

**Letter To Industry**  
**LTI# 0000011**

**Date:** June 30, 2014

**DCSM Reference :** Article 8

**Summary of Issue/Topic:** Virginia Stormwater Management Program Requirements

**Effective Date:** July 1, 2014

**Policy/  
Requirements/  
Guidelines:** Change wording on page 8-17 of the City of Manassas Design and Construction Standards Manual (DCSM) from:

“The 2-year frequency storm should be used for a natural channel and a 10-year frequency should be used for a man made channel.”

To:

“The one-year 24-hour storm should be used for a natural channel and the two-year 24-hour storm should be used for a manmade channel in accordance with the Section 8-530.4 of this manual.”

Change wording on page 8-17 of the DCSM from:

“Concentrated stormwater leaving a development site shall only be discharged into a well defined (i.e., with bed and banks) natural (2-year design storm) or man-made (ten year design storm) outfall channel of sufficient hydraulic capacity,…”

To:

“Concentrated stormwater leaving a development site shall only be discharged into a well-defined, (i.e., with bed and banks) natural or man-made outfall channel of sufficient hydraulic capacity,…”

Change wording on page 8-19 of the DCSM from:

“a 10-year storm”, “10-year frequency storm”, “25-year frequency storm”, and “100-year storm”

To:

“a 10-year 24-hour storm”, “10-year 24-hour storm”, “25-year 24-hour storm”, and “100-year 24-hour storm”

Change wording on page 8-19 of the DCSM from:

"B. The 2-year storm and the actual time of concentration shall be used for the design of all curb inlets, catch basins, or yard inlets, unless conditions require a higher frequency curve for design, as determined by the Director of Public Works."

To:

"B. The VDOT Drainage Manual shall be used for the design of inlets or catch basins unless the conditions require the design for a larger storm event as determined by the Director of Public Works and Utilities. The 10-year 24-hour storm and the actual time of concentration shall be used for the design of the grate inlets."

Change wording on page 8-35 of the DCSM from:

"ten-year frequency storm"

To:

"ten-year 24-hour storm"

Change wording on page 8-37 of the DCSM from:

"A. The outlet end of the storm sewer system should, without exception, discharge directly into a stabilized existing drainageway."

To:

"A. The outlet end of the storm drainage system and stormwater management/BMP facilities should, without exception, discharge directly into a stabilized existing drainageway, natural channel, or other conveyance system in accordance with channel protection and flood protection requirements of this manual."

On page 8-40 of the DCSM, at the end of the first paragraph in the Policy and General Requirements section, add a new sentence:

"All regulated land disturbing activities shall meet the stormwater quality and quantity requirements set out in this manual, stormwater management code, and other applicable regulations."

Change wording on page 8-40 of the DCSM from:

"No building permit shall be issued by the Building Official for any parcel or lot until a SWM and BMP plan, or waiver thereof, for the plat or parcel, shall have been approved as meeting all applicable requirements.

Every land developer/owner shall provide a SWM and BMP plans as a part of every site plan and subdivision plan submission

unless a waiver of the requirements of the policy in the form of pro-rata share is approved.”

To:

“No building permit shall be issued by the Building Official for any parcel or lot until a SWM plan addressing water quality and quantity requirement, or waiver thereof, for the plat or parcel, shall have been approved as meeting all applicable requirements. Every land developer/owner shall provide a SWM plan which is a component of the stormwater pollution prevention plan as a part of every site plan and subdivision plan submission.”

Change wording on page 8-42 and 8-43 of the DCSM from:

A. Peak flows shall be computed by the methods set forth in Section 8-100. Rainfall frequencies and durations shall be determined using the provisions of this subsection.

B. The 10-year storm will be used in determining pre-developed flow except in critical watershed areas. The 24-hour SCS Type II rainfall distribution shall be used.

C. A 10-year storm will be used in determining the developed flow except in critical watershed areas. If the rational method is used, increments of this storm (5 or 10 minutes) are computed and compared to the predeveloped runoff to determine the amount of storage required. (See Exhibit 18 in Appendix A.)

D. In areas where high density developments exist or are shown on the Comprehensive Plan or the zoning map in the vicinity of the proposed developments, SWM facilities must also be designed to regulate the peak discharge from the 2-year storm unless the facility incorporates BMP structural controls.

E. In critical watershed areas, SWM facilities must be designed to regulate developed flows to the predevelopment levels for 2-year storm, 10-year, and 25-year storm events. A list of critical watershed shall be maintained by the Department of Public Works. Monetary contribution in addition to providing storage for the 10-year storm may be allowed by the Director of Public Works in lieu of regulating the 25-year storm. Requests for such substitutions must be made in writing.

F. Emergency spillways and ponds will be designed to pass the 100-year storm, assuming that the principal outlet structure is inoperative, unless, due to the height of the dam and the capacity of the impoundment, smaller frequency storms have to be considered during the design. The effect of the 100-year storm must be considered in the design of all SWM facilities. Dam design shall be performed in conformance with Section 8-900 of this Article.

G. The following information shall be included in the final SWM and BMP plan:”

To:

"A. Peak flows and rainfall frequencies and durations shall be determined using the provisions of this subsection and Section 8-530.6 (Design Storms and Hydraulic Methods).

B. Except in critical watershed areas, SWM facilities shall be designed to regulate the 2-year and 10-year 24-hour storm such that the postdevelopment peak flows do no exceed predevelopment peak flows.

C. SWM facilities shall be designed to regulate the peak discharge from the 2, 10 and 100-year 24-hour storm events, if located adjacent to special flood hazard areas, as delineated in the FEMA's Flood Insurance Rate Map (FIRM).

D. In areas where high density developments exist or are shown on the Comprehensive Plan or the zoning map in the vicinity of the proposed developments, SWM facilities must also be designed to regulate the peak discharge from the 2-year and 10-year 24-hour storm.

E. In critical watershed areas, in addition to the 2-year and 10-year 24-hour storm events, SWM facilities must be designed to regulate postdevelopment flows to the predevelopment levels for 25-year 24-hour storm events.

F. Emergency spillways and ponds will be designed to pass the 100-year 24-hour storm, assuming that the principal outlet structure is inoperative, unless, due to the height of the dam and the capacity of the impoundment, smaller frequency storms have to be considered during the design. The effect of the 100-year 24-hour storm must be considered in the design of all SWM facilities. Dam design shall be performed in conformance with Section 8-900 of this Article.

G. The following information shall be included in the final SWM plan and in accordance with Section 58-103 of the City Code:"

Change wording on page 8-45 of the DCSM from:

"All required SWM and BMP setback areas shall be stabilized provided all access easements remain clear, in accordance with Article 9 of this Manual."

To:

"All required SWM and BMP setback areas shall be stabilized and landscaped based on types of facility. Access areas shall remain clear, in accordance with Article 9 of this Manual."

Change wording on page 8-47 of the DCSM from:

"Development exempt from City of Manassas SWM plan submission requirements are: (Refer to Section 8-730 for waiver of BMP.)

A. Any minor land disturbing activity involving less than five hundred (500) cubic yards of earthwork and less than two thousand five hundred (2500) square feet of disturbed area

and which is promptly stabilized to prevent erosion and sedimentation, not including creation of paved or other impervious surfaces.”

To:

“Development exempt from City of Manassas SWM plan submission requirements are as follows:

A. Any minor land disturbing activity involving less than one acre of disturbed area and which is promptly stabilized to prevent erosion and sedimentation, not including creation of paved or other impervious surfaces.”

Add subsection C on page 8-48 of the DCSM after the first paragraph:

“C. Single-family detached residences separately built and disturbing less than one acre and not part of a larger common plan of development or sale, including additions or modifications to existing single-family detached residential structures. However, (i) for construction activities involving single-family detached residential structure, within or outside a common plan of development or sale, such projects shall adhere to the requirements of the general permit; and (ii) registration statement is not required for single-family detached residential construction within or outside of common plan of development or sale.”

Change wording on page 8-72 of the DCSM from:

“H. A dam break analysis shall be required for wet ponds with a dam height of fifteen (15) feet or greater and an impoundment capacity of twenty-five (25) acre-feet or greater.”

To:

“H. A dam break analysis shall be required:

(a) for wet ponds with a dam height of fifteen (15) feet or greater and an impoundment capacity of twenty-five (25) acre-feet or greater.

(b) Following State dam safety requirements:

i. if the impounding structure is twenty five (25) feet or greater in height and creates a maximum impounding capacity of fifteen (15) acre-feet or great.

ii. if the impounding structure is six (6) feet for greater in height and creates a maximum impounding capacity of fifty (50) acre-feet or greater.”

Change wording on page 8-88 of the DCSM from:

"The most current edition of the "BMP Handbook for the Occoquan Watershed" prepared by the Northern Virginia Planning District Commission (NVPDC) shall be used in designing and reviewing BMP facilities."

To:

"The most current edition of the "BMP Handbook for the Occoquan Watershed" prepared by the Northern Virginia Planning District Commission (NVPDC), Virginia Stormwater Management Handbook, and the Virginia Stormwater BMP Clearinghouse website shall be used in designing and reviewing SWM and BMP facilities. The engineer shall complete the "Design and Plan Review Checklist and BMP Design Checklist" provided in the Virginia SWM Handbook for each SWM/BMP facility and incorporate the same in the plan."

On page 8-89 of the DCSM, remove Section 8-700.1 (Pollution Loads) and Section 8-700.2 (Methods to Achieve the Above Goals).

Change wording on page 8-91 of the DCSM from:

"Based on the rational method "C" factor, (refer to Section 8-120 of this Manual) determine the amount of BMP volume required per acre of the site from Exhibit 35 in Appendix A. BMP volumes may also be determined using percentages impervious pursuant to BMP handbook guidelines."

To:

"This manual shall be the primary regulating document for all technical requirements relating to construction standards for materials and design. However, the DCSM does not supersede any regulation required by the Code or any condition imposed under the provisions of the Code."

Change wording on page 8-93 of the DCSM from:

"For any redevelopment incorporating an existing BMP, the Engineer will also certify that the facility is in good working order and performing at the necessary level of service. Maintenance records may be necessary to verify that the facility has been operating correctly."

To:

"For any redevelopment incorporating an existing BMP, the licensed professional engineer registered in Virginia will also certify that the facility is in good working order and performing at the necessary level of service in addition to providing required

computations for water quality compliance Section 8-530.3 (Water Quality Compliance) of this Manual. Maintenance records may be necessary to verify that the facility has been operating correctly.”

Change wording on page 8-93 of the DCSM from:

“Any maintenance, alteration, use, or improvement to an existing structure which does not degrade the quality of surface water discharge, as determined by the Director of Public Works, may qualify for a waiver of the requirements of this subsection provided that it complies with all erosion and sediment control requirements of Article 4 of this Manual.

The Director of Public Works may also consider granting a waiver of BMP requirements for sites where the SWM requirements have been waived in accordance with Section 8-510.6 (A), (D), or (E).”


To:

“Any maintenance, alteration, use, or improvement to an existing structure which does not degrade the quality of surface water discharge, as determined by the Director of Public Works, may qualify for a waiver of the requirements of this subsection provided that it complies with all erosion and sediment control and stormwater quality control requirements of this Manual. No waiver of the requirements of this subsection shall be granted for redevelopment”

**Background:** The regulatory changes on stormwater management (SWM) are wide ranged, necessitating changes to the DCSM.

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**Manager Approval:** Patrick Moore, P.E.  


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