



# Bridge Technical Committee – Minutes Wisconsin DOT, Industry, and Partners Thursday March 10, 2022 1:00 – 3:30 PM Microsoft Teams meeting

## Subcommittee Reports:

### 1. Design Subcommittee update – Aaron Bonk

- Aaron will give an update for the Design Subcommittee
- Bridge Technical Committee - Overlay Equipment Subgroup – Update (Bill Oliva)

## Standing Topics:

### 1. Wisconsin Highway Research Program Bridge Items – (James Luebke)

WHRP: <http://wisconsindot.gov/Pages/about-wisdot/research/whrp.aspx>

James update on the following in-progress WHRP projects:

- Internal Curing of Bridge Decks – Completed
- Textured Epoxy Coated Rebar – Completed (On WHRP)
- Rating Longitudinal Laminated Timber Slab Bridges – Completed
- Adhesive Anchors
- Bridge Abutment Slope Protection  
Optimizing Bridge Abutment Slope Protection at Stream Crossings
- Deck Overlays  
Improving Bridge Concrete Overlay Performance
- Any suggestions for additional projects?

**Action Item:** Contact James Luebke ([james.luebke@dot.wi.gov](mailto:james.luebke@dot.wi.gov)) with future WHRP suggestions by April 15<sup>th</sup>

## New topics:

### 1. Terex Bid-Well – Development of new overlay paver (Luke Ohara)

Terex – Bid-Well are currently in the process of re-design of a new generation of the vibra-screed overlay finishing machines. Luke will discuss developments and timelines for this equipment.

Luke gave a presentation on the development of a new overlay paver for low-slope concrete overlays with a 1” to 4” thickness. A prototype is in the works and coordinating with South Dakota DOT. The proposed design has a maximum length of 28-ft with a standard (min.) length of 10-ft. The full structural analysis has been completed and looking at testing the prototype this summer and machines will tentatively be available for the 2023 season. Jim Parry asked how test pours were being done. Luke mentioned trails in a gravel parking lot on gravel and would like to work with South Dakota DOT. Mike Delemont asked about standard specification deviations. Luke mentioned the vibration source needs to be updated and the intent is to match the old screed spec

requirements. Presentation Attached:



2 Terex  
Bid-OF-WiscDOT.pdf

**2. Backfilling of Pre-Boring – Jeff Horsfall**

Jeff mentioned a previous inquire on what material is used to backfill pre-bored holes and asked attendees on their thoughts. The use of grout and concrete was discussed. Jeff intends to clarify the spec requirements for backfilling pre-bored holes.

**3. Changes being made to Section 501 Concrete and Section 7 on Quality Management of the Standard Specifications for 2022, highlight this for the committee. (Jim Parry or Mark Finnell)**

Mark Finnell and Leslie Hidde provide 2022 spec changes. This included the new Portland Limestone Cement (PLC) usage, Silica Fume requirements, admixtures, aggregate acceptance, simplified concrete grades (A,B,C, & E), department testing, curing methods, and BTS List-Serv. Jason Samz (Zenith Tech) mentioned issues with fly-ash being use for concrete overlays. Presentation Attached:



2 - 2022.03.10\_Spec  
Updates for Bridge Te

**4. AASHTOWARE MATERIALS - 2024 Std. Spec./CMM Impacts (John Rublein)** Due to the Aashtoware-Materials implementation, the 2024 Spec. and CMM are going to require major changes in format relative to how Materials and QA requirements are presented. FHWA has also expressed strong interest in cleaning up the QA process in multiple areas.

John Rublein gave a presentation on the AASHTOWARE-Materials implementation. Project close-outs should be much easier. John is working with WisDOT business areas to develop and implement.

**Previous Meeting Carryover Topics:**

**1. Initiative to reduce overruns in Concrete Masonry Overlays (CMOD Overrun Work Group)**  
Effort from regions to reduce overruns in Concrete Masonry Overlays. This has been an ongoing problem and a small committee has formed to consider options on both the design and construction side to get better estimated quantities and limit cost overruns. There were a number of meeting held in the spring of 2021 on this issue.

There are currently a few options being considered

**Option 1 - Altered Work (104.2.2.4.2)**

This was the preferred approach from the Department group that met in spring of 2021. This will focus additional payment at the additional material cost and additional time for workers to place the additional materials. – *Matt Grove point out concerns with this approach and there may be challenges to this approach.*

## **Option 2 - 104.2.2.4.3 Changed Quantities**

(1) The department will adjust the contract if the department or contractor demonstrates that quantity changes affect the contractor's unit cost to perform the work and meet one of the following: 1. The quantity of a major bid item, as defined in 101.3, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity applies only to that portion in excess of 125 percent of the original contract bid item quantity, or in case of a decrease below 75 percent, to the work actually performed. Follow Spec 109.4.4 for guidance of the pricing of the over/under -run quantity (75-125% at the contract bid price) from Spec 109.4.4 Negotiated Prices. - *The Region Contract Administration people have voiced concerns about payment at the contract price for quantities between 100 – 125%.*

## **Option 3 – Changed Quantities as an exception to the rule. (Mike Hall Suggestion)**

Write something into 509.4 and/or 509.5 that overrides 104.2.2.4.3 Changed Quantities as an exception to the rule. We currently explicitly override 104.2.2.2 and 104.2.2.4.3 for the Piling bid items in 550.5.2(3). In these cases, we acknowledge the increase in quantity but also reserve the right to adjust prices. – *This has yet to be fully examined internally within the department and externally to stake holders.*

**Action Items:** There is additional internal/external discussion needed before a decision is made on this item. We will craft language and run it by both the Department internal CMOD Team and external stakeholders through Matt Grove.

Bill gave a brief update on the topic and past work. Looking to get the committee back together and determine if Option 3 (change of quantities). Matt Groove said option 2 made most sense and still has concerns with option 1. Dan Kowalski mentioned about the possibly adding cores. Kristi mentioned possibly adding some as-built information. Aaron suggested that the “on budget” report be revisited to see if it’s still an issue. David Castleberg may be able to assist with a rough evaluation. Bill will reach out to others (BTS) to get updated information.

## **2. Pay quantities for Concrete Masonry Bridges, (Tim MacLaughlin-Barckand – Larson Construction Company, Inc.)**

We have been experiencing numerous pay deducts off of plan quantities for Concrete masonry, bridges, because the field engineer’s calculations vary from the designer, inevitably in a negative direction.

**Action Items:** – Spec 502.4 Measurement has been revised for the 2023 STD Spec to reflect payment based on dimension of the Plan. Aaron discussed how the bridge manual was updated to report to the nearest 0.1CY for structure units (i.e. piers) and not to always roundup. He mentioned that in-house staff and the consultant review staff are aware of these concerns, but don’t think this an issue moving forward. Kristi mentioned that field staff still need to verify the quantities and not just pay plan quantities.

## **3. Edge of Deck Flashing (Standard 17.03) - (Tim MacLaughlin-Barckand)**

Tim shared a concern about the sequence related to placement of the Edge of Deck Flashing (STD 17.03). Specifically, the requirement of placing the flashing after the protective surface treatment is applied. The challenge some contractor may face is that access to the side of the bridge may be removed after falsework or other related construction supports are removed. This can be driven by the waiting time for deck cure prior to placement of surface treatment. Tim asked for additional guidance or ideas on what could be done differently. These may include application surface treatment and flashing to the sides of the deck prior to removal of falsework.

**Action Items:** BOS has some additional questions to contracts that we would like to ask at the

March 10<sup>th</sup> BTC Meeting. Bill is looking for more information. Tim was not present for the meeting.

**Standing Item - Specification Changes / Updates – Discussion (Aaron Bank or technical sponsor) (These items weren't discussed due to time restraints, attached for reference)**



2 BTC Meeting  
Minutes 2022-03-10 :

- (C1) Bridge - Pay 502.4.1 Concrete for Bridges
  - Field engineers are to re-calculating values
- (C1) Bridge - Expansion Device 502.2.7.3 Expansion Devices
  - STSP moved to Std. Spec
- (C1) Bridge – Rebar Repair 509.3.1 General
  - Epoxy repair methods were discussed
- Added removing existing piling SPV (steel and timber)
- Aaron added ACI/CRSI Adhesive Anchor Installation Certification
  - Lack of availability of training opportunities
  - 1 trainer in Wisconsin
  - Aaron talked to AASHTO. Our counterparts (Michigan, Illinois, Minnesota) might be an option.
  - Suburb in Chicago – 7 days a week training.

**Attachments:**



























**Attendance List:**

The screenshot shows a meeting interface with a list of participants. On the left, there is a vertical list of participants with their initials in a circle and their names and roles. On the right, there is a larger list of participants, including a 'Mute all' button and a 'Meeting guest' indicator. The participants listed are:

Initials	Name	Role
MD	Delemont, Michael	External
MF	Finnell, Mark W - DOT (DTSD Co...	
	Hidde, Leslie A - DOT	
JS	Jason Samz	External
JJ	Jenks, Julie - DOT	
JL	Joe Lombard	External
LK	Krueger, Linda M	External
JL	Lahm, Jason - DOT	
	Lamers, Brandon - DOT	
RL	Luck, Ryan - DOT	
	Luebke, James D - DOT	
GB	Baer, Gregory - DOT	
JB	Balice, Joe (FHWA)	External
BD	Bill Dreher	External
	Brooks, Julie - DOT	
TC	Castle, Tony	External
CH	Chad Halverson	External
C	Craig - DNR (Guest)	Meeting guest
DK	Dan Kowalski	External
DS	David Stanke	External
DK	Dan Kowalski	External
DS	David Stanke	External
MD	Delemont, Michael	External
MF	Finnell, Mark W - DOT (DTSD Co...	
	Hidde, Leslie A - DOT	
JS	Jason Samz	External
JJ	Jenks, Julie - DOT	
JL	Joe Lombard	External
LK	Krueger, Linda M	External
JL	Lahm, Jason - DOT	
	Lamers, Brandon - DOT	
RL	Luck, Ryan - DOT	

Michael Radtke External	Craig - DNR (Guest) Meeting guest	Luebke, James D - DOT
Michael Ryan (Guest) Meeting guest	Dan Kowalski External	Balice, Joe (FHWA) External
Oberdorf, Ryan (FHWA) External	David Stanke External	Bill Dreher External
OHara, Luke External	Delemont, Michael External	Brooks, Julie - DOT
Oliva, William - DOT Organizer	Finnell, Mark W - DOT (DTSD Co...)	Castle, Tony External
Parry, James - DOT	Hidde, Leslie A - DOT	Chad Halverson External
Pringle, Craig - DOT	Jason Samz External	Craig - DNR (Guest) Meeting guest
Qian (Guest) Meeting guest	Jenks, Julie - DOT	Dan Kowalski External
Rublein, John F - DOT	Joe Lombard External	David Stanke External
Shadewald, Laura - DOT	Krueger, Linda M External	Delemont, Michael External
Smith, Charles External	Lahm, Jason - DOT	Finnell, Mark W - DOT (DTSD Co...)
Staab, David A - DOT	Lamers, Brandon - DOT	Hidde, Leslie A - DOT
Sydow, Dan External	Luck, Ryan - DOT	Jason Samz External
Tadd Owens, PE External	Luke Haun External	Jenks, Julie - DOT
Thielmann, Ann C - DOT	Matt Grove External	Joe Lombard External
VanHout, Kristin M - DOT		Krueger, Linda M External
		Lahm, Jason - DOT

	Luebke, James D - DOT		Lahm, Jason - DOT
	Balice, Joe (FHWA) External		Luck, Ryan - DOT
	Bill Dreher External		Luke Haun External
	Bonk, Aaron M - DOT		Matt Grove External
	Brooks, Julie - DOT		Michael Radtke External
	Castle, Tony External		Michael Ryan (Guest) Meeting guest
	Chad Halverson External		Oberdorf, Ryan (FHWA) External
	Craig - DNR (Guest) Meeting guest		Oliva, William - DOT Organizer
	Dan Kowalski External		Parry, James - DOT
	David Stanke External		Pringle, Craig - DOT
	Delemont, Michael External		Qian (Guest) Meeting guest
	Finnell, Mark W - DOT (DTSD Co...)		Rublein, John F - DOT
	Hidde, Leslie A - DOT		Shadewald, Laura - DOT
	Horsfall, Jeffrey - DOT		Staab, David A - DOT
	Jason Samz External		Tadd Owens, PE External
	Jenks, Julie - DOT		Thielmann, Ann C - DOT
	Krueger, Linda M External		VanHout, Kristin M - DOT
	Lahm, Jason - DOT		

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 Brooks, Julie - DOT	 Krueger, Linda M External
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