

COMMITTEE ON MATERIALS AND PAVEMENTS

Meeting (Annual or Mid-Year)	2019 Annual Meeting
Date	August 6, 2019
Scheduled Time	8:00 AM to 10:00 AM
Technical Subcommittee & Name	TS 4a – Concrete Drainage Structures
Chair Name and (State)	Daniel (Dan) Miller, Ohio
Vice Chair Name and (State)	Darin Tedford, Nevada
Research Liaison Name and (State)	

I. Introduction and Housekeeping

II. Call to Order and Opening Remarks

A. Brief Summary of Activities

The goals for today are to discuss previous ballot items and address any negative comments or other input received. Also to discuss items for revision/reconfirmation. Collaborate together as a group to keep things moving forward with concrete drainage structures.

Henry Ford- *“Alone we can do so little, together we can do so much.”*

III. Roll Call of Voting Members

Present	Member Name	State	Present	Member Name	State
<input type="checkbox"/>	Charles Babish	VA	<input type="checkbox"/>	William Lawrence	UT
<input type="checkbox"/>	Richard Barezinsky	KS	<input type="checkbox"/>	Joseph Robinson	PA
<input type="checkbox"/>	Rick Douds	GA	<input type="checkbox"/>	Michael San Angelo	AK
<input type="checkbox"/>	Chuck Dusseault	NH	<input type="checkbox"/>	Jesus Sandoval-Gil	AZ
<input type="checkbox"/>	Brian Egan	TN	<input type="checkbox"/>	Kenny Seward	OK
<input type="checkbox"/>	Paul Farley	WV	<input type="checkbox"/>	Donald Streeter	NY
<input type="checkbox"/>	Clement Fung	MA	<input type="checkbox"/>	Mick Syslo	NE
<input type="checkbox"/>	Steven Ingram	AL	<input type="checkbox"/>	Daniel Tobias	IL
<input type="checkbox"/>	Edward Inman	NJ	<input type="checkbox"/>	Brett Troutman	MO
<input type="checkbox"/>	Becca Lane	ONT CA	<input type="checkbox"/>	Merrill Zwanka	SC

Quorum Rules Met?

Annual Meeting: Simple majority of voting members (☐y/ ☐n) | Mid-Year Meeting: Voting members present (☐y/ ☐n)

A. Review of Membership (New members, exiting members, etc.)

IV. Approval of Technical Subcommittee Minutes

(Include as separate file, attachment A.)

V. Old Business

(Outstanding or action items from previous meeting; use Heading 1 through Heading 6 styles to get outline format.)

A. M 199M/M 199 update and ballot similar to TS 4a Ballot 1 changes for cementitious materials.

1. Need to make updates to standard for red line edition

a. Send out as Ballot #2 for 2019.

B. Review standards for revision or reconfirmation

1. M 175M/M 175 (ASTM C 444M-03/C 444-03) Perforated Concrete Pipe
2. M 262M/M 262 (ASTM C882-08b_ Concrete Pipe Related Products
3. R 73 (No ASTM) Evaluation of Precast Concrete Drainage Products

C. COMP Ballot Items (Include any ASTM changes/equivalencies, including ASTM standards' revision years.)

COMP Ballot #	Standard	Results (neg/affirm)	Comments/Negatives	Action

D. Technical Subcommittee Ballots

TS Ballot #	Standard	Results (neg/affirm)	Comments/Negatives	Action
1	M 86M – M86	Affirmative 19/24, 5 No Vote	TN- Realize the intent is to be consistent with ASTM C14, but it appears that there are other combinations that could/should be allowed (e.g. allows A combination of portland-pozzolan cement and fly ash (which the pozzolan must be a fly ash), but not the combination of a Portland-pozzolan and slag cement)	
1	M 170	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 170M	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 176	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 178	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 206M – M 206	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 207M – M207	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 242M – M242	Affirmative 19/24, 5 No Vote	TN- Same as M 86 above.	
1	M 259	18 Affirmative, 1 Negative, 5 No Vote	SC- In Section 7.4, near the end of the paragraph, suggest inserting "Type W" after M31 to clarify the weldable steel requirement. "If welds are made to Grade 60 reinforcing bars, weldable bars conforming to ASTM A706/A706M, or M31M/M31 Type W, shall be used."	

D. Technical Subcommittee Ballots

TS Ballot #	Standard	Results (neg/affirm)	Comments/Negatives	Action
1	M 259	18 Affirmative, 1 Negative, 5 No Vote	TN- - Same as #1 it appears that other combinations could/should be allowed - Section 11.2.1 - Wording of 2nd sentence is "confusing". Does AASHTO and ASTM need to be reworded?	
1	M 259	18 Affirmative, 1 Negative, 5 No Vote	MO- 1) In Section 7.1, the third line, recommend the word 'Section' after 'Table 1' not be capitalized so it reads as: "...Section 12. Table 1 sections are designed for..." 2) In Section 7.1, the third line, recommend the comma's be removed from between the words 'earth' and 'dead' and from between the words 'load' and 'and' so it reads as: "...designed for combined earth dead load and AASHTO HL-93..." 3) Section 11.2.3.1 states "average compressive strength of two cylinders tested for a group" when evaluating acceptability of the concrete strength. This works well for 6 in. by 12 in. cylinders. This may not work well when utilizing 4 in. by 8 in. cylinders. MoDOT requires a minimum of three cylinders be tested to account for the increase variability associated with smaller diameter cylinders. Does the specification need to require the use of 6 in. by 12 in. cylinders or does the specification need to include wording to address the use of 4 in. by 8 in. cylinders. We currently specify ASTM C1577. 4) In Table X1.1, the last row second column on page 60, need to remove the space between the letters 'b' and 't' so it reads as: "0.002 bt"	
1	M 259	18 Affirmative, 1 Negative, 5 No Vote	1. ALDOT's bridge section provided the following comments: 2. 3. 1. the sentence is grammatically incorrect as the word, "longitudinal" is an adjective without a noun, 4. 5. 2. stirrups are not used in precast boxes 6. 7. 3. if any steel is exposed (which is what the, "longitudinal", is referring to) it is susceptible to corrosion and the eventual structural compromise of the box unit. This sentence implies it's permissible for steel to be exposed.	
1	M 273	19 Affirmative, 5 No Vote		

E. Reconfirmation Ballots

Reconf. Ballot #	Standard	Results (neg/affirm)	Comments/Negatives	Action

F. Task Force Reports

Task Force #	Title	Members	Status/Update

VI. New Business

- A. AASHTO re:source/CCRL/NTPEP (*Observations from assessments, as applicable.*)
- B. Presentation by Industry/Academia
- C. Revisions/Work on Standards for Coming Year
- D. Review of Stewardship List
(*List of subcommittee's standards flagging those requiring action; include as separate attachment.*)
- E. Proposed New Standards
 - 1.
- F. NCHRP Issues
- G. Correspondence, Calls, Meetings
- H. Proposed New Task Forces (*Include list of volunteers to lead and/or join TF.*)
- I. New TS Ballots
 - 1.

VII. Open Discussion

- A.
- B.

VIII. Adjourn

TS Meeting Summary

Meeting Summary		
Items Approved by the TS for Ballot <i>(Include reconfirmations.)</i>		
Standard Designation	Summary of Changes Proposed	Ballot Type
		<input type="checkbox"/> TS <input type="checkbox"/> COMP <input type="checkbox"/> CONCURRENT
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New Task Forces Formed		
Task Force Name	Summary of Task	TF Member Names and (States)
Research Proposals <i>(Include number/title/states interested.)</i>		
Other Action Items		



COMMITTEE ON MATERIALS & PAVEMENTS

2019 Mid Year Meeting (*Webinar*)

Wednesday January 23, 2019

11:00 AM – 1:00 PM EST

TECHNICAL SECTION 4a

Rigid Drainage Structures

- I. Introduction and Housekeeping Casey summarized the webinar procedures
- II. Call to Order and Opening Remarks Chris Peoples summarized the activities of the Technical Section, including Task Force efforts.
- III. Roll Call Attendees who were present for today's call:

Name	State	Present
Chris Peoples (Chair)	NC	X
Darin Tedford (Vice Chair)	NV	X
Brian Egan	TN	X
Clement Fung	MA	X
Daniel Tobias	IL	X
Daniel Miller	OH	X
Donald Streeter	NY	X
Edward Inman	NJ	
Kenny Seward	OK	X
Merrill Zwanka	SC	X
Richard Barezinsky	KS	X
Steven Ingram	AL	
William Lawrence	UT	X
Charles Babish	VA	X
Richard Douds	GA	
Paul Farley	WV	
Paul Burch	AZ	X
Joseph Robinson	PA	
Michael San Angelo	AK	
Brett Trautman	MO	X
Rick Bradbury	ME	
Mick Syslo	NE	
Becca Lane	ON	

Guests present were: Robert Sarcinella

Temple Short (SC)

Mike McGough – NCSPA

Danny Lane (TN)

Mike Doran (TN)

Brian Carmody (NY)

Josiah Beakley (ACPA)

Eric Carleton (NPCA)

IV. Approval of Technical Subcommittee Minutes

A motion was made by New York and seconded by Ohio to approve the meeting minutes from the June 20, 2018 Annual meeting webinar. The minutes were approved unopposed.

V. Old Business

- A. COMP Ballot Items - **None**
- B. TS Ballots - **None**
- C. Reconfirmation Ballots - M 175 (18 of 21 Affirmative with 3 no votes) **Reconfirmation complete**
- D. Task Force Reports

- 1. Task Force 18-01 Harmonization of M 259/C 1577 report from co-chairs Josh Beakley (ACPA) and Dan Tobias (IL)

Dan Tobias (IL) spoke on the progress and work of this task force:

- Background on task force development and volunteers.
- AASHTO Bridge and Materials participation and Industry
- In August the TF met to discuss ASTM equivalency review
- Dan Tobias and Josh Beakley developed first drafts for review
- December a TF meeting was held, then Dan wrapped up comments and sent for review, finished in early January
- There was a question about the need for the metric equivalent. This will need to be balloted.
- The design tables were proofed and vetted extensively by the TF, incorporating LRFD design code
- Sections 6.2 of the methods were revised for slag cement and pozzolan changes to be applied to all methods as appropriate
- The ballot will be sent out with a clean copy and a red-lined copy to allow for complete review of the changes
- The Appendix was also heavily reviewed for changes and accuracy
- Josh Beakley added that the AASHTO Culvert Committee was included in the review

- 2. Task Force 18-02 Harmonization of AASHTO Standards with ASTM: M 170, M 206, M 207, M 86, M 242, M 178 and M 176 report from chair Paul Tennis (PCA)

Paul Tennis (ACPA) spoke on the progress and work of this task force

- A 5-point rationale was developed to guide the review and update of the Standards listed above. It is included in the notes for the TF report
- The TF was formed at the last annual meeting and met to discuss harmonization with both ASTM and the other standards.
- The focus was the cementitious material sections
- Redline changes were developed and reviewed
- The task force met in November and January
- Limits of slag and fly ash were discussed
- Chris Peoples suggested that we add the same rationale to M 259 for balloting
- Thanks to all the participants: IL, OH, ACPA, NC, NV, MO, NY

- Eric Carleton, NPCA requested to include the Section 6 changes in M 199.
- The Chair agreed to have the changes included in M 199 and ballot it with the rest.

VI. New Business

- A. Research Proposals Josh Beakley indicated the TRB Culvert/Subsurface Committee is interested in soil category research to be used for pipe design
- B. NCHRP Issues None
- C. Correspondence, calls, meetings Task Forces only, covered above
- D. Revisions/Work on Standards for Coming Year Addressed below Stewardship
- E. Proposed New Standards None
- F. Proposed New Task Forces No new TF, will keep 18-01 and 18-02 active to address ballot comments
- G. New TS Ballots
 1. Send M259 to TS ballot: To approve updates by the TF. Motioned by Nevada, seconded by New York, passed unopposed.
 2. Send 14 Standards: M170M, M 170, M 207M, M 207, M 206M, M206, M 176, M 178, M 242M, M 242, M 86M, M 86, M 199M, M 199 to TS ballot: Updated to harmonize the cementitious sections. Motioned by Missouri, seconded by Ohio, re-motioned and re-seconded by the same after clarification of the standards, passed unopposed.
 3. Ballot to remove M 273 and M 273M: Has been incorporated into M 259. Motioned by Ohio, seconded by Missouri, passed unopposed.
 4. Remove M 259M: No need for the metric equivalent. Motioned by Illinois, seconded by Oklahoma, passed unopposed.
- H. Stewardship Appointments/Volunteers

Chris Peoples discussed needing to establish stewards for each of the Standards. Casey S. will verify that the list is accurate. New York will forward to specialist to pick a couple standards. NC and NV will handle 2 each. Dan Tobias (IL) indicated that for harmonization purposes during reviews, M 259 should be the guideline. Chris stated that M 259 should be good as of the TF review.

Post-meeting update: the list that was provided of the standards requiring action was updated after the mid-year meeting. The version attached to these meeting minutes is the correct version reflecting standards that should have reviews initiated in preparation for their upcoming reconfirmations in Fall 2019.

Technical Subcommittee membership

The Chair called or any new voting members or Friends. None were heard.

VII. Open Discussion

Robert Sarcinella of NTPEP indicated there is a glitch in the requirement for production of reinforcing mat for pipe. Some companies abide by the NTPEP audit requirements. Some smaller manufacturers may not, depending on which specification is used, i.e. ASTM 184. The Chair requested that Mr. Sarcinella prepare a presentation for the summer meeting.

The timing of ballot development was discussed. The Chair suggested a goal of the beginning of March for ballots to be ready, with a hard deadline of the end of March.

VIII. Adjourn

COMP TS Planning Ahead—Full Standards

TS 4a			
Designation No.	Title	ASTM Equiv.	Planning Needed
M 086M/M 086-17	Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe	C14M-15a and C14-15a	No
M 170-17	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	C76-16	No
M 170M-17	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe [Metric]	C76M-16	No
M 175M/M 175-05 (2013)	Perforated Concrete Pipe	C444M-03 and C444-03	Begin Review
M 176M/M 176-17	Porous Concrete Pipe	C654M-05a and C654-05a	No
M 178M/M 178-17	Concrete Drain Tile	C412M-05a and C412-05a	No
M 199M/M 199-17	Precast Reinforced Concrete Manhole Sections	C478M-15a and C478-15a	No
M 206M/M 206-17	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	C506M-16b and C506-16b	No
M 207M/M 207-17	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	C507M-16 and C507-16	No
M 242M/M 242-17	Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe	C655M-15 and C655-15	No
M 259-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers	C789-95a	No
M 259M-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers [Metric]	C789M-98	No
M 262-11 (2015)	Concrete Pipe and Related Products	C822-08b	Begin Review
M 273-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 2 ft of Cover Subjected to Highway Loadings		No
M 273M-17	Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers with Less Than 0.6 m of Cover Subjected to Highway Loadings [Metric]		No
R 073-16	Evaluation of Precast Concrete Drainage Products		Begin Review
T 280-14 (2018)	Concrete Pipe, Manhole Sections, or Tile	C497-13	No
T 281-14 (2018)	Vitrified Clay Pipe	C301-13	No