

IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures

Date March 3, 2006

Attention All Employees

Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject Method's Memo No. 109 (Reinforcement Placement in Round Columns)

In a recent meeting, it was noted that contractors on certain projects were having trouble placing concrete for columns. The designer had used 90-degree hooks to develop the column reinforcement into the cap. The bends were placed on the inside of the columns and restricted the opening for the tremie. Sometimes hooks are required because of increased development length for epoxy-coated steel. However, attempts should be made to limit their use by taking advantage of the reduced development length allowed in article 6.6.4.1.2.2 of the Bridge Design Manual.

If the hook is still required for design, a minimum opening of 12 inches shall be provided in the center of the column for concrete placement with a tremie. A 180-degree hook should also be considered for increasing the opening size.

This change shall be incorporated into all plans currently under development.

GAN:dgb:bj