

ACEC/MaineDOT Bridge Design Subcommittee

MEETING NOTES

March 15, 2022

Location

Virtual

Time

1:00 PM to 3:00 PM

Purpose of Meeting

1th Quarter Meeting - 2022

Invitees

- | | |
|---|---|
| <input type="checkbox"/> Jeff Folsom, MaineDOT | <input checked="" type="checkbox"/> Bob Blunt, VHB |
| <input checked="" type="checkbox"/> Garrett Gustafson, MaineDOT | <input checked="" type="checkbox"/> Keith Wood, Kleinfelder |
| <input type="checkbox"/> Laura Krusinski, MaineDOT | <input checked="" type="checkbox"/> Owen Krauss, HTA |
| <input type="checkbox"/> Kathy Parlin, MaineDOT | <input checked="" type="checkbox"/> Daniel Taylor, Stantec |
| <input type="checkbox"/> Ben Foster, MaineDOT | <input checked="" type="checkbox"/> Chris Taylor, T.Y. Lin |
| <input checked="" type="checkbox"/> Richard Myers, MaineDOT | |
| <input checked="" type="checkbox"/> Devan Eaton, MaineDOT | |
| <input checked="" type="checkbox"/> Ron Taylor, MaineDOT | |

MEETING ITEMS

1. Introductions
 - a. Keith Wood – PM with Kleinfelder for 15 years, about 20 years total experience.
2. Meeting Minutes Submission – Give the last set a couple more weeks before finalizing since they were submitted late.
3. Information Dissemination by MaineDOT
 - a. Contracting /workload – Not much to share. Teams have been assigned all the new projects for the 3-year plan. PMs have been assigned to projects for the most part, for all 3 of the teams. Most projects don't get activated until late Spring. Later this year there will be more work to put out to consultants.
 - b. Federal Grants & Federal Funding Updates – no updates.
 - c. MaineDOT Staffing Update: Scott Rollins took a new internal position, vacating team south senior PM. Position is posted. Closes on 3/22. Working on trying to hire other assistant transportation engineers – offers will go out shortly, interviews done.
 - d. Return to work plan/COVID Info. Beginning next Tuesday 3/22, bridge program has been instructed to be in the office every Tuesday. Interim stage before the full hybrid system that all state government will implemented. 3 days required in the office.
 - e. Construction Cost Estimating – overall bid prices are consistently coming in high.
 - f. Standards Update (BDG, PDR/PIC, CADD, Notes) – Bi/Tri-weekly meetings with HNTB. Working outline for entire BDG. Will be working on first 3 chapters. Just began putting text together for chapters 1 & 3. Internal comment on full outline in the next month or so. Will begin text review in the next couple of months.
 - No real discussion on consultant comment on outline. There will likely be some back-and-forth discussion, then send out for comment.

- Schedule – intending to do about 1 chapter per month.

4. Summary of Designer Meetings (Rich & Garrett)

- a. No designer meetings. There will be one next week – PIC review refresher.

5. Discussion Topics

- a. Upcoming projects to be advertised (and recent bids)

- Nickel (~10x cost increase) supply is affecting stainless steel prices. May redesign to GFRP during construction. May not be able to get stainless steel soon. Suppliers are passing on a surcharge cost to bidders.
- Potentially consider design alternatives for projects in progress.

- b. Deck design (how will it look in the BDG) – still TBD.

- c. Plate steel – May need to consider being a little more weight-conscious, as far as design goes, with prices going up.

- d. There haven't been too many projects this year to get a real feel for bid prices. We'll find out this spring.

- e. Stainless steel prestress (design guidelines/material properties) – AASHTO is doing some research on it. Few papers here and there. Not much to share from MaineDOT.

- Pleasant Cove in Woolwich – HNTB bulb-tee design had stainless prestress.
- Fabricators had 2 options for stainless strand – 250 ksi.
- Team south also had epoxy strand bid (Buckfield?).

- f. Still using the NEXT beam special provision to adjust beam seat elevations on projects, unless the span is short and adjustment is not worth it.

6. Brainstorming

- a. How to make this ACEC meeting more useful?

- Extend duration of members? What's the benefit? Champion for specific topics? Allows for larger variety of ongoing projects to be reviewed by same team.
- Maybe more of a live way to share information for consultants without current committee members? Solicit discussion topics/questions from all consultants, perhaps with some type of survey or email?
- Suggest revisiting goals for each meeting.

7. Contracting

- a. How has it been getting through contract? General thought is MaineDOT is easy to work with.

- b. Pre-proposal meeting is valuable when necessary.
 - c. Consider pre-proposal meetings for project development process in BDG.
 - d. Is a pre-proposal meeting worthwhile for simple projects too? Yes, it's helpful. Even if it's 30 mins it's worthwhile. Could save hours of proposal time to have a quick discussion. Consultants should talk to PM.
 - e. Feedback working for towns? Towns don't have much money to spend on engineering so it can be frustrating. Sometimes projects are given to Civil firms who don't necessarily fully design the structure, more fabricator-designed.
 - MaineDOT is having to post brand new municipal bridges in some cases where too much is left up to the fabricator.
 - The bridges need to be designed for scour. Maine won't take ownership of the bridge if it doesn't meet design standards. If bridge designed prior to 1993 and there's a new deck or superstructure going on it for HL-93 design, need to check for scour. Generally if the substructure is founded on ledge it's stable for scour conditions. Stacked stone appropriate chinked on ledge is usually okay, but can get tricky if not adequately chinked.
 - f. Donald Davey bridge RT 1 is scour critical, found out recently. Likely will be okay with the determination that the approaches will flood before scour critical elevation is reached.
8. Review goals
- a. Core goals fine.
 - b. Technical goals
 - Integral wearing surface – evolving process
 - PIC – will likely be updated during BDG re-write. Should it be part of PDR or final design contract? Usually lumped in phase 1. PDR can typically be PIC quality, but there is some public process that needs to happen in between, so they can't be the same.
 - BDG updates, topics will come up as part of the re-write.
 - TAMEing process is evolving/changing regularly.
 - MaineDOT will likely update CAD/MicroStation around September.
 - Bridge Subcommittee is loosely in favor of getting the CAD committee going again to prepare for the change.
 - ACEC – training ideas for MaineDOT. Coordinating training would be good.
 - Contracting community does not like ABC projects. May fall within a BDG section, but does not necessarily need to be a discussion topic.
 - Detail-build – AIT's G-beam. #1 - Allow them to compete. #2 - Once we have cost, specify G-beam. MaineDOT will continue to use if they're cost-competitive.
 - Construction/Maintenance lessons learned.
 - Online Bluebeam reviews.
 - Concrete quality & shrinkage cracking. Started looking at trial batches with early talks with the concrete suppliers. Might heat beams below deck

placement. Bob to check on ramp f – heated beams and tented the whole thing. Will dig up photos.

c. Rating for emergency vehicles

- If designed for HL-93 emergency vehicles are usually okay. If < HL-93 you may need to look at it. Will load rating manual be updated? Probably should be, check with Jeff.

9. Subcommittee Rotation for Consultants

a. Active:

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|---------------------------|----------------------|
| • 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 |
| • Keith Wood, Kleinfelder | Q1 2022 thru Q4 2023 |

b. Future:

- | | |
|-------------------------|----------------------|
| • Ashley Stephens, HNTB | Q3 2022 thru Q2 2024 |
| • Andrew Blaisdell, GZA | Q3 2022 thru Q2 2024 |

Peggy will put the notes up on the web and figure out the rotation list for who's next on the committee.

10. The Next Meeting is set for: June 14th.