

## **APPENDIX O**

### **DCR Approvals/Conditional Approvals**



**COMMONWEALTH of VIRGINIA**  
**DEPARTMENT OF CONSERVATION AND RECREATION**

203 Governor Street, Suite 206  
Richmond, Virginia 23219  
Phone: (804) 786-2064 Fax: (804) 786-1798

June 9, 2006

Mr. Roy T. Mills  
State Hydraulic Engineer  
Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219

Subject: 2006 VDOT Annual Specifications and Standards for Erosion and Sediment Control  
and Stormwater Management

Dear Mr. Mills:

In accordance with § 10.1-564 of the Virginia ESC Law and § 10.1-603.5 of the Virginia SWM Law, the Department of Conservation and Recreation (DCR) has completed the review of the 2006 VDOT Annual Standard 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. The proposed standard details and procedures for culvert outlet protections will be implemented into all plans developed after December 10, 2006 provided there will be no impacts to the right of way previously acquired or authorized for acquisition and there will be no impacts to previously acquired water quality permits. Once actual field implementation occurs, VDOT will visually monitor and document the implementation and performance of the proposed outlet protection policy with digital photographs of the outlet conditions at 5 outlets per VDOT District. VDOT will submit monitoring reports with digital photographs of the outlets at installation and at six-month intervals for a two-year period to the Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.
2. Eliminate the specification and use of Silt Fence for concentrated flows greater than 1 c. f. s. All plans developed after December 10, 2006 will reflect this limitation in concentrated flow areas.

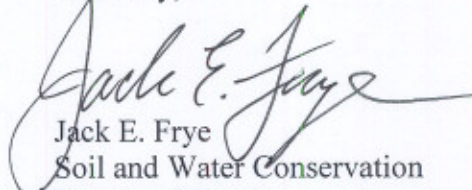
3. Revised site-specific nutrient management specifications (N-P-K and lime application rates and procedures) will be utilized on all state force construction operations undertaken after July 1, 2006 and included on all plans developed after December 10, 2006. Soil testing and determination of N-P-K and lime application rates will be in accordance with the VDOT Road and Bridge Specifications Section 603.3c and the VDOT Nutrient Management Plans Chapter 10: Active Construction.

Please note that all regulated land disturbing activities undertaken on private and publicly owned lands in Virginia must be conducted in accordance with the conditionally approved 2006 VDOT Annual Standard and Specifications. Individual project-specific erosion and sediment control plans 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 conditionally approved 2006 VDOT Annual Standard and Specifications.

To ensure compliance with conditionally approved specifications and 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,



Jack E. Frye  
Soil and Water Conservation  
Division Director

cc: Eric Capps, DCR

**TABLE 1: 2007 VDOT Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications (Rev. Dec. 2006)**

VDOT Annual Specifications Appendix	VDOT Document	VDOT Document Sections	Current Date	Approved 2006 Items	New/Updated 2007 Items	Notes
Appendix F	ESC & SWM Plan Development/Implementation Process	ESC/SWM/VSMP Requirements Flowchart	Aug. 15, 2006	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-11.24 ESC - Revised	Dec. 1, 2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Submitted to DCR Oct. 28, 2006
Appendix F	ESC & SWM I&IM	IIM-LD-73.4 Riprap	Dec. 1, 2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-110.17 General Notes	Aug. 15, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Submitted to DCR Oct. 28, 2006
Appendix F	ESC & SWM I&IM	IIM-LD-121.15 Pipe Criteria and Drainage Instructions	Aug. 26, 2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-122.11 Roadside Development	Jan 13, 2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-166.4 Soil Stabilization Mat	Dec. 1, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-195.5 Management of Stormwater	Feb. 12, 2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-228 Sinkholes	Aug 15, 2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM-LD-214 Culvert Design	July 27, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	ESC & SWM I&IM	IIM- LD-242 VSMP	Oct. 28, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	Hydraulic Design Advisory	HDA 05.03 NOAA Atlas 14	Nov. 2, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	Hydraulic Design Advisory	HDA 05.04.1. TR-55 & TR-20	Nov. 2, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix F	Hydraulic Design Advisory	HDA 06.03 Culvert Outlet Protection	Nov. 2, 2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Appendix G	VDOT Road Design Manual	Appendix A, pages A105-A140	7/06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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Appendix H	Road & Bridge Standards	EC-1	2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Submitted to DCR Nov. 2, 2006
Appendix H	Road & Bridge Standards	EC-2	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-3	2005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-4	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-5	2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Submitted to DCR Nov. 2, 2006
Appendix H	Road & Bridge Standards	EC-6	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-7	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-8	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC-9	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	L-3 Typical for Plant Benching	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	Roadside Development Sheet a4	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	EC Summary a5	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	Temp. Sediment Trap Detail a6	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	Sink Hole Details Isd2944	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	Temp. Diversion Channel & Acceptable Linings	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	ESC-INS Sheet 1	2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	ESC-INS Sheet 2	2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	ESC-INS Sheet 3	2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	PG-2A – Standard Paved Ditch - Triangular	2004	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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Appendix H	Road & Bridge Standards	PG-3 - Standard Rip Rap Ditch & Slope Protection	2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A note was added to the drawing to reference an insertable plan sheet
Appendix H	Road & Bridge Standards	PG-5 – Standard Paved Ditch - Trapezoidal	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-1 (Cast-In-Place)	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-1 (Precast)	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-DR - Sheet 1	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-DR - Sheet 2	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-DR - Sheet 3	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-DR - Sheet 4	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix H	Road & Bridge Standards	SWM-DR - Sheet 5	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 101 Definitions	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 103 Award and Execution	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 104 Scope of Work	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 105 Control of Work	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 106 Control of Material	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 107 Legal Relations & Public Responsibility	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division I	Sec. 108 Prosecution & Progress of Work	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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Appendix I	Road & Bridge Specifications - Division II	Sec. 203 Coarse Aggregate	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 204 Stone for Masonry, Riprap, Porous Backfill, and Gabions	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 239 Sodium Chloride – Calcium Chloride	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 240 Lime	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 242 Fences	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 244 Roadside Development Materials	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division II	Sec. 245 Geosynthetics	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division III	Sec. 301 Clearing & Grubbing	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division III	Sec. 302 Drainage Structures	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division III	Sec. 303 Earthwork	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 401 Structure Excavation	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 402 Sheet Piles	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 413 Dismantling & Removing Structures	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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Appendix I	Road & Bridge Specifications - Division IV	Sec. 411 Protective Coatings of Metal in Structures	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 414 RipRap	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 415 Concrete Slope Protection	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division IV	Sec. 418 Timber Structure	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division V	Sec. 501 Underdrains	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division V	Sec. 506 - Retaining Walls	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division V	Sec. 511 Allaying Dust	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division V	Sec. 512	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division V	Sec. 520 Water & Sanitary Sewer Facilities	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 602 Topsoil	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 603 Seeding	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 604 Sodding	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 605 Planting	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 606 Soil Retention Coverings	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 607 Herbicide Spraying	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	



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Appendix I	Road & Bridge Specifications - Division VI	Sec. 608 Mowing	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 609 Tree Wells & Tree Walls	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix I	Road & Bridge Specifications - Division VI	Sec. 610 Gabions	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix J	Erosion and Sediment Control Inspection Forms, Related Construction Forms & Memoranda	C-107a&b, C-10, C-12, C-18a, C-26, C-36i, C36, C-45, C-5, C-54, C-83, C-84, CD-2002-9, LD-445, LD-445A, LD-445B, LD-445C, LD-445D	Varies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Check marks were removed from C-107A form. Added LD-445(A-D) forms
Appendix K	VDOT Stormwater Management Maintenance Program	SWM Facilities Maintenance Program	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix K	VDOT Stormwater Management Maintenance Program	SWM Basin Maintenance Inspection Checklist	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Appendix M	Modifications to Specifications	c100b0b, s106A2B, s107A0B, s107F1B, s107G0B, s242A0B, s244A0B, s245A1B, c302a0b, c302b1b, c302b2b, s303A0B, s303c1B, s303D0B, s303E2B, s303E3B, c603a0b	2006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
See Web Site	VDOT Drainage Manual	Chapter 6	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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See Web Site	VDOT Drainage Manual	Chapter 7	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
See Web Site	VDOT Drainage Manual	Chapter 8	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
See Web Site	VDOT Drainage Manual	Chapter 10	2002	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
See Web Site	VDOT Drainage Manual	Chapter 11	2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	