

CONSULTING ENGINEERS
GENERAL MEMORANDUM 08-01

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND
HIGHWAY OPERATIONS
OFFICE OF ENGINEERING

Storm Drainage Pipe and Culvert Selection

February 11, 2008

To: CONSULTING ENGINEERS

The Federal Highway Administration has published revisions to 23 CFR 635.411 Subpart D, which effectively requires competition in the selection of storm drainage pipe and culvert materials. The purpose of this memorandum is to inform consultant design engineers of their responsibility for determining the appropriate type of pipe product for specific applications. The evaluation of the pipe material should be based on durability, hydraulic capacity, structural capacity, compatibility of pipe material to site conditions and life cycle cost. Designers are reminded that pipe selection should also consider height of fill required for all loads during construction. Acceptable pipe types to be considered are reinforced concrete, corrugated aluminum and aluminum-coated corrugated steel, high density polyethylene and polyvinyl chloride plastic pipe. These materials are specified in the Standard Specifications, Form 816 and the AASHTO LRFD Bridge Design Specifications.

The Drainage Manual currently provides guidance for the use of various types of pipes and engineering judgment should be applied in the pipe selection process. The Department of Transportation (Department) is in the process of developing more specific design guidelines for future incorporation into the Drainage Manual. The pipe selection process is to be documented in the hydraulic and drainage reports and submissions where deemed appropriate.

Projects for which the drainage design is essentially complete should be documented as such in either the final drainage report, or a subsequent design report submission. This General Memo is not intended to be direction to redesign completed work. Consultants should discuss project specific issues concerning this direction with the Department's project engineer.

The Consulting Engineers Manual and the Drainage Manual will be updated in the future to incorporate these practices and procedures.

Very truly yours,

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