



## **Department of Public Works**

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# **Memorandum**

**From:** April Talon, P.E., Town Engineer  
Richard Reine, M.S.C.E., CA, Director of Public Works

**Date:** April 9, 2021

**To:** Durham Planning Board

**Subject:** Comments from the Dept. of Public Works (DPW) | 19 Main St. Parking Lot

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In addition to our memorandum to the Planning Board dated March 9, 2021 for the subject project, we would like to provide the following comments related to the third-party review of both the traffic/parking and drainage design. We are satisfied that the developers engineer, Mike Sievert of Horizon's Engineering, has addressed the substantive comments made by both VHB (for the traffic study) and Altus Engineering (for the drainage design) and that they have made changes to the plans and designs where warranted to meet requirements of current site plan regulations.

### **Traffic/Parking**

DPW met with Stephen Pernaw and Mike Sievert on Tuesday April 6, 2021 to review comments from the third-party review completed by Jason Plourde, VHB dated March 4, 2021 and the response letters dated March 19, 2021 and March 30, 2021 completed by Stephen Pernaw, SGP & Co., Inc.

1. The analysis and findings of the traffic study are strictly based on the proposed parking lot expansion for UNH students who reside at 19-21 Main St and student housing developments nearby. Should the parking lot be used for any other use in the future the developer should be required to come back to the Planning Board.
2. The traffic study and findings confirmed by the third-party review conclude that the proposed project will have a negligible impact to nearby intersections of Main St./Madbury and Main St./Route 108. The study included traffic observations pre COVID during both the AM and PM peak hours in which the driveway of the proposed project was blocked for 47 seconds in the PM only. Any delays during the peak PM hour would occur on the site driveway.
3. In regards to the concern that traffic exiting the proposed parking lot wanting to take a left to get to Madbury will instead take a right turn and go all the way around through the Mill Pond Road and Faculty Road, the analysis concluded that even in the future year 2031 PM peak hour, the time waiting to take a left turn was 29 seconds, compared to the much longer time it would take to go all the way around including the traffic light and multiple stop signs.

4. The stopping sight distance was calculated by the client's engineer Mike Sievert, Horizon's Engineering as 260 feet looking east towards the Main St./Route 108 traffic light and well over 500 ft looking west towards Madbury Road. These calculated stopping sight distances exceed the standard requirement of 158 feet for a 25-mph roadway on a 3% incline.

### **Stormwater Management Comments**

DPW met with Mike Sievert on Wednesday April 7, 2021 to review comments from the third-party review completed by Erik Saari, Altus Engineering dated February 22, 2021 and the response letter dated April 6, 2021 completed by Mike Sievert, Horizon's Engineering.

5. The applicant's engineer has provided a preliminary wall design detail which includes bulk fill material to be placed behind the wall. Their intention is to provide a complete structural wall design stamped by a NH-licensed Professional Engineer prior to construction. This should be a requirement by the Planning Board, as a Condition of Approval.
6. The Stormtech detention system allows for exfiltration and this system is being installed in fill underneath the parking lot. The applicant's engineer should be required to specify the fill material, following the full geotechnical study, to ensure that the system functions as designed.