Fields of Opportunities

STATE OF IOWA

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DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

December 18, 2013

CENTER FOR TRANSPORTATION RESEARCH AND EDUCATION (CTRE)
ATTN: MR. PAUL WIEGAND, P.E.
2711 SOUTH LOOP DRIVE, SUITE 4700
AMES, IA 50010

RE: Variance from Construction Requirements at Water Main and Storm Sewer Crossings

Dear Mr. Wiegand:

We are approving your request for a variance from the requirements found in Subparagraph IAC 43.3(2) "a"(3) of the Iowa Administrative Code regarding the use of water main material storm sewer piping at water main and storm sewer crossings.

The reason for granting this variance to accept storm sewers constructed of reinforce concrete pipe (RCP) and O-ring gasket joints at water main and storm sewer crossings is as follows:

> RCP with O-ring gasket joints are water tight up to a pressure rating of 11-13 pounds per square inch (psi). This pressure rating provides a level of protection that far exceeds any conditions that will be experienced in a storm sewer pipe.
>
> Replacing a section of RCP storm sewer with Polyvinyl Chloride (PVC) or Ductile Iron (DI) water main material pipe has a higher potential of creating a pathway for contaminants due to the connection of two dissimilar pipes.
>
> Finally, this alternative method still requires an additional level of protection (O-ring gasket joints) to the 18-inches of vertical separation that is only required by Ten States Standards.

If you have any questions, contact A.J. Montefusco at 515.725.0277 or e-mail him at aj.montefusco@dnr.iowa.gov.

Sincerely,

Dennis J. Alt, Supervisor
Water Supply Engineering

c: Field Office #1, Manchester; Field Office #2, Mason City; Field Office #3, Spencer
Field Office #4, Atlantic; Field Office #5, Des Moines; Field Office #6, Washington
SUDAS Std Spec File