



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. Nov. 18, 2009 & Nov. 18, 2010)

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 effective for 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. Galvanizing end bent piles is not required.

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. Determine the exposed pile length by computing the difference in elevation from the bottom of cap to the ground line or stream bed. Place the following note on the appropriate interior bent plan sheet:

***Galvanize the top of each interior bent pile a minimum of \_\_\_ feet. Galvanize 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 required galvanized lengths. Payment for partially galvanized piles will be made under the contract unit price for galvanized steel piles.***

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.

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
STRUCTURE DESIGN  
1581 MAIL SERVICE CENTER  
RALEIGH NC 27699-1581

TELEPHONE: 919-250-4037  
FAX: 919-250-4082

WEBSITE: [WWW.NCDOT.ORG](http://WWW.NCDOT.ORG)

LOCATION:  
CENTURY CENTER COMPLEX  
BUILDING A  
1000 BIRCH RIDGE DRIVE  
RALEIGH NC 27610

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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. A. Peoples, P. E.  
R. A. Hancock, P. E., Attn: M. S. Robinson, P. E.  
D. D. Holderman, P. E.  
R. D. Rochelle, P. E.  
Division Bridge Engineer, FHWA  
N. W. Wainaina, P. E.