

# NCDOT - G/C PCI Joint Meeting

## Thursday, March 26, 2015; 1:30pm

### Final Minutes

1. Self-introductions were made.

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2. Approval of Minutes – November 19, 2014 Meeting - The minutes were approved as distributed.

3. Technical Committee Report – Minutes have not been distributed for the previous Technical Committee Meeting. PCI reviewed the actions items from the meeting.

4. Old Business

a. *Top Strand Debonding*

Design notes have been submitted to SMU for review. SMU will review the notes to develop a standard for design requirements.

b. *Standard Elongation and Detensioning Sequences*

Several producers have submitted their detensioning submittals for review & approval. SMU is still in the process of reviewing the submittals.

c. *Bearing Plates on Bulb Tee Girders*

The PCEF Committee has been working on standard details between the 3 states. This item was discussed at the G/C PCEF meeting on February 19, 2015 and all 3 states are in agreement. No further action is required.

d. *Alternate ID's on Shipping Tickets*

Correct Alternate ID's are being listed on the shipping tickets. No further action required.

e. *Standard for SIP Form Clips*

The NCDOT standard for SIP form clips is 12 gauge clips at 12" spacing. Prestress producers stated that they are seeing submittals from SIP form suppliers that call for 10 gauge clips at 12" spacing. This has happened on design-build projects, but may also be happening with other projects. Prestress of the Carolinas contacted several SIP form designers and they provided information concerning how they design the clips. The gauge and spacing of the clips are based on two things: 1) the NCDOT Standard or 2) the design calculations. Prestress producers stated that they still see approved drawings with 10 gauge clips at 12" spacing. Since it is difficult to visually distinguish a 10 gauge from 12 gauge, prestress producers stated that it would be easy for 12 gauge clips to be installed where 10 gauge is required. SMU doesn't know why 10 gauge clips are being required at 12" spacing when that 12 gauge clips can carry the stresses incurred by the SIP forms. SMU is going to review the NCDOT standard for the clips.

f. *NCDOT Implementation of Bar Codes/RFID Tags on Prestressed Concrete Members*

Implementation of the bar codes/RFID tags is scheduled for August 2015. Prestress producers stated that they are still waiting on more information about the bar codes. This includes location of the bar codes on each prestress member and how long to track both numbers (Alternate ID's and RFID). MTU will provide more information at the Technical Committee Meeting in July.

5. New Business

a. *PCI Audits of Prestress Producers*

MTU requested that PCI inform them when a prestress producer is audited to maintain PCI certification. PCI stated that MTU should contact PCI's Director of Quality Programs who could provide a notice of audits. Prestress producers were requested to submit verification of their PCI certifications after each audit as require by the specifications.

b. *Calcium Nitrite Corrosion Inhibitor*

MTU informed the prestress producers that recently, there have been a few issues with low nitrite values. Article 1078-4(G) of the standard specifications was reviewed. The target value for nitrite is 5.8 pounds per cubic yards. The lowest value that can be accepted without a pay reduction is 5.1 pounds per cubic yards. A prestress member with 3.0 – 5.0 pounds per cubic yard of nitrite does not meet specifications but will be accepted with a pay reduction. A prestress member with less than 3.0 pounds per cubic yard of nitrite does not meet specification and will be rejected.

c. *Water Cure of Vertical Cracks*

MTU reminded the prestress producers of the required water cure of vertical cracks due to a couple of related issues that have occurred recently. Article 1078-12 of the standard specifications was reviewed which states vertical cracks that are observed before detensioning shall receive 7 day water cure. There was a discussion of water cure when temperatures are below freezing. It was determined that these situations may have to be reviewed on a case by case basis.

6. Project Updates

- a. Monroe Bypass – Design work is progressing, but it is still unknown when construction will start.

- b. Bonner Bridge (B-2500) & Pea Island Bridge (B-2500A) – NCDOT is working with the environmental agencies to address environmental issues. It is unknown at this time when construction will be allowed to start on B-2500 and when construction will be allowed to resume on B-2500A.
- c. Several cities will have bypass projects such as Fayetteville, Greensboro, Shelby, Goldsboro, and Asheboro. Most of these projects are Design-Build.

#### 7. Other Topics

- a. PCI asked if there was any interest in doing a Prestressed Concrete Bridge Design Seminar on a routine interval. SMU expressed interest in this. There was further discussion on the type of topics and the time interval for the seminar which will be discussed at the next Technical Committee Meeting.
- b. Agenda items for the July Technical Committee Meeting were listed:
  - i. NCDOT Implementation of Bar Codes/RFID Tags on Prestressed Concrete Members
  - ii. Stressing Strands in Harped Position
  - iii. Top Strands Debonding
  - iv. Prestressed Concrete Bridge Design Seminar

#### 8. Action Items

- a. SMU will review design notes for top strand debonding to develop a guide for design requirements.
- b. SMU will continue to review strand elongation & detensioning submittals from prestress producers.
- c. MTU will provide an update and answer questions at the Technical Meeting in July concerning implementation of barcodes/RFID tags.
- d. SMU will review their standard for SIP form clips in reference to 12 gauge verses 10 gauge clips .

#### 9. Future Meetings

- a. NCDOT – G/C PCI Joint Committee Meetings for 2015 – November 19, 2015 (1:30 pm) at NCDOT-MTU
- b. NCDOT – PCI Technical Committee – July 16, 2015 at NCDOT – Structures Management Unit
- c. G/C PCEF Meetings for 2015 – August 20, 2015 - Hosted by NC (10:00 – 4:00)

#### 10. Meeting Adjourned - 3:00 pm