



ACEC-NH/NHDOT Highway Design Sub-Committee



NHDOT
7 Hazen Drive Concord NH
November 12, 2019
Room 112/113 8:00 am – 9:30 am

Meeting Minutes

Attendees:

Jim Marshall, NHDOT (Chair)	Brian Colburn, MJ (Vice Chair)
Tobey Reynolds, NHDOT	Ben Martin, VHB
Leah Savage, NHDOT (absent)	Jen Mercer, GM2
Corey Spetelunas, NHDOT (absent)	Travis Wolfel, Kleinfelder
Maggie Baldwin, NHDOT	Clinton Mercer, Jacobs (Scribe)
Ron Grandmaison, NHDOT	Linda Greer, Fuss & O'Neill

These meeting minutes are from the November 12, 2019 ACEC-NH/NHDOT Highway Design Sub-Committee Meeting.

1. Introductory Remarks

Clint volunteered to be the scribe for the meeting.

2. Review and approve minutes – for September 10, 2019 meeting

The meeting minutes from the September 10, 2019 meeting were formally accepted as final. All final meeting minutes will be posted.

3. Reporting Back

a. Bluebeam Submission Checklists

Brian noted a smaller working group (WG) was created to review submission deliverables and checklists with representatives both internal and external to the DOT. The WG met on 10/25 to review the Pre-Preliminary submission checklist. The meeting turned into a philosophical discussion about how the checklists will be used.

Brian indicated that it would be beneficial to have clarification on the type of deliverables for certain design expectations, and not just on the expectation themselves. For example, a sightline study may need to be complete in the pre-preliminary phase, but also how the sightline study is captured in the deliverables should be communicated in the checklist. Brian also added that often times, assembling this information into a “package” or deliverable often takes a significant amount of time. Tobey acknowledged that there has been internal discussion about issues similar to this, including how 3D modeling ties into the submission deliverables. Brian stated that consistent expectations would help avoid comments. Maggie asked if the focus should be on the submission deliverables versus the submission checklist, the former being the design support documentation while the latter is more cadd-centric. Tobey reiterated

that the current focus of the review is on submissions associated with final design, where the primary focus is the plans. Brian indicated that clarifications as simple as when the roadway select “constants” should be included would be helpful. Jim followed up stating that the checklists had previously been intended as part of the Highway Design Manual (HDM) Volume 2, but the current hope is to keep them separate to reduce lead time (related to the FHWA approval process) when revisions are needed. A reference to checklists could be added to HDM.

Jim mentioned the checklists could be used in the scoping phase as a separate attachment or included in the scope. The checklist could be scalable to the project to better define the items included in the contract and providing clear expectations for development of fee. Further discussions on what format, spreadsheet or pdf, are needed.

b. Bluebeam Club

Tobey stated the Club met on 10/21. There are three projects using Bluebeam for review. The feedback has been useful with younger staff commenting on faster reviews and older staff slower. A standardization of the workflow is needed. He specified that ideas for the toolset review included assignment of different colors to identify the different disciplines. The highway group typically collects comments from other disciplines and compiles before sending to the consultant. Some thought on how to store and manage comments internally is needed. There are some with Bluebeam experience in house, but no expert. It may be beneficial to include Bridge Design if we intend to have reviews consistent for all of DOT. This recommendation will be presented to the Bluebeam Club for consideration.

4. CADD Specification and Deliverable

a. Review Deliverables

Jim provided an update on OpenRoads Designer (ORD) development. The workspace development is nearly complete. The plan is to release a draft workspace for review/comment around March and finalize in April. Jim indicated waiting for the workspace to be completed before adding to CADD deliverables. Jim and Bill Oldenburg are scheduled to meet on 11/14 to discuss. Jim noted the department has won a grant for \$100k so Bentley can assist the Department with developing their ORD Standards. Since the Department has already done most of that, the money will be mostly for ORD training. Bentley will come to NHDOT for training. A date has not been determined yet, but January may be a possibility. Brian asked if the training would be open to consultants as well. Some consultants are currently training staff and may want to join the training for a fee to learn the same way as department staff. Jim noted that they just received the grant about a week and a half ago, so the details are still being worked out.

b. Poll NH Firms About OpenRoads

Jim asked if we could poll NH consultants (through ACEC) about mandating OpenRoads as NHDOT’s only design software.

Information on this subject from our September 10, 2019 meeting:

Potential Department requirement for all Consultants to use OpenRoads.

- i. The 2017 CAD/D Procedures and Requirements document sets the standard for all deliverables to conform to certain expectations. This document allows for the use of 3D modeling software other than OpenRoads, and specifies the deliverables associated with such. Discussion at a recent internal meeting with the CAD/D staff included whether Consultants should be required to use

OpenRoads only. Jim was unsure what the impetus was for considering sunsetting the use of other 3D modeling software. He acknowledged that this might put a financial burden on Consultants to acquire OpenRoads and train their staff, particularly smaller consulting firms.

- ii. It is known that there are issues going both to and from Bentley and other products. Clint added that if the decision is made to require modeling be done in OpenRoads, the Department should establish and share working libraries (linestyles, levels, etc) to make the process more efficient for the Consultants. Jim noted that there have been issues with the OpenRoads Connect version maintaining line properties when a linestyle is applied. The Department is currently working through this issue with Bentley.

5. Other Items

Jim asked the group how to improve the outcome of this meeting. How do we get quicker results? Should we make this more of a working meeting?

Brian asked if the consultants could take more of the load. Maybe the department begins a process and hands over the meeting set up, coordination, note taking etc? Maggie mentioned that standardizing reports and design criteria, both with samples, are numbers 2 and 3 in our prioritized list, so maybe we should start working on those? The group agreed, so a majority of each meeting will now be a working meeting.

The group decided to use a portion of the December meeting to work on submission checklist formatting. Each member will send an electronic file with a preferred format to Jim by Dec. 3. Jim will send out all examples with the agenda for our December 10, 2019 meeting so members will have an opportunity to review prior to the meeting.

6. Next Steps:

- a. Begin making samples of reports and design criteria forms. Each committee member will provide an example of a report or design criteria form we can discuss at December meeting. There may be portions of a report that you like, but not necessarily the entire report.
- b. Continued coordination with the NHDOT Estimating Task Force to arrange for an informational session and potential partnering to establish project estimating protocols. (Jim)
- c. Each member will send an electronic file with a preferred format to Jim by Dec. 3.
- d. Tobey to continue checklist development meetings and report back to committee.
- e. **Next Meeting – December 10, 2019**