Nashoba Associated Boards of Health

Environmental Health Service

30 Central Avenue, Ayer, Ma. 01432

M E M O

DATE: **3/10/24**

TO: **Littleton Board of Health**

FROM: **Jim Garreffi, Littleton Board of Health**

RE: **MEETING NOTES**

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95 Taylor St – Subdivision Approval

I have reviewed the subdivision plan for 95 Taylor St. The proposed subdivision will create 3 lots from the existing property.

Soil testing has been done on the property and good soil conditions were found; sandy, gravelly soil with percolation rates < 2 minutes/inch. The seasonal high groundwater table noted on site will allow for the installation of leaching areas with minimal fill.

The site is in the Zone 2 of a public water supply well and this will require each lot in the subdivision to have 10,000 square feet of land area for each bedroom in the proposed houses on these lots. The materials from the applicant's engineer state the proposed houses will contain five bedrooms. Based on my review of the plan, one of the lots will not contain enough land to comply with the nitrogen loading standards based on the proposed house size. There is enough land in the development so the applicant has the following options: 1.) the proposed house on the undersized lot can be reduced to a four bedroom dwelling, 2.) land could be added to the undersized lot to create the minimum lot size needed or 3.)the applicant can request approval of a nitrogen aggregation plan from the Board (this process is allowed by DEP; a legal encumbrance is created between lots to ensure the nitrogen loading standards are met).

Based on my review of the lot and soil evaluation holes, I did not find any issues with the lot or test results which could be injurious to the public health and safety (except for the need to address the undersized lot mentioned previously): the proposed leaching areas will be placed in excess of 100' from the wetlands and the leaching areas will be designed with a 5' groundwater offset.

The proposed plans indicate the surface water will be addressed with swales, stone infiltration trenches and subsurface chambers to handle the roof run off.

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Other concerns appear to be addressed in the engineer's narrative for the site regarding dust and the stabilization of disturbed areas to minimize dust.

I do not see an issue with approving the subdivision with the following conditions.

1.) The applicant must address the nitrogen loading question to ensure all the proposed lots will meet the nitrogen loading requirements.
2.) The activities on the site shall not create dust, odor or noise which would create a "condition of air pollution," in accordance with 310CMR7.00, Air Pollution regulations.
3.) No wood wastes shall be buried on the site, all stumps and slash shall be disposed of properly.
4.) All detention/retention basins shall minimize standing water.
5.) The proposed sewage disposal system shall be designed in compliance with Title 5 and the Littleton Board of Health regulations, and a permit for each system must be issued by the Board of Health.

42 George St.

The sewage disposal system for this property is in failure based on the seasonal high groundwater table.

Soil testing was conducted on the site and the results showed the groundwater table to be high (18" below grade) and the soil was consistent with the previous perc rate of 27 minutes/inch. The site is essentially flat.

This lot presents the following challenges to the replacement of the sewage disposal system: high groundwater table, high perc rate, flat lot and the elevation of the existing building sewer line (it looks like the line comes out under the slab floor of the house and therefore can't be raised).

The applicant is proposing to install a new septic tank, pump chamber and a GeoMat leaching area. In order to minimize the surface run-off onto abutting lots, the applicant is requesting Board approval of a 2' groundwater reduction for the leaching area (allowed by the DEP approval of the GeoMat system). In addition, because of the elevation of the building sewer line and the high groundwater, the applicant is requesting a local upgrade approval to allow a reduction of the groundwater offset for the tank outlet inverts to the high groundwater table (less than 1" when groundwater is determined by a Soil Evaluator).

The site is small and has a number of challenges to the installation of a fully compliance system and I believe this design represents a reasonable approach to replace this failed system. Given the high groundwater table, I would recommend the use of monolithic tanks equipped with cast in rubber boots on the inlet and outlet inverts of the tanks.