



October 15, 2023

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

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LAND USE OFFICE

**RE: Town of Barrington, Planning Board Services
Site Plan Review
49 Winkley Pond Rd (Tax Map 253, Lot 14)
CMA #1205.34**

Dear Ms. Price:

CMA Engineers has received the following information for site plan review of a proposed residential development at 49 Winkley Pond Road in Barrington, NH (Tax Map 253, Lot 14):

- 1) Major Site Plan Application and supporting materials, including Site Review Application Checklist, application narrative, and Waiver Request Form.
- 2) Plans titled "Residential Site Plan for Hambone LLC," dated August 16, 2023, prepared by Berry Surveying & Engineering.
- 3) Drainage Analysis, dated August 16, 2023, prepared by Berry Surveying & Engineering.
- 4) Traffic Impact Memo, dated August 16, 2023, prepared by Berry Surveying & Engineering.

We have reviewed the information submitted for conformance with Barrington Site Plan and Subdivision Regulations, NHDES New Hampshire Stormwater Manual, and general engineering practices and offer the comments below.

General

The Applicant, Hambone, LLC of Dover, NH, is proposing construction of two buildings containing seven residential units on a 13.47-acre parcel at 49 Winkley Pond Road. Associated infrastructure proposed includes a 22-foot-wide private road, water, sewer, and drain lines, as well as septic tanks, leach field, private well, 30,000-gallon fire cistern, liquid propane tanks, and stormwater management infrastructure. The existing barn and mobile home will both be demolished.

The site was surveyed by Berry Surveying & Engineering in October 2022, and wetlands were delineated by Deidra Benjamin, CWS, in June 2022 and August 2023, and by John Hayes, CSS, CWS, during the summer of 2022.

Approved Waivers:

We note that the Barrington Planning Board has approved three waivers as requested by the applicant:

- Subdivision Regulation Article 12, Table #1: Minimum road centerline radius
- Subdivision Regulation Article 12, Table #2: Maximum grade within 100' of an intersection
- Site Review Regulation Article 4.8.6(2): Sight distances measurement location

Site Plan Regulations:

12.8.3 Pavement

Include all pavement material, joint adhesive, and tack coat requirements to ensure conformance with Town regulations.

12.8.6 Road in Cut/Fill

12.8.6.5(5) Underdrain shall be provided in all cut sections.

Site Plan Regulations:

4.5 Water System

Water supply wells shall be designed to meet NHDES, and Town, Regulations.

NHDES Regulation Env-Wq 704.19 states no sewer shall be located within the applicable well protective radii; however, the proposed development has a septic holding tank and pumping station within the well protective radii. Wastewater infrastructure shall be located outside of the well protective radii.

Additionally, the well protective radii shall be controlled by the owner, and as shown, the well protective radii extends beyond the right-of-way onto Winkley Pond Road. The well shall be relocated to meet this requirement.

4.7.7 Pipe Size, Velocity, and Type

4.7.7(3) The minimum depth of cover for storm drain lines shall be 36 inches from the top of pipe to finished grade. It does not appear this requirement is met for all pipes. The storm drain lines should be adjusted to meet the requirement, or a waiver request submitted.

Drainage Calculation Review:

1. The grate for Outlet Structure #101 (in Rain Garden #101) at elevation 163.00 should be modeled as a horizontal outlet.
2. The 4-inch orifice in Outlet Structure #101 is set at elevation 161.50 in the drainage calculation, but it is called out with an elevation of 160.50 on Sheet P-101 of the plan set. Coordinate the elevations.

Traffic Impact Analysis Review:

1. The Analysis should consider the traffic safety and crash test data at the northern/southern Winkley Pond Road and NH Route 125 intersections. Additionally, both intersections need intersection improvements to improve vehicular safety, and the Planning Board should consider if the development contributes to this recommendation.

Plan Set:

1. Sheet 5 – Overview Site Plan
 - a. Revise Site Plan Note #32 to add requested waiver from Site Review Regulation Article 4.8.6(2).
 - b. Hatches for poorly and very poorly drained wetlands should be added to the Legend.

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2. Sheet 6 – Detail Site Plan
 - a. Suggest adding typical parking spot dimensions to spaces in front of Units #1 – #5.
3. Sheet 7 – Plan & Profile
 - a. See comment above on Site Plan Regulation 4.7.7(3).
 - b. For Rain Garden #101, all slopes to match to existing grade should be at a 3H:1V, and not transition to 2H:1V.
 - c. The Bridle Path Way profile has callouts to the right that are not pointing at anything.
 - d. In the Bridle Path Way Profile View, the minimum cover dimension shown on the drainage pipe exiting CB#3 should be shown at the location of minimum cover.
 - e. Include material requirements for the General Fill to be installed under the roadway.
4. Sheet 8 – Drainage Profiles
 - a. Include minimum pipe cover dimensions.
5. Sheet 12 – Utility Plan and Profile
 - a. Between the water and sewer infrastructure (pipes and tanks), include 10-ft minimum separation dimensions, so it is clear this NHDES Regulation is met during construction.
6. Sheet 22 – Construction Details
 - a. See comment above on Subdivision Regulation 12.8.3.
7. Sheet 28 – Utility Construction Details
 - a. Has the Town Fire Department approved the Fire Cistern Detail?

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

Very truly yours,

CMA ENGINEERS, INC.

Benjamin Clark, P.E.
Senior Project Manager


Josh Bouchard, P.E.
Project Manager

cc: Chris Berry, Berry Surveying & Engineering

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