

NHDOT / ACEC-NH Bridge Subcommittee **MEETING AGENDA**

December 8, 2023



Location: Time:

Large Highway Design Conf. Room/Virtual 10:00 AM to 11:30 AM

Purpose of Meeting: Fourth Quarter Meeting 2023

Invitees:

☑ Jennifer Reczek, NHDOT

☑ Angela Hubbard, NHDOT (Co-Chair)

☑ David Scott, NHDOT

☑ Paul Lovely. NHDOT

☑ Jason Tremblay, NHDOT

☐ Levi Byers, NHDOT

☑ Tim Boodey, NHDOT

☑ Nicholas Caron, HDR

☑ Daniel Taylor, Stantec

☑ Anna Giraldi, QCC

☑ John Byatt, BETA (Co-Chair)

☑ Chris Fournier, HEB

☑ Steve Langevin, GPI

1. Department staff changes (promotions, new-hires, retirements, etc.)

- a. ACEC members:
 - Welcome Anna and Nicholas.
- b. NHDOT Staffing discussion:
 - Bill Cass has been confirmed as Commissioner for the next 4 years.

2. Summary of In-House Design Section staff meetings

Staff meeting notes haven't been compiled yet.

3. NHDOT Information for Consultants

- Sample Plans
 - Please ask the NHDOT coordinator for a recent sample plan set similar to the project you are working on, since not all the details or samples are posted online. Some sample plans will be updated in the next few weeks.
 - Need consistency of NHDOT plans.
- Precast Single Slope Concrete Median Barrier
 - The median barrier no longer needs to be integral with the concrete bridge deck.
 - The precast single slope barrier can be placed on the bridge base pavement and the final top course placed on each side of it. This provides a 1.5" embedment of pavement on each side. Reinforcing steel no longer needs to be embedded into the deck from the barrier.
 - The barrier was MASH crash tested with 1" of pavement embedment on each side. The crash test can be found: https://www.roadsidepooledfund.org/longitudinal-barrier/txdot-42-inch-tall-singleslope-concrete-barrier/ (see page 35-45).
 - Steel sliding plates on the barrier need to be detailed at the expansion joint.



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New Engineer of Record Policy

- Stamps of each discipline is now required on the Front Sheet and calculations.
 Clarification of exactly which stamps will go on the Front Sheet will be provided, however initial thoughts were Structural, Highway, Traffic, and ITS. It is expected the geotechnical stamps and stamps for hydraulic analyses will go on their respective reports.
- Additional hours need to be added to the Construction Services scope for changes in the field requiring EOR re-analysis and sign off.
- Contractor questions and submittal reviews requires a reply by 15 working days per Specification 105. This should be a priority once the question/submittal is sent to the EOR.

4. Technical Topics

- a. Chapter 11 Revisions
 - Revisions to the chapter were made last month. See the Revisions History document for sections highlighted that were changed.
 - Section on Galvanic Corrosion Protection was added along with an Appendix showing how to estimate the anodes.
 - Mechanical Splice lengths were revised to the approved AASHTO changes for calculating the development and splice lengths that will be included in AASHTO 10th ed. Please use these lengths so they can be stockpiled.
 - Section 11.5.4 was revised noting what percentage is each submittal stage.
 Chapter 1 will be revised to match these design plan percentages. Preliminary
 Plans considered 40%-50% complete. The PPS&E plans will be considered 85%
 complete but still do not require full rebar detailing. The PS&E plans will be
 considered 99% complete.
 - Section 11.8.2 Concrete Items was added to indicate when to use the items. Item 521.22 should be used for partial-depth overhead applications.
 - Revisions to the Final Contract Plan Checklist were made.

b. Changes to Drawings

- K-frames:
 - Minor dimension changes on some details pertaining to gusset plate clearance and gusset plate bend clearances.
- Bridge Approach Curb Detail:
 - New detail added.
 - Place detail showing the earthwork limits of the approach curb on roadway section sheet.
 - Detail notes how to quantify if Bridge or Roadway project.
 - Since the work is constructed by a different Contractor from the one that installs the bridge railing, placing the detail on the bridge approach rail sheet wasn't the correct location.



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- c. Revisions to Drawings and BDM
 - Angela will be reviewing the comments of revisions to bearings, utilities, prestressed and scupper details.
 - Angela will be adding more recent sample plans.
 - The reinforcement development and splice length table was removed from Chapter 6 due to the constant changes in these lengths in each AASHTO revision. Designers will have to calculate reinforcement lengths themselves using the current AASHTO criteria.
- d. Finishing up Chapter 7 is next.
- e. Bridge Mounted Signs
 - The designer is to determine exactly where a bridge mounted sign is to be
 located to ensure the sign supports do not interfere with railing anchor and cross
 frame locations. The designer is also to check that the sign will not exceed the
 3'-6" overhang limit at the top of the sign. If this limit is exceeded, then the
 Traffic Section should be notified so they can specify a smaller sign or a ground
 mounted sign.
 - Hours should be included in the consultant's scope to cover the costs of these layouts.
 - Drilled and grouted anchor bolts will no longer be allowed since AASHTO and ACI design equations do not apply to grouted anchors. A special provision will be developed to include the anchors the Contractor can use.
 - A memo will be released soon regarding this topic. Drilling and grouting will no longer be acceptable. Only cast-in-place and mechanical expansion anchors are allowed.
- f. Shop Drawing Stamp Changes
 - Section 105.02 has been revised. The working drawings have been placed into 3 different categories: A. Approval, B. Acceptance, and C. Documentation. The revised specification can be found under "2016 Supplemental Specifications" on the webpage: 2016 Standard Specifications | Department of Transportation (nh.gov)
 - The new category B. Acceptance has been created for shop drawings that are typically shop drawings for permanent installations that are designed by the Supplier/Contractor and are stamped, prepared, and signed by a Licensed PE (e.g., overhead sign structures, ITS structures, precast box culverts, arches, frames, modular expansion joints, HLMR bearings). The design calculations are received for documentation and the working drawings are accepted for fabrication.
 - The shop drawings are to be reviewed for general conformity with the contract plans, proposal, addenda, special provisions, and standard specifications. If there are no comments, the working drawings can be stamped "Accepted", or "Reviewed", or "No Exceptions Taken". No "Approved" stamp should be applied.
 - NHDOT will place an additional stamp on the working drawing noting the



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design has been received for documentation and the drawings have been accepted for fabrication.

g. Snow and Protective Screen Bridge Detail Sheets

- The Bridge Detail Sheets have been revised to show the top of the posts clipped and this required the first screen/fence connection to be lowered 9".
- Due to having the top of the post clipped, the T2 bridge railing will not be used with protective screening. The lowered connection creates too long of a cantilevered section of the snow screening that can be pushed out by snowplows.
- Only T3 bridge railing shall be used with snow screening and T4 bridge railing used with protective screening.
- If there is a situation where snow screen is needed on T2 bridge railing. discuss with your NHDOTcoordinator.

h. Concrete Soundwall

- The plans and special provision note that the form liner shall be SC Ashlar architectural finish cast using a Pattern No. 1515 form liner manufactured by SPEC Formliners Inc.
- Contractors have been requesting a different form liner company that also has an ashlar pattern. However, the ashlar pattern requested are different than SPEC Formliners.
- Please reject any request for a different form liner so we can have a consistent look on all the soundwalls.

5. Business Topics

a. None.

6. Potential NHDOT and Consultant bridge training opportunities

- a. The Department may be interested in hosting the NHI Safety Inspection of In-Service Bridge course but needs to gauge interest to meet the minimum of participants needed.
- b. ACEC will send out an email asking for interest among consultants in taking the course.

7. Bridge Bureau workload and anticipated consultant support needs

a. There are holdups in processing projects due to the lack of CE-IV and CE-V engineers. These engineers are crucial for the coordination that is needed. The Department may look into hiring a specific position to handle this coordination.



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- b. The Department has two technicians who are available for work outside of the Department. If consultants need technician help, the Department could find a way for them to work on consultant projects.
- c. The Department has been using their On-Call consultants to perform design checks on In-House designs.

8. Additional Topics

- a. Dan Taylor provided suggestions on clarifying what designer is required to do for the bridge mounted sign supports.
 - Subsequent to the meeting, changes were made to the notes to the designer on the Bridge Mounted Sign Support Detail Sheet.
- b. Dan Taylor provided suggestions on the Pier Protection Detail Sheets to clarify that additional details may be required.
 - Subsequent to the meeting, changes were made to the notes to the designer on the Pier Protection Detail Sheets.

9. Subcommittee membership rotation / new members

John Byatt, Daniel Taylor, Jason Tremblay, Paul Lovely	Sept. 2021 to Sept. 2024
Chris Fournier, Stephen Langevin	Sept. 2022 to Sept. 2025
Anna Giraldi, Nicholas Caron	Sept. 2023 to Sept. 2026

10. Upcoming meeting - scheduled Fridays from 10:00 to 11:30 AM

- a. March 1, 2024
- b. June 14, 2024
- c. September 13, 2024
- d. December 12, 2024