

# Bridge Technical Committee - Minutes

Wednesday, November 19th, 2014

1:00 PM– 3:30 PM

SW District office (Dane – Columbia Rooms)

## Subcommittee Reports:

1. **Concrete Masonry Structures – Ready Mix Industry Concerns.** - Two meetings have been held with internal WisDOT Business areas and a number of discussion items identified.
  - **Update of from the November 4<sup>th</sup>, 2014 meeting with Ready Mix Industry members.**
    - Contractors have concerns with current concrete pay reductions due to non-conforming concrete. The department will most likely not split the bid item as requested by the contractors (prime vs. ready mix supplier). Work Group will be examining guidance on pay reduction. Better CMM guidance and training for material testing has been requested. More conversations are expected in January and Matt Groove would like to be involved.
2. **Convening a subcommittee to develop a ride quality specification for bridges – (Deb Bischoff & Jim Parry)**
  - **The new QMP Specifications Engineer in Jim Parry's group is Deb Bischoff. Deb will be leading a committee this winter to work on development of a ride quality specification for bridge decks and approaches. Jim and Deb will be looking to recruit participants for this committee.**
    - Volunteers were solicited for a ride quality subcommittee consisting of BOS, BTS, and members of the industry. Peter Kemp is to assist in field trouble shooting. The group will work on a draft specification this winter and will include example IRI's (Ride Quality Parameter's) similar to what has been used in Ohio. Other items include low /high speed profiling equipment, calibration, and a HTCP profiling course. Pilot projects are expected thereafter and general implementation is expected for 2016-2017. Interested volunteers included Joe Larson (Lunda), Brent Freeman (EK), Kevin McMullen (WCPA), Darrin Stanke (ZTI), Laura Shadewald and Bill Dreher.

## Standing Topics:

1. **Hoan Bridge Update** (Laura Shadewald)
2. **USH 41 Update** (Bill Dreher) –
3. **Zoo Interchange** (Laura Shadewald)
4. **IH-39 (Illinois – Dane County)** (Laura Shadewald & Jim Lucht)
5. **Verona Road (Madison)** (Laura Shadewald & Brandon Lamers) –
6. **Every Day Counts – EDC-3 (Initiatives)** (Bill Oliva)
7. **Wisconsin Highway Research Program (WHRP) Bridge Items** – (Bill Oliva)
  - **FY2016 Projects**

- **Names contractor members were requested and provided for consideration. – Adam Dour of Kraemer North America**

### **Previous Meeting Carryover Topics:**

1. **Updates - Concrete Slope Paving Constructability and joint design and layout. (Kevin McMullen)** A few of the contractors would like to eliminate the details where the slope paving is done in layers and with keyway joints in favor of placing the entire slope and sawing or forming joints. And the joints are tied together with #4 tie bars.

- James Luebke agrees that improvements can be made to current concrete slope paving details. He proposed adding an alternative detail, to the bridge standard detail 15.03, that includes sawed joints and tie bars. Draft plans will be sent to Kevin McMullen in the fall of 2014 for review prior to publication.
- James is expected to provide Kevin a draft (alternative) construction joint detail for review prior to an anticipated 1/15 publication. Mike Hall expressed concerns that the specification language has already been changed and details have not been updated. He recommended that BOS communicate with field staff via a monthly teleconference for the allowance of alternative details. James indicated that plan details should be still applicable and once a detail has been developed it can be shared with others. Note: specifications removed language on pour widths (5 to 10 feet wide) and the mentioning of forms. Standard 15.03 now controls and provides joint spacing and joint details. Current guidance is provided and joint alternatives are expected.

2. **Slip formed parapet wall – (Joe Larson)**

A number of years ago the industry reached out to the Department about the possibility of slip formed parapet wall. At that time, the Department elected to stay with the traditional hand formed barrier wall. Joe Larson brought up the slip-forming of parapets Bill Oliva stated that BOS will investigate this further. After investigation BOS *may* still not allow, but there will be more substantial reasons as to why not. **This item was brought forward as a research idea for WHRP Structure TOC for consideration. There were higher priorities identified for spring 2015 Research Projects by the TOC.**

- Update was provided with no further discussion.

### **New topics:**

1. **Pile Under-Runs. (Matt Grove & Joe Larson)** This item is back from other committees that have discussed and did not have the ability to provide discussion and closure. Attached, you will find a piling spec from the state of North Dakota. This spec is from their 2008 edition. This might be a good tool for the Department to implement for piling over/under runs. With significant

piling quantity changes the contractor and the Department get at odds on how to compensate the contractor for the added costs. This is black and white way of adjusting the payment schedule for both sides. Over the past eight years we have completed two large projects for the state of North Dakota; consequently, this spec came into to play on both projects. After reviewing the job costs, this spec essentially covered our costs. Please feel free to call and discuss in greater detail. – **Attachment**

- Pile over and under runs have been a problem for contractors on both minor and mega projects due to cost implications. Matt Grove suggested the use of ND specifications that would better protect contractors for quantity differences. Mike Hall commented he didn't see how the department would save money and stated that a ND specification would most likely not be incorporated into WisDOT specifications due to the unknowns. Darrin Stanke was going to send Bill Dreher information for better understanding the issue. A subgroup was proposed (Joe, Matt, Bill...?) to help determine if recommendations for changes or to stay the course.
  - A Committee consisting of DOT Staff and Industry (Joe Larson, Matt Grove, Darrin Stankke) met on January 20<sup>th</sup>, 2015 to discuss the issue and frame potential response to this issue. We anticipate bringing forward to the April 2015 BTC results of this Committee effort.
- 2. Specification question for the contractors pertaining to protective surface treatment that I would like to get their input on as well (Aaron Bonk)**
    - Parapet and deck protective surface treatments specifications were proposed due to ASTM requirements for coloring (pigment). It was noted that the clear coloring may have a temporary pigment used for identifying application areas and could be confusing if not mentioned.
  - 3. 505.3.4 Placing and Fastening (reinforcement). (Joe Balice - FHWA)** On several recent bridge construction projects, I have observed bridge deck reinforcement tied at 50% on the top mat and 25% on the bottom. To my knowledge, the standard specs call out 100% ties unless spa. Of bar intersections is < than 1 ft in both direction. I'm unsure where the 25% comes in and would like to discuss more at the Tech Meeting.
    - Joe was not present at the meeting. Item not discussed and will be addressed at a future meeting.
  - 4. Use of a conventional deck paver during the placement of a low-slump overlay. (Joe Larson)**
    - For concrete overlays outdated machinery is required per Standard Specification 509.3.2. Contractors mentioned that they have invested in this equipment and its high repair costs. Contractors objected to the Hoan Project (Walsh) using a concrete paver since overlay bids were based on the assumption that machinery identified in the specification was required and a concrete paver would not be allowed. Contractors would like clarification to the required equipment and voiced concerns on the overlay quality using the concrete paver. Jim Parry may look at different concrete mixes and methods.

It is our understanding that future overlay projects will not allow the use of concrete pavers until alternative methods have been investigated and presented to others.

5. **Abutment Wing Construction General discussion on the pouring sequence of wings and the means to support the 6'-6" wing overhang during construction (James Luebke) – Attachment**
  - Contractors stated that they did not have any issues with forming abutment wings and thought the described approach was an isolated project. No follow-up required.
6. **Hammer Head Pier Shaft Pours (Bill Dreher, Tom Buchholz, Kristin Van Hout, & Aaron Bonk) -** The issue is hammerhead piers where the contractor wants to lengthen the shaft pour/reduce the number of pours and resulting bar laps. Our standard directs designers to place construction joints to limit pours to 20 feet; the contractor wants to increase this length.
  - Construction staff indicated that a 24'-0" pour would have been beneficial to a particular project. Dave K. stated that the detail could be rephrased for design and construction allowances. One idea was for the use of optional bar laps, but would be paid as detailed on the plans. Field staff indicated that CRI's have been used to address contractor's concerns.
7. **Consistency between regions with administration. Namely, some accept PDF files on finals, sublets, etc. Others require strictly hard copies. (Curt Pheifer)**
  - Limited discussion - not a bridge technical item
8. **Internal Curing (Kevin McMullen)**
  - Kevin was not present at the meeting. Item not discussed and will be addressed at a future meeting.
9. **Railroad flagging – (revisited) (Darren Stanke)** Pre-payment on multi-year projects has become an issue. Contractor pays up front and the DOT does not have to reimburse their 50% until the contract is complete. There are some creative Contract Mods out there, but it needs to be addressed globally. The flagging rules continually change from railroad to railroad and are not consistent within the same railroad.
  - Limited discussion - not a bridge technical item. Item to be brought up at the annual freight meeting.
10. **Temporary Barrier Block (Darren Stanke) -** Payment for temporary attachment items needs to be better addressed. Specifically when the temporary barrier is attaching to an existing bridge or barrier with a tie beam or to a higher roadway barrier with the wedge section shown in the standard drawings. They are not incidental per the standard drawing.
  - Limited discussion – concern identified.
11. **Payment for Ice in Concrete. Developments to Date (Mike Hall, Don Gruel, Matt Grove, and Aaron Bonk)-** discussion and input from the Bridge Technical Committee. - **Attachment**

- WTBA preferred option #1 and was agreeable to the dual approach based on the project concrete quantity. Mostly, contractors requested consistency in administering payment and CMM guidance that could document these understandings.

## 12. Specification Changes / Updates – Discussion (Mike Hall)

- **Revise the standard specifications for HMA paving in cold weather.** The new specification will be included in all projects via ASP 6 effective with the January 2015 letting. Designers may need to add the new HMA Cold Weather paving bid item along with the associated quantity and unit price estimate for final PS&Es already submitted. - **Attachment**
- Limited discussion - not a bridge technical item