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| **Location** | | **Time**  1:00 PM to 3:00 PM | |
| Virtual | |
| **Purpose of Meeting** | | |  | | |  | | |
| 4th Quarter Meeting - 2021 | | | | | |
| **Invitees** |  | | | |  | |
| 🗹 Jeff Folsom, MaineDOT  🗹 Garrett Gustafson, MaineDOT  🗹 Laura Krusinski, MaineDOT  🞎 Kathy Parlin, MaineDOT  🞎 Ben Foster, MaineDOT  🗹 Richard Myers, MaineDOT  🗹 Devan Eaton, MaineDOT | 🗹 Bob Blunt, VHB  🗹 Thomas French, HDR  🗹 Owen Krauss, HTA  🗹 Daniel Taylor, Stantec  🗹 Chris Taylor, T.Y. Lin | | | |
| **MEETING ITEMS** | | | | | | | |

1. Introductions
   1. Ron Taylor might join on the meetings moving forward.
2. Meeting Minutes Submission
   1. What’s the process to get posted on the website? Owen K. to reach out to Peggy Duval.
3. Information Dissemination by MaineDOT
   1. Contracting/workload –
      * Busy finalizing next work plan. Published early next year. Funding for bridge is more than last year, but might be offset by increase in prices. $200 mil for bridge construction/rehab. Most going towards supplemental needs. 66 new projects: 48 replacement/improvement (similar to what has been put out in the past, includes deck and superstructure replacements), 10-15 paint, 4 rehab.
   2. Federal Grants & Federal Funding Updates
      * Put in for 2 RAISE grants Bangor Holden Road and Northern ME, but didn’t get. Project with Maliseet Indian Tribe, Bangor got an interchange grant & broadway bridge will combine. State DOTs got about 20% as far as overall grants go.
   3. MaineDOT Staffing Update: ATE Silias Fitzgerald will be moving to construction permanently. Team south Kendra Nash transferred to bridge management. Two vacancies for south team, 2 ATEs.
   4. Return to work plan/COVID Info – no new updates. See how winter goes.
   5. Construction Cost Estimating. Using fall 2021 as basis for estimating. Keeps going up.
   6. Standards Update (BDG, PDR/PIC, CADD, Notes) –
      * Bridge Design Guide – HNTB is doing this work to update. Been scaled back a little over what was originally expected. Step 1 establish what is desired/outline, then will pick away at it. Targeting a 2023 overall completion to have it complete. Will come out in pieces as it is completed.
      * Still planning on involving the ACEC committee, but hasn’t gotten that far yet.
4. Summary of Designer Meetings (Rich & Garrett)
   1. 3 meetings since last – October: Consistency issues – interior vs exterior camber (3/4” soft guideline for difference), integral abutment rebar layout guidelines, breaking high-side shoulder (past not break if it’s 4’ or less, so will be practice moving forward). November 2 meetings: Contractor Input Design (CID) process discussion; general construction and structural steel note discussions – should be getting to the website shortly.
   2. Do consultants look at designer meeting notes? They are currently just a direct transcript of the meetings. Used to be attached to the ACEC meetings, not sure when it changed. DOT will work cleaning up notes and make more user friendly.
5. Geotechnical Update (Laura K.)
   1. No updates. Last meeting – first application of FGA on Brewer-Eddington. Will be a research project over the next 3 years.
6. Discussion Topics
   1. Cost estimating/scheduling
      * Recommendations for estimates (recent bids and/or percentage)
        + Earlier this year, bumping up old prices by 20%.
      * Supply chain – Consult Joe Stillwell.
      * Experience testing AASHTOWare’s estimation module has been disappointing thus far.
   2. NHDOT ACEC update
      * Bare decks – NHDOT bridge maintenance suggested to use lightweight aggregate as part of the UMaine research study if possible. They’re noticing less cracking in these placements in repair areas.
      * Complex project approach – NHDOT was asked about this process, but they didn’t have much feedback to offer. The generally reach out to contractors outside the region to provide feedback. They were interested in MaineDOT’s CID process.
      * Bentley connect edition rollout. NHDOT is starting to use the Connect edition on a trial basis.
      * Estimator tool – NHDOT will have a new online based estimator tool that will be available to consultants/DOTs. Dan will share the link once it’s up and running.
      * Anodes – NHDOT is looking for guidance on where to use or independent verification on performance other than from the manufacturers.
        + Bath Viaduct monitoring project. Bob will reach out to Vector.
   3. Geotech
      * Frost depth considerations for stub abutment on piles. It was asked whether the Department would consider reducing frost embedment requirements for stub abutments on piles. Integral abutments generally only need 4’ embedment, but stub abutments on piles would need at least 5’ + riprap thickness, so could end up with ~9’ frost embedment minimum. Other nearby states only seem to require 4’. May provide more cost-effective substructure options for multi-row H-piles or micropiles, where integral abutment use is difficult due to shallow bedrock or high skew.
        + Originally used to control the height of integral abutments.
        + Frost charts are based on Modified Berggren.

*Follow-up thought: It is not always obvious how to use Table 5-1 for non-geotech engineers, particularly the water content. Generally, for new substructures existing material is excavated out and granular borrow would be used to backfill around the substructure units. Would there be a way to simplify the frost embedment determination for standard granular borrow backfill or other backfill materials?*

* + - MaineDOT BDG Rankine Kp passive pressure vs. MassDOT?
      * GC #10 – similar plot of wall rotation vs. lateral earth pressure coefficient. Wall rotation up to 0.02.
      * First calculate wall rotation. Use MassDOT table up to 0.02 rotation. Above that GC #10 kicks in.
      * MaineDOT has recently adopted the new method for earth pressure coefficient determination for in-house geotech reports.
  1. Deck design
     + With SS and GFRP should the BDG deck design table still be used or should we include full design? Team south is asking for new deck designs. Might be part of the new BDG re-write.
  2. Standard Details
     + Consideration of removable finger plates on finger joints? Penobscot-Narrows may have them. Thought is, bridge maintenance may not want to be in traffic to remove them. May depend on trough type/details.
     + Worth including of alternate railing (i.e. Kansas rail) details or other commonly used details? Not anticipated since their use is not expected to be that common. It was noted that it would be helpful to know the origin for where some of the details come from as they are developed.
     + MaineDOT has had issues where guardrail thrie-beam transitions are all asymmetrical and don’t quite line up with bridge rail.
  3. Other –
     + Any updates on FRP? Project specific right now. AIT FRP beams will be used on Augusta Rines Hill, Webster, Solon detail-build.

1. Future Discussion Topics
   1. Training Areas
      * It would be nice to get some more NHI trainings going. Structural Stability?
      * NHI is potentially revamping their training as a result of COVID/remote trainings.
2. Subcommittee Rotation for Consultants
   1. Active:
      * Thomas French, HDR - Q1 2020 thru Q4 2021
      * Owen Krauss, HTA - Q3 2020 thru Q2 2022
      * Chris Taylor, TYLin Q3 2020 thru Q2 2022
      * Bob Blunt, VHB Q4 2020 thru Q3 2022
      * Dan Taylor, Stantec Q2 2021 thru Q1 2023

* 1. Future:
     + Keith Wood, Kleinfelder Q1 2022 thru Q4 2023
     + Ashley Stephens, HNTB Q3 2022 thru Q2 2024
     + Andrew Blaisdell, GZA Q3 2022 thru Q2 2024

1. The Next Meeting is set for: March 15.