

# May 25, 2023 Meeting Agenda — Concrete Technical Committee

Location: State Patrol Conference Room, Truax Office, Madison & TEAMS

**Date:** May 25, 2023

**Time:** 9:00 am to 12:00 pm

#### **Attendance**

#### **Committee Members:**

# WisDOT Members -

Bureau of Technical Services (BTS):

- ☐ Barry Paye Director

- ☐ *Vacant* Concrete Quality Assurance Engineer
- □ Peter Kemp Pavement Unit Supervisor
- ☐ Vacant Pavement Policy and Research Engineer
- ☐ Mark Finnell Concrete Engineer Consultant (Behnke Materials)

#### Bureau of Project Development (BPD):

- ☐ Mark Zander Construction Standards Engineer

#### Bureau of Structures (BOS):

□ Aaron Bonk – Chief Structures Design Engineer

#### Bureau of Aeronautics (BOA):

## Regional Representatives:

- □ Paulo Florio SW Region Soils & Materials Engineer
- ☐ Kurt Flierl SE Region Construction Project Manager
- ☐ Eric D Hanson SE Freeways Project Manager
- □ Devin Harings NW Region Pavement Engineer

#### FHWA Members -



Inc	lustry Members –		
	Sara Shoenmann – American Council of Engineering Companies Liaison		
$\boxtimes$	Ed Anastas – A.W. Oakes		
	Eric Glendenning – BARD Materials		
$\boxtimes$	Paul Mathe – Carew Concrete		
$\boxtimes$	Barry Bohman – Chippewa Concrete Services		
	David Meyer –Continental Cement Company		
	Dave Stanke – Kraemer North America		
	Brian Borowski – Lafarge/Holcim		
	Mark LaLonde – LaLonde Contractors		
$\boxtimes$	Brad Diener – Lunda Construction		
$\boxtimes$	John McConahy – Mapei		
$\boxtimes$	Scott Grams – Michels Road & Stone		
	☐ Tom Ptaschinski – Ptaschinski Construction Company		
$\boxtimes$	James Palmer – St. Mary's Cement Company		
$\boxtimes$	Benny Walker – Todds Redi-Mix Concrete		
	Mike Hammitt – Trierweiler Construction Company		
$\boxtimes$	Heath Schopf – Vinton Construction Company		
	Jackie Spoor – Wisconsin Concrete Pavement Association		
	Kevin McMullen – Wisconsin Concrete Pavement Association		
	Leslie Hidde – Wisconsin Concrete Pavement Association		
	Cherish Schwenn – Wisconsin Ready Mixed Concrete Association		
	Matt Grove – Wisconsin Transportation Builders Association		
	David Burt – Zenith Tech		
$\boxtimes$	Andrea Breen – Zignego Ready Mix		
Re	source Members (as needed) –		
$\boxtimes$	Myungook (MK) Kang – Quality Assurance Supervisor – MUG Chair		
$\boxtimes$	Brandon Lamers – BPD Construction Oversight, Standards, & Local Program Chief		
	Chad Hayes – BPD Construction Oversight Engineer		
$\boxtimes$	Adam Albers – BTS Concrete Materials Lab Coordinator		
	Laura Shadewald – BOS Structures Development Chief		
	Deb Bischoff – BTS QMP Engineer		
	Zach Dittberner – Michels Road & Stone		
$\boxtimes$	Tom Sand – Vinton Concrete Construction		
	Tony Zignego – Zignego Company		

# **Agenda Items**

- 1. Welcome and Introductions Lyngdal/ Mandal (~5 min)
  - a. Myungook (MK) Kang
- 2. Review of Action Items Lyngdal/ Mandal (~10 min)
  - Buckling Research TF Membership Finalized L Hidde (December 2022)
  - PEM Research TF Membership Finalized M Finnell (January 2023)
     All task forces are on hold for now while WisDOT re-organizes the spec and implements
     AWP.



## 3. MOTP – Lyngdal (~15 min)

- WisDOT Manual of Test Procedures (MOTP) is ready for the 2024 spec, which will be for the following October let. All references to AASHTO methods will be changed to reference the MOTP in the Standard Specs (SS) and Construction and Materials Manual (CMM).
- It will be updated annually aligned with the SS. Annual changes will be in red text to emphasize them consistent with the SS. Adam Albers will control the draft and any changes made on an annual basis.
- MOTP will be located on the QMP website. There was a recommendation to have it live on the same page as the SS and CMM. Highway Construction Contract Information (HCCI) site is preferred.

#### **ACTION ITEMS:**

- WisDOT to send out updated version of MOTP to CTC members
- Lamers to follow up on the location of MOTP

# 4. NTPEP Update – Lyngdal (~15 min)

- The NTPEP cement testing program is changing from testing quarterly to being more of an audit program with one annual test. It will be rolled out next year.
- A letter was sent by the new products engineer regarding this. The new concrete engineer will assist with the rollout.
- By March 15, 2024, suppliers will need to apply for the new program.
- In July, the new concrete engineer and a team will make some CMM changes, along with members from the CTC to help shepherd the implementation.
- <u>Task Force Members</u>: James Pforr, Christine Krall, Leslie Hidde, Mark Finnell, and New Concrete Engineer

#### 5. IL Cement – Lyngdal/ Mandal/ McMullen (~10 min)

- Table 5 in C595: cement cert does not always report the limestone %. Suppliers should report the % in the documentation.
- FHWA is looking at implementing 56-day breaks in response to the availability of SCMs.
   Two coal-fired power plants are decommissioning in 2025 and 2026, which will greatly impact the inventory of ash.
- 6. WHRP Research Updates Mandal/ McMullen (~15 min)
  - a. 0092-21-03: Evaluating the Impact of Anti-Icing Solutions on Concrete Durability
  - Research moving along with the data collection.
  - Waiting for the analysis and report when the field data is collected.
  - b. 0092-22-02: Field Investigation of Dowel and Tie Bar Placement Curb Shear



- Waiting for the software update for the MIT Scan device. The project will move forward
  using the current version of the software. The same data can be used to analyze with the
  newer software.
- The selection of projects is underway right now.
- c. 0092-22-03: Timely and Uniform Application of Curing Materials
- Researchers have gathered data on I 43 and the analysis is underway.
- Researchers will be visiting STH 15 at the end of May.
- d. 0092-23-03: Chemistry and Performance of SCMs for Wisconsin Concrete Pavement
- Researchers have started collecting alternative SCM samples. Issues with gathering two SCMs (Weston Class C fly ash and Opus). POC will be notified of progress soon.
- The research team will be using the coarse aggregate quarried from Lannon Stone. Fine aggregate will be locally sourced from a source in Minnesota.
- 7. Specification Re-org Lyngdal/ Mandal (~20 min)
  - a. Task Force Initiation
  - Category system to replace our class system to simplify the testing frequencies. A given category will have the same mix design and testing frequency.
  - Spec reorg layout and the general scheme were presented.
  - AWP pilot projects to begin with AWP and spec reorg draft in 2024. Pilot project training cost/time should be included in the contract so pilot project bidders can include it.
  - <u>Task Force Members:</u> Andrea Breen, Leslie Hidde, Brad Diener, Jake Franzmeier (Bay Area Testing & Consulting), Julia Slota (INTERRA, Inc.), Tom Sand, Benny Walker, Anna Romenesko (Sommers Construction), Sara Shoenmann (JT Engineering), Matt Spindler (REI Engineering), James Pforr, Mark Zander, Mark Finnell, and New Concrete Engineer (more to be added eventually)
- 8. Task Force Updates Lyngdal (~10 min)
  - All task forces are on hold for now while we reorganize the spec and implement AWP.
  - a. Fast Track
  - No updates
  - b. Curb Shear
  - Memo sent to maintenance folks for how to repair curb shear. Some regions are moving ahead with using thickened edge and 12" curb heads for maintenance to mitigate curb shear issues. Discussion about whether this is the direction the DOT wants to go or not.
  - The task force recommends the thickened edge over the 12" curb head.
  - Jointing on islands should be looked at in general.
  - c. Structure Aggregate



- Department needs to work with the AWP team to determine the best path forward for concrete aggregate gradation testing.
- d. Buckling Research
- No updates
- e. PEM Research
- No updates
- 9. Curb Shear Hidde (~10 min)
  - a. Regions putting in 12-inch curb head
  - Memo sent to maintenance folks for how to repair curb shear. Some regions are moving ahead with using thickened edge and 12" curb heads for maintenance to mitigate curb shear issues. Discussion about whether this is the direction the DOT wants to go or not.
  - The task force recommends the thickened edge over the 12" curb head.
  - Jointing on islands should be looked at in general.

## 10. ASR Testing – Mandal (~10 min)

- ASR testing draft spec presented. Changing from a geologic definition to a county name that has ASR risk sources.
- The central office will be testing aggregates from all the identified sources (nine counties).
- Clarification was made that any combination of SCM is allowed when conducting this test,
   and C1567 doesn't need to be performed if C1260 passes.
- 11. Factors Effecting Concrete Strength Gain Lyngdal/ Parry (~10 min)
  - Trial batch strength tests in some projects are nearly twice what was seen from the same mix during the production/field testing.
  - Could be linked to the use of SCMs or tester/testing conditions.
- 12. Concrete Inspection Training Spoor/ McMullen/ Hidde (~15 min)
  - 150 attendees mix of in-person and virtual.
  - Next year plans are to have it as in-person only.
  - Many opportunities to improve this training. There can be improvement of this training in the future.
- 13. Regional Meetings with WCPA Spoor/ McMullen/ Hidde (~15 min)
  - These meetings were found to be valuable.
  - Starting the planning process earlier for these meetings would help to improve in the future.
- 14. Pre-pour meetings (All)
  - Pre-pour meetings should become more frequent and not just on Class I projects.



**Upcoming Meetings** 

operating meanings			
2023			
August 17, 2023	9:00 am to 12:00 pm	CTC	
September 12-14, 2023		National Concrete Consortium	
November 16, 2023	9:00 am to 12:00 pm	CTC	