP Authority. A list of Local VSMP Authorities is available on DEQ's website here: Local VSMP Authority List.

DEQ'S CONSTRUCTION GENERAL PERMIT WEBSITE

http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx

Appendix D
Notice of Project Completion

Notice of Project Completion

Construction Activity Operator

Name: _____

Title: _____

Firm: _____

Name: _____

Address: _____

_____

Telephone: _____

Date: _____

Signature: _____

Location of Construction Activity

Name: _____

Title: _____

Firm: _____

Name: _____

Address: _____

_____

Telephone: _____

Date: _____

Signature: _____

OLD DOMINION UNIVERSITY

Project Completed Certification
Under the site specific SWPPP

Certification:

"I certify under penalty of law that in signing this notice of project completion all necessary post-construction control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization has been achieved on all portions of the site for which the operator is responsible."

Name:_____

Title: _____

Date: _____

RLD Signature: _____

Appendix E
Record of Land Disturbance

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Record of Land Disturbance

Location (Attach a map showing the location of the activity)	*Dates*		
	Land Disturbance Began	*Land Disturbance Ended*	*Stabilization Measures Implemented*

Appendix F
Record of Inspections

Record of Site Inspection

(Attach as many sheets as necessary, including maps)

Inspection Item	*Location*	*Control Measure*			*Incident of Non-Compliance (Y/N)*[1]	*Comments*	*Corrective Measure*	*Re-Inspection*
		Type	*Maintenance Req'd (Y/N)*	*Additional BMP Req'd (Y/N)*				
Concrete Washout Area								
Construction Entrance								
Exit								
Silt Fencing								
Stockpile								
Chemical Storage								
Equipment Storage								
Receiving Waterway								
Dry Weather Flow Pumpback								
Runoff Appearance								
Tree Protection								

Inspection Item	*Location*	*Control Measure*			*Incident of Non-Compliance (Y/N)*[1]	*Comments*	*Corrective Measure*	*Re-Inspection*
		Type	*Maintenance Req'd (Y/N)*	*Additional BMP Req'd (Y/N)*				
Dust Control								
Dewatering Methods								
Safety Fencing								
Straw Bales								
Storm Drain Inlet Protection								
Topsoiling								
Temporary & Permanent Seeding								
Soil Stabilization Blanket Matting								
Receiving Channel								

Name:_____ Title:_____ Date:_____

Signature:_____

[1]If no incidents of Non-Compliance have been noted above, I certify that the site complies with the provisions of this SWPPP and Permit.

[2]Blank lines should be used for additional inspection items including potential pollutants and items defined by owner.

Record of Potential Construction Site Pollutants

Material/Chemical	*Physical Description*	*Stormwater Pollutant*	*Location*

Appendix G
Record of Contractor Certification

Record of Contractor Certification

"I certify under penalty of law that I understand the terms and conditions of this Virginia Stormwater Management Program (VSMP) general permit that authorizes the storm water discharges from the construction activity identified as part of this certification."

Site:_____

Contractor No. _____

Name:_____

Title: _____

Firm: _____

Address:_____

_____

Telephone:_____

Date: _____

Signature: _____

Contractor No. _____

Name:_____

Title: _____

Firm: _____

Address:_____

_____

Telephone:_____

Date: _____

Signature:_____

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Appendix H
Water Quality Protection

Water Quality Protection

Permanent BMP Description	*Geographic Location*	*Water body Discharge*	*Acres Treated*

Appendix I
Details of Best Management Practices

CHAPTER 3

State Minimum Standards and Specifications

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Designate Washout Areas

Instructions

Describe location(s) and controls to eliminate the potential for discharges from washout areas for concrete mixers, paint, stucco, and so on.

BMP Description

A designated temporary, above-grade concrete washout area will be constructed as detailed on the site plans. The temporary concrete washout area could be constructed as shown in the figure below, with a recommended minimum length and minimum width of 10 feet and with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The washout area will be lined with plastic sheeting at least 10 mils thick and free of any holes or tears. Signs will be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility.

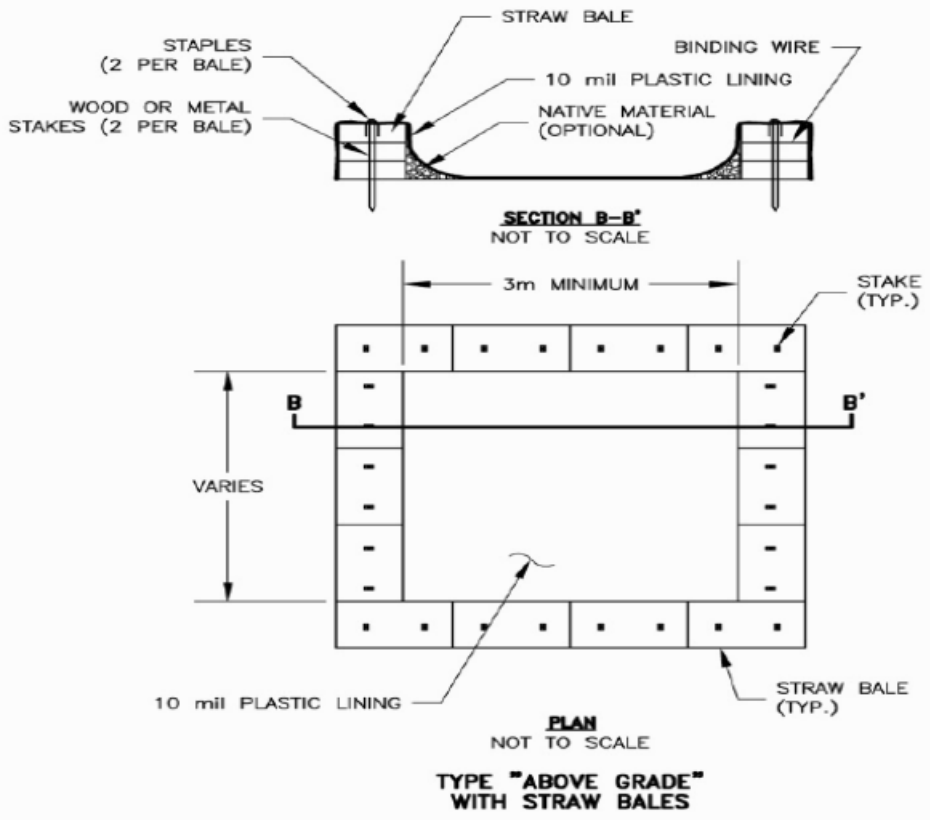
Concrete pours will not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes will be washed in the designated area or concrete wastes will be properly disposed of off-site. When the temporary washout area is no longer needed for the construction project, the hardened concrete and materials used to construct the area will be removed and disposed of according to the maintenance section below, and the area will be stabilized.

Installation Schedule

The washout area will be constructed before concrete pours occur at the site.

Maintenance and Inspection

The washout areas will be inspected daily to ensure that all concrete washing is being discharged into the washout area, no leaks or tears are present, and to identify when concrete wastes need to be removed. The washout areas will be cleaned out once the area is filled to 75 percent of the holding capacity. Once the area's holding capacity has been reached, the concrete wastes will be allowed to harden; the concrete will be broken up, removed, and taken to a nearby Landfill for disposal. The plastic sheeting will be replaced if tears occur during removal of concrete wastes from the washout area.



Design Specifications:

1. Temporary concrete washout type Above Grade will be constructed as shown above, with a recommended minimum length and minimum width of 10 feet.
2. The washout will be a minimum of 50 feet from storm drain inlets.
3. Plastic lining will be free of holes, tears, or other defects that compromise the impermeability of the material.

Responsible Staff: Contractor

Appendix J
ESC & SWM Approval Letters

Appendix K
Site Plans (11” x 17” reductions)

Appendix L
Amendment Log

SWPPP Amendment Log

Instructions: Include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or the timing of the project, changes in personnel, changes in inspection and maintenance procedures, and updates to site maps, etc.

Date Changed	***Concern***	***Actions Taken***	***Completed By***	***Signature***

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Appendix D:
Non-VESCH Specifications

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1. Construction Entrance & Construction Road Stabilization

Alturnamats & Versamats

Definition
Temporary protective matting employed to provide ingress and egress throughout the construction site.

Purpose
The mats provide vehicular access while protecting the existing ground cover.

Conditions Where Practice Applies
Temporary protective mats are typically used in areas in which installing a temporary stone construction entrance/road is not feasible and/or in situations where access will be needed for a relatively short period of time.

Planning Considerations
Provisions must be made on construction sites to minimize the transport of sediment by vehicular traffic onto a paved surface per Minimum Standard #17. The use of temporary matting prevents vehicles from disturbing unpaved, grassed, and/or denuded areas. As a result, the matting reduces the amount of mud picked up by construction vehicles.

Construction Specifications
1. Install mats where temporary access is needed.
2. Join mats together using links to ensure the mats do not shift.

Matrax®
One Size Does Not Fit All.

AlturnaMATS®

ALTURNAMATS® GROUND PROTECTION MATS

The Original Ground Protection Mats Featuring Maximum Traction Diamond Plate Tread Design

These rugged mats are made of 1/2" thick polyethylene so they are virtually indestructible. They withstand vehicles weighing up to 120 tons, bend but do not break and feature a Limited Lifetime Warranty. AlturnaMATS® have been tested in record cold and heat. AlturnaMATS® are an environmentally friendly mat as they are made from recycled plastic materials.

With AlturnaMATS®, getting stuck is virtually eliminated. They are available smooth on one side or smooth on both sides, ideal for removing dirt or gravel.

ALTURNAMATS® FEATURES:

- Easily supports 120 ton vehicles
- Rugged 1/2" thick polyethylene
- Bold cleat design for great traction
- Build a roadway or working platform in minutes
- Leave turf smooth, even in soft conditions
- No more splintered, warped, water logged plywood
- Simply hosing down leaves the mats clean
- Available in black, white and clear mats
- Mats can be locked together with Turn-A-Links forming a continuous roadway
- Limited Lifetime Warranty

Diamond Plate Tread

SIZES TO SUIT YOUR NEEDS

BLACK	WHITE	APPROX. SHIP WEIGHT
4' x 8' (1.22 x 2.44m)	4' x 8' (1.22 x 2.44m)	86.00 lb. (39.00 kg.)
3' x 8' (0.91 x 2.44m)	3' x 8' (0.91 x 2.44m)	64.50 lb. (29.25 kg.)
3' x 6' (0.91 x 1.83m)	3' x 6' (0.91 x 1.83m)	51.00 lb. (23.13 kg.)
2' x 8' (0.61 x 2.44m)	2' x 8' (0.61 x 2.44m)	43.00 lb. (19.50 kg.)
2' x 6' (0.61 x 1.83m)	2' x 6' (0.61 x 1.83m)	32.25 lb. (14.62 kg.)
2' x 4' (0.61 x 1.22m)	2' x 4' (0.61 x 1.22m)	21.50 lb. (9.75 kg.)

LANDSCAPING

TREE CARE

CONSTRUCTION

CONCRETE

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From the Experts in Industrial Safety

SAFETY TECH PADS
ONE PIECE PLASTIC OUTRIGGER PADS

Delivering the safety, quality and performance you expect from the industry leader.

SAFETY TECH PADS FEATURES:

- Reliable Load Distribution
- Lightweight
- Safety Texturing
- Memory Recovery
- Lifetime Guarantee

STANDARD PADS

MODEL	LOAD VERTICAL	LOAD 45° ANGLE	WIDTH	LENGTH	HEIGHT	WEIGHT	SQUARE INCH
PAD15151.75	40,000 lb. (KG20,412)	18,000 lb. (KG9,072)	15 in. (C38.1)	15 in. (C1.905)	.75 in. (C2.54)	5.5 lb. (KG3.40)	225 (CT1,451.70)
PAD18181	55,000 lb. (KG24,948)	30,000 lb. (KG13,608)	18 in. (C45.72)	18 in. (C45.72)	1 in. (C2.54)	11 lb. (KG4.99)	324 (CT2,090.45)
PAD24241	60,000 lb. (KG27,216)	35,000 lb. (KG15,876)	24 in. (C60.96)	24 in. (C60.96)	1 in. (C2.54)	20 lb. (KG9.07)	576 (CT3,761.35)
PAD24242	62,000 lb. (KG28,123)	40,000 lb. (KG18,144)	24 in. (C60.96)	24 in. (C60.96)	2 in. (C5.08)	38 lb. (KG17.24)	576 (CT3,761.35)
PAD30301	81,000 lb. (KG36,741)	41,000 lb. (KG18,597.6)	30 in. (C76.2)	30 in. (C76.2)	1 in. (C2.54)	31 lb. (KG14.06)	900 (CT5,806.8)
PAD36361	93,000 lb. (KG42,184.8)	43,000 lb. (KG19,504.8)	36 in. (C91.44)	36 in. (C91.44)	1 in. (C2.54)	45 lb. (KG20.41)	1296 (CT8,361.79)
PAD48481	135,000 lb. (KG61,236)	52,000 lb. (KG23,587.2)	48 in. (C121.92)	48 in. (C121.92)	1 in. (C2.54)	80 lb. (KG36.29)	2304 (CT14,865.4)
PAD30302	85,000 lb. (KG38,556)	43,000 lb. (KG19,504.8)	30 in. (C76.2)	30 in. (C76.2)	2 in. (C5.08)	62 lb. (KG28.12)	900 (CT5,806.8)
PAD36362	98,000 lb. (KG44,252.8)	45,000 lb. (KG20,412)	36 in. (C91.44)	36 in. (C91.44)	2 in. (C5.08)	90 lb. (KG40.83)	1296 (CT8,361.79)
PAD48482	140,000 lb. (KG63,504)	55,000 lb. (KG24,948)	48 in. (C121.92)	48 in. (C121.92)	2 in. (C5.08)	160.0 lb. (KG72.58)	2304 (CT14,865.4)

*8"x10" Outrigger Leg applied under two separate conditions: 10,000# vertically and 10,000# with a 45 degree angle.
**TuffGrip Handle located on width side of all pads. Pads 900 sq.in. or larger have two or more handles or more handles opposite each other.
Custom size pads available. Requires a minimum order. Lead time for non-stock items is 30-45 days.
KEY: C = Centimeters; KG = Kilograms; CT = Square Centimeters

Safety Texture

MANUF. HOUSING

REC AREAS/EVENTS

TRENCHING

SEPTIC PUMPING

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One Size Does Not Fit All.

AlturnaMATS® & VersaMATS®

AlturnaMATS® & VersaMATS® each leave turf smooth, even under heavy vehicle traffic. No costly turf repair bills and you'll Never Get Stuck Again.

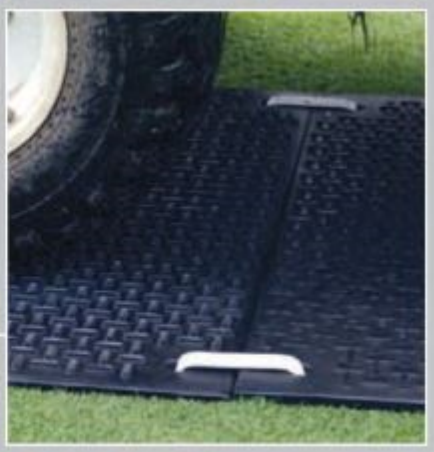
ADVANTAGES:

- AlturnaMATS: Featuring a bold diamond plate tread for maximum traction.
- VersaMATS: Featuring a flat, slip-resistant tread on one side designed for pedestrian traffic, and the bold diamond plate tread on the other side for vehicle traffic.
- Limited Lifetime Warranty

These mats virtually eliminate damage to lawns and landscaped areas throughout the world... from North America, Asia, Australia, Europe, to even Antarctica. These rugged mats are the popular choice among professionals. They are easy to use. Lock into place to form a continuous, solid roadway or work platform and they last for years. They are unequalled for quality and performance under the most hazardous conditions.

Each mat can be used in a broad variety of applications such as construction, golf courses, utilities, landscaping, tree care, cemeteries, drilling, sewage...wherever saving the costs of ground restoration is a factor. And they are great to save heavy vehicles from getting stuck in mud.

AlturnaMATS and VersaMATS provide locking links designed of steel to fit into holes on each end of the mats, locking them end-to-end to create a continuous roadway, or you can easily create a large platform for working vehicles.



**EASY TO WALK ON... SAFE TO WORK ON...
GREAT TO DRIVE ON PLUS...
PERFECT FOR STORING MATERIALS
ON WORK SITE AND OUT OF THE MUD**

DON'T GET STUCK IN A RUT!

Now there is no reason to create ruts such as shows here after a stumper traversed this front lawn. The owner had the ruts repaired at a cost of $1,800 and needless to say, never used the tree removal company again.

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ALTURNAMATS® ACCESSORIES

TURN-A-LINKS

Steel links lock mats together to form a semi-permanent, yet portable, continuous roadway, walkway or working platform. The same steel material, but with a galvanized coating: easier to locate & harder to rust.

Single Turn-a-Link

Double Turn-a-Link

Galvanized Turn-A-Link: Single or Double

EZ-LINK SYSTEM

E-Z Links are a quick & convenient linking system for the AlturnaMATS® VersaMATS®. The links are available in single or double, & are suitable for pedestrian applications as well as movement of light, compact equipment (Less than 12,000 GVW) when on stable ground conditions.

Single E-Z Link

DESCRIPTION	ITEM NUMBER	SHIP WEIGHT
SINGLE ROUND LINK	RTL-S-G	8 oz.
DOUBLE ROUND LINK	RTL-D-G	20 oz.
SINGLE FLAT LINK	FTL-SG	8 oz.
DOUBLE FLAT LINK	FTL-DG	20 oz.
SINGLE EZ LINKS	EZL-S	4 oz.
DOUBLE EZ LINKS	EZL-D	6 oz.

MAT-PAK

This complete package is the handy way to transport and store your AlturnaMATS®.

Pak Consists of:

- 12 Mats (4' x 8' or 3' x 8')
- 1 Metal storage, skid rack
- 20 Single Turn-A-Links
- 2 Handi-Hooks
- 2 Ratchet Straps

MAT-PAK DIAMOND PLATE	ITEM NO.	WEIGHT
Black – 4' x 8' Package	AMCP4	1126 lbs.
Black – 3' x 8' Package	AMCP3	868 lbs.
White – 4' x 8' Package	WMCP4	1126 lbs.
White – 3' x 8' Package	WMCP3	868 lbs.
MAT-PAK VERSAMATS®	**ITEM NO.**	**WEIGHT**
Black – 4' x 8' Package	VMCP4	1126 lbs.
Black – 3' x 8' Package	VMCP3	868 lbs.
White – 4' x 8' Package	WVCP4	1126 lbs.
White – 3' x 8' Package	WVCP3	868 lbs.

HANDI-HOOKS

AlturnaMATS®' Handi-Hooks make moving mats easier, even in wet areas. Made of steel rod, painted white.

LENGTH	WEIGHT
3' (91.44cm)	2.5 lbs. (1.13kg)

Manufactured by CHECKERS® INDUSTRIAL SAFETY PRODUCTS

To view our full line of Safety Products, visit us at www.matraxinc.com or call 1-855-575-7512.

MADE IN THE USA

Maintenance/Inspections

The matting shall be maintained in a condition which will prevent tracking or flow of mud onto public rights-of-way. All materials spilled, dropped, washed, or tracked from vehicles onto roadways or into storm drains must be removed immediately. Inspect the matting to ensure adjoining pieces do not separate. The use of water trucks to remove materials dropped, washed, or tracked onto roadways is not be permitted under any circumstances. If matting begins to separate, adjust or align the entrance/road as necessary.

2. Dewatering

Dandy Dewatering Bag

Definition and Purpose
A temporary settling and filtering device for water which is discharged from dewatering activities.

Purpose
To filter sediment-laden water prior to the water being discharged off-site.

Considerations Where Practice Applies
Wherever sediment-laden water must be removed from a construction site by means of pumping.

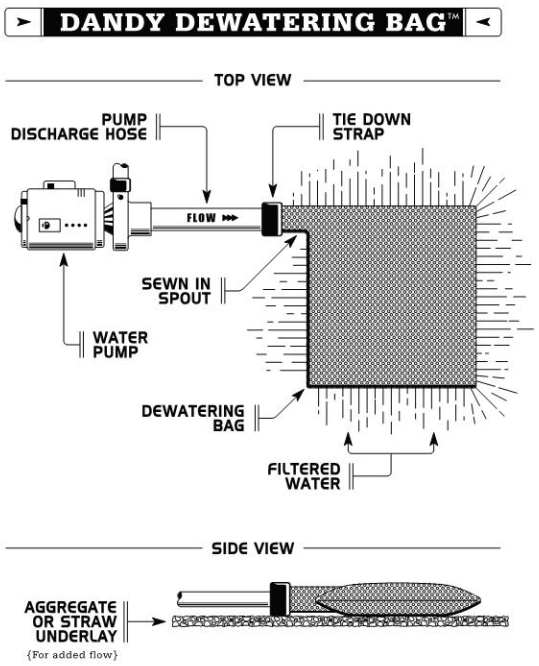
Planning Considerations
Water which is pumped from a construction site usually contains a large amount of sediment. A dewatering structure is designed to remove the sediment before water is released off-site.

A dewatering structure may not be needed if there is a well stabilized, vegetated area on-site to which water may be discharged. The area must be stabilized so that it can filter sediment and at the same time withstand the velocity of the discharged water without eroding. A minimum filtering length of 75 feet must be available in order for such a method to be feasible.

Design Criteria
The dewatering bag must be sized (and operated) to allow pumped water to flow through at an appropriate rate.

Construction Specifications

1. Place lifting straps under the unit to facilitate removal after use.
2. Unfold Dewatering Bag on stabilized area over dense vegetation, straw, or gravel (if an increased drainage area is needed).
3. Insert discharge hose from pump into Dandy Dewatering Bag a minimum of six (6) inches and tightly secure with attached strap to prevent water from flowing out of the unit without being filtered.



Maintenance/Inspections

1. Replace the unit when it is half full of sediment or when the flow rate of the pump discharge has been reduced to an impractical rate.
2. The accumulated sediment which is removed from a dewatering device must be spread on-site and stabilized or disposed of at an approved disposal site as per approved plan.
3. If using optional oil absorbents, remove and replace absorbent pillow when it nears saturation.

3. Inlet Protection

Dandy Bag, Curb, Curb Bag, Curb Sack, and Sack

Definition
A sediment filter around a storm drain drop inlet or curb inlet.

Purpose
To prevent sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area.

Conditions Where Practice Applies
Where storm drain inlets are to be made operational before permanent stabilization of the corresponding disturbed drainage areas.

Planning Considerations
Storm sewers which are made operational prior to stabilization of the associated drainage areas can convey large amounts of sediment to natural drainageways. In cases of extreme sediment loading, the storm sewer itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

This practice contains several types of inlet filters and traps which have different applications dependent upon site conditions and type of inlet. The following inlet protection devices are for drainage areas of one acre or less.

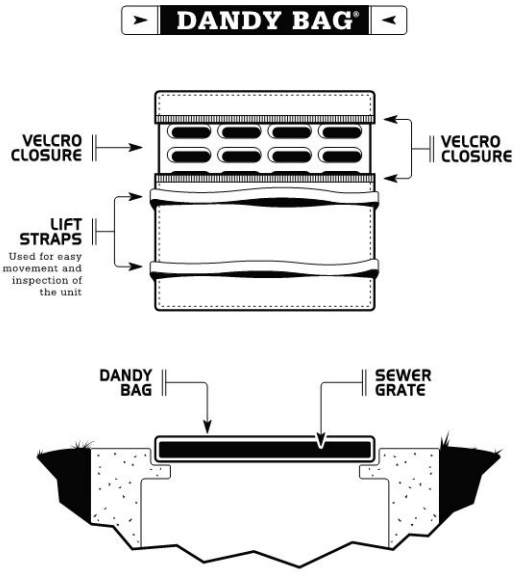
Design Criteria

1. Drainage area shall be no greater than 1 acre.
2. The inlet protection device shall be constructed in a manner that will facilitate clean-out and disposal of trapped sediment and minimize interference with construction activities.
3. The inlet protection measure shall be appropriately sized to prevent stormwater from unintentionally bypassing the protection measure.

Construction Specifications

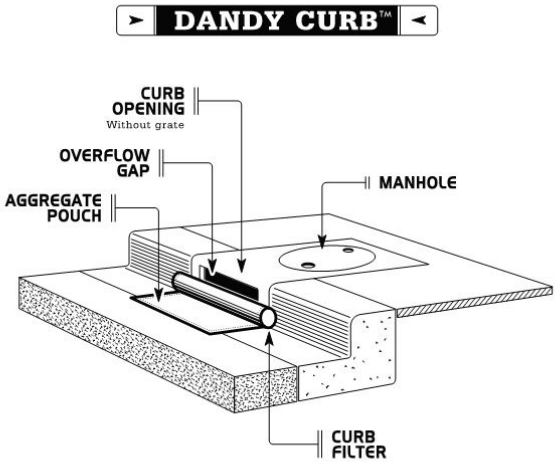
Dandy Bag

1. Place the empty Dandy Bag over the grate as the grate stands on end.
2. Tuck the enclosure flap inside to completely enclose the grate.
3. Holding the lifting devices, insert the grate into the inlet being careful not to damage the Dandy Bag unit.



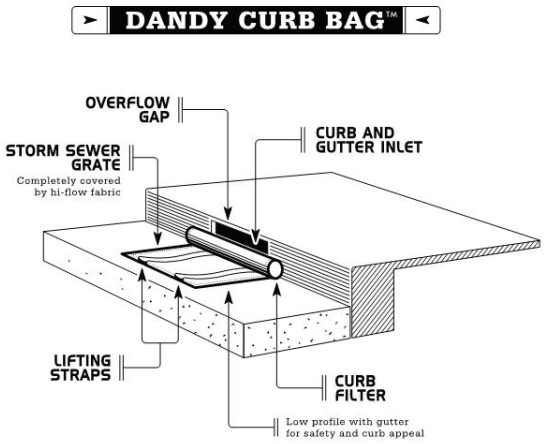
Dandy Curb

1. Place Dandy Curb inlet protection unit on ground with aggregate pouch on street side near inlet it will be installed on.
2. Fill pouch with aggregate such as #5-7, 8's or similar to a level (at least ½ full) that will keep unit in place during a rain event and create a seal between the Dandy Curb and the surface of the Street. Reseal Velcro access.
3. Center the unit against curb or median inlet opening so that the curb side of the unit creates a seal with the curb or median barrier and inlet structure. There will be approximately twelve (12) inches of inlet protection unit overhanging on each side of the opening. If the unit is not installed in this manner, it will not function properly.



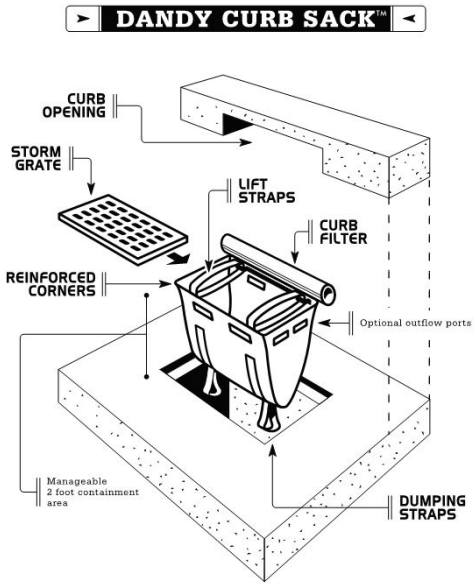
Dandy Curb Bag

1. Place the empty Dandy Curb Bag unit over the grate as the grate stands on end.
2. Tuck the enclosure flap inside to completely enclose the grate.
3. Holding the lifting devices, being careful not to damage the sewn fabric unit, insert the grate into its frame, street side edge first, then lower back edge with cylindrical tube into place. The cylindrical tube should be partially blocking the curb hold opening when installed properly.



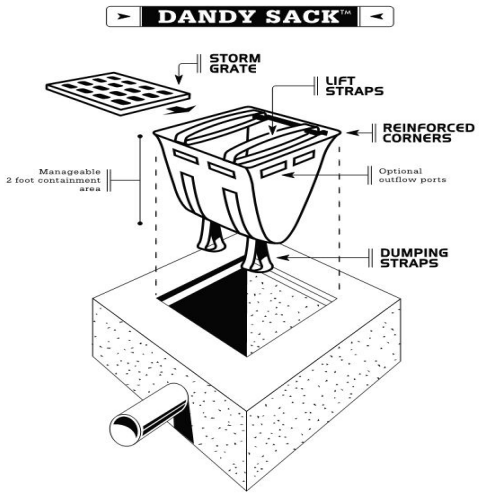
Dandy Curb Sack

1. Remove the grate from the catch basin.
2. Stand the grate on end. Move the top lifting straps out of the way and place the grate into the Dandy Curb Sack unit so that the grate is below the top straps and above the lower straps. The grate should be cradled between the upper and lower straps.
3. Holding the lifting devices, insert the grate into the inlet, then lower back edge with cylindrical tube into place, being careful that the grate remains in place and being careful not to damage the Dandy Curb Sack unit. The cylindrical tube should partially block the curb hood opening when installed properly.



Dandy Sack

1. Remove the grate from the catch basin.
2. Stand the grate on end. Move the top lifting straps out of the way and place the grate into the Dandy Sack unit so that the grate is below the top straps and above the lower straps. The grate should be cradled between the upper and lower straps.
3. Holding the lifting devices, insert the grate into the inlet, being careful that the grate remains in place and being careful not to damage the Dandy Sack unit.



Maintenance/Inspections

1. Structures shall be inspected after each runoff producing rain event and repairs shall be made as needed.
2. Sediment shall be removed as necessary. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. Replace the inlet protection measure if any rips, tears, or holes are found.

Erosion Eel and Gutter Buddy

Definition
A sediment filter around a storm drain drop inlet or curb inlet.

Purpose
To prevent sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area.

Conditions Where Practice Applies
Where storm drain inlets are to be made operational before permanent stabilization of the corresponding disturbed drainage areas.

Planning Considerations
Storm sewers which are made operational prior to stabilization of the associated drainage areas can convey large amounts of sediment to natural drainageways. In case of extreme sediment loading, the storm sewer itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

This practice contains several types of inlet filters and traps which have different applications dependent upon site conditions and type of inlet. The following inlet protection devices are for drainage areas of one acre or less.

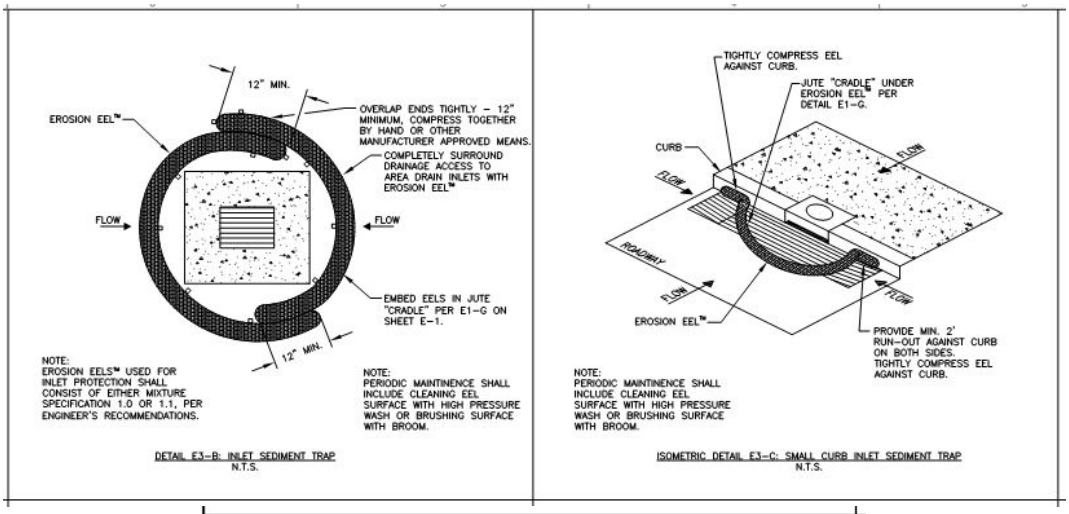
Design Criteria

1. Drainage area shall be no greater than 1 acre.
2. The inlet protection device shall be constructed in a manner that will facilitate clean-out and disposal of trapped sediment and minimize interference with construction activities.
3. The inlet protection measure shall be appropriately sized to prevent stormwater from unintentionally bypassing the protection measure.

Construction Specifications

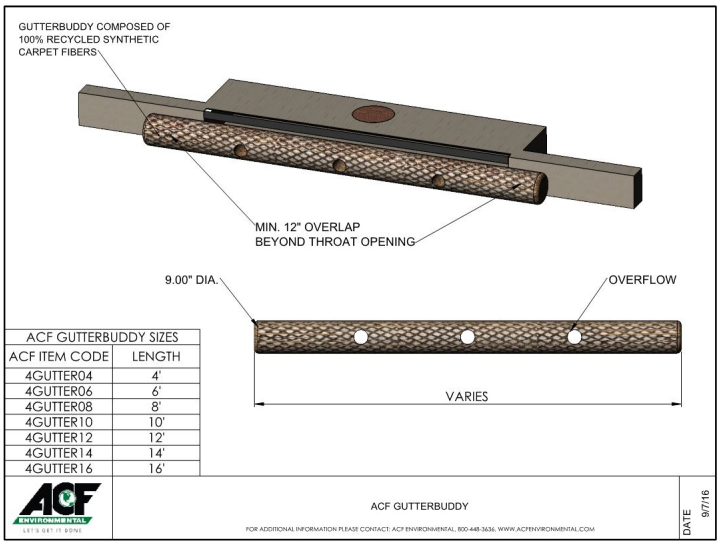
Erosion Eel

1. Place Erosion Eel at curb inlet. Bed the Eel in a jute mesh (or Flocmat) cradle.
2. If more than one Erosion Eel is placed in a row, install the Eels by firmly butting the sewn end against the tied end of the Eels together to form a butt join. No wraps are required around the joint locations.
3. Eels shall be installed where the handles will be positioned at the very top of the bag.



Gutter Buddy

1. Choose an appropriately sized Gutter Buddy and Install the measure in front of the curb inlet.
2. Ensure the Gutter Buddy overlaps a minimum of 12" beyond the throat opening.



Maintenance/Inspections

1. Structures shall be inspected after each runoff producing rain event and repairs shall be made as needed.
2. Sediment shall be removed, and the protection device restored to its original dimensions when sediment has accumulated to one half the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. Replace the inlet protection measure if any rips, tears, or holes are found.

Silt Sack

Definition
A sediment filter around a storm drain drop inlet or curb inlet.

Purpose
To prevent sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area.

Conditions Where Practice Applies
Where storm drain inlets are to be made operational before permanent stabilization of the corresponding disturbed drainage areas.

Planning Considerations
Storm sewers which are made operational prior to stabilization of the associated drainage areas can convey large amounts of sediment to natural drainageways. In case of extreme sediment loading, the storm sewer itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

This practice contains several types of inlet filters and traps which have different applications dependent upon site conditions and type of inlet. The following inlet protection devices are for drainage areas of one acre or less.

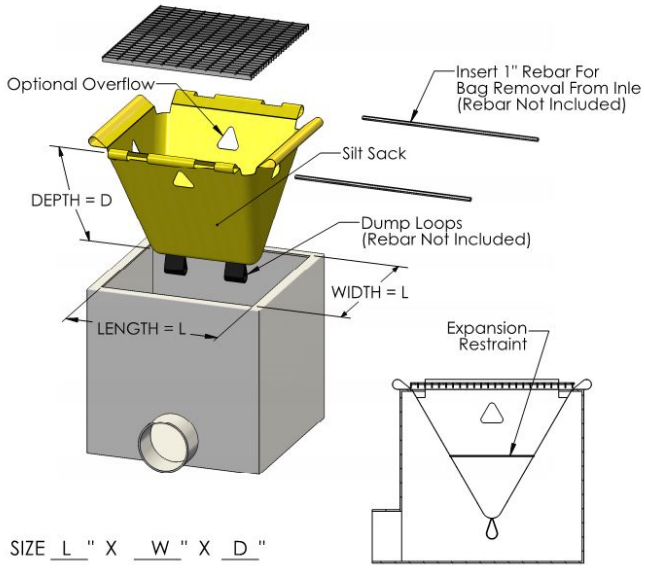
Design Criteria

1. The drainage area shall be no greater than 1 acre.
2. The inlet protection device shall be constructed in a manner that will facilitate clean-out and disposal of trapped sediment and minimize interference with construction activities.
3. The inlet protection measure shall be appropriately sized to prevent stormwater from unintentionally bypassing the protection measure.

Construction Specifications

1. Remove the grate and place the sack in the opening. Hold approximately six inches of the sack outside the frame. This is the area of the lifting straps.
2. Replace the grate to hold the sack in place.

Silt Sack - Type A



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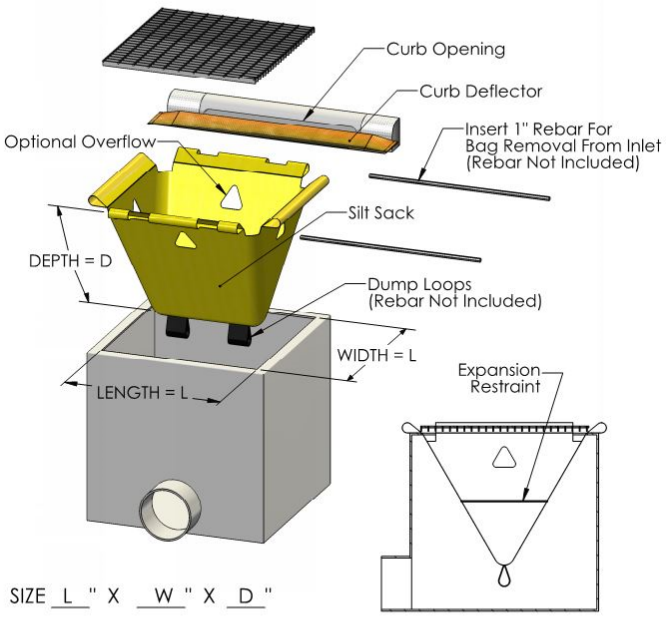
Silt Sack - Type B



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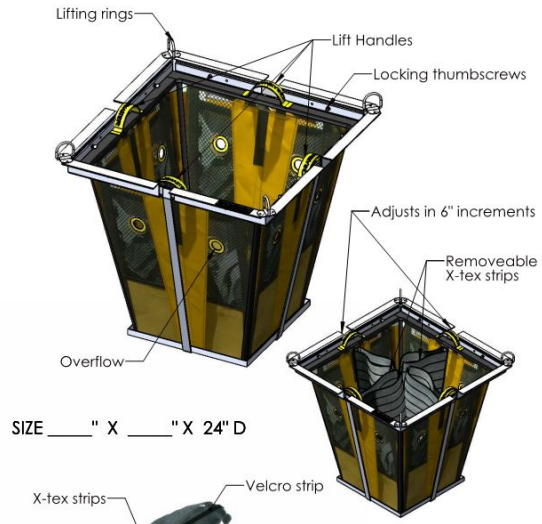
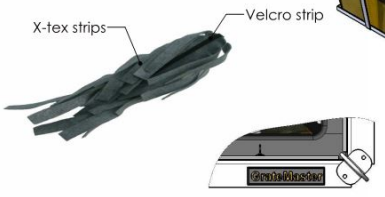
GrateMaster - Type C





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Maintenance/Inspections

1. Inlet protection shall be inspected immediately after each runoff producing rain event.
2. Check for tears, rips, or holes in sack. If noticed, have replaced immediately.
3. When the restraint cord is no longer visible, the Silt Sack is full and should be emptied.
4. To remove the Silt Sack, take two pieces of 1" diameter rebar and place through the lifting loops on each side of the sack to facilitate the lifting of the Silt Sack.
5. To empty the Silt Sack, place the unit where the contents will be collected. Place the rebar through the lift straps and lift. This will lift the bottom and empty the contents. Clean out and rinse. Return the Silt Sack to its original shape and place back in the basin.
6. Silt Sacks are reusable. Once the construction cycle is complete, remove the Silt Sack from the basin and clean. Silt Sacks should be stored out of sunlight until next use.

4. Perimeter Control

Erosion Eel

Definition
A temporary sediment barrier used to prevent sediment from leaving the site

Purpose
1. To intercept and detain small amounts of sediment from disturbed areas during construction operations in order to prevent sediment from leaving the site.
2. To decrease the velocity of sheet flows and low-to-moderate level channel flows.

Conditions Where Practice Applies
1. Below disturbed areas where erosion would occur in the form of sheet and rill erosion
2. Where the size of the drainage area is no more than one quarter acre per 100 feet of Erosion Eels length; the maximum slope behind the barrier is 100 feet; and the maximum gradient behind the barrier is 50 percent (2:1).

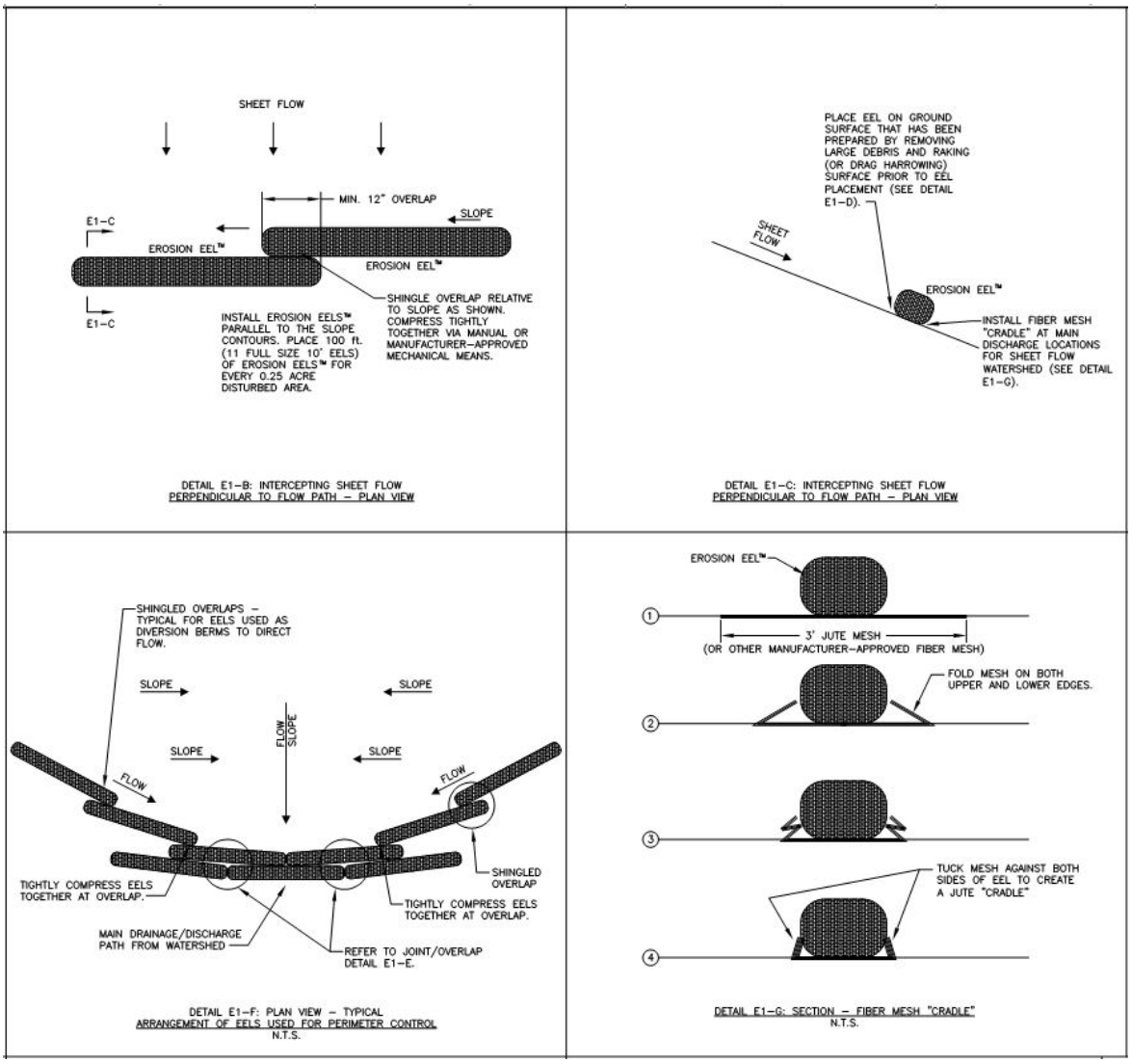
Planning and Considerations
1. Erosion Eels can be placed at the top, on the face, or at the toe of slopes to intercept runoff, reduce flow velocity, release the runoff as sheet flow, and provide reduction/removal of suspended solids from the runoff.
2. Erosion Eels shall be installed along ground contour, at the toe of slopes, at an angle to the contour to direct flow as a diversion berm, in a ditch as a check dam to help reduce suspended solids loading and retain sediment, or as a general filter for any disturbed soil area.
3. No trenching is required for installation of Erosion Eels.

Design Criteria
1. The size of the drainage area should be no more than one quarter acre per 100 feet of Erosion Eels.
2. See the spacing recommendations chart included below for slope percentages.

Construction Specifications
1. Prepare bed for Eel installation by removing any large debris including rocks, soil clods, and woody vegetation (greater that 1 inch in size). Erosion eels can also be placed over paved surfaces including concrete and asphalt with no surface preparation required.
2. Rake bed area with a hand rake or by drag harrow.
3. All surfaces shall be uniformly and well-compacted for maximum seating and stability of the Eels in place.
4. Do not place Eel directly over rills and gullies until area has been hand excavated and raked to provide a level bedding surface. Eels should sit uniformly with no bridging effects that would allow flow to bypass under the bag.
5. Bed the Eels in a jute mesh (or FlocMat) cradle.
6. If more than one Erosion Eel is placed in a row, install the Eels by firmly butting the

sewn end against the tied end of Eels together to form a butt join. No wraps are required around the joint locations.

7. Eels shall be installed where the handles will be positioned at the very top of the bag.



Spacing Recommendations for the Erosion Eel™
for Perimeter Controls and Intercepting Sheet Flow on Slopes

slope(%)	single eel spacing (ft)	*Stacked Dual eel spacing (ft)
0.5	300	N/A
1	200	N/A
2	160	N/A
3	80	N/A
4	50	N/A
5	40	N/A
6	35	N/A
8	30	N/A
10	25	N/A
15	17	N/A
20	12	25
25	7	15
33	N/A	10
50	N/A	6

* DUAL STACK REFERS TO TWO EELS STACKED ATOP ONE ANOTHER AND STABILIZED WITH T-POSTS. SEE DETAIL E2-E ON SHEET E-2.

Maintenance/Inspections

1. Structures shall be inspected after each runoff producing rain event and repairs shall be made as needed. Any required repairs shall be made immediately.
2. Sediment shall be removed when sediment and debris accumulation affects the performance of the devices. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

Appendix E:
ESC and SWM Plan Approval Letter

Environmental Health and Safety
2501 Spong Hall
Norfolk, VA 23529
Phone: 757.683.4495
dalexander@odu.edu

Douglas Alexander
Director
Department of Environmental
Health and Safety
Old Dominion University
Norfolk, VA 23529

RE: Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Plan Approval

To Whom It May Concern:

Thank you for preparing plans for ESC and SWM review. The plans submitted by _____ for the _____ project dated _____ were reviewed by an ODU representative for compliance and found to be in accordance with the Virginia Stormwater Management Act, Virginia Erosion and Sediment Control Law, attendant regulations, and ODU's approved Annual Standards and Specifications for ESC and SWM. Based upon the representative's recommendation, ODU approves the plans for ESC and SWM.

Please note that approval does not relieve the operator of complying with all other federal, state, or local laws and regulations. It is the responsibility of the operator to ensure that the project Is constructed in accordance with the approved plans and accompanying specifications.

Land-disturbing activities may commence after:

- A pre-construction meeting is held including the ODU Project Manager, the general construction permit operator, the RLD, and any other necessary parties
- If the project disturbance is over one acre, coverage under the Department of Environmental Quality (DEQ) Virginia Pollutant Discharge Elimination System (VPDES) Construction General Permit will be required. If coverage is required, confirmation of coverage shall be provided to ODU
- If applicable, all other required regulatory approval has been received

A copy of the approved ESC and SWM plans shall be kept on site and made available. No changes shall be made to the plans unless in accordance with ODU's Annual Standards and Specifications.

If you have any questions, please feel free to contact me.

Regards,

Douglas Alexander
Director
Department of Environmental
Health and Safety

Appendix F:
Annual Standards and Specifications Information Sheet

Annual Standards & Specification (AS&S) Entity Information Sheet

1. Annual Standards & Specifications Entity:		
2. AS&S Coverage Verification		
a. Operator:		
b. Project name:		
c. Estimated Area to be Disturbed (acres):		
3. Plan Approval Verification		
a. Erosion & Sediment Control (ESC) Plan:		
	i. ESC Plan Reviewer Name and Certification Number:	
	ii. ESC Plan Date:	
	iii. ESC Plan Approval Date:	
b. Stormwater Management (SWM) Plan:		
	i. Technical Criteria Used:	
	ii. SWM Plan Reviewer Name and Certification Number:	
	iii. SWM Plan Date:	
	iv. SWM Plan Approval Date:	
4. Comments:		

Printed Name:	**Title:**
Signature:	**Date:**

(Please sign in ink. This must be signed by an employee of the AS&S entity who has oversight of this project and is aware of its coverage under their AS&S.)

(Retain a copy of this form onsite and within project specific AS&S files.)

Instructions for completion:

1. AS&S Entity/Holder Name as it appears on the AS&S Approval Letter
2.a. Operator = Owner, operator, developer, person or general contractor that the AS&S holder is allowing to operate under their DEQ approved AS&S.
2.b. Project Name = Name of the construction activity as it appears on the Registration Statement.
2.c. Estimated Area to Be Disturbed = Provide the estimated area (to the nearest one-hundredth acre) to be disturbed by the construction activity. Include the estimated area of land disturbance that will occur at any off-site support activity to be covered under this general permit.
3.a. Erosion & Sediment Control (ESC) Plans **i.** = AS&S ESC plans are required to be reviewed and approved by DEQ-Certified ESC Plan Reviewers. Provide the name and certification number of the qualified individual. **ii.** = Provide the date of the ESC plan. **iii.** = Provide the date the ESC plan was approved.
3.b. Stormwater Management (SWM) Plans **i.** = The technical criteria used for this project will be either IIB or IIC per the SWM Regulations; 9VAC25-870. **ii.** = AS&S SWM plans are required to be reviewed and approved by DEQ-Certified SWM Plan Reviewers. Provide the name and certification number of the qualified individual. **iii.** = Provide the date of the SWM plan. **iv.** = Provide the date the SWM plan was approved.
4. Comments = Indicate whether the project package contains any requests (e.g. SWM plan waiver, Decline to Permit, Variance, Exception, Deviation…) DEQ is the VESCP and VSMP Authority for AS&S Entities. Approval for such requests must be issued by DEQ.

(Further questions can be directed to StandardsandSpecs@deq.virginia.gov**)**

Appendix G:
General Erosion and Sediment Control Notes

General Erosion and Sediment Control Notes

ES-1- Unless otherwise indicated, all vegetative and structural erosion and sediment control practices shall be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook and Virginia Regulations 9VAC25-840 Erosion and Sediment Control Regulations.

ES-2 – The plan approving authority (ODU Director of Environmental Health and Safety) must be notified at least one week prior to the pre-construction conference, one week prior to commencement of land disturbing activity and one week prior to final inspection. The name of the certified responsible land disturber, including their certification number and contact information must be provided to the plan approving authority prior to actual engagement in land disturbing activity.

ES-3 – All erosion and sediment control measures shall be placed prior to or as a first step in clearing.

ES-4 – A copy of the approved ESC plan shall be maintained on the site at all times.

ES-5 – Prior to commencing land disturbing activities in areas other than indicated on these plans (including, but not limited to, off-site borrow or waste areas), the contractor shall submit a supplementary erosion control plan to the ODU Director of Environmental Health and Safety or representative of the Director for review and approval.

ES-6 – Include a completed and signed ESC/SWM Plan Preparer/Reviewer Checklist.

ES-7– The contractor is responsible for installation of any additional erosion control measures necessary to prevent erosion and sedimentation as determined by the plan approving authority.

ES-8 – All disturbed areas are to drain to approved sediment control measures at all times during land disturbing activities and during site development until final stabilization is achieved, after which, upon approval of the plan approving authority, the controls shall be removed. Trapped sediment and the disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized.

ES-9 – During dewatering operations, water shall be pumped into an approved filtering device.

ES-10 –The contractor shall inspect all erosion control measures at least once in every two-week period and within 48 hours following any runoff producing storm event. The operator shall inspect in accordance with the Construction General Permit requirements when applicable. Any necessary repairs or cleanup to maintain the effectiveness of the erosion control devices shall be made immediately. The contractor shall submit evidentiaries of inspection reports to the owner or within the Stormwater Pollution Prevention Plan (SWPPP).

ES-11 – The contractor is responsible for the removal of sediment that has been transported onto paved or public roads. At a minimum, tracking shall be cleaned by the end of each work day.

ES-12 – Temporary or Permanent stabilization operations shall be initiated within 7 days after reaching final grade or upon suspension of grading operations for anticipated duration of greater than 14 days or upon completion of grading operations for a specific area.

ES-13 – The contractor shall be responsible for preventing surface and air movement of dust from exposed soils.

Appendix H:
ESC and SWM Plan Submitter's Checklist

ESC and SWM Plan Submitter's Checklist

1. General

_____ **1.1 Complete Set of Plans and Supporting Documentation**- Include all sheets pertaining to the site grading and stormwater and any activities impacting erosion and sediment control and drainage:

- □ Existing Conditions
- □ Demolition
- □ Site Grading
- □ Erosion and Sediment Control
- □ Storm sewer systems
- □ Stormwater management facilities
- □ Landscaping
- □ On-site and off-site borrow and disposal areas that do not have separate approved ESC Plans
- □ Calculations

_____ **1.2 Professional's Seal –** The designer's original seal, signature, and date are required on the cover sheet of each Narrative and each set of Plan Sheets. A facsimile is acceptable for subsequent Plan Sheets.

_____ **1.3 Number of Plan Sets –** A pdf set of ESC/SWM Plans are to be submitted.

_____ **1.4 Variances –** Variances requested at the time of plan submission are governed by Section 9VAC25-840-50 of the Virginia Erosion and Sediment Control Regulations and Old Dominion University Annual Standards and Specifications for ESC and SWM.

_____ **1.5 Completed Plan Preparer/Reviewer Checklist –** Include a completed and signed ESC/SWM Plan Preparer/Reviewer Checklist.

_____ **1.6 Plan Compliance Table –** Include a table that lists the project disturbed area, pre/post-development impervious cover, pre/post-development open space, water quality compliance method, water quantity-channel protection compliance method, and water quantity-flood protection compliance method.

2. ESC Minimum Standards

Yes	No	NA		
[]	[]	[]	MS-1	Temporary and permanent stabilization been addressed in the narrative
[]	[]	[]		Practices shown on the plan
[]	[]	[]		Temporary and permanent seed specifications
[]	[]	[]		Lime and fertilizer
[]	[]	[]		Mulching
[]	[]	[]		Blankets/Matting
[]	[]	[]		Pavement/Construction Road Stabilization
[]	[]	[]	MS-2	Stabilization of soil stockpiles, borrow areas, and disposal areas been addressed in the narrative and on the plan
[]	[]	[]		Sediment trapping measures been provided
[]	[]	[]	MS-3	Establishment and maintenance of permanent vegetative stabilization been addressed
[]	[]	[]	MS-4	Plan specifically states that sediment-trapping facilities shall be constructed as a first step in land-disturbing activities
[]	[]	[]	MS-5	Plan specifically states that stabilization of earthen structures is required immediately after installation? Is this noted for each measure on the plan?
[]	[]	[]	MS-6	Sediment traps and sediment basins specified where needed and designed to the standards and specifications
[]	[]	[]	MS-7	Design and temporary/permanent stabilization of cut and fill slopes been adequately addressed? Surface Roughening provided for slopes steeper than 3:1?
[]	[]	[]	MS-8	Adequate temporary or permanent conveyances (paved flumes, channels, slope drains) been provided for concentrated stormwater runoff on cut and fill slopes
[]	[]	[]	MS-9	Water seeping from a slope face been addressed (e.g., subsurface drains)
[]	[]	[]	MS-10	Adequate inlet protection provided for all operational storm drain and culvert inlets
[]	[]	[]	MS-11	Are adequate outlet protection and/or channel linings provided for all stormwater conveyance and receiving channels? Is there a schedule indicating:
[]	[]	[]		Dimensions of the outlet protection? Lining? Size of riprap?
[]	[]	[]		Cross section and slope of the channels? Type of lining? Size of riprap, if used?
[]	[]	[]	MS-12	In-stream protection measures required so that channel impacts are minimized
[]	[]	[]	MS-13	Temporary stream crossings of non-erodible material required where applicable
[]	[]	[]	MS-14	All applicable federal, state and local regulations pertaining to working in or crossing live watercourses being followed

[] [] [] MS-15 Immediate restabilization of areas subject to in-stream construction (bed and banks) been adequately addressed

[] [] [] MS-16 Have disturbances from underground utility line installations been addressed?

[] [] [] No more than 500 linear feet of trench open at one time
[] [] [] Effluent from dewatering filtered or passed through a sediment-trapping device
[] [] [] Proper backfill, compaction, and restabilization

[] [] [] MS-17 Transport of soil and mud onto public roadways properly controlled (i.e., Construction Entrances, wash racks, transport of sediment to a trapping facility, no washing before sweeping and shoveling)

[] [] [] MS-18 Removal of temporary practices has been addressed
Have the removal of accumulated sediment and the final stabilization of the resulting disturbed areas been addressed?

[] [] [] MS-19 Properties and waterways downstream from development adequately protected deposition, erosion, and damage due to increases in volume, velocity and peak flow rate of stormwater runoff

[] [] [] Concentrated stormwater runoff leaving the development site discharged to an man-made receiving channel, pipe or storm sewer system

[] [] [] Calculations provided to verify the adequacy of all channels and pipes

[] [] [] If existing natural receiving channels or previously constructed man-made channels or pipes are not adequate, provisions have been made to prevent downstream erosion

[] [] [] Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property-diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility

3. Narrative

_____ **3.1 Project description** – This section shall describe the nature and purpose of the land-disturbing activity.
Provide project specific information. Also include the following:

- □ Provide the area (acres to the nearest hundredth) to be disturbed. This disturbed area (limits of disturbance) shall include laydown, access and any other areas that may be disturbed during the course of the project. This area shall provide adequate space for the contractor to perform required work for excavation and grading
- □ Provide the existing impervious area and the increase, or decrease, in impervious area (acres).
- □ Estimated schedule for project. (Start/end dates, or estimated length of project in months or years)
- □ Ultimate developed condition of the site.

_____ **3.2 Existing site conditions –** This section shall provide a description of the existing topography (% slopes), ground cover, and drainage (on-site and receiving channels).

- □ Discuss any existing drainage or erosion problems and how they are to be corrected.
- □ Provide the size of drainage areas in pre-development and post-development conditions.

_____ **3.3 Adjacent areas** – This section shall provide a description of all neighboring areas such as residential developments, agricultural areas, streams, lakes, roads, etc., that may be affected by the land disturbance. Discuss any environmentally sensitive areas, including any on-site or adjacent water bodies included in the Virginia 303(d) list of impaired waters, and any possible problems during and after construction (traffic issues, dust control, increases in runoff, etc.).

_____ **3.4 Off-site areas** – This section shall describe any off-site land-disturbing activities that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with this project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.

_____ **3.5 Soils** – This section shall provide a description of the soils on the site, giving such information as soil name, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure.

- □ Indicate reference for additional soil information if not included within this section.
- □ Provide a reference to where a copy of the soil survey map can be found within the plan set or engineering report.

_____ **3.6 Critical areas** – This section shall provide a description of areas on the site that may have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., critical slopes, watercourses, wet weather / underground springs, etc.). Discuss any area(s) of the project which may become critical during the project.

_____ **3.7 Erosion and sediment control measures** – This section shall provide a description of the structural and vegetative methods that will be used to control erosion and sedimentation on the site. Controls should satisfy applicable minimum standards and specifications in Chapter 3 of the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH).

_____ **3.8 Management strategies/Sequence of construction** – This section shall address management strategies, the sequence of construction, and any phasing for the installation of ESC measures. The sequence of construction shall provide specific details concerning the construction and installation and phasing of ESC and SWM measures.

_____ **3.9 Permanent stabilization** – This section shall provide a brief description, including specifications, of how the site will be stabilized after construction is completed. List any soil testing requirements. A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion.

_____ **3.10 Maintenance of ESC measures** – This section shall provide a schedule of regular inspections, maintenance, and repair of erosion and sediment control structures should be set forth. List who will be responsible for ESC maintenance during the course of the project. VESCH control measures shall be maintained in accordance with the VESCH maintenance schedules, and non-VESCH control measures shall be maintained in accordance with the manufacturer's recommendations.

_____ **3.11 Calculations for temporary erosion and sediment control measures** – For each temporary ESC measure, provide the calculations required by the standards and specifications. All calculations showing pre-development and post-development runoff should be provided including any worksheets, assumptions, and engineering decisions.

_____ **3.12 Stormwater management** – Will the development of the site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Reference where each piece of information can be found within the plan set or engineering report.

Describe the strategy to control stormwater runoff:

- □ Provide exhibits showing the drainage divides, the direction of flow, and the size (acreage) of each of the site drainage areas that discharge runoff off-site, both existing and proposed.
- □ Provide calculations for pre- and post-development runoff from these drainage areas.
- □ Ensure that Minimum Standard 19 is satisfied for each off-site receiving channel, including those that receive runoff from stormwater management facilities.
- □ Provide calculations for the design of each permanent stormwater management facility.
- □ Ensure that increased volumes of sheet flows are diverted to a stable outlet, to an adequate channel, pipe or pipe system, or to a stormwater management facility.
- □ Provide adequacy calculations (capacity and erosion resistance) for all on-site stormwater conveyances in accordance with the next checklist item.

_____ **3.13 Calculations** – Provide the following design calculations as applicable:

- □ Drainage area map with time of concentration (TC) path shown and points of analysis with worksheets.
- □ TC calculation/nomograph
- □ Locality IDF curve
- □ Composite runoff coefficient or RCN calculation
- □ Peak runoff calculations
- □ Stormwater conveyance channel design calculations
- □ Storm drain and storm sewer system design calculations
- □ Hydraulic Grade Line if any pipe in the system is more than 90% full for a 10-year storm
- □ Culvert design calculations
- □ Drop Inlet backwater calculations
- □ Curb inlet length calculations
- □ Water quality calculations for BMPs including worksheets

_____ **3.14 Maintenance of SWM Facilities** – Provide a table with a description of requirements for maintenance of the facility and a recommended schedule for inspections and maintenance.

_____ **3.15 Water Quality** – Is the plan in compliance with 9VAC25-870-63 water quality criteria requirements for new development and development on prior developed land?

_____ **3.16 Water Quantity** – Is the plan (including prescribed calculations) in compliance with 9VAC25-870-66 water quantity criteria requirements?

_____ **3.17 General Construction Permit** – Ensure that the stormwater management criteria outlined in the general construction permit (9VAC25-880) are met as well as, the elements presented in 9VAC25-870-55.

_____ **3.18 BMP Calculations** - Provide supporting calculations for each best management practice with a checklist; include a completed Design and Plan Review Checklist from Appendix 3 of the Virginia Stormwater Management Handbook. The Virginia Runoff Reduction Method or an equivalent method approved by the board (9VAC25-870-65) shall be used to determine water quality criteria.

_____ **3.19 Specifications for Stormwater and Stormwater Management Structures** – Provide specifications for stormwater and stormwater management structures, i.e., pipe materials, pipe bedding, and stormwater structures.

_____ **3.20 Page Numbers** – Number the pages of the Narrative and the Calculations.

_____ **3.21 General Information** – Narrative contains project specific information, and where appropriate general information has been modified to represent the project specific information and situation.

4. Site Plan

_____ **4.1 Owner Contact Information** – On the cover sheet, provide name, address, telephone number and email of the owner representative/project manager.

_____ **4.2 Vicinity Map** – A small map locating the site in relation to the surrounding area. Include any landmarks.

_____ **4.3 Indicate North** – The direction of north in relation to the site.

_____ **4.4 Limits of Disturbance** – Areas which are to be cleared and graded and areas to be protected during construction. This disturbed area shall include laydown, access and any other areas that may be disturbed during the course of the project. Provide notes on how areas will be marked and for areas NOT to be disturbed.

_____ **4.5 Existing Contours** – The existing contours of the site shall be shown as dashed light lines and elevation labeled adequately.

_____ **4.6 Final Contours and Elevations** – Changes to the existing contours, including final drainage patterns. Note the finished floor elevation (FFE) of all buildings on site, including basements. Proposed contour lines shall be solid and bolder than existing contour lines and the elevations labeled.

_____ **4.7 Profile of Storm Drain System** – Proposed storm drainage components shall be provided in a profile. Pipe diameter, material, inverts, stationing, percent slope, proposed and existing grade, etc. shall be included as part of the profile.

_____ **4.8 Existing Vegetation** – The existing tree lines, grassed areas, or unique vegetation.

_____ **4.9 Soils Map** – The boundaries of different soil types, K factor and soil survey classifications.

_____ **4.10 Existing Drainage Patterns** – The dividing lines and the direction of flow for the different drainage areas. Include the size (acres) of each drainage area.

_____ **4.11 Proposed Drainage Patterns** – The dividing lines and the direction of flow for the different drainage areas. Include the size (acres) of each drainage area.

_____ **4.12 Critical Areas** – Note all areas with potentially serious erosion problems.

_____ **4.13 Site Development** – Show all improvements such as buildings, parking lots, access roads, utility construction, etc.

_____ **4.14 Landscape Plan** – Include a plan showing location and plant selection for landscaped areas.

_____ **4.15 Location of Practices** – Show locations of ESC and SWM practices to be used on the site. Use standard symbols and abbreviations from ESC and SWM handbooks. A legend denoting symbols, line uses and other special characters shall be provided.

_____ **4.16 Offsite Areas** – Include any off-site land-disturbing activities (e.g., borrow sites, disposal areas, etc.) not covered by a separate approved ESC Plan. Discuss who has final authority for off-site areas and who will be responsible for stabilization.

_____ **4.17 Detail Drawings** – Show detail drawings of all SWM and ESC practices to be implemented. Any structural practices used that are not referenced to the ESC handbook or local handbooks should be explained and illustrated with detail drawings. Details should be provided which are clearly dimensioned and reflect the ability to be "built" in the field according to proper design criteria. Alternative ESC/SWM measures must have proper drawings to indicate how and where they are to be constructed.

_____ **4.18 Erosion and Sediment Control Notes** – At a minimum, include the erosion and sediment control notes found in Appendix G. Ensure that all applicable Minimum Standards not covered elsewhere in the plan have been addressed. Ensure that the requirements of Part II.A.2 of the General Construction Permit (9VAC25-880) are addressed.

_____ **4.19 Minimum Standards** – Minimum Standard 1 through Minimum Standard 19 shall be included in the plan set.

_____ **4.20 Legend** – Provide a complete listing of all ESC and SWM measures to be used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.

_____ **4.21 Property Lines and Easements** – Show all property and easement lines. For each adjacent property, list the deed book and page number and the property owner's name and address.

Project Name: _____

Plan Preparer's Signature: _____ **Date:** _____

Appendix I:
Delegation of Authority

Old Dominion University

Delegation of Authority Form

I, _____ (name), hereby designate the person(s) listed below to serve as a representative of Old Dominion University in the capacity of _____.

Program Administrator Signature _____ Date _____

_____ Name of Person/Position

_____

_____ DEQ Certification

_____ Company Name

_____ Address

_____

_____ Phone Number

With my signature, I confirm that I satisfy the requirements and definition of _____ as detailed in the Old Dominion University Annual Standards and Specifications.

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

Signature _____ Date _____

Name _____