

MEMORANDUM

July 20, 2018

TO: ACEC-INDOT Bridge Inspection Committee Members

FROM: Jonathan Olson, Butler, Fairman & Seufert, Inc.

RE: ACEC-INDOT Bridge Inspection Committee Meeting Minutes
(Meeting held May 11, 2018)

The following were in attendance:

Andrew Fitzgerald, INDOT
Bill Dittrich, INDOT
Randy Strain, INDOT
Jose Ortiz, FHWA
Bobby Chandler, Clark Dietz
Pat Connor, LTAP
Adam Post, INDOT

Scott Minnich, United Consulting
John Lukac, BLN
Jonathan Olson, BF&S
Michael Vereb, Lochmueller Group
Rob Coop, USI Consultants
Nate Pfeiffer, INDOT

Item #1 – County Border Bridges

- FHWA Memo was sent regarding county border bridges. They do not want to pay to inspect bridges twice with federal money.
- There are 750+ border bridges in the state. Indiana is working on addressing bridges on Illinois border first, followed by Ohio, and then Kentucky. Knox County and Benton County have been visited. Newton County is next, followed by Lake County and Vigo County.
- Bridge inspection data needs to be in both states databases, however, duplicate inspections are not required. Inspectors will need to get other state's inspection data and input it into BIAS. Each bridge will be coded as to who is responsible for inspections. These inspections won't resolve who owns and maintains the bridges.
- If a county has border bridges, they should wait until INDOT addresses them before taking any action.
- Adam asked about when inspectors will update data. Andy said INDOT will coordinate with each County to arrange this. It will likely vary by county.
- Bill said our inspectors will be attaching the other State's reports to our reports. Adam asked if we need to put our inspector names on the reports. Bill said yes, but to add the disclaimer that it was inspected by the other State's inspectors.

Item #2 – Critical Findings

- Bill is working to create an online class for critical findings and is hoping it will be ready by late summer. The class will be a teaching tool that will have quizzes, etc.
- Bill stated that he reviewed critical findings from the past year and put together a document to showcase a number of them. Bill presented this document/slideshow to the committee.
 - o While looking at a photo of a prestressed beam with spalling and exposed steel, Bill said the damage usually has to be a ways out from the bearing to affect the load rating. But if the inspector is not sure, they can just submit a critical finding. Alternatively, an

- o inspector can just submit for a load rating without a critical finding.
 - o If guardrail is knocked off of bridge, you can put up barrels to address critical finding.
 - o Andy mentioned the importance of time stamped photos to look at the history of deterioration.
 - o A bridge in Lawrenceburg was closed due to high water, the city wanted to be cautious. Scott asked if flooding was a critical finding. Randy said that no it wasn't, but this bridge had more particular concerns.
 - o Scott asked about County bridges with no rail, or rails with a post damaged. Bill said if there was rail and now there isn't then it should be a critical finding. If one post is disconnected, inspector must use discretion based on other posts and traffic volume. Andy said that Counties need to determine which bridges need railing, because some may not.
- Jonathan stated that it would be beneficial to have examples of different situations to show what is and what isn't a critical finding, with explanation on why for each on.
- Bobby asked about bridges closed by the County and what to do when the inspector finds it. Bill stated that it should be a critical finding.
- Bill stated that in general, if something is questionable on whether it should be a critical finding or not, just to submit it as a critical finding.

Item #3 - Metrics Compliance

- Jose stated that INDOT currently has 6 improvement plans. Metrics 6, 7, and 10 are the biggest issues. These metrics are mainly checking that inspections are done on time. Often item #90 does not always get updated and this is the date that Jose looks at.
- FHWA and INDOT are running queries on the data monthly, if not more frequently.
- Another issue is Metric 11. This is regarding reducing the inspection frequency when you have a condition of 4 or less for deck, superstructure, substructure, or culvert. Inspectors need to reduce routine inspection frequency, or instead they can make a special inspection to look at one area. Randy stated that the executive summary needs to be updated if the frequency is changed.
- Metric 23 checks that data is updated in a timely manner.
- Jose stated that the State's data was rejected a few days ago because of 6 structures where item 32, approach roadway width, was coded as a "0". NHS bridges need to be 90% in fair or good condition. In order to calculate this, the approach roadway width is needed.
- Other errors in submittal included item 66 higher than item 64. INDOT will provide further explanation on this.
- INDOT has 15 days to fix above items and resubmit the data. Metrics 6, 10, and 14 will be ran again after the above is accepted.
- Some NHS bridges need added and some need removed before INDOT can resubmit data at end of May. FHWA maps for NHS bridges are old, INDOT's maps are more up to date. Bill will be resolving errors. Some element level data may have to be wiped out to resolve conflicts with condition ratings. Adding NHS bridges trigger an element level inspection. However, these won't be due in 30 days, they will be completed as the inspections come due.
- Rob would like a quarterly update on compliance at each meeting to track progress and address problem areas.

Item #4 - Notice to Proceed Procedures

- Andy stated that consultants are not to do any work until the notice to proceed has been received.
- Notify Andy if there are issues with notice to proceed - the sooner the better.
- Any work that is performed before the NTP is issued will not be reimbursed.

Item #5 - Non Destructive Testing (NDT)

- Randy stated that Chapter 5 and 6 of the INDOT Bridge Inspection Manual are outdated and need to be removed.
- There was a question from the manual regarding the requirement for a NDT Specialist. Randy stated that as inspectors, we do NDT all of the time. NDT Specialist was meant more for contract work.
- Andy stated that there are no specific requirements that you have to do NDT, it's just a tool available.
- Randy stated that using NDT on pins is expensive. It would be better to spend money on maintenance of the pins.
- Bill mentioned that the plan of action to perform NDT on pin and hangers may move from 5 years to 10 years, but it will need approval from FHWA. This was a recommendation by Wiss, Janney, Elstner Associates.
- Scott asked about the requirements in the Bridge Inspection Manual for level I and level II NDT. Randy said that was for contract work.
- The complex bridge inspection prequalification category was brought up. Bill and Randy stated that some firms are currently prequalified for complex bridge inspections, but the prequalification is really meant to be a case by case basis per bridge.
- Jose stated that complex bridges need action plans.
- Rob mentioned that he would like to possibly have all of the pin/hanger and complex bridges in the state contracted together, separate from county-wide contracts.

Item #6 - S-BRITE Training

- Andy stated that per the bridge inspection manual, the S-BRITE training is not required to become a Team Leader, but it is required to remain qualified. This is done on purpose, due to the limited availability of the S-BRITE course. That way it does not restrict people from becoming team leaders, but they will need to take the course when it is available to remain qualified.
- Mona Davis may be emailing people when the class becomes available if team leaders need it.
- There may be a class this fall.

Item #7 – LPA Status and Discussion

- John L. asked about the status of a lump sum contract that was discussed last year. FHWA is pushing back on lump sum contracts because it is harder to audit. They want to make sure bridges are not being inspected twice.
- John L. asked if consultants can start getting NTP sooner, about 1 month prior to contract. Andy would like to see that happen, and at a minimum 2 weeks prior.
- Andy would like consultants to get BIAS access 1 month in advance of contract.
- Randy said that side by side open reports in BIAS, such as fracture critical and routine reports, creates conflicts with data when approving reports. There needs to be one report and one inspector.

Item #8 – LPA Inspection Scheduling

- Andy stated that he would like to start looking at the compliance month schedules for the LPA.
- Randy stated that for LPA bridges, approximately 70% of the state is due this year for inspections, and 30% is due next year. Also, not many bridges are inspected in the winter. INDOT is looking at balancing years and months out so there is a more even workload. That might open up competition a little more between consultants.
- Andy stated that it is easy to reschedule the State's bridges, but harder to reschedule the LPA bridges because of money and contracts.
- Randy stated that in order to reschedule, you would likely have inspections scheduled for less than one year apart.
- Andy asked if having one month to do all inspections in a county is really realistic. Michael stated that one county has around 180 bridges, which normally they would be allowed to do over 2 months, but since the previous inspections were all done in 1 month, they can't spread out because of the compliance month.
- Andy thinks that costs are generally higher because of the tight inspection schedules.
- Jonathan stated that he would like to see the schedule balanced not just by months and even/odd years, but balanced over a four year period coinciding with the four year contracts. That way 25% of the counties in the state would start a contract in year 1, 25% in year 2, and so on. Right now, the majority of LPA contracts are advertised in the same year and around the same time period. That makes it difficult when submitting on work and hurts competition.
- Andy suggested that maybe they could change the cut-off for doing inspections over two months from 150 bridges to 100 bridges.
- Bobby asked if we could do some inspections at 25 months instead of 24 to help rebalance. Andy said that we cannot go past 24 months because of Federal law, but we can always move up inspections.
- Rob stated it would be hard to move up phase I inspections due to contracts, but we could move up phase II.
- John L. said one of the difficulties of doing all inspections in one month is if a portion of the county is flooded for a couple weeks it may only leave 1 week for inspections.
- Andy stated that the quality of inspections would increase if the schedule was better balanced.
- Jonathan suggested getting a rough program idea together and then getting input from Counties on their thoughts and concerns.

Item #9 - Load Ratings

- Scott mentioned that one area that the program could save some money is in load ratings. The state doesn't have to re-rate unless something changes on the bridge, but on the county side consultants with a new county have to re-rate all the bridges in Phase I because they are contractually responsible for the load rating.
- Randy stated that engineers shouldn't stamp load ratings unless they did them.
- Andy said that the contract wording is prohibiting change right now. The contract may need to change to prevent frequent re-rating of bridges and to remove the liability of not re-rating.
- Sean Hankins replied via email to this item when draft meeting minutes were sent out. As stated in Part 3 of the Bridge Inspection Manual, re-rating is only required if there is a change in condition. To better define and separate the roles of the load rater and inspector a new drop down was added to the MAD tab in BIAS. It asks "Has the dead load or the structural condition of the primary load carrying members changed since the last inspection?" This field must be filled out for each inspection. Only when the answer is yes will a re-rate be necessary. Sean stated that this issue was discussed internally back in early December of 2017 with the drop down list solution following soon after. If there are additional steps that need to take place to make this official, perhaps modification of new contract language if necessary, they should be discussed in the committee to ensure that this is implemented. INDOT agrees with Scott that there is no need to rerate every bridge with each new contract.

Item #10 - BIAS

- Bill stated that the iPad app has problems with uploading reports. The reports go into limbo and inspectors end up losing pictures. This is a Bentley issue that they are working on.
- The county summary reports are still an ongoing issue.
- Report any BIAS issue to Mona Davis.
- Rob mentioned that he would like notifications when new bridges have been created from Mona on a more consistent basis. Bill stated that creating bridges is a long process because there are a lot of databases tied together.
- Bill stated that he tries to run status reports regularly to catch bridges before the inspections become 90 days late. There was a 9 month period after Susan Hines left where no status reports were run in BIAS.

Item #11 - Closed Bridges

- Scott asked about closed bridges and what is the current procedure for handling them.
- Randy and Bill stated that inspectors still need to do safety checks, but no fracture critical, special, or underwater inspections. They confirmed that this is different guidance from the previous meeting.
- Inspectors need pictures of the closure and need to update the item 90 date.
- There will still be no Federal reimbursement for the safety checks on closed bridges.

Item #12 - Training Update

- NHI 130055 2-Week class is July 24 - August 9 in Seymour. There are 30 seats.
- NHI 130053 Refresher class is August 12 - August 14 at Indy Sub district. There are 30 seats.
- S-BRITE Training - there are no upcoming classes firmly scheduled at this time.
- Randy stated that currently there is a culvert class for INDOT people. They might consider opening that up to consultants.
- Randy stated that it's possible there might be a S-BRITE class for railroad flatcar bridges.
- Scott mentioned that a safety training course would be beneficial. It could include material on fracture critical and confined space inspections as well as operation of snoopers and man-lifts.
- This year's test bridge is currently on hold.

Item #13 - Areas That Need Improvement

- Andy asked what areas in the bridge inspection program need improvement.
 - o Scott mentioned a safety class
 - o Rob mentioned regular metrics updates at meetings
 - o Andy mentioned system-wide scheduling
 - o Jonathan mentioned LPA contracts and invoicing
 - o Michael mentioned better guidance and documentation on how to document critical findings

Item #14 - Next Meeting

- The next meeting is scheduled for Friday August 10, 2018 at 9:00am at INDOT Indianapolis sub-district at 7105 Brookville Road, Indianapolis, IN 46239.

Action Items

- INDOT/ACEC Bridge Inspection Committee meeting minutes to start being uploaded to INDOT Bridge Inspection Homepage for future reference.