



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

MEMORANDUM TO: Project Engineers
Project Design Engineers

FROM: T. K. Koch, P. E.
State Structures Engineer

DATE: January 23, 2015

SUBJECT: PRESTRESSED CONCRETE GIRDERS – MISCELLANEOUS
DESIGN AND DETAIL REVISIONS

Effective with the May 2015 letting, implement the following design criteria for all AASHTO Type and Modified Bulb Tee Girders:

- To facilitate the tying of shear reinforcing steel in girders with draped strand patterns, ensure the draped strands at the end of the prestressed members are not detailed in the top 8" of the girder.
- To prevent a sag in prestressed concrete girders, cored slabs and box beams, ensure the deflection due to dead loads does not exceed the camber of the girder alone in place.

Also, to accommodate casting form tolerances and to create standard details used by North Carolina, South Carolina and Georgia, the embedded bearing plate details for all AASHTO Type and Modified Bulb Tee Girders have been revised as follows:

- The beveled edge perpendicular to the girder has been eliminated.
- The width of the embedded plate perpendicular to the girder has been modified.
- The spacings of the anchor studs parallel and perpendicular to the girder have been modified.

These revisions are at the request of the prestressed concrete girder producers.

The Design Manual, Standard Drawings PCG1 through PCG9, and Standard Drawings EB3 and EB4 have been updated to reflect these changes and are available online.

TKK/TMG/kaw

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
STRUCTURES MANAGEMENT UNIT
1581 MAIL SERVICE CENTER
RALEIGH NC 27699-1581

TELEPHONE: 919-707-6400
FAX: 919-250-4082

WEBSITE: WWW.NCDOT.ORG

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

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Cc: B. C. Hanks, P. E.
E. B. Nelson, P. E.
C. A. Peoples, P. E.
R. A. Hancock, P. E.; Attn.: K. G. Bowen, P. E.
Director of the Transportation Program Management Unit
E. E. Dubin, P. E., FHWA
Division Bridge Program Managers
Trudy Mullins