

# KYTC Division of Structural Design / ACEC-KY Bridge Subcommittee Partnering Meeting

**August 2nd, 2018, 9:00 AM – 10:00 AM  
Room 311**

## Minutes

These minutes provide an outline of discussions at the Division of Structural Design and ACEC Bridge Sub-Committee partnering meeting held at the Transportation Cabinet Office Building. Those in attendance were:

Bart Asher	KYTC Division of Structural Design
Joseph Van Zee	KYTC Division of Structural Design
Carl Van Zee	KYTC Division of Structural Design
Aaron Stover	Michael Baker International
David Rust	Palmer Engineering
Bryan Reid	Lochner
Craig Klusman	AECOM
Scott Ribble	Burgess and Niple

Discussion topics included:

1. **Purpose** – This meeting was requested by the Sub-Committee to continue the dialog with the Division of Structural Design (DOSD). The goal is to exchange feedback on bridge design issues that could be addressed or avoided in future projects, resulting in more economical, easier to construct, and longer lasting bridges.
2. **Division of Structural Design Update/Topics**
  - a. Recently Division of Structural Design (DOSD) has been noticing issues with quality of plans and submittals of late and wants to see this corrected. When checking plans make sure that good quality control practices are being implemented.
  - b. DOSD will be placing a renewed emphasis on review of Advance Situation Folders and Stage 1 Plan Submittals. Consultants can expect to see more input from the DOSD regarding Cabinet preferences on future plan reviews.
  - c. With the current fiscal constraints, KYTC's direction both internally and externally is to first look at rehabilitation options for structures to determine if there are viable

strategies to prolong the life existing structures. Consideration of re-using the foundations, substructure, or parts of the superstructure can all be considered and should be discussed with the DOSD.

- d. Carl Van Zee is the new Branch Manager for the Bridge Review Branch. Carl is going to start developing a list of things that they want to see done differently. Currently DOSD is seeing general issues with quality, and a lack of consistency.
- e. DOSD is working with Division of Bridge Maintenance to draft a special note for sealing of new bridge decks. DOSD is anticipating several pilot projects using this sealing note and will collect cost data and ultimately performance data. KYTC is looking at sealants which may ultimately replace the current masonry coatings. DOSD is primarily pushing sealants for new bridges but they also have potential use for cleaning and preventative maintenance.

### 3. Follow-up from last meeting

- a. **Recurring Plan Issues** - DOSD Identified common problems during the 2017 meeting with ACEC. Consultants should be aware of and address these issues. The group also discussed the development of both Concrete and Steel Alternates in preliminary plans. There have been issues on past lettings with volatility in concrete beam prices, including \$1,100 /LF prestressed concrete beams on a recent letting. The group discussed various ways to approach this issue from dual designs, to value engineering which may be used on a case by case basis.
- b. **Advance Situation Folder (ASF) Training** - KYTC has met with Drainage Branch on the ASF. At this point in time there is no real need for training. They are moving towards fully electronic ASF, including any supporting DGNs. KYTC is looking to create an FTP type transfer site and will be assigning a file folder protocol for submittal of the ASF. DOSD will in the future look for different or new file protocols. ACEC offered to work with KYTC on any issues with implementation.
- c. **Steel Reinforcement Splice Charts (AASHTO LRFD 8<sup>th</sup> Ed)** - DOSD has developed splice length tables for their designs. They have been using these designs internally but are still under development and not ready for distribution.
- d. **KYTC Bridge Design Manual Update** - KYTC is looking to transition to an online format for all guidance manuals. This is still being discussed and a schedule for implementation has not been set.
- e. **As-Built Plans** - As built plans are currently being collected by Earl Downey. The DOSD has advertised for additional staff to assist Mr. Downey with this effort. The goal would be to get someone to work with the Resident Engineers to collect As-Builts, catalog them and make them available for the cabinet. Currently As-Builts are being stored in two separate places (BrM and Strut). Consultants can access existing plans and As-Builts

via either of those means. KYTC has also internally looked at centralizing As-Built data to avoid issues with version control and duplication.

- f. **Cracking of Concrete Barriers** - KYTC has not seen extensive cracking in bridge barriers. DOSD is going to keep with the current guidance which is continuous barriers without any relief joints.
- g. **Strip Seal Standard** - A new standard has been drawn up for a 4" strip seal. Joe Van Zee is slated to review the standard, which will be incorporated into a future release.

#### 4. New Topics

- a. **Manual for Assessing Safety Hardware (MASH) Implementation (DM 06-17)** - December 2019 is the date for implementation of MASH. DOSD advised that this may mean big changes and that the Type III Barrier might be going away. DOSD indicated that a new standard is under development, and is currently being vetted with the 6<sup>th</sup> floor, Division of Construction, and the Construction industry.
- b. **EOR involvement during construction** - For the routine issues DOSD will probably review in house. For other issues DOSD will seek guidance from the EOR. ACEC recognized that not all the field reviews need EOR review, and that sometimes timing and answers are needed very quickly. KYTC will engage consultants on a case-by-case basis. It was also acknowledged that in general the engineer of record generally appreciates the opportunity to be aware of any changes, and it also provides an opportunity to learn what issues might be dealt with on future plans.
- c. **Bridge Review Branch** – Carl Van Zee is the Branch Manager of the Bridge Review Branch, consultants should expect more input than has been given in the past. DOSD indicated that consultants are welcome to contact the Bridge Review Branch during the preliminary phase to get input and avoid possibly heading down the wrong direction.
- d. **Statewide Structural Design Reduction in standard hours** - DOSD indicated that the standard hours had not been changed for many years. The reduction in hours was discussed internally with the staff and felt to be reasonable. DOSD noted that efficiency in drafting, standardization of design and automated processes led to the decision to reduce the hours. ACEC raised the concern that standard hours tend to be used for negotiation of other contracts, which may not be similar or may be more complex. It was noted that these are the baseline hours and they may be increased for complexity of specific designs on a case-by-case basis. It was noted that DOSD has automated the design and drafting process for much of their designs and anticipates that consultants have similar efficiencies built into their design routines. ACEC noted that if there are KYTC accepted standard design templates or tools that these could be shared with the industry to further increase efficiency and standardize design for KYTC.
- e. **Approach Slabs** – KYTC has been working on a new backfill and associated details. This includes the GRS backfill material with Geofam adjacent to the back wall suitable for

implementation in some parts of the commonwealth. These are not intended for large embankments. DOSD has been considering development of a standard for approach slabs. The Geotechnical Branch may make recommendations on approach slabs on a case-by-case basis. If the geotechnical report does not include recommendations consultants may contact the Geotechnical Branch for their recommendation. Occasionally districts may request specific approach slabs, DOSD suggested having a quick discussion with the Bridge Review Branch to ensure current and standardized details are used whenever possible.

- f. **Bridges on Curved Alignment** – Per SD-202-2 *The maximum allowable widening to accommodate a straight bridge in a curved roadway section is 15 inches.* There have been deviations from this on some recent projects. Consultants should review this on a case-by-case basis and discuss with DOSD review branch for exceptions.
  - g. **KYTC Partnering Conference** - It was noted that very few presentations were suggested for the structural tract at the KYTC Partnering Conference. KYTC is very interested in keeping the current tract and is very open to participation from consultants and the industry. It was noted that the structures tract was the most heavily attended tract at last year's partnering conference. KYTC indicated that presentations given at Bridge Day should still be considered for the Partnering Conference since it would be presented to a much broader audience.
5. **Future Meetings – 2019** – The group discussed the timing of this meeting in late summer often causes many conflicts. It was discussed that there may be a benefit in moving this meeting to a date more evenly between Bridge Day and the Partnering Conference to capitalize on lessons learned and aid in the planning of the Partnering Conference. The committee will look at a potential May meeting.