MEETING MINUTES

ACEC-IL / IDOT Bridge Committee

Location: Illinois Department of Transportation
2300 S. Dirksen Parkway
Springfield, IL
Lower Level Auditorium

Meeting Date: March 14, 2017

Topics Discussed:

1. Welcome and introductions

   IDOT and ACEC members introduced themselves. The Committee Chair Dan Lutz welcomed IDOT BBS representatives and thanked past-chair Mike Cima for his work with this committee. Jeremy Buening was introduced as the Committee Secretary and is responsible for the meeting minutes.

2. ACEC Items:
   a. Committee purpose and goals:

      The purpose is to provide an opportunity for open dialog between the ACEC committee members and IDOT BBS representatives. The goals are to have 2 regular committee meetings a year, with the Bridge Seminar counting as a meeting. The next Bridge Seminar is scheduled for the fall of 2018.

   b. Dave Bender update.

      The general assembly is in session and there are a total of 161 bills currently being monitored. House bills which are being closely monitored include HB0220 (DBE Goals), HB0511 (Home Rule), HB2681 (QBS increase), HB3136 (Gas tax increase), HB3322 (Land survey intern), HB4333 (Procurement Reform), and HB5813/SB3020 (Design build). Also being monitored are the senate bills SB0001-00016 contained in the “Grand Bargain”. Lobby Day is being held on May 10th.

   c. IDOT staffing update.

      The BBS currently has a head count of 84. They hired 9 CEs and 4 techs in the past year. There were 4 retirements at the end of the year.
d. IDOT update on their funding and the impact of the lock box amendment.

IDOT is still working through the details of the lock box amendment. The Department is developing policies and procedures based on the impacts from the lock box amendment.

e. IDOT update on the MYP and anticipated size of future bulletins.

Office of Planning and Programming estimates that future bulletins will average approximately 20 selections.

f. IDOT thoughts on:

1. Using galvanized piling and spread box beams

The BBS is not aware of any issues of pile deterioration below ground and have not observed the need to galvanize the piling. The BBS is aware of spread box beams and have not used them in that configuration before. The BBS welcomes additional feedback on the benefits consultants see in utilizing box beams in a spread format. The Committee will form a task force to identify best practices of other state DOTs and provide the BBS information and recommendations on those practices which are identified.

2. Performance of epoxy coated rebar in bridge decks after +/-25 years in service

The experience of epoxy coated rebar has been overall positive. There are numerous instances in which the epoxy coating is still intact when the concrete is removed during an expansion joint replacement. The department has not used other rebar types such as stainless steel bars. BBS is looking into projects to use textured rebar. Research is being completed on bond and pull out strength. It was mentioned that the Repair Unit has been monitoring the sealing of existing bridge decks for the past 5 years and feel it has been beneficial in extending deck life.

3. Using AASHTOWare design software package

The BBS only has experience with AASHTOWare’s rating software. The committee’s best practices task force will look into the potential benefits of using the design software package.

4. Hearing from consultants on other DOT’s processes and systems

The committee’s best practices task force will identify these items and will provide information and recommendations to the BBS.
g. IDOT update on:

1. New load rating policy for LPA bridges

The FHWA now requires all new structures have a load rating analysis performed. In addition and in conjunction with this, the long-term goal is to have an up-to-date system, providing a more accurate depiction of the load carrying capacity of all structures, and allowing quick analysis of permits for the ITAP (Illinois Transportation Automated Permit) system, not only for the State highway system, but also on the local system.

CL 2016-10, dated April 15, 2016, indicated “We expect that beginning July 1, 2017, all new construction, rehabilitations, and other work affecting the load capacity of a structure, will require a load rating analysis, and submittal of the plans and load rating results to the Department.”

Currently, IDOT anticipates consultants rating only Local Public Agency structures - not State structures. IDOT anticipates that the load ratings will be documented on IDOT BBS 2795 (Structure Load Rating Summary) and not the plans, and that the plans and (AASHTOWare) analysis file will be submitted with the SLRS to IDOT-BBS.

We expect this submittal will be provided at the completion of design, and again before opening the structure if structural modifications are made during construction affecting the load carrying capacity of the structure.

When work is performed on a structure, it is reasonable and appropriate to expect to know the effect the work has on the load carrying capacity, and to know the resulting load carrying capacity.

At this time, IDOT anticipates any construction affecting the load carrying capacity of a structure will require the load rating submittal of a SLRS. This includes not only new structures, but also rehabilitations, repairs, resurfacings and roadway re-profiling projects.

2. AASHTOWare BrR requirements

A handout was passed around that had instructions on obtaining the software and FAQs.
3. Consultant licenses for AASHTOWare BrR

An email went out on January 13, 2017 to all subscribers of the NBI Subscription Service, and Local Roads Circular Letter 2017-10 was sent out on January 20, 2017. They contained details on how consultants may obtain AASHTOWare for load rating.

BBS was recently asked about providing training. IDOT is providing AASHTOWare to Local Agencies and their consultants at no cost, and there are more than 100 online tutorials, so our thought is that training is on the user. All of the training tutorials are online.

https://aashto.mbakercorp.com/Pages/Training.aspx

Information was provided in a handout on obtaining the licenses. Further specific questions could be directed to the Bridge Management Unit or email DOT.Bridge.Ratings@illinois.gov

4. Policy on consultant provided load ratings for bridge rehabilitation projects of limited scope

At this time, IDOT envisions that any construction affecting the load carrying capacity of a structure will require a load rating and submittal of a SLRS. When doing a rehabilitation or repair which only includes a portion of the structure, it is still necessary to know the final load carrying capacity.

If the Owner or consultant has the load rating analysis in their files, the consultant may review and use that, updating the file as necessary. At this time, the Department is not releasing our analysis outside the Department.

Consultants may also contact the BBS-Local Bridge Unit (LBU) to determine if the BBS has previously load rated the structure. If the LBU has files, and the modification is not to the controlling member, it may be possible that the consultant can work with the LBU to re-evaluate the load carrying capacity. For instance, if sealed timber pile repair drawings are provided, the LBU may use that to revise the structure load rating. Procedures and deliverables for coordination with the BBS/LBU will be developed.
h. IDOT update on NBIS metrics and the FHWA “National Bridge Inspection Program Update – Illinois” document.

The comments from the FHWA were that the program has improved tremendously. There were 17 metrics that were Compliant, 4 metrics were Substantially Compliant (6, 7, 12 & 21), and 2 metrics Conditionally Compliant (13 & 16). The state’s inspection delinquency went from 20% to 3%. Exposed H-piles are increasingly becoming an issue and section loss below the pier cap has been recently discovered.

i. IDOT update on additional tasks being delegated to NBIS Program Managers (i.e. load rating checklist, bridge file checklist). How are other consultants handling compensation for this extra work?

No additional tasks are anticipated in the near future for NBIS Program Managers. However, recently there have been a number of additional requirements and we cannot say there won’t be more.

j. IDOT update on new Bridge Manual.

IDOT has a goal of releasing the new Bridge Manual by the end of 2017.

k. IDOT update on changes to BBS CADD policy under the new IDOT CADD Manual.

No additional changes are anticipated due to the new IDOT CADD Manual. The new base sheets and fonts were the latest changes, and implementation is required on new projects only. Projects that have already been started do not need the fonts updated to the latest standard.

l. Request that IDOT correspondence with subconsultants go through the prime consultant.

The prime correspondence issue when involving subconsultants appears to be isolated with SGRs and the review comments. For subconsultant prepared SGRs, the BBS will still email the subconsultants the comments but will also send a speed letter in the mail to the prime consultants. The BBS will now require a Disposition of Comments for SGRs and a pdf of the revised report before issuing approval. BBS is also considering completing Performance Evaluations for SGR consultants.

For District-prepared SGRs, coordination through email to the TS&L consultant will still occur.
m. UHPC implementation team update.

Andrew Keaschall is the Team Lead for ACEC. The initial meeting discussed the Peoria Street project in Chicago that utilized UHPC. The Everyday Counts program was discussed and the potential funding that IDOT could receive from it. Identification of informational documents, such as from FHWA, was also discussed. The goal of the team is to push the technology and utilize it more in Illinois.

3. Illinois Department of Transportation Items:

   a. New rating loads/parametric study results.

      The goal of the study was to develop and define a set number of analytical rating vehicles that envelope the force effects of legal loads to use in ratings. The study is almost complete and the resulting vehicles will be placed in the upcoming revised Structural Services Manual.


      As stated in 3.a., new legal loads are being established and will be inserted into the revised Manual. IDOT has a goal of releasing the Manual in mid-2017.

   c. ABD Memo 16.1 Three Sided Structure Policy Revision.

      This ABD memo was a result of an IDOT/FHWA review of the three-sided structure policy. In summary, the ABD memo eliminates the need for foundation design in the construction plans, and places the responsibility on the Contractor. The goal is to provide a more cost-effective substructure design because it will be tailored to the actual precast manufacturer loads. The construction plans shall specify the span and minimum opening, as well as the scour countermeasure treatments. GBSP 90 should be used for new projects rather than GBSP 15.

   d. Transportation Asset Management Plan requirements including a Bridge Management System.

      The IDOT committee determined that the data available on bridges for the Bridge Management System was much greater than that of roadways. IDOT is looking into utilizing AASHTOWare’s Bridge Management Software.

   e. Upcoming ABD Memos.

      The next ABD memos will pertain to Bridge Deck Smoothness Grinding, which will include guidelines and special provisions. A new ABD memo will also be released to provide updated details for Integral Abutments.
f. Summary of BBS base sheet revisions.

The substructure base sheets will be updated. The BBS will look into ways to track sheet revisions, possibly being similar to how changes to Highway Standards are tracked.

4. Open discussion.

No additional items were discussed during open discussion.

5. Next meeting dates:

- September 2017 – Full committee meeting, date to be determined
- March 2018 – Full committee meeting, date to be determined
- Fall 2018 – Bridge Seminar

6. Adjourn.

The meeting was adjourned at 12:28pm

Minutes prepared by Jeremy Buening (jbuening@chastainengineers.com).

Attendance Sign-In Sheet is attached.