ROAD DESIGN MANUAL REVISIONS August, 2016

CHAPTER 2E

• Page 2E-47 – Deleted the following language under bullet #7 "Copy of the Public Hearing Brochure (including information on design elements or improvements, location, NEPA documents, etc., Provided by the District).

Added the following language to the new bullet #7 to read; Copy of the Public Hearing Transcript, Public Hearing Brochure "(*including information on design elements or improvements, location, NEPA documents, etc., Provided by the District*)"

Page 2E-61 – Deleted the following language in the first sentence in the first paragraph under "FUNCTIONAL CLASSIFICATION – TRAFFIC DATA" from; "A block is to be shown in the upper right corner below the project number block listing the class or type of road, whether divided or undivided roadways, type of terrain (level, rolling, or mountainous), and the design vehicle that the project is design for, i.e. WB-62." To; A block is to be shown in the upper right corner below the project number block listing the class or type of road, whether divided or undivided roadways, type of terrain (level, rolling, or mountainous), and the design vehicle that the project is design for, i.e. WB-62." To; A block is to be shown in the upper right corner below the project number block listing the class or type of road, whether divided or undivided roadways, type of terrain (level, rolling, or mountainous). This was removed from the Title Sheet and can now be found in the "Roadway Design Scoping Worksheet".

CHAPTER 2G

 Page 2G-18 thru 20 – Replaced language under "ROADSIDE DEVELOPMENT" with the following; Seeded Area

The approximate area to receive Permanent Seeding and Temporary Seeding in <u>acres</u> will be shown under "Notes" on the Roadside Development Sheet. This area is <u>not</u> to be expanded for estimating purposes.

The Designer is advised to:

- 1. Determine the <u>disturbed area</u> to receive Permanent Seeding.
 - a. Determine the mowed areas on the project (slopes 3:1 or flatter) and provide the most severe gradient in the calculated mowed area to be used to select Hydraulic Erosion Control Product (HECP) mulches.
 - b. Determine non-mowed areas (slopes greater than 3:1) and provide the most severe gradient in the calculated mowed area to be used to select Hydraulic Erosion Control Product (HECP) mulches.



- 2. Determine the <u>disturbed area</u> to receive Temporary Seeding.
- 3. The area to receive Overseeding or Legume Overseeding is assumed to be equal to the area to receive Permanent Seeding.
- 4. The area of the project designated to receive Topsoil Class A of the area to receive Topsoil Class B.

PAY ITEMS

PAY ITEM	<u>UNIT</u>	ITEM CODE
• Lime	TON	27250
• Fertilizer (N – Nitrogen)	LB.	27230
• Fertilizer (P – Phosphoric Acid)	LB.	27231
• Fertilizer (K – Potassium)	LB.	27232
Permanent Seeding	LB.	27100
• Overseeding	LB.	27103
Legume Seeding	LB.	27104
Legume Overseeding	LB.	27105
Temporary Seeding	LB.	27101
Topsoil Class A	AC.	27012
Topsoil Class B	AC	27022
• HECP Type 1	S.Y.	27110
• HECP Type 1	S.Y.	27111
• HECP Type 1	S.Y.	27112
• HECP Type 1	S.Y.	27113

For additional information on Roadside Development, see <u>IIM-Maint-2016.8.0</u>.

INSERTABLE SHEETS

The Roadside Development Sheet may be accessed from the <u>sheet2000.cel</u> library in MicroStation.

- A-4 Roadside Development Sheet (RDSDEV)

The Erosion Control Summary Sheet may be accessed from the <u>sheet2000.cel</u> library in MicroStation.

- A-5 Erosion Control Summary Sheet (ECSUM)

CHAPTER 2H

• Page 2H-19 thru 2H-23 – Replaced these sample sheets with updated files.

APPENDIX "A"

- Page A-134 Revised to add the following language at the bottom of the page; "The current versions of the No Plan files are in Falcon in the sub-directory for No Plan under Engineering Services (eng-ser)."
- Page A-137 Revised the following language in the second and fourth sentence in the first paragraph under "DRAINAGE FACILITIES AND EROSION AND SEDIMENT CONTROL MEASURES" from; "The appropriate notes on the SWPPP General Sheets must be completed and the SWPPP General Information Sheets must be included in the plan set or other such contract documents. Guidelines for developing and approving an ESC Plan are contained in the latest version of VDOT's <u>Drainage Manual</u>. Guidelines for completing the SWPPP General Information Sheets are contained in the latest version of VDOT's <u>Drainage Manual</u>." <u>To</u>; The appropriate notes on the SWPPP General "Information" Sheets must be completed and included in the plan set or other such contract documents. Guidelines for developing an ESC Plan are contained in the latest version of VDOT's <u>Drainage Manual</u>. "<u>To</u>; The appropriate notes on the SWPPP General "Information" Sheets must be completed and included in the plan set or other such contract documents. Guidelines for developing and approving an ESC Plan are contained in the latest version of VDOT's <u>Drainage Manual</u>. Guidelines for completing the SWPPP General Information Sheets are contained and included in the plan set or other such contract documents. Guidelines for developing and approving an ESC Plan are contained in the latest version of VDOT's <u>Drainage Manual</u>. Guidelines for completing the SWPPP General Information Sheets are contained in "Chapter 10 of" the latest version of VDOT's <u>Drainage Manual</u>.
- Page A-138 Replaced the following language under "POST CONSTRUCTION STORMWATER MANGAGEMENT PLAN AND VSMP CONSTRUCTION PERMIT" from; "For all land disturbance activities that disturb an area equal to or greater than one acre or 2,500 square feet or greater in an area locally designated as a Chesapeake Bay Preservation Area, a post construction stormwater management plan and coverage under the Virginia Stormwater Management Program (VSMP) Construction Permit are required. For routine maintenance activities, the land disturbance threshold is 5 acres (see the latest version of IIM-LD-242 for additional information).

Permanent Stormwater management facilities may be addressed in a similar fashion as the erosion and sediment control facilities provided sufficient detail is included to ensure their proper construction. Any Plan Narrative or details will also become part of the contract assembly. The appropriate notes on the SWPPP General Sheets must be completed and the SWPPP General Information Sheets must be included in the plan set or other such contract documents. Guidelines for developing and approving a post construction SWM Plan are contained in the latest version of VDOT's Drainage Manual and IIM-LD-195. Guidelines for completing the SWPPP General Information Sheets are contained in the latest version of VDOT's Drainage Manual. Guidelines for applying for VSMP Construction permit coverage are contained in the latest version of IIM-LD-242."

<u>To;</u> "VPDES CONSTRUCTION GENERAL PERMIT AND POST CONSTRUCTION STORMWATER MANAGEMENT:

All land disturbing activities that disturb an area equal to or greater than one acre in size require coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (VPDES Construction General Permit) issued by DEQ. Land disturbing activities located in Chesapeake Bay Preservation Areas that disturb between 2,500 square feet and up to one acre are not required to have construction permit coverage but are regulated by certain technical criteria and administrative requirements of the VSMP regulations. Routine maintenance activities are exempt from the VSMP Regulations and VPDES Construction General Permit but are regulated by the ESC Law and Regulations. (See the current version of IIM-LD-242 for additional information).

Post construction stormwater management has become complex with the current VSMP Regulations. Designers should engage stormwater requirements at the earliest stage of project development to ensure the purpose and need of the project can be accomplished. (See IIM-LD-195 and the VDOT Drainage Manual for additional information)."

- Page A-150 Revised the "Seeding Schedule" in the Roadside Development sample sheet for "No Plan" Projects.
- Page A-151 thru 161 and 163 thru 166 Deleted the Erosion & Sediment Control information. This information is located in the Drainage Manual, Chapter 10. (*Note these sheets were intentionally left blank due to the time restrains of getting this revision out, it will be deleted in the January 2017 revision.*)
- Page A-162 Revised language in the "Section of Seed Location" sheet for "No Plan" projects.