

January 25, 2021

Ms. Meghan N. Lally, Chair
Andover Inland Wetlands and Watercourses Commission
17 School Road
Andover, CT 06232

RE: IWWC 20-35 436 Lake Road

Dear Ms. Lally,

As requested, I performed a review of the following documents received for the above referenced project.

1. Permit Application, dated 11/23/20.
2. Permit Item 9 Supplemental information
3. Site Plan set entitled "Zoning Location Survey Plot Plan, 436 Lake Road, prepared for Kevin & Catherine Shea, Andover, CT" prepared by Dutton Associates, LLC, dated 10-29-2020 as revised through 11/20/20, Sheet 1 & 2 of 2.
4. EHHD Septic Plan Review application, review, and approval documents.

Following are review comments consideration by the Commission.

1. It appears the proposed garage location does not meet the minimum side yard setback of 25'. Zoning compliance information related to the garage should be noted on the plans to confirm that the garage and house will not need to be shifted closer to the Lake, increasing the limit of disturbance.
2. The proposed sediment barrier parallel with Andover Lake extends into wooded areas, is located along an existing 1:3 or steeper slope and is located at the bottom of an exposed ledge area. As the long steep slope continues down to the Lake, additional erosion and sedimentation control measures may be necessary to address the increased potential for erosion and the presence of an important resource downgrade.
 - a. It does not appear that the area between the limit of clearing and the sediment barrier has been included in the calculated area of disturbance within the 200' upland review area. This area should be included due to the potential for erosion, siltation, and maintenance upgradient of the barrier.
 - b. Proper installation and maintenance of the sediment barriers through this area will be difficult without additional clearing and land disturbance activities. The sediment barriers should be located within a cleared area or lane to allow for installation and maintenance. The barriers should be relocated, or the clearing limits adjusted.
 - c. Redundant E&S control measures may be warranted at the bottom of slope to accommodate the steep slopes, potential for ledge, etc.

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- d. Sediment control barriers should be located at the top of the steep slope in addition to the bottom to minimize the potential for siltation migrating onto the steep slope where it will be difficult to control or clean.
3. It appears that the roof leaders will discharge to the top of a steep embankment on the west side of the house. I recommend that the roof leaders be collected and discharged away from the steep embankment (north and/or south) with appropriate end controls to dissipate energy before flowing overland through wooded areas.
4. A detail should be provided on the plan for the proposed wood mulch path to ensure that it is properly constructed and does not create a route for concentrated flow along the steep slopes leading to the lake, thereby increasing the potential for erosion and sedimentation.

Should you have any questions, please don't hesitate to contact me at (860) 367-7264.

Sincerely,



Brandon Handfield, PE
Civil Engineer