DPS | Montgomery County Department of Permitting Services

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WATER RESOURCES TECHNICAL POLICY

WRTP-9

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES SEDIMENT TRAP DESIGN MODIFICATIONS

In addition to Sediment Basins, the Maryland Department of the Environment "2011 Standards and Specifications for Soil Erosion and Sediment Control" lists three types of acceptable Sediment Trap designs for use in Maryland. The Montgomery County Department of Permitting Services has developed the following modifications to the design and use of these trap types. These modifications must be addressed when designing sediment traps for projects in Montgomery County.

Pipe Outlet Sediment Trap ST-I:

DPS requires these traps to be designed using a separate dewatering device. For details please see "Modified Pipe Outlet Sediment Trap ST-1 with Dewatering Device" and "Modified Dewatering Device for Sediment Traps, Sediment Basins and Stormwater Management Ponds". The maximum allowable drainage area to a Pipe Outlet Trap is 5 acres.

Stone/Riprap Outlet Sediment Trap ST-II:

These traps are designed to dewater through an integral stone overflow weir. DPS has found this design to be difficult to install in the field and less effective than other trap options. **This design should only be used where it is not practical to use an ST-I or ST-III trap design**. DPS has made no modifications to the standard design requirements found in the 2011 MDE manual. The maximum allowable drainage area to a Stone/Riprap Outlet Sediment Trap is 10 acres.

Riprap Outlet Sediment Trap ST-III:

When used with the "Modified Dewatering Device for Sediment Traps, Sediment Basins and Ponds" detail mentioned above, this trap may be design with a total of 3600 cf per acre rather than the 5400 cf per acre required in the MDE manual. This design modification must provide 1800 cf per acre wet storage and 1800 cf per acre dry storage as shown in the modified dewatering device detail. In addition, the maximum allowable drainage area to a Riprap Outlet Sediment Trap, when designed with the DPS dewatering device, is 15 acres. If designed without the dewatering device, the required storage and drainage area limits will be as per the MDE manual.