

## SUBCOMMITTEE ON MATERIALS

2017 Annual Meeting – Phoenix, AZ

Monday August 7, 2017

1:00 – 3:00 PM EST

### TECHNICAL SECTION 4a

#### Rigid Pipe

- I. **Call to Order and Opening Remarks**
  - A. Brief summary of activities *(to ensure all attendees up to speed)*
  
- II. **Roll Call**
  - A. **By either AASHTO Resources or Chair/Vice Chair**
    - i. **Voting member States**  
Present states: **FHWA, GA, LA, MO, NC, NV, PA, SC, VA, WI, TN, AL, AZ**
      1. **Determination of quorum**
    - ii. **Others please 'sign in' using the I-pad**
  
- III. **Approval of Technical Section Minutes from Tuesday January 26<sup>th</sup>, 2017**
  - A. **Annual Distributed August 25, 2017**
    - i. **Minutes approved as distributed**
  - B. **Mid-year meeting January 26, 2017**
    - i. **AASHTO Resources**
      1. **Ms. Katheryn Malusky – minutes (THANK YOU!)**
    - ii. **Motion to approve/second**
      1. **Discussion (if any)**
    - iii. **Approval based on discussion (and amendments if any)**  
**Motion made by NC, seconded by MD. All were in favor.**
  
- IV. **Old Business**
  - A. **SOM Ballot Items**
    1. **Outstanding items from Mid-Year Meeting?**
      - ii. **TS Ballots - NONE**
      - iii. **Pull test of welded circumferentials**
        1. **Work group formulated a test method along with ACPA participation. Referred to TS 4F**
          - a. **TS Chair (M. Zwanka) has since indicated its passed TS vote with no negatives (one affirmative with comment which was addressed) one and will be part of the rolling ballot for AASHTO T244 as an appendix document (one of many).**
            - i. **Thank you to the workgroup and Merrill (TS 4f). This passed TS 4f and is being sent to full committee ballot.**
              - **The corresponding ASTM standard balloted by ACPA (an annex to ASTM A380) has not yet been published due to one technical negative regarding the wire diameter**

accuracy (which will be addressed by reducing the limit from 0.01" to 0.001".. ACPA will forward the standard along with the proposed revisions to address the technical negative to Merrill and Bob Horwhat. A future revision to the AASHTO T 244 annex will need to be made to include the wire tolerance reduction.

## 2. Water Quality Standards

- a. Minor comments which were addressed. Brian Egan (Research Liaison) suggested a minor editorial change ( ie max chloride limit of 0.15% and conforming to AASHTO M157, Section 4.14 and Tables 1 and 2.
  1. The chair accepted the comment as editorial and AASHTO made the corresponding revisions to all the affected standards.
  2. During 'open discussion' at the mid-year meeting about a recommendation to add verbiage concerning welding to the proposed pull test standard. Bob Sarcinella was to forward information to the chair. Bob Horwhat indicated he needed to follow up with Sarc..
- **Action Item:** The Chairman will follow up on this item with Robert Sarcinella.

## V. New Business

- A. Research Proposals
  1. 20-7 RPS - None
  2. Full NCHRP RPS- None
- B. AASHTO Resource/CCRL –
  - i. Observations from Assessments affecting TS? – if any? None
- C. Queries: Multiple (M 259, M273, T-280, M170, M176, M178, M199)
- D. M206, M207, M242
  - i. All very minor.
    1. T-280 (editorial) to include revision to image to show english dimensions of leaf gauge for 0.01" crack measurement. The revised figure was circulated to the meeting attendees.
- E. NCHRP Issues - Any? None
- F. Correspondence, calls, meetings  
-To be discussed later in the agenda
- G. Updates and Presentation by ACPA
  - i. AASHTO's status of their plant certification program; ASTM A380 WRT the weld pull test method.  
-ACPA Update: QCAST implements changes once per year. The change will be reviewed by their Users Group first. This would be balloted after these changes are made so the requirement to have testing performed as part of the certification audit would begin in 2019. ACPA indicated the frequency would be: 1 test/wire size/year unless the weld procedure was revised which would require retesting  
-NPCA: They have a Committee that meets who would review and incorporate this item into their plant certification audit process as well to maintain parity between both certifying bodies.
  - ii. Al Hogan from ACPA made a presentation on installation inspections recent publication of evaluation procedures for post-installation (ASTM C1840)  
-This presentation is attached to these minutes.

- The chair indicated that his recommendation for renaming the tech section to more accurately reflect the specifications, tests and standards. The recommended new name for this tech section (currently rigid pipe.) is Concrete Drainage Structures. The change has been implemented.

(Note: A post meeting recommendation was made to refine the title to “Concrete and Other Rigid Drainage Products’ as tile, clay pipe etc fall under the committee. The revised title will be forwarded to AASHTO (Evan Rothblatt) for revision.

H. Proposed New or revised standards

i. TF 16-01 was formed to update AASHTO M-259 (Box Culvert) to meet LRFD design criteria

1. Work group member states- AL, MD, AK, PA

- a. PennDOT has previously assisted ACPA with their LRFD ASTM C1577 box culvert specification providing design review.)
- b. New LRFD compliant designs were produced by PennDOT’s Bridge Division.

i. Outstanding issues noted

- 1. ‘M dimension for top slab, top mat reinforcement were added)
- 2. Appendix for special designs outdated (some reference back to 1970’s era working stress design criteria from AASHTO was completely re-written
- 3. New applicable referenced standards were added
- 4. The cement and pozzolan requirements were revised to be clearer, less restrictive and reflect new blended cement types.
- 5. Type 1 and 2 synthetic fibers were added since only Type 3 had been specified.

a. (Note: This is not a comprehensive list of all the revisions).

b. Plan

i. Update and circulate for for Workgroup approval. Additional States volunteered to also review the draft. (see below)

ii. Once finalized, the revised specification will be submitted for TS ballot.Discussion

- NY, NC, LA volunteered to review this revised document. Comments will need to be due by the end of September.

- Motion made to withdraw AASHTO M 273 by NC, seconded by AL. This will be done on the concurrent ballot. All were in favor.

I. Proposed New Task Forces

-None

J. Future planned standard revisions?

i. AASHTO reinforcement criteria (Currently MP 30) to be added along with ASTM A1064

K. Standards

i. Those requiring re-confirmation were provided to chair/vice chair by AASHTO

ii. Few standards were re-confirmed this year. Others were identified for future revisions such as the reinforcement revisions.

- 1. AASHTO T-280: Verbiage indicates dual units. Updated (editorial revision) to the diagram forthcoming to show english soft conversion, ie 13mm = ½” for crack feeler gauge, etc.

iii. Other:

- 1. AASHTO M175 Standard Specification for Perforated Pipe)

- a. ASTM equivalent (ASTM C444 has not been updated since 2003. Propose to drop as equivalent. ACPA believes this was re-approved in 2009. ACPA will send the Chair and C. Peoples any changes that were made so they can take action if necessary.
- 2. AASHTO T 281 Standard method for Test for Vitrified Clay Pipe
  - a. Appeared to TS chair this wouldn't be up for confirmation until NEXT year but agreed to reconfirm based on ASTM standard equivalent was confirmed to have been updated (2017).

L. SOM Ballot Items (including any ASTM changes/equivalencies)

M. Chair Departure

- i. Chair will be retiring effective October 20, 2017
- ii. Chris Peoples from North Carolina has agreed to fill the chairman position.
- iii. Vice-Chair position-Darin Tedford (NV)

**VI. Open Discussion**

-None

**VII. Adjourn**