From:	Jonathan R. Earle
Sent:	Thursday, March 01, 2018 10:29 AM
То:	Dustin Roma; Amanda L. Lessard
Subject:	RE: 18-03 Sabatus Lane Subdivision - Review Comments

Amanda & Dustin,

I've reviewed the additional information provided for the project and offer the following question and clarification:

- 1. At the February 12, 2018 Planning Board meeting, the Board granted the waiver requests for the high intensity soils survey and hydrogeologic analysis. My comments (1 & 2) below no longer apply and have been addressed.
- 2. A PBR was submitted on February 19th for the project. Have you received any comments or feedback from DEP? The 14-day period for DEP comment ends on March 5 and the Board should be aware that the permit is approve as of that date if DEP does not comment by then. Along with the correspondence from IF&W, this would address the requirement for all state and federal permitting prior to final approval.

Jon Earle, PE Town Engineer Town of Windham

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From: Jonathan R. Earle Sent: Monday, February 12, 2018 1:59 PM To: 'Dustin Roma'; Amanda L. Lessard Subject: RE: 18-03 Sabatus Lane Subdivision - Review Comments

Amanda & Dustin,

I've reviewed the additional information provided and offer the revisions to my review comments (in red):

1. A waiver has been requested for the high intensity soils survey. Justification for the waiver request was based on each lot having a passing test pit to support a residential subsurface wastewater disposal system. However, the medium intensity soil survey indicates quite a bit of variability in the hydrologic soils groups used for stormwater management analysis (soils are indicated to be in each of the groups A-D). Given the variability in the hydrologic soils groups, a high intensity survey within the developed portion of the site and especially in the areas where the buffers and level spreaders are located, is recommended. I reviewed the area to be developed for the project and confirmed that the development

mostly occurs in HSG 'C' soils. The sizing of the BMPs reflects this and the waiver for the high intensity soils survey is reasonable.

2. A waiver has been requested for the hydrogeologic assessment based on the project and adjacent properties being served by public water. This is the case for the existing properties on Sabatus Lane and Cedar Lane, but the abutting properties on Bristol Road, Hidden Pines Drive, and Rosewood Avenue are all served by private well. Please clarify. The additional information provided does provide further justification for a waiver being reasonable for the project. It would be the Board's discretion to ask for the nitrate plume analysis for each lot's septic disposal field.

5. An entrance permit will need to be obtained for the project from the Public Works Department along with a street opening permit to make the connection to public water. No further action needed at this time.

6. The stormwater calculations, plans, and details have been reviewed and are in compliance with both Chapter 500 and the Town's Subdivision Ordinance. The request for a waiver from the flooding standard is reasonable for the project. A calculation showing the project's BMPs are treating 75% of the combined developed and impervious area was not provided. The calculation requested was provided and reviewed. Comment has been addressed.

Jon Earle, PE Town Engineer Town of Windham

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From: Dustin Roma [mailto:dustin@dmroma.com] Sent: Friday, February 09, 2018 6:51 AM To: Jonathan R. Earle; Amanda L. Lessard Subject: RE: 18-03 Sabatus Lane Subdivision - Review Comments

Hi Amanda & Jon,

Thanks for your comments on the above referenced project – we offer the following additional information for your consideration. The numbers correspond with your comments below.

- 1. As you indicated, there are several different soil types on the overall property. The area of proposed development is relatively homogeneous and has been assumed, based on the medium intensity mapping, to be soils with hydrologic soil grouping "C". The stormwater buffer design was based on being located on land with "C" soils. We felt that this was a conservative approach, because a high intensity soil mapping is highly unlikely to downgrade the soil types below a "C" rating based on my visual inspection of the property. Can you please consider this information and reconsider our waiver request for a high intensity soil survey submission?
- 2. The soil types in the proposed development area have a hydrologic soil grouping of "C" and the test pits performed by the Licensed Site Evaluator indicate groundwater and/or restrictive layers at a depth of 15 inches to 30 inches. Based on the shallow groundwater conditions and

relatively low permeability of the soils, the direction of the higher stratum of groundwater flow is expected to generally follow surface grade conditions given that there is some slope to the land. Groundwater flow, and the corresponding wastewater effluent flow, would be expected to either flow towards the Presumpscot River or to the wetlands that run through our property. Furthermore, there is a rise in elevation as the land approaches the western property line, which would be expected to restrict the influence of groundwater in that direction. Based on this information, it is our professional opinion that a Hydrogeological Analysis could reasonably be waived for this project.

5. We understand that permits will be required from DPW prior to street opening.

6. A table is attached which shows the project is providing BMP treatment of at least 75% of the total developed area, as required by the ordinance.

Thank you,

Dustin M. Roma, P.E.



59 Harvest Hill Rd, Windham, ME 04062 P: (207) 310-0506

From: Jonathan R. Earle [mailto:jrearle@windhammaine.us]
Sent: Friday, February 02, 2018 3:46 PM
To: Amanda L. Lessard <allessard@windhammaine.us>; 'Dustin Roma (dustin@dmroma.com)'
<dustin@dmroma.com>
Subject: RE: 18-03 Sabatus Lane Subdivision - Review Comments

See below for my revised comments in red.

Jon

Jon Earle, PE Town Engineer Town of Windham

Office: (207) 894-5900, ext. 6124 Cell: (207) 212-1802 www.windhammaine.us

From: Jonathan R. Earle Sent: Thursday, February 01, 2018 11:21 AM To: Amanda L. Lessard; 'Dustin Roma (<u>dustin@dmroma.com</u>)' Subject: 18-03 Sabatus Lane Subdivision - Review Comments

Amanda & Dustin,

I have reviewed the following information submitted by DM Roma Consulting Engineers as part of the preliminary major subdivision application for this project and offer the following comments:

- Major Subdivision Application dated January 25, 2018.
- Subdivision plans and details (Sheets 1-7) dated January 25, 2018.
 - 1. A waiver has been requested for the high intensity soils survey. Justification for the waiver request was based on each lot having a passing test pit to support a residential subsurface wastewater disposal system. However, the medium intensity soil survey indicates quite a bit of variability in the hydrologic soils groups used for stormwater management analysis (soils are indicated to be in each of the groups A-D). Given the variability in the hydrologic soils groups, a high intensity survey within the developed portion of the site and especially in the areas where the buffers and level spreaders are located, is recommended.
 - 2. A waiver has been requested for the hydrogeologic assessment based on the project and adjacent properties being served by public water. This is the case for the existing properties on Sabatus Lane and Cedar Lane, but the abutting properties on Bristol Road, Hidden Pines Drive, and Rosewood Avenue are all served by private well. Please clarify.
 - 3. Provide documentation from the Portland Water District on their ability to serve the project. See Amanda's email dated 1/29. This criteria has been met based on the information provided in the supplemental letter.
 - 4. The subdivision ordinance requires a traffic impact analysis be provided for projects generating more than 140 trips per day. 17 dwelling units will generate more than 140 daily trips per the ITE Trip Generation Manual, 9th edition. An analysis shall be provided or a waiver requested for this standard. A waiver has been requested for the traffic impact analysis. The justification for the waiver request is reasonable and it doesn't not appear offsite improvements would be necessary to accommodate the additional traffic generated by the project.
 - 5. An entrance permit will need to be obtained for the project from the Public Works Department along with a street opening permit to make the connection to public water.
 - 6. The stormwater calculations, plans, and details have been reviewed and are in compliance with both Chapter 500 and the Town's Subdivision Ordinance. The request for a waiver from the flooding standard is reasonable for the project. A calculation showing the project's BMPs are treating 75% of the combined developed and impervious area was not provided.

Please do not hesitate to contact me with any questions.

Jon

Jon Earle, PE Town Engineer Town of Windham

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