

# **BERRY SURVEYING & ENGINEERING**

335 Second Crown Point Road Barrington, NH 03825 Phone: (603) 332-2863

Fax: (603) 335-4623 www.BerrySurveying.Com

November 13, 2023

Town of Barrington Planning Office Attn: Vanessa Price, Town Planner 4 Signature Drive Barrington, NH 03825

Re: Residential Site Plan Review
Berry Surveying & Engineering
Hambone, LLC
49 Winkley Pond Road
Tax Map 253, Lot 14

Based on comments from CMA Engineers, Inc. dated October 15, 2023, we respectfully submit the following comments and revisions. Our comments are in **bold**.

#### **COMMENTS**

Subdivision Regulations:

12.8.3 Pavement

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

These requirements have been added to detail C1, sheet C-101.

## 12.8.6 Road in Cut/Fill

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

Underdrain has been added to the cut section of Bridle Path Way. Please find Grading Plan, sheet #7.

## 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.

There septic tank and pump chamber are located outside of 50' of the well. Tanks are allowed to be within the well radius, outside of 50', as long as the tanks are sealed, grouted, and water proofed and SDR 26 is used. Please find attached NHDES approval for the leachfield.

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.

Please find attached NHDES approval for the leachfield.

# 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.

A waiver is now requested for minimum pipe cover for pipe from CB #3 & CB #4. This waiver is noted on the Site Plan, sheets #5 & 6.

## **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.
  - This has been corrected. Please find revised proposed drainage analysis in the resubmission.
- 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.

The orifice elevations on the plans have been corrected to 161.50. Please find sheet #9.

## 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.

The intent of this document is a "Traffic Generation Memo" to provide an estimated trip generation for the Site Plan, and not intended as a Traffic Impact Analysis. According to the Barrington Site Review Regulations, a Traffic Impact Analysis is not required for the number of units proposed on the Site Plan.



#### 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).

Note #32 has been revised. Please find sheet #5.

b. Hatches for poorly and very poorly drained wetlands should be added to the Legend.

Hatches for the poorly and very poorly drained wetlands have been added to the project legends.

- 2. Sheet 6 Detail Site Plan
  - a. Suggest adding typical parking spot dimensions to spaces in front of Units #1 #5.

Dimensions have been added to the front of Units #1-5.

- 3. Sheet 7 Plan & Profile
  - a. See comment above on Site Plan Regulation 4.7.7(3).

A waiver is now requested for minimum pipe cover for pipe from CB #3 & CB #4. This waiver is noted on the Site Plan, sheets #5 & 6.

b. For Rain Garden #101, all slopes to match to existing grade should be at a 3H:1V, and not transition to 2H:1V.

A 3' tall retaining wall and fencing has been added to the rain garden to provide 3:1 slopes for the remainder of the BMP.

c. The Bridle Path Way profile has callouts to the right that are not pointing at anything.

Lines showing the depth of select materials and the depth of granular fill materials have been added to the profile on sheet #7.

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.

A dimension has been added to the location of minimum cover. The original dimension that this comment is referencing has been left, as it was to indicate the cover at the centerline of the roadway.



## **BERRY SURVEYING & ENGINEERING**

e. Include material requirements for the General Fill to be installed under the roadway.

The "general fill" note has been removed from the profile and definition for granular material has been added to the road note.

- 4. Sheet 8 Drainage Profiles
  - a. Include minimum pipe cover dimensions.

Minimum pipe cover dimensions have been added to sheet #8.

- 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.

Dimensions between the water and sewer infrastructure has been now dimensioned accordingly. Please find sheet #12.

- 6. Sheet 22 Construction Details
  - a. See comment above on Subdivision Regulation 12.8.3.

These requirements have been added to detail C1, sheet C-101.

- 7. Sheet 28 Utility Construction Details
  - a. Has the Town Fire Department approved the Fire Cistern Detail? The fire department has received design plans at the initial submission.

Respectfully,

BERRY SURVEYING & ENGINEERING

Christopher R. Berry Principal, President

Kenneth A. Berry, PE, LLS VP – Technical Operations

Kevin R. Poulin, PE Design Engineer

