

June 14, 2021

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Conservation Commission
Town of Bolton
c/o Ms. Rebecca Longvall, Conservation Agent
663 Main Street
Bolton, Massachusetts 01740

www.bscgroup.com

RE: Peer Review – Notice of Intent Stormwater Review
Proposed Century Mill Road Subdivision
Bolton, Massachusetts

Dear Conservation Commission Members and Ms. Longvall:

BSC Group, Inc. (BSC) has completed a peer review of submitted documents relative to the Stormwater Report and Calculations for A Proposed Common Driveway and & Development of Lots 2, 3, & 4 at Century Mill Road. BSC has evaluated the project’s compliance with the Massachusetts Wetlands Protection Act (the Act), the applicable Town of Bolton Bylaws and Regulations of the Conservation Commission (Bylaws and Regulations), the Massachusetts DEP Stormwater Management Handbook (the Handbook), and standard engineering practices. This letter is provided to outline BSC’s findings, comments, and recommendations. The following review comments reflect our review of the materials submitted as referenced below. As part of our peer review, BSC reviewed the following documents:

- *Stormwater Report and Calculations*, dated September 20, 2018 and revised April 23, 2021.
- *Common Driveway Plan and Profile*, last revised April 23, 2021.

Project Summary

The project site is a four-lot common driveway off Century Mill Road. The existing lot will be divided in four lots with the existing house located on lot 1 and new single-family residences on Lots 2, 3, and 4.

Stormwater Review Comments

1. The introduction to the report states that estimated seasonal high groundwater was 60-inches below surface at DTH 1017-1 on Lot 3. Per Massachusetts DEP Stormwater Management Handbook there should be a minimum of a 2-foot separation between estimated seasonal high groundwater and the bottom of the system. We request the Applicant submit all test pit logs performed on site with ground elevations and depth to estimated seasonal high groundwater as well as a plan showing these test pit locations so we may review separation from groundwater for infiltration BMP’s. It should be noted that any infiltration BMP’s used to attenuate peak flows for the 10-year storm event or larger that have less than 4-feet of separation to groundwater require a mounding analysis in accordance with the Handbook.
2. The Operation and Maintenance Plan (O&M) only includes information for the porous

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asphalt driveway. The O&M plan should also include information on the roof infiltration systems for each home.

3. The O&M plan for porous asphalt includes an allowance for salt use. The Commission may wish to restrict salt use on the porous asphalt based on its proximity to wetlands. It should be noted, however, that sand should not be used on porous asphalt as it will clog the void spaces and reduce its infiltrative capacity. Should the Commission choose to restrict salt use, we recommend the Applicant submit an alternative, non-salt deicer for review and approval and include that product in the O&M plan.
4. The O&M plan should include the responsible party for each BMP's maintenance. If a homeowner's association will be the responsible party, we recommend the Commission include a condition on any approval that the association's maintenance agreement for these BMP's be submitted for review and approval prior to issuance of any building permits. Additionally, we recommend the Commission include a condition that the final O&M plan be recorded at the Registry of Deeds and proof of recording be provided prior to the start of construction.
5. The required recharge volume for Stormwater Standard 3 is based on hydrologic soils group (HSG) C soils only. However, the project includes both HSG C and HSG A soils. We request that the Applicant provide required recharge volume calculations based on both types of soils as required.
6. Drawdown calculations should be provided for all infiltration systems to ensure they drain within 72 hours as required by the Handbook.
7. The proposed soil absorption system for Lot 3 appears to be closer than the required 50-foot setback requirement from porous pavement.
8. Will the roof infiltration systems have any type of overflow for storm events that are larger than the design storms or for multiple storm events? We recommend that some form of overflow be provided and a detail included on the plans.
9. While it may not be necessary to meet the requirements of the Handbook, would the Applicant consider installing a roof infiltration system on Lot 3 as well to improve localized groundwater recharge and quality?
10. The Sediment and Erosion Control notes were included as part of the detail sheet. BSC would recommend the applicant provide a plan detailing the location of the sediment and erosion controls.
11. A written Construction Period Pollution Prevention Plan should be included with the Stormwater Report per Standard 8 of the Handbook.
12. The pre-development runoff calculations use curve numbers (CN's) based on surface types of "woods, fair" and "woods/grass combination, fair". Based on previous visits to the site and the definition of "woods, fair" contained in TR-55 ("woods are grazed but not burned, and some forest litter covers the soil"), it is our opinion that a use of "good" surface types is more appropriate for this site.
13. The pre-development runoff calculations include 47,324 sq.ft. of HSG A soils and 51,734 sq.ft. of HSG C soils. The post-development runoff calculations include 54,323 sq.ft. of HSG A soils and 44,735 sq.ft. of HSG C soils. This discrepancy may result in an increase to the pre-development runoff rates and/or a decrease to the post-development runoff rates. We request the Applicant to update the runoff calculations with equivalent areas for each soil type.



Upon receipt of any additional information requested above and any responses to comments from the Applicant, BSC Group will update this letter report. We look forward to discussing this project with you further at the upcoming public hearings on the project. Please feel free to contact me at (617) 896-4386 or drinaldi@bscgroup.com should you have any questions on the information in this report.

Sincerely
BSC Group, Inc.

A handwritten signature in black ink, appearing to read "D. Rinaldi".

Dominic Rinaldi, P.E., LEED AP BD+C
Senior Associate