



May 14, 2026

Meeting Minutes – Concrete Technical Committee

Location: MS Teams and ASL Conference Room, Truax Office, Madison
Date: May 14, 2026
Time: 9:00 AM to 11:40 AM

Attendance

Bureau of Technical Services (BTS):

- Barry Paye – Director
- Erik Lyngdal – Chief Materials and Pavements Engineer
- Tirupan Mandal – Concrete Materials Unit Supervisor
- Peter Kemp – Pavement Unit Supervisor
- Aleksandra Graff – Concrete Engineer
- Adam Albers – Concrete Materials Lab Engineer
- Adam Johnson – Independent Assurance Program Coordinator
- Jeff Bruesewitz – Geologist

Bureau of Project Development (BPD):

- Mark Zander – Construction Standards Engineer
- Craig Pringle – Construction Oversight Engineer

Bureau of Structures (BOS):

- Aaron Bonk – Chief Structures Design Engineer

Bureau of Aeronautics (BOA):

- Lucas Ward – Chief Airport Construction Standards

Regional Representatives:

- Bao Tran – SE Region TSS Chief – Management Liaison
- Travis Mikshowsky – SW TSS Supervisor – TSS Liaison
- Matt Smith – SW Region Independent Assurance
- Bryton Meyer – SW Region Soils and Materials Engineer
- Nicole Roberts – SE Region Materials Engineer
- Isabelle Holcomb – SE Freeways Project Engineer
- Brent Ferguson – NC Region Independent Assurance
- Devin Harings – NW Region Pavement Engineer
- Matt Bertucci – NE Region Pavement Engineer

FHWA Members –

- Michelle Gehrke – Transportation Engineer



Industry Members –

- Sam Martinez – American Council of Engineering Companies Liaison
- Brian Borowski – Amrize Cement Inc
- Connor McMahon – A.W. Oakes
- Jason Andrews – A.W. Oakes
- Brian Luchene – BARD Materials
- Signe Reichelt – Behnke Materials
- Paul Mathe – Carew Concrete
- Barry Bohman – Chippewa Concrete Services
- Sean LePlavy – Jacobs
- Dave Stanke – Kraemer North America
- Mark LaLonde – LaLonde Contractors
- Brad Diener – Lunda Construction
- John McConahy – Mapei
- Tim Hendrickson – MCC Inc
- Travis Kurey – MCC Inc
- Scott Grams – Michels Road & Stone
- Vacant* – Ptaschinski Construction Company
- David Meyer – Quickrete Cement
- Andrea Breen – Schmitz Ready Mix
- Anna Romenesko – Sommers Construction
- James Palmer – St. Mary's Cement Company
- Benny Walker – Todds Redi-Mix Concrete
- Kevin Newmier – Trierweiler Construction Company
- Heath Schopf – Vinton Construction Company
- Jackie Spoor – Wisconsin Concrete Pavement Association
- Leslie Ashauer – Wisconsin Concrete Pavement Association
- Cherish Schwenn – Wisconsin Ready Mixed Concrete Association
- Matt Grove – Wisconsin Transportation Builders Association
- Jeff Zignego – Zignego Company

Resource Members (as needed) –

- Paul Piccione – Construction Oversight and Automation Chief
- Laura Shadewald – BOS Structures Development Chief
- Myungook (MK) Kang – BTS Quality Assurance Supervisor
- Linette Rizos – BTS Quality Assurance and Sustainability Engineer
- Michael Dickey – BTS Prequalified Products Engineer
- Chad Hayes – BPD Construction Oversight Engineer
- Zach Dittberner – Michels Road & Stone
- Matt Trierweiler – Trierweiler Construction Company
- Tom Sand – Vinton Concrete Construction

Agenda Items

1. Welcome and Introductions – T. Mandal (5 min)
 - Incomings:
 - Bao Tran – SE Region TSS Chief – Management Liaison
 - Sean LePlavy – Jacobs



2. Meeting Format and Collaboration – E. Lyngdal/ L. Ashauer (15 min)

- Hybrid/ In-person?
 - There will be one mandatory in-person meeting per year (no Teams invite). This would likely be the January meeting.
- Collaboration (Updates/Discussion)
 - To enhance collaboration, engagement, and meeting productivity, the agenda will be reorganized to topics into – “Discussions” or “Updates”. Members will be provided with a brief update or be engaged in discussions on individual topics.
- Leadership of Task Forces
 - To encourage ownership and engagement, WisDOT wants industry members to lead task forces. This will include sending out the when-is-good invite to schedule the meeting date, drafting the Task Force (TF) meeting minutes in collaboration with Bureau of Technical Services (BTS). This will help disperse the workload among the Concrete Technical Committee (CTC) members and their counterparts as appropriate.
 - This approach may speed up the Task Force (TF) meetings, enhance collaboration and develop further shared understanding of the subject matter being evaluated from different perspectives.
- Call for agenda for future CTC meetings?
 - In the past, there were no “call for agenda items” for CTC. Starting with the August CTC meeting, agenda items will be asked by the members in advance.
 - Details of whether the agenda item is an update or discussion will be included.

3. Task Force Discussions – A. Graff (15 min)

- TF members do not need to be CTC members. If any CTC member knows someone who may be a good fit for any TF and would like to suggest them, please contact T. Mandal and A. Graff.
- Fast Track
 - Next meeting will be in June. Meetings will be divided into subgroups (Maturity, DT forms, and HES/SHES). TF is expected to be completed by January/February 2027 with the above three subgroups to make any changes in the next spec book.
 - Maturity
 - This subgroup will be looking into the new AASHTO standard for maturity and updating the WisDOT specifications, as needed.
 - Interested members: J. Palmer and S. LePlavy
 - L. Ashauer will assist BTS to lead this subgroup.
 - Updating DT Forms
 - This subgroup will be updating the DT forms to fix the current issues and update the forms to incorporate the category system from the Pilot specifications.
 - Interested members: J. Andrews
 - HES/SHES mixes
 - Others?
- Concrete Strength
 - Acceptance using 4x8 cylinders for pavements



- Data collection for 56-d strength
- Data collection to start this year
 - TF met on 03/13/2026. Current industry interest is on pavement projects only. Structures projects are not of an interest because of the nominal aggregate size.
 - The department plans to evaluate ~10 projects (2 projects per region) and will cast seven 6x12 cylinders and seven 4x8 cylinders to perform 28-day and 56-day strength testing. Resistivity will be tested on cylinders subject to standard and accelerated curing at 28 and 56 days. Data collection is anticipated to start in June.
 - Projects with optimized gradation and nominal maximum aggregate size of less than 1.5 in will be evaluated.
 - **Collaboration Request:** The contractor will already be performing temperature, air content, 28-day strength and resistivity (accelerated) testing for a WisDOT contract as random QC testing. For the same subplot, if the contractor can cast three additional 6x12 cylinders and seven 4x8 cylinders in the molds provided by the department that would be very helpful. Contractor will have to provide the mix design information to BTS. If contractors would like to help test and sample concrete, BTS will provide cylinders, pick them up from the site, and test them.
 - **Action Item:** Inform A. Graff of any WisDOT projects where the industry would collaborate to cast extra cylinders.
- Curb Shear
 - **Past Action Item:** BTS will investigate installation practices and consider providing more guidance for which materials are meant to be used in specific applications
 - P. Kemp provided a summary of the expansion material referenced in the SDD (see table below).
 - WisDOT and industry would collaborate to create the guidance language through TF.
 - Discussion is needed about the type of material for different applications. Concerns about Buy America requirements, product availability, and cost will also be discussed.
 - **TF volunteers?**
 - H. Schopf, L. Ashauer, K. Newmier, P. Kemp, M. Bertucci, A. Graff, and T. Mandal



Locations	Joint Filler Thickness	SDD Reference Link	Expansion Material
Between Vertical Face Curb Types Extending from the Top of Curb to 1 Inch Below the Adjoining Concrete Surface	1 inch	SDD 8D1	ASTM D8139
Between Structural Approach Slab and Concrete Approach Slab of Bridge	1.5 inch (w/o dowel bars)	SDD 8D2	AASHTO M153, AASHTO M213, or ASTM D8139.
Bridge Approach with Concrete Shoulders	1.5 inch (with dowel bars)	SDD 8D2	AASHTO M153, AASHTO M213, or ASTM D8139.
Curb Ramps (all Types) - Sidewalk	0.5 inch	SDD 8D5	ASTM D8139
Structure surface drains	1.5 inch	SDD 8D2	AASHTO M153, AASHTO M213, or ASTM D8139.
Driveway and Sidewalk Ramps Types X and Y	0.5 inch	SDD 9A11	ASTM D8139
Driveway and Sidewalk Ramps Type Z	0.5 inch	SDD 9A12	ASTM D8139
Concrete Median Nose	0.75 inch	SDD 11B2	ASTM D8139
Bridge/Concrete Pavement Approach Slab	1.5 inch	SDD 13B2	AASHTO M153, AASHTO M213, or ASTM D8139.
Concrete Pavement Jointing (Doweled expansion joint on the side road , Standard Intersection and Approach to Median)	1.5 inch	SDD 13C18	AASHTO M153, AASHTO M213, or ASTM D8139.
Concrete Pavement Jointing (Expansion joint at vertical curb at a splitter island)	1 inch	SDD 13C18	ASTM D8139
Concrete Barrier, Single Faced (with Anchorage) a b	3/4 inch	SDD 14B22	ASTM D8139
Concrete Barrier Single Slope (CBSS)	unspecified	SDD 14B32	ASTM D8139
Concrete Barrier Single Slope Thrie Beam Anchorage	unspecified	SDD 14B33	ASTM D8139
Concrete Barrier Single Slope for Runs under 40-Foot Long	unspecified	SDD 14B34	ASTM D8139
Single-Faced NJ Shape Concrete Barrier to Single Slope Concrete Barrier Transitions	unspecified	SDD 14B35	ASTM D8139
F Shape Concrete Barrier to Single Slope Concrete Barrier Transitions	unspecified	SDD 14B36	ASTM D8139
Double-Faced NJ Shape Concrete Barrier to Single Slope Concrete Barrier Transitions	unspecified	SDD 14B37	ASTM D8139
Double-Faced F Shape Concrete Barrier to Single Slope Concrete Barrier Transitions	unspecified	SDD 14B38	ASTM D8139
Height Transitions for Single Slope Concrete Barrier	unspecified	SDD 14B39	ASTM D8139
Vertical Faced Concrete Barrier to Single Slope Concrete Barrier Transitions	unspecified	SDD 14B40	ASTM D8139
Single Slope Roadside Retaining Wall	3/4" polystyrene	SDD 14B41	unspecified

- **New: Blended SCMs and Alternative SCMs**
 - TF to review WHRP project to revise spec language on SCMs and ASCMs
 - Currently, WisDOT spec allows the use of blended SCM and alternative SCMs and references all the tests per the applicable ASTM standard.
 - TF will evaluate the recommendations made in the WHRP project (Project ID 0092-23-03 Chemistry and Performance of Supplementary Cementitious Materials for Wisconsin Concrete Pavement) to recommend revisions to the specifications and provide guidance regarding these materials. The WHRP report identified a framework for accepting these materials.
 - The proposed framework will also be evaluated for constructability issues based on the research done at NRRA for these materials.
 - **TF volunteers?**
 - A. Breen, L. Ashauer, A. Graff, and T. Mandal
 - Need to discuss whether to include suppliers
 - Potential testing firms
 - Larry Sutter

4. Approved Products List – A. Graff/ T. Mandal (20 min)

- Updates
 - Grout and Repair Materials Change



- Updated list for Vertical Repair “Form and Pour”:
<https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/ap-current/vertical-rapid-set-concrete.pdf>
 - A new list for vertical repair using “form and Pour” has been added to the APL. The location still needs to be approved by the engineer.
 - WisDOT researched the APL processes for repair (horizontal, vertical, and overhead) and grout materials in various states. WisDOT’s APL process is very similar to other states, especially the neighboring states.
 - WisDOT will include an additional test to evaluate chlorides for the repair (horizontal, vertical, and overhead) and grout materials. The process will require either Rapid Chloride Permeability per ASTM C1202 or Total Chlorides per ASTM C1218. The total chlorides test has been used in some structures SPVs as well. The drafted APL process was presented.
 - **Action Item: Review** the change in the APL process for the repair (horizontal, vertical, and overhead) and grout materials and send any comments to T. Mandal by June 5, 2026.
- Cure and Seal Compound APL
 - The drafted APL process was presented, highlighting the material property requirements for permanent and temporary applications.
 - **Action Item: Review** the APL process for cure and seal compound and send any comments to T. Mandal by June 5, 2026.
- HP Dowel Bars
 - The drafted APL process was presented, highlighting the material property requirements for steel and stainless-steel dowel bars.
 - Three testing standards are given as an option for the load deflection test.
 - Manufacturers will have to submit new applications under new requirements to remain on the APL.
 - **Action Item: Review** the APL process for HP Dowel Bars and send any comments to T. Mandal by June 5, 2026.
- **Prestress Plant APL** process is currently being drafted and will be sent to CTC for review as well.
- Discussions
 - **New: FRP Dowel Bars**
 - The drafted APL process was presented, highlighting the material property requirements for FRP dowel bars.
 - Three testing standards are given as an option for the load deflection test.
 - The FRP dowel bars on this APL may be used through an SPV that will refer to this APL.
 - **Action Item: Review** the APL process for FRP Dowel Bars and send any comments to T. Mandal by July 10, 2026.



5. Statewide SPVs – A. Graff/ T. Mandal (20 min)

- Updates
 - HPC Pavements
 - Statewide template for HPC pavements SPV was presented.
 - The intent is to make the SPV standardized and allow options specific to the region/project. Guidance will accompany how to use for the regions; option to stipulate specific tests and timeframes based on region needs and project specifics.
 - Color codes in the SPV are based on an option, regional specifics, and SPV statewide requirements. Language highlighted in “green” color will be optional for the region and language highlighted in “yellow” color will be region/project specific.
 - **Action Item: Review** the statewide HPC pavements SPV and send any comments to T. Mandal by June 19, 2026.
 - Discussions
 - **New:** FRP Dowel Bars
 - Template for FRP Dowel Bars SPV was presented.
 - The SPV references the FRP dowel bars APL, and the use is limited to for rural State trunk highways classified as Arterials, Collectors, or Local without structures. FRP dowel bars are not intended for interstate concrete pavements.
 - The lightness of these dowels can lead them to floating if they aren’t anchored down properly. Members discussed regarding the potential use of FRP dowel bars as an alternative option to HP dowel bars.
 - **Action Item: Review** the FRP Dowel Bars SPV and send any comments to T. Mandal by July 10, 2026.

6. 715 SPVs Update – T. Mandal (30 min)

- The draft was approved by FHWA on April 30, 2026.
- All changes to the approved SPVs since the last version sent to CTC on January 8, 2026 were presented. The remove and replacement section has most of the changes.
- A document summarizing the changes will be sent along with all the approved SPV and the guidance documents. The SPV documents will highlight these changes as well.
- Three projects to pilot these SPVs in 2027. One project for each SPV (pavements: F-and t-test analysis, pavements: tolerance analysis, and structures).

7. Spec Reorganization/ AWP Update – E. Lyngdal (5 min)

- Pilot projects have kicked off for AWP and using the Pilot specifications (spec re-org specs).
- Next round of pilots will include 7-10 projects in 2027.
- Current spec book is being updated for the 2027 pilot spec book.

8. Cement types in Standard Specification Discussion – A. Graff (10 min)

- WisDOT standard specification 501.2.4.1 specifies the cement types allowed on WisDOT projects.



- A new cement type IC will soon be included in ASTM C595. Type IC is a blended cement with 30% Portland cement with 70% of other materials. It can include limestone, slag, coal ash, etc.
- Change may come to ASTM allowing this, but will not affect WisDOT projects. Discussion is for awareness only.

9. MOTP – A. Albers/ T. Mandal (10 min)

- **Due date for any other changes:** August 1, 2026.
- Updates
 - **Past Action Item:** Provide any feedback to A. Albers on the proposed language for WTM T22 and WTM T97 by the next CTC meeting (05/14/2026)
 - No comments from CTC. The proposed language will be submitted to FHWA for the next MOTP update.
 - **New:** Wipe Test
 - The draft of the wipe test for evaluating joint cleanliness prior to filling or sealing was drafted as a WTP. This is an ACPA process for cleaning the joints before you fill it or seal it.
 - This procedure has been used in SE, NE, and NW regions by the department.
 - **Action Item:** Review the Wipe Test procedure and send any comments to T. Mandal by June 19, 2026.

10. WHRP Research Updates – A. Graff/ L. Rizos/ T. Mandal (15 min)

- Optimization of Dowel Bars in Concrete Pavements
 - During the modeling phase, multiple dowel configuration and dowel types were evaluated and five configurations were tested in the lab phase. Lab testing was completed this winter.
 - Two of the five lab configurations will be evaluated in the field-testing phase. The field test sections will include repetitive loading tests on selected dowel bar configurations. Concrete was placed in the field section on May 14, 2026. Wheel will be mounted and then mimic traffic.
- Evaluation of Ride Quality and Tining/Finishing Practices for Concrete Pavements
 - Project team is working through analysis, and a high-level update was provided in the last meeting.
- Evaluating Water-Cementitious Material Ratio (w/cm) as Acceptance Parameter for freshly Placed Concrete
 - The goal of this research is to evaluate if the w/cm parameter can be used for acceptance that will remove the need the casting and testing cylinders.
 - Literature review is complete, and the phoenix test oven is selected for testing in the lab and field.
 - Project timelines are being considered for testing operations in the field. Testing will be done at the plant and in the field.
 - Project types include pavements, structures, and ancillary.
- Performance and Durability Assessment of Portland Limestone Cement Used in Wisconsin



- This project will start in October 2026. This will mainly include laboratory testing and field investigations on 5 sites (~one per region).
- **Any research ideas for this year?**
 - Please send any research ideas to T. Mandal.

11. Noise Wall

- Approval criteria and application process for sound-absorptive precast concrete panel noise wall systems is being finalized.
- These plants will be audited as part of the pre-cast plant inspections.
- Slide summarizing the changes is provided below:

- **APL Spec: Sound-Absorptive Precast Concrete Panel Noise Wall Systems**
 - Approval criteria and application process for system approval
 - Requires precast APL for the panels
 - Submittal review process will require SME support from BTS (materials properties) and BOS (structural design example)

- **STSP 541-020 Single-Sided/Double-Sided Sound-Absorptive Precast Concrete Panel Noise Wall Systems**
 - Previous stsp's will be deleted
 - BOS has developed new APL for Structure Mounted Noise Wall fabricators
 - In structure-mounted applications, supports must come from an approved fabricator
 - New list to be populated soon to work in coordination with stsp

- **Precast Plant Inspections**
 - New "Category E" created for precast panels
 - Include in 2026 audits (information only)

Upcoming Meetings

2026		
August 13, 2026	9:00 am to 12:00 pm	CTC
September 29–October 1, 2026		National Concrete Consortium
November 12, 2026	9:00 am to 12:00 pm	CTC