LLHD
Ledge Light Health District

Promoting healthy communities

Date: 9 November 2022
To: Peter Gardner, LS
Subject Property: **94, 96, 98, 100 Stoddards Wharf Rd. Ledyard**

Plan Designed by:Peter Gardner, LS Plan Date: **July 7, 2022** Last Revision Date: **October 31, 2022**
Date Paid: July 7, 2022
The plan and associated information was submitted to our office on July 30, 2022 for a proposed **26** lot subdivision/commission review. Lots range from 0.17 to 0.54 acres and are to be served by **private well water** and **private septic systems**, in the Town of **Ledyard .**

The Ledge Light Health District (LLHD) does not issue approvals for Subdivision or Commission reviews, but our recommendation for suitability of the previously stated plan/lots to accommodate the LLHD Subdivision Submission Requirements and Connecticut Public Health Code Section 19-13-B103e are as follows:

☒ **Lots 1-26 are recommended suitable in their current condition IF footing drains are not required**

Comments

1. Some lots may require further soil testing if the proposed septic location is not close to test holes that have been recorded. These lots are recommended as suitable in their current state based on the consistency of soil observed in the vicinity. Lot 1 is recommended as suitable because suitable soil in a suitable location exists, even though the proposed septic system is not shown in this area.
2. Approval of no foundation drains (on lots where septic systems are to be located less than 25ft from the house) is to be provided by Ledyard Building Official.
3. The feasibility of providing each lot with a private well that would produce an adequate quantity of water to serve a 3 bedroom single family dwelling was studied by GEI Consultants, and the results of the study provided in a document: "Water Study Proposed Stoddards Wharf Road Subdivision Ledyard, CT" July 6, 2022. The document concludes that "multiple lines of evidence" suggest that the current groundwater supply is adequate to supply the subdivision as proposed. It should be noted that the study uses an estimated subdivision demand of 7.5gpm "assuming typical residential demands", whereas the CT Public Health Code would assume a demand of 8.1gpm for 26 lots, 3 bedrooms per lot. The study states that the expected bedrock aquifer recharge over the footprint of the proposed subdivision is estimated to be 4.0gpm, leaving a deficit of 3.5gpm to be made up by groundwater flow entering the subdivision footprint horizontally. This deficit may in fact be greater (4.1gpm) based on the expected water demand for the total number of bedrooms.

   There is no doubt that siting 26 wells in such close proximity could have a noticeable effect on the local groundwater table. Data collected for 5 existing wells in the area (drilled over 25 years ago) indicate that they are fairly deep (average 280ft) and have yields around 3gpm. The study does point out that the proposed subdivision is at least partially surrounded by an undeveloped watershed area, allowing for replenishment of the aquifer that would serve the wells. In Connecticut it is recommended that the 75ft well protective radius be located completely on the property that the well serves in order to allow neighbors full use of their property. While the 75ft radii of the proposed wells are not located completely on the individual lots they serve, none of the radii extend onto neighboring properties beyond the subdivision.

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Due to the density of the proposed subdivision, It is noted that a public water supply would be the preferable means of supplying water to the community.

4. Proposed septic layouts on the lots demonstrate the feasibility of siting code complying primary and reserve septic leaching areas on the lots using proprietary leaching products that provide a high leaching credit per linear foot. On a few lots, positioning of the septic tank in a way to meet code requirements may be difficult and should be demonstrated in the context of not just the property served but also with respect to the surrounding properties.

5. It is recommended that thought be given to space on the lots that might be needed for Water Treatment Wastewater systems in the future.

6. Individual site plans may require additional soil testing. Individual site plans where the house location, septic location or well location differs from the approved subdivision plan must be submitted on plans that show the proposed (or actual) locations of these items on the surrounding lots to ensure the proper separating distances are met.

*Please note that soils testing indicated on this plan are representative of actual soils conditions and additional deep test pits and percolation tests may be required by the Ledge Light Health District if the building or system location is altered and/or the suitable septic area is limited. Applicant should be aware that subdivision approval IS NOT sufficient for individual lot approval. Each lot must be reviewed by the Ledge Light Health District at the time of building permit application in order to obtain lot approval and issue a septic/well permit.

Please call me at 860-910-0446 with any questions regarding this matter.

Sincerely,

Wendy K. Brown-Arnold, RS, REHS
Supervisor, Land Use Activities

cc: Town of Ledyard Planning and Zoning Departments