Message

From: Trumble, Luke (EGLE) [TrumbleL@michigan.gov]
Sent: 4/29/2019 6:19:46 PM
To: Pelloso, Elizabeth [Pelloso.Elizabeth@epa.gov]
Subject: FW: Grand River Revitalization - Hydraulic Modeling Meeting Follow-up

Fyi

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From: Trumble, Luke (DEQ)
Sent: Friday, February 1, 2019 9:22 AM
To: 'Staal, Michael' <mstaal@grand-rapids.mi.us>; Saldivia, Luis (DEQ) <SALDIVIAL@michigan.gov>; Occhipinti, Matthew (DEQ) <OCCHIPINTIM@michigan.gov>; Patin, Jacob (DEQ) <PatinJ1@michigan.gov>
Cc: Steffen, Jay <jsteffen@grand-rapids.mi.us>; Richard Bishop <richard@grandrapidswhitewater.org>; Matt Chapman <matt@grandrapidswhitewater.org>; Smalligan, James <jesmalligan@ftch.com>; Soltys, Peter W. <pwsoltys@ftch.com>; Jason Carey <jason.carey@riverrestoration.org>; Quinn Donnelly <quinn.donnelly@riverrestoration.org>; Scott Prins <scott.prins@riverrestoration.org>; Michael Scurlock <michael.scurlock@riverrestoration.org>
Subject: RE: Grand River Revitalization - Hydraulic Modeling Meeting Follow-up

Good morning all:

We are finally back in the office today after winter weather office closures and wanted to respond to this email and subsequent inquiries from the GRWW group. FYI, WRD staff have had a chance to review the December 19, 2018 email and attached documents and have the following comments/concerns:

1. Per a 12/28/18 email from Luke Trumble, WRD did not instruct GRWW to utilize a blanket 0.02 increase in Manning's roughness coefficient (n-values) for characterizing increased bed roughness from the existing to proposed conditions.
2. Table 2.2 of the 12/12/18 River Restoration Tech Memo suggests the following ranges for n-values for the proposed conditions model:
    a. Boulder 0.045 – 0.050
    b. Coarse Cobble 0.040
    c. Cobble and Gravel 0.030 – 0.035
    d. Concrete 0.016
    e. River bottom outside areas of disturbance 0.028 – 0.034
    f. River Banks 0.045 – 0.100
    g. Overbanks and floodplain 0.045 - 0.100
3. Riverbanks, overbanks, and floodplains that are to remain unchanged as part of the project utilize the same n-values as the existing conditions model. This is appropriate.
4. The 12/12/18 Tech Memo goes on to state the following:
   "The Manning's n values listed in Tables 2.1 and 2.2 are conservative for flood plain determination compared to engineering standards and other literature sources including Chow (1959), Acrement (1989), Barnes (1967), Phillips (1998), Brunner (2016) and Jarrett (1985)."
5. WRD staff have reviewed all references listed in the Tech Memo, and determined that the values suggested for coarse cobble and boulder fill are not conservative and would not be representative of the increased channel roughness associated with the proposed coarse fill material.

6. WRD's review of these documents indicate that conservative n-values for the 12-18 inch alluvium fill and 3-foot minimum diameter boulders as proposed in the project plans would be 0.05 to 0.06 and 0.08, respectively. N-values for other proposed fills like riprap substructure, boulder gardens, etc., should be appropriate for the material gradation and relative roughness, in accordance with the referenced materials.
7. The proposed conditions model should be re-run utilizing these conservative values where coarse fill is proposed in order to provide an estimate of impacts associated with this fill.
8. Item #12 of the 11/27/18 Meeting Notes indicates that further discussions regarding the property owner acknowledgement of any changes in flood stages is necessary. WRD would like to reiterate that notification of adjacent owners will be necessary if any increases in flood profiles affect their property, whether or not those increases constitute a harmful interference under Part 31. Notification to affected property owners may be achieved through the standard affected property owner statement and possibly through language included in the easement, but this would require further discussion and approval from WRD management.

Please let us know if you have any questions or concerns.

Thanks,
Luke

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From: Staal, Michael <mstaal@grand-rapids.mi.us>
Sent: Wednesday, December 19, 2018 12:51 PM
To: Saldivia, Luis (DEQ) <SALDIVIAL@michigan.gov>; Occhipinti, Matthew (DEQ) <OCCHIPINTIM@michigan.gov>; Trumble, Luke (DEQ) <TrumbleL@michigan.gov>; Patin, Jacob (DEQ) <PatinJ1@michigan.gov>
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Subject: Grand River Revitalization - Hydraulic Modeling Meeting Follow-up
Importance: High

Good afternoon Luis,
I hope this e-mail finds you well as we enter this holiday season. Attached to this e-mail is the follow-up we promised from our hydraulic modeling conference call on November 27, including the 11/27 meeting notes, a memo from River Restoration Org on the changes made to the Manning's N coefficients, and a letter from FTCH who reviewed the modeling.

Would you and your team please look over the attached documents? I believe the changes we made are consistent with our discussion on 11/27, and I would like to make sure that our changes with the Manning's Coefficients are in agreement with your understanding of that discussion too. Your feedback on these documents would be greatly appreciated. Once we know our changes are in agreement with what we talked about, we will ensure the other modelling reports get updated as well, including the Modelling QA/QC Memo that Luke has seen and may have distributed.

Please let me know if you have any questions or concerns. Our team is available to discuss any outstanding items that may not have been addressed.

Thanks again for your time at our meeting and taking the time to make sure our understandings are in agreement. I hope everyone has a great holiday season.

Best,

Mike

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