#### **ASCE-INDOT STRUCTURAL COMMITTEE**

#### **MEETING NO. 77 MINUTES**

September 28, 2017 / 10:00 am / INDOT Room N642

Meeting called to order at 10:00 am by Mike McCool. Those in attendance were:

Anne Rearick INDOT, Bridge Division Jeremy Hunter INDOT, Bridge Division Mike McCool Beam Longest & Neff, LLC. INDOT, Bridge Division Ed Spahr Pete White INDOT, Greenfield INDOT, Bridge Division Mahmoud Hailat Kurt Heidenreich Engineering Resources, Inc. Mike Eichenauer Butler, Fairman and Seufert, Inc.

Mike Halterman USI Consultants, Inc.
Seth Schickel HNTB Corporation
Jason Yeager E&B Paving, Inc.

Stephanie Wagner INDOT, Bridge Division Elizabeth Phillips INDOT, Bridge Division

In addition to the attendees, these minutes will be sent to the following:

Ben Borcherding American Structurepoint, Inc.

Greg Pankow INDOT, Construction Management

Jose FHWA Matt Shergalis NBSA

Mike Wenning GAI Consultants, Inc.

Troy Jessop CHA Consultants, Inc.

The following is a summary of the meeting discussion.

- 1. Previous meeting minutes not available for review.
- 2. Design Conference (McCool)
  - a. Handout provides draft agenda for the upcoming bridge design conference, tentatively scheduled for 02/07/2018.
  - b. Agenda includes ideas from sub-committee meeting in September.
  - c. Some changes will occur durations, addition of traffic control presentation, potential Frank Russo LRFD steel topic. McCool will coordinate.
  - d. Hailat volunteered for sign/signal foundation design presentation.
  - e. Discussion about contractor roundtable (per input from Hunter and ICI). The group will solicit questions PRIOR to the conference to guide the roundtable discussion. Topics could include traffic control, means/methods input, common field changes.

# 3. Load Rating (Hunter)

- a. Quick aside by Hunter: Expect LRFD 8 adoption memo soon. Will adopt, use it, then determine any exceptions over time, through use.
- b. Part 3 Load Rating policy update (from bridge inspection manual) is now with FHWA for review and approval.
- c. INDOT is providing updates to Counties about the changing policy.
- d. Discussion about liability and contracting in relation to BrR effort, input, drawings.
- e. INDOT will share legal load library to avoid re-work by each county.

# 4. Asymmetrical Barrier (White)

- a. Effort is complete. IDM changes are in process. Calculations and presentation from 2017 bridge design conference may become a bridge design aid (BDA).
- b. Borcherding will check calculations.

# 5. General Notes (McCool)

- a. McCool received no review comments from last distribution.
- b. INDOT will provide input on implementation.

# 6. Life-Cycle Cost (Spahr)

- a. Spahr is including Adam Post (INDOT) as a resource
- b. Goal is to develop general guidance for all designers to use, and maybe a place to look to find actual data.
- c. INDOT has concern about specifying numbers (costs, life ranges) because of the high variability of each bridge condition, situation, future programming, current budgets.
- d. White stressed user costs are a significant piece of this analysis.
- e. Discussion about asset management and programming including specific bridge concerns related to scoping.

## 7. Approach Slabs (Hailat)

- a. Hailat is now looking at terminal joints separately with the pavement design group.
- b. Still working on approach slabs with several players involved. Move to next meeting agenda.

### 8. Research Needs (Rearick)

- a. Will hold research brainstorm/idea generation meeting in early winter 2018.
- 9. Pile Foundations for Three-Sided Structures (Schickel)
  - a. Research phase other states, fabricators, colleagues
  - b. Overall goal is to provide guidance for these rare projects: analysis is needed to determine pile needs, coordination with fabricators will be helpful, quantity and pay guidance
  - c. Group discussed examples, likely analysis methods, bridge vs structure ideas.

### 10. Prestressed Concrete Beam Stirrups (Hailat)

a. IDM updates drafted and are under INDOT review.

### 11. Overlay Types (White and Wagner)

- a. Wagner is incorporating updates into specs, IDM, etc.
- b. Discussion about White's research into high-early strength and rapid-setting overlays.
- c. Moving this topic off active discussion items.

## 12. Deck Overhand (Wagner)

a. Updates complete and FHWA is now reviewing final document changes.

- 13. Semi-Integral End Bents (no updates)
- 14. Rocker Bearigs (Hunter)
  - a. Discussion about progress to date.
  - b. Good candidate for Bridge Deign Aid.
- 15. Bridge Design Aids (Wagner)
  - a. Held subcommittee meeting in September.
  - b. BDAs will replace "practice pointers", and will include general guidance and ideas about bridge design, detailing, software, etc.
  - c. Example: Construction feedback about less patching on average (2%) on thin overlay projects
  - d. INDOT will develop a website location for BDAs.
  - e. Discussion about proposed overall bridge website update.
  - f. BDAs can be divided into topics (piers, deck, beams, etc), which each have a section for design, detailing, software.
  - g. Hunter reiterated these are not policy (not enforceable), just design guidance.
  - h. Wagner and the subcommitted will work on website and BDA format.
  - i. Agenda includes a list of BDAs and person who will develop.

#### 16. New Business

- a. Deep Semi-Integral or Integral Bents (Hunter)
  - i. Following up on previous design memo guidance, Hunter would like design examples.
  - ii. Will develop guidance on analysis/design/decision and could include in a BDA.
  - iii. Hailat will lead effort, with Heidenreich and McCool.
- b. Expansion Joint Nosing Material (White)
  - Nosing materials are not adequately described or covered in special provisions for newer joint types. Special provision updates will better define the material and payment.
  - ii. White provided draft special provisions for review:
    - 1. Remove nosing from the exp joint sealing system RSP
    - 2. New USP for nosing material (standalone)
  - iii. Committee will review for next meeting.

The next meeting for the INDOT ASCE Structural Committee is scheduled for 1:00 pm on December 13, 2017 at IGCN Room N642. Mike McCool will distribute an agenda prior to the meeting. This meeting adjourned at noon.

Respectfully submitted,

Halal

Seth Schickel, PE

**HNTB** 

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