# **APPENDIX O**

DCR Approval /Conditional Approval letter

VDOT Annual ESC & SWM Standards and Specification table



## COMMONWEALTH of VIRGINIA

#### DEPARTMENT OF CONSERVATION AND RECREATION

203 Governor Street
Richmond, Virginia 23219-2010
(804) 786-1712

June 3, 2011

Mr. Roy T. Mills State Stormwater Program Administrator Virginia Department of Transportation 1401 East Broad Street Richmond, Virginia 23219

Subject: 2010 VDOT Annual Standards and Specifications for Erosion and Sediment Control and

Stormwater Management

Dear Mr. Mills:

In accordance with §10.1-564 of the Virginia Erosion and Sediment Control Law and §10.1-603.5 of the Virginia Stormwater Management Law, the Department of Conservation and Recreation (DCR) has completed the review of the 2010 VDOT Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management and they are conditionally approved. The conditional approval is based on DCR staff review and recommendations. The approval contains the following conditions:

- 1. All regulated land disturbing activities undertaken by VDOT shall comply with the minimum engineering, plan preparation and implementation guidance for post development stormwater management plans as specified in Instructional and Informational Memorandum IMM-LD-195.7. The method of achieving compliance with water quality requirements, utilizing the definition of "impervious area" found in this Memorandum is acceptable until December 31, 2012. This extended approval date allows for DCR and VDOT to conduct a cooperative effort to further evaluate best management practices to allow projects to meet the water quality and quantity requirements of the revised stormwater management regulations.
- 2. Section 5.4.4.2 of IMM-LD-195.7 shall be revised to reflect the following: The water quality volume for any required BMP shall be based on the total post development impervious area draining to the BMP. In areas where VDOT cannot prevent runoff from off-site impervious areas from entering the BMP, a variance may be sought for the design of the BMP.
- 3. The column entitled "Applicable Percent Impervious Cover of Site" of Table 1 in IMM-LD-195.7 should be revised to "Applicable Percent Impervious Cover of the Regulated Site".

- 4. VDOT will complete a literature review of the pollutant removal efficiency of grass shoulders and waterways associated with completed transportation projects and develop a draft report by September 1, 2011.
- 5. Section 5.4.7 of IMM-LD-195.7 change "Offsets" to "Offsite".
- 6. The text contained in Items 1, 2, and 3 at the top of Sheet 3 of IIM-LD-242.3 should be clarified in the next submission of the annual standards and specifications.
- 7. All VDOT land-disturbing activity requiring a stormwater management plan or General Permit for Discharges of Stormwater from Construction Activities will need to meet the requirements of the Virginia Stormwater Management Program (VSMP) Permit Regulations.
- 8. All regulated land disturbing activities undertaken by VDOT on private and publicly owned lands in Virginia must be conducted in accordance with the approved 2010 VDOT Annual Standard and Specifications. Individual project-specific erosion and sediment control and stormwater management plans must be prepared to ensure proper on site implementation of erosion and sediment control and stormwater management measures. However, these plans need not be submitted to DCR for approval as long as they comply with the approved 2010 VDOT Annual Standard and Specifications.

To ensure compliance with approved standards and specifications, the Virginia Erosion and Sediment Control Law, and the Stormwater Management Law, staff in DCR regional and central offices will conduct random site inspections, respond to complaints, and provide on site technical assistance with specific erosion and sediment control and stormwater management measures and plan implementation.

Thank you very much for your submission and continued efforts to conserve and protect Virginia's precious natural resources.

Sincerely,

J**ep** Wilkinson

Chief Deputy Director

cc:

Doug Fritz, DCR John McCutcheon, DCR Stephen D. Kindy, VDOT

JW/jm



DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, VIRGINIA 23219 2000

Gregory A. Whirley Commissioner

July 22, 2011

Mr. Jeb Wilkinson Chief Deputy Director Department of Conservation and Recreation 203 Governor Street Richmond Virginia, 23219

Subject: 2010 Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management

Dear Mr. Wilkinson:

Thank you for your letter dated June 3, 2011 providing conditional approval of VDOT's 2010 Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management. Except for item number 2 in your letter, we are in general agreement with all of the conditions noted. The requested changes to VDOT guidance documents are generally minor will be made at the earliest convenience.

With regards to item number 2, you have requested that our guidance be changed to reflect that the water quality volume of any required BMP be based on the total post development impervious area draining to the BMP (i.e., both onsite and offsite).

Our current guidance states that the water quality volume is to be based on the total impervious area from within the <u>site</u> (i.e., right of way) draining to the BMP. This language was based on discussions held between DCR Director Mr. David Johnson and members of his staff and VDOT Commissioner Mr. Gregory Whirley and members of his staff on August 10, 2010 and was reflected in the meeting notes taken by both myself and Mr. Lee Hill (formerly) of your office. Additionally, I have been unable to find any regulatory language that would require impervious area other than that within the site to be considered in the water quality volume for any required BMP.

Mr. Jeb Wilkinson July 22, 2011 Page 2

Certainly eliminating offsite stormwater runoff from entering our BMPs would resolve this issue. However, while we typically try to do this as much as practicable, it is often not feasible or possible given the nature of linear development. To separate the offsite and onsite stormwater runoff would often require dual drainage systems (open ditches or storm drains), one for the onsite runoff and one for the offsite runoff, with each potentially running for long distances.

Mr. Doug Fritz, of your office, and I have discussed the water quality volume issue to some length. Those discussions are continuing in the hope that we can come to some mutual understanding on this issue. Once a final resolution is reached, we will make any necessary adjustments to our guidance documents to reflect the outcome of those discussions.

Again, thank you for the conditional approval of VDOT's 2010 Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management. We appreciate the efforts of you and your staff in helping us to resolve any issues with our Stormwater Program and in helping to make it stronger in providing for the protection of our natural water resources. We look forward to a continuing relationship and open dialogue between our staffs.

Sincerely,

Roy T. Mills

Roy J. Mil

State Stormwater Program Administrator

Cc:

Mr. Doug Fritz (DCR)

Mr. John McCutcheon (DCR)

Mr. Charlie A. Kilpatrick, P.E. (VDOT)

Mr. Malcolm T. Kerley, P.E. (VDOT)

Mr. Mohammad Mirshahi, P.E. (VDOT)

Mr. John Olenik (VDOT)

VDOT Annual Submittal Appendix	VDOT Document	VDOT Document Sections	Current Date	Previously Approved Items	New/Updated 2012 Items	Notes:
Appendix F	ESC & SWM Plan Development / Implementation Process	ESC/SWM/VSMP Requirements Flowchart	August 15, 2006			
Appendix F	ESC & SWM I&IM	IIM-LD-11.26	March 19, 2010			SWM / E&S program note modified
Appendix F	ESC & SWM I&IM	IIM-LD-73.5	July 9, 2008	$\boxtimes$		
Appendix F	ESC & SWM I&IM	IIM-LD-110.21	March 19, 2010			General note sheet revised
Appendix F	ESC & SWM I&IM	IIM-LD-122.13	April 27, 2009			
Appendix F	ESC & SWM I&IM	IIM-LD-166.4	December 1, 2005			
Appendix F	ESC & SWM I&IM	IIM-LD-195.7	September 8 2010			Post Development SWM modified
Appendix F	ESC & SWM I&IM	IIM-LD-214.2	July 27, 2006	$\boxtimes$		
Appendix F	ESC & SWM I&IM	IIM-LD-228.1	September 12, 2008	$\boxtimes$		
Appendix F	ESC & SWM I&IM	IIM-LD-242.3	March 19, 2010			VA SWM program note modified
Appendix F	ESC & SWM I&IM	IIM-LD-245	December 28, 2011			The information contained in IIM 245 regarding the SWM components to Rural Rustic Road program is now contained in the recently published Rural Rustic Road Manual pages of 7-8 of 23.
Appendix F	ESC & SWM I&IM	IIM-LD-246.2	March 19, 2010			SWPPP note modified
Appendix F	Hydraulic Design Advisory	HDA 05-03 NOAA Atlas 14	September 25, 2006	$\boxtimes$		
Appendix F	Hydraulic Design Advisory	HDA 05-04.3 TR-55 & TR-20	August 27, 2008	$\boxtimes$		
Appendix F	Hydraulic Design Advisory	HDA 06-03.1 Culvert Outlet Protection	September 1, 2007	$\boxtimes$		

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Appendix F	Hydraulic Design Advisory	HDA 06-05 ESC Plans	November 16, 2006	$\boxtimes$		
Appendix F	Hydraulic Design Advisory	HDA 07-01.2 SWM Plans	February 20, 2009	$\boxtimes$		
Appendix F	Hydraulic Design Advisory	HDA 08-02	February 4, 2008			
Appendix F	Hydraulic Design Advisory	HDA 09-01	February 20, 2009	$\boxtimes$		
Appendix F	Road Design Manual	Section A-7	7/09			
Appendix H	Road & Bridge Standards	EC-1	2007			
Appendix H	Road & Bridge Standards	EC-2	2001	$\boxtimes$		
Appendix H	Road & Bridge Standards	EC-3	2007			
Appendix H	Road & Bridge Standards	EC-4	2001			
Appendix H	Road & Bridge Standards	EC-5	2006			
Appendix H	Road & Bridge Standards	EC-6	2003			
Appendix H	Road & Bridge Standards	EC-7	2001			
Appendix H	Road & Bridge Standards	EC-8	2001			
Appendix H	Road & Bridge Standards	EC-9	2001			
Appendix H	Road & Bridge Standards	EC-10	2008			
Appendix H	Road & Bridge Standards	EC-11	2008			
Appendix H	Road & Bridge Standards	EC-12	2008			
Appendix H	Road & Bridge Standards	EC-13	2008			
Appendix H	Road & Bridge Standards	EC-14	2008			
Appendix H	Road & Bridge Standards	L-3	2008			

VDOT Annual Submittal Appendix	VDOT Document	VDOT Document Sections	Current Date	Previously Approved Items	New/Updated 2012 Items	Notes:
Appendix H	Road & Bridge Standards	L-3A	2008			
Appendix H	Road & Bridge Standards	Roadside Development Sheet A4	2003	$\boxtimes$		
Appendix H	Road & Bridge Standards	EC Summary A5	2002			
Appendix H	Road & Bridge Standards	Temp. Sediment Trap A6	2002			
Appendix H	Road & Bridge Standards	Sink Hole Detail ISD2944	2002			
Appendix H	Road & Bridge Standards	ESC-INC Sheet 1	2004			
Appendix H	Road & Bridge Standards	ESC-INC Sheet 2	2004			
Appendix H	Road & Bridge Standards	ESC-INC Sheet 3	2004			
Appendix H	Road & Bridge Standards	PG-2A	2004			
Appendix H	Road & Bridge Standards	PG-3	2003			
Appendix H	Road & Bridge Standards	PG-5	2001			
Appendix H	Road & Bridge Standards	SWM-1 cast in place	2003			
Appendix H	Road & Bridge Standards	SWM-1 precast	2003			
Appendix H	Road & Bridge Standards	SWM-1 gate details	2008			
Appendix H	Road & Bridge Standards	SWM-DR-Sheet 1	2003			
Appendix H	Road & Bridge Standards	SWM-DR-Sheet 2	2003			
Appendix H	Road & Bridge Standards	SWM-DR-Sheet 3	2003			
Appendix H	Road & Bridge Standards	SWM-DR-Sheet 4	2003			
Appendix H	Road & Bridge Standards	SWM-DR-Sheet 5	2003			

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Appendix H	Road & Bridge Standards	SWPPP sheet 1	2003			
Appendix H	Road & Bridge Standards	SWPPP sheet 2	2003			
Appendix H	Road & Bridge Standards	SWPPP sheet 3	2003			
Appendix I	Road & Bridge Specifications Division I	Section 101 Definitions	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 103 Awards and Execution	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 104 Scope of Work	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 105 Control of Work	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 106 Control of Material	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 107 Legal Relations & Public Responsibilities	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division I	Section 108 Prosecution & Progress of Work	2007			
Appendix I	Road & Bridge Specifications Division II	Section 203 Course Aggregate	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division II	Section 204 Stone for Masonry, Riprap, Porus Backfill and Gabions	2007			
Appendix I	Road & Bridge Specifications Division II	Section 239 Sodium Chloride-Calcium Chloride	2007			
Appendix I	Road & Bridge Specifications Division II	Section 240 Lime	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division II	Section 242 Fences	2007	$\boxtimes$		

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Appendix I	Road & Bridge Specifications Division II	Section 244 Roadside Development Materials	2007			
Appendix I	Road & Bridge Specifications Division II	Section 245 Geosynthetics	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division II	Section 248 Stone Matrix Asphalt	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division III	Section 301 Clearing & Grubbing	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division III	Section 302 Drainage Structures	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division III	Section 303 Earthwork	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division IV	Section 401 Structural Excavation	2007			
Appendix I	Road & Bridge Specifications Division IV	Section 402 Sheet Piles	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division IV	Section 411 Protective Coating of Metal in Structures	2007			
Appendix I	Road & Bridge Specifications Division IV	Section 413 Dismantling & Removing Structures	2007			
Appendix I	Road & Bridge Specifications Division IV	Section 414 Riprap	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division IV	Section 415 Concrete Slope Protection	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division IV	Section 418 Timber Structures	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division V	Section 501 Underdrains	2007	$\boxtimes$		

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Appendix I	Road & Bridge Specifications Division V	Section 506 Retaining Walls	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division V	Section 511 Allaying Dust	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division V	Section 520 Water & Sanitary Sewer Facilities	2007			
Appendix I	Road & Bridge Specifications Division VI	Section 602 Topsoil	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division VI	Section 603 Seeding	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division V	Section 604 Sodding	2007	$\boxtimes$		
Appendix I	Road & Bridge Specifications Division V	Section 605 Planting	2007			
Appendix I	Road & Bridge Specifications Division V	Section 606 Soil Retention Coverings	2007			
Appendix I	Road & Bridge Specifications Division V	Section 607 Herbicide Spraying	2007			
Appendix I	Road & Bridge Specifications Division V	Section 608 Mowing	2007			
Appendix I	Road & Bridge Specifications Division V	Section 609 Tree Wells & Tree Walls	2007			
Appendix I	Road & Bridge Specifications Division V	Section 610 Gabions	2007			
Appendix J	Erosion and Sediment Control Inspection Forms, Related Construction Forms & Memoranda	C-5,C-10, C-12, C-18a, C-26, C-36, C36i,C-368, C-45, C- 83, C-84, C-107 5 of 5, C- 107.16 CD-2002-9, LD- 433,LD-445, LD-445A, LD- 445B, LD-445C, LD-445D, LD-445E	Varies			C-107.16 (a) modified to comply with DCR requirements

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Appendix K	VDOT Stormwater Management Maintenance Program	Environmental Policy for Maintenance of Ditches and Shoulders, Property Owner Agreement-Disposal Site, Disposal Area-DEQ MOA				Added – revised BMP Filtration, Infiltration, Manufactured, Miscellaneous and inspection sheets. Added - Solid Waste, Disposal Areas MOA Centralized Burning of Vegetative Debris Revised - Maintenance Activity Disposal Ares Process and Property Owner Agreement
Appendix K	VDOT Stormwater Management Maintenance Program	Hampton Roads District SWM Basins Inventory and Inspection Manual	2011	$\boxtimes$		This document is being used as a prototype to develop a new statewide VDOT SWM Maintenance Program Manual. It is currently used in all 9 VDOT construction districts.
Appendix L	Environmental Monitoring Program Environmental Compliance Report	VDOT Environmental Monitoring Program	2009			Environmental Compliance Report was modified. The project report and documentation is now the responsibility of the project inspection

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Appendix M	Modifications to Specifications	c100c00-0708 c105ag0-0708 c106fn0-0708 c302h00-0708 S100F100-0708 S107F00-0708 S107G01-0309 S108M00-0808 S303-DP0-0708 S303J00-0708 S303K00-0909 S302H01-0909 SS30302-0909 SS1D006-0909 SS30303	Varies			c106fn0-0708 revised to c106fpo- 0609  S100F100-0708 now included in SS1D012  S107F00-0708 now included in SS1D012  S303K00 revised to SS30305-0911  SS30302 revised to SS30305-0911  SS1D006 revised to SS1D012-0911  SS30303 revised to SS30305-0911
Appendix N	VDOT contact list		2012			This document was revised to follow changes in VDOT staff and closing of numerous residencies
Appendix Q	NMP	Nutrient Management Plan, S107F1C-0108, S107G0B1- 0108	2007			Documents to be completed in the 2011 Calendar year
				<b>5</b>	<b>5</b>	
See Web Site	VDOT Drainage Manual	Chapter 6	2002		$\boxtimes$	
See Web Site	VDOT Drainage Manual	Chapter 7	2002		$\boxtimes$	
See Web Site	VDOT Drainage Manual	Chapter 8	2002		$\boxtimes$	
See Web Site	VDOT Drainage Manual	Chapter 9	2002		$\boxtimes$	
See Web Site	VDOT Drainage Manual	Chapter 10	2002			
See Web Site	VDOT Drainage Manual	Chapter 11	2003			