



Loudoun County, Virginia  
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**Department of Building and Development**

1 Harrison Street, S.E., P.O. Box 7000, Mailstop #60A, Leesburg, VA 20177-7000  
(703) 777-0220

FAX Numbers: Permits (703) 771-5522 - Engineering (703) 737-8993  
Zoning & Administration (703) 771-5215

## **TECHNICAL MEMORANDUM**

**January 17, 2012**

**TO: Members of the Land Development Community**

**FROM: Jim Brown, Program Manager, Erosion and Sediment Control  
Department of Building and Development  
Engineering Division**

**SUBJECT: HURRICANE SEASON PRECAUTIONS FOR ACTIVE CONSTRUCTION  
PROJECTS**

The purpose of this memorandum is to inform the Land Development, Engineering, and Building Community of Loudoun County's recommendations in regard to severe weather conditions, which may cause extensive flooding and erosion from active construction projects.

**Please take time to review this information and kindly distribute to applicable personnel within your organization.**

As most of you are aware, the hurricane season extends from June 1 through November 30. Floods cause more damage and loss of life than any other natural disaster.

In the event of Special Weather Statements issued from the National Weather Service predicting severe weather with possible flooding, the County is issuing the following recommendations for active construction sites. These recommendations should not be misconstrued to apply to storm events under routine 10-year engineering designs. The recommendations should be forwarded to the project Superintendents to prepare for storm events.

### **RECOMMENDATIONS**

- 1) Identify potential areas where concentrated flow does not currently exist, and apply the appropriate E/S control measure. Most likely, this will be a check dam, diversion ditch, pipe slope drain, or gravel filter weir trap.**

- 2) **Apply additional straw, mulch, or wood chips, to denuded areas, which are not at final grade or ready for permanent stabilization. This will reduce the effect of accelerated erosion.**
- 3) **Additional check dams should be placed in drainage areas or ditches with steep slopes to protect drainage channels or swales from scouring.**
- 4) **Additional rip rap should be placed in outfall areas as needed. Inspect the sediment basin or sediment trap outfall protection. Inspect permanent structure wingwalls and apply rip rap as needed.**
- 5) **Install additional Silt Fence or Super Silt Fence as necessary, although this may only be effective in sheet flow areas with non-critical slopes. Apply more effective controls in areas where concentrated flows currently exist.**
- 6) **Inspect Stormwater Management Pond structures and orifices to remove any debris which may prevent designed dewatering of the pond.**
- 7) **Remove any storm sewer inlet protection, which may cause flooding to a street or personal property.**
- 8) **Reduce the volume of water in sediment basins or traps, if necessary. Sediment basins are designed to handle a 25-year storm event, which equates to approximately 6.0 inches of water in a 24-hour period for Loudoun County (See Loudoun County Facilities Standards Manual, Section 5.210 - Hydrologic Design Tables I and II for Intensity Values and Rainfall Depth). If a pond is retaining water in the dry-storage capacity in a pre-storm event, then the capacity may be reduced to the designed wet storage capacity. Consult with E&S engineering field technician for dewatering instructions before lowering basin volumes.**
- 9) **Please consult with your assigned E&S engineering field technician, Land Development Engineer, or contact the Engineering Division for specific site advice, should a pre-emergency inspection be required.**