

# HYDRAULIC DESIGN ADVISORY

## HDA 09-02

Date: June 9, 2009

**SUBJECT: STORM SEWER PIPE - DESCRIPTION, SUMMARIZATION AND COST ESTIMATES**

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The current VDOT Road and Bridge Standard PC-1 allows various pipe materials to be used in storm drain systems unless specific conditions prohibit such (e.g., pH, resistivity or velocity values, pipe size, height of cover, etc.) . The Allowable Pipe Type Chart is typically shown on the plans with all the allowable pipe types noted for a specific project location. The plans would typically specify a certain size of "Pipe" required and allow the contractor to select the type he wants to install from among those allowable. This is the same procedure that has been, and is currently, used for non storm sewer pipe (i.e., culvert pipe, entrance pipe, etc.). All "Pipe" on the project would typically be lumped together for the purposes of summarization, cost estimates and bid tabulations. This presents a problem for those that wish to know how much of the total pipe on the project is storm sewer pipe versus how much is non storm sewer pipe. Lumping both types of pipe together also presents a problem in developing historical bid prices for use in developing project estimates.

In order to resolve this issue, the following procedures are to be implemented:

1. Pipe that is considered storm sewer pipe is to be so designated in the plan descriptions for each specific pipe section. This is to be done by placing the words "Storm Sewer" prior to the word "Pipe" in each specific pipe section description (e.g., 200' – 24" Storm Sewer Pipe Req'd.). For those projects where the drainage descriptions have essentially been completed in their final form, the sections of pipe considered storm drain pipe can be designated by placing an asterisk (\*) adjacent to each specific pipe description and a note on each drainage description sheet that states "\* Denotes Storm Sewer Pipe"
2. The drainage summary is to include a heading for "Storm Sewer Pipe", where all such designated pipe is to be summarized, and a heading for "Pipe", where all non storm sewer pipe is to be summarized.
3. The project estimates are to include separate bid items for "Storm Sewer Pipe" and "Pipe", where applicable. The Scheduling and Contract Division has established item codes in TRANSPORT for use with various sizes of "Storm Sewer Pipe" for both Imperial and Metric projects.

The information in this HDA is to be implemented immediately on all projects that have not already been submitted to the Scheduling and Contract Division for advertisement and shall supersede all existing guidance related to the designation and summarization of storm drain pipe.