



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

MEMORANDUM TO: Project Engineers  
Project Design Engineers

FROM: G. R. Perfetti, P. E.  
State Bridge Design Engineer

DATE: September 9, 2009 (Rev. November 18, 2009)

SUBJECT: CORROSION PROTECTION FOR STEEL PILES

To provide consistent corrosion protection measures for vulnerable areas of steel piles at end bents and interior bents, the following policy is being implemented in corrosive and non-corrosive environments.

For steel piles at end bents, detail a concrete collar for each pile as shown in the attached Design Manual Figures 7-23 and 7-24.

For steel piles at interior bents, use the following guidelines:

- For a steel pile 40 feet (12 meters) or less in length, the full length of the steel pile will be galvanized. Place the following note on the appropriate interior bent plan sheet:

***Galvanize the full length of each interior bent pile in accordance with Section 1076 of the Standard Specifications.***

- For a steel pile greater than 40 feet (12 meters) in length, the exposed pile length plus an additional 20 feet will be galvanized. Place the following note on the appropriate interior bent plan sheet:

***Galvanize the top \_\_\_ feet of each interior bent pile in accordance with Section 1076 of the Standard Specifications***

In addition, place the following note on the General Drawing sheet with the Total Bill of Material:

***For interior bent(s) \_\_\_\_, only partial galvanizing of the piles is required. See interior bent sheet(s) for details.***

This policy is effective immediately. The Standard Notes and Design Manual Figures have been updated. The Design Manual will be updated at a later date.

Page 2  
September 9, 2009

GRP/BCH/TPG/kmb

Attachments:

[Figure 7-23](#)-Standard Brace Pile Detail (for End Bents)

[Figure 7-24](#)-Standard Brace Pile Detail (for End Bents with Double Row of Piles)

cc: T. K. Koch, P. E.  
R. A. Raynor, Jr., P. E.  
C. L. Jones, P. E.  
R. A. Hancock, P. E., Attn: M. S. Robinson, P. E.  
D. D. Holderman, P. E.  
R. D. Rochelle, P. E.  
T. S. Drda, P. E., FHWA  
N. W. Wainaina, P. E.