



January 5, 2024

Vanessa Price, Town Planner
Town of Barrington
4 Signature Drive
Barrington, NH 03825

**RE: Town of Barrington, Planning Board Services
Subdivision Application Review #2
Young Road (Tax Map 240, Lot 8)
CMA #1205.35**

Dear Ms. Price:

CMA Engineers has received the following information for site plan review of a proposed conservation subdivision on Young Road in Barrington, NH (Tax Map 240, Lot 8):

- 1) CMA Engineers Response Letter, dated December 21, 2023
- 2) Plans titled "Conservation Subdivision for Paul Thibodeau," dated February 15, 2023, revised December 21, 2023, prepared by Berry Surveying & Engineering
- 3) Drainage Analysis & Erosion and Sediment Control Plan, dated September 19, 2023, revised December 21, 2023, prepared by Berry Surveying & Engineering
- 4) Trip Generation and Distribution Analysis, revised December 21, 2023, prepared by Berry Surveying & Engineering
- 5) Hydrogeological Desktop Study, dated December 2023

We reviewed the information submitted for conformance with Barrington Site Plan and Subdivision Regulations, NHDES New Hampshire Stormwater Manual, and general engineering practices. Our review of the application documents was summarized in our Review Letter #1, updated on November 29, 2023. BS&E reviewed the comment letter and submitted updated materials to the Town for review. Our review of these additional materials is summarized in this Review #2 letter.

General

The Applicant, Paul Thibodeau of Barrington, NH, is proposing the creation of a conservation subdivision consisting of twenty-three (23) individual lots on Young Road in Barrington. The conservation subdivision is proposed on Tax Map 240, Lot 8, which is an existing vacant lot with an area of approximately 65.55 acres.

The site was surveyed by Berry Surveying & Engineering in October of 2022, and wetlands were delineated by John Hayes, CWS, during the summer of 2022.

Approved Variances, Special Exception, and Waiver:

On January 18, 2023, the Barrington Zoning Board of Adjustment approved the following three variances and one special exception as requested by the Applicant. On October 17, 2023, the Barrington Planning Board approved a waiver.

- Variance from Article 6, Section 6.2.6 – Perimeter buffer to permit driveways within the front buffer of a conservation subdivision.
- Variance from Article 6, Section 6.2.6 – Perimeter buffer to permit the front buffer to be reduced to 40' on certain lots in the conservation subdivision.
- Variance from Article 6, Section 6.2.6 – Perimeter buffer to permit the front buffer to be used in the lot areas in a conservation subdivision.
- Special exception to Article 4, Section 1.3 to allow shared access point and shared driveways.
- Waiver to Section 8.1 to allow sight distances to be consistent with common practice.

Subdivision Regulations:

Article 7 Additional Information and Studies

7.2 Grading, Erosion and Sediment Control Plan

The Regulation states that developments shall not increase, decrease, modify, or alter the normal patterns of off-site drainage, or increase the erosion or sedimentation caused during the development of the site and/or by the eventual development itself. The applicant shall provide for and maintain methods that eliminate any detrimental downstream effect to other property. A Grading, Erosion and Sediment Control Plan is required for projects with a cumulative disturbance exceeding 20,000 square feet; construction of a street, road, or driveway; and disturb environmentally sensitive areas. The applicant added Sheets 21 through 41 to show lot specific grading and stormwater collection; however, stormwater treatment is not proposed to mitigate against sedimentation impacts to downstream properties as is required. Additionally, has NHDES reviewed the project, and the project's proposed erosion and sediment controls, to ensure there are no detrimental downstream effects to other property?

7.3 Stormwater Management Plan

The Regulation states that developments shall not increase, decrease, modify, or alter the normal patterns of stormwater drainage. The applicant shall provide for and maintain methods that eliminate any detrimental downstream effect to other property. A Stormwater Management Plan is required for projects with a cumulative disturbance exceeding 20,000 square feet; construction of a street, road, or driveway; and disturb environmentally sensitive areas. It appears construction of the development itself (driveway construction, site grading, and house lots) impacts an area greater than 20,000 square feet, so a Stormwater Management Plan to treat site generated stormwater runoff with calculations for a 50-year event and ensuring that post-development surface runoff is equal to pre-development run-off. To make these determinations, a site-specific stormwater analysis would be completed, limited to the development site itself, and not considered globally to the overall watershed. This approach is atypical, and we recommend the analysis be reconsidered to determine the requirements in this section are met.

Article 13 Drainage, Erosion & Sedimentation Control Standards

13.8 Other Required Permits

The Regulation states that RSA 485-A: 17 requires a permit from the New Hampshire Department of Environmental Services for any person proposing to significantly alter the characteristic of the terrain, in such a manner as to impede natural runoff or create an unnatural runoff, and a permit is required for any project involving more than 100,000 square feet of disturbance. It appears the initial construction of the development itself (driveway construction and associated grading) may impact an area greater than 100,000 square feet, so an Alteration of Terrain permit may be required. Please confirm the impact area for the project's initial construction, and in addition, the impact area of the overall development as is typical. If the impact area is greater than 100,000 square feet, we understand an AoT permit is required.

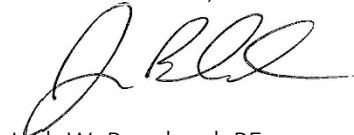
Plan Set:

1. General
 - a. On Sheet E-102, Typical Rural Driveway Cross-Section, shows a 16-ft long paved platform at a ¼-in per ft slope (2%); however, the driveway profiles generally have a platform at 4% and many of the platforms are shorter than 16-ft long. The driveway profiles should be updated to match the detail.
 - b. Lots 18-18/19 are accessed by a common driveway and Lots 18-20/21/22 by a separate common driveway, and the two common driveways are 20 feet apart which is atypical. We recommend the two common driveways be combined into a single access point and upgraded to a private road. The applicant would benefit from lower construction costs of building a single 20-ft wide private road instead of two separate 18-ft wide common driveways, maintenance would be easier for the future property owners, and there would be one fewer access point onto Young Road.

Should you have any questions, please do not hesitate to call.

Very truly yours,

CMA ENGINEERS, INC.



Josh W. Bouchard, PE
Project Manager