Kristin Esposito McRae, RS Director



BOARD OF HEALTH
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MEMORANDUM

Date:

May 24, 2021

To:

Emilie Cademartori, Planning Director Peter Ogren, PE Hayes Engineering

CC:

Owner, Linda Vallis; Applicant, Paul Caggiano

BOH Members

From:

Kristin Esposito McRae, RS

Subject:

Definitive Plan Subdivision Vallis Way (109 Lowell Street)

The Lynnfield Board of Health (BOH) held its regular meeting on May 20, 2021 and the above referenced plan was on the agenda.

The BOH requires a Title 5 Inspection of the existing system(s) serving the dwelling at 109 Lowell St.

Connection to public water supply should be confirmed by the owner/applicant as private potable wells are not proposed.

The soil suitability assessment has been done (perc tests were witnessed by the BOH) and the signed soil suitability assessments were submitted to the BOH on May 20, 2021. Each lot will require a septic plan designed in full compliance for new construction and the BOH holds public hearings for these applications.

On May 11, 2021 we wrote to Peter Ogren, PE, Hayes Engineering: The above referenced plan is placed on our Board of Health (BOH) meeting for May 20, 2021. The meeting starts at 5:30pm and a zoom link will be posted. On Nov 12, 2020 the site, Vallis Way, 109 Lowell St, Preliminary Subdivision Plan, was on the Board of Health (BOH) public meeting agenda. Unfortunately, the project engineer, Peter Ogren needed to leave the meeting before the site agenda item was heard. Since then we received the following:

- 1) Definitive Plan Vallis Way Assessors Map 17 Lot 921 dated April 12, 2021
- 2) Form C Application for Approval of Definitive Plan

This site is located in the Lynnfield Groundwater Protection District. The existing dwelling is located at 109 Lowell Street. The Definitive Plan creates additional lots 1-5 for a total of 6 dwellings in this subdivision plan. Will need to correlate the number of bedrooms to

each lot square footage as 10,000 sf per bedroom is required. The sequence labeling during the soil testing is different than the Definitive plan: refer to table below:

109 Lowell	What is New square footage?	Existing System 1966	"Approx 4 bedrooms" 400 total daily flow 1966	No new soil testing No T5 Inspection of existing system
Lot 1 Labeled Lot 2 during soil testing	45,866 sf	Need Primary and Reserve	Correlates to 4 bedrooms max	Soil testing 8/25/20
Lot 2 Labeled Lot 3, 4 during soil testing	60,421 sf	Need Primary and Reserve See Infiltrate-Pond	Correlates to 6 bedroom max	Soil testing 8/25/20
Lot 3 Labeled Lot 5 during soil testing	60, 265 sf	Need Primary and Reserve	Correlates to 6 bedroom max	Soil testing 8/25/20
Lot 4 Labeled Lot 6 during soil testing	40,576 sf	Need Primary and Reserve See comment on equipment storage	Correlates to 4 bedrooms max	Soil testing 8/25/20
Lot 5 Labeled Lot 7 during soil testing	41,302 sf	Need Primary and Reserve See comments on topography, driveway over system	Correlates to 4 bedrooms max	Soil testing 8/25/20

Given the subdivision will be for new construction full compliance and a reserve area are required for each. It is unclear if there is a proposed system to replace the 1966 system and reserve areas are not shown.

Regarding soil suitability, soil testing has been conducted and percolation tests witnessed by the BOH on August 25, 2020 though the Soil Suitability Assessment logs have not yet been submitted (typically on Form 11) by Gordon Rogerson, Hayes Engineering. The percolation rates were between less than 2 minutes per inch and 5 minutes per inch, indicating fast perc rates.

Other soil testing was undertaken in 1987 by Gordon Rogerson and soil log on file with the BOH; perc rate 2 minutes per inch.

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Estimated Seasonal High Groundwater (ESHGW): No groundwater was found in the excavations to 10' in depth in Aug 2020.

Water supply refer to Lynnfield Center Water District for connection. The on-site septic systems will need 10' minimum setback from the water supply line.

Each lot will require a septic plan designed in full compliance for new construction and the BOH holds public hearings for these applications.

All setbacks must be met under T5 septic systems, in full compliance. Refer to Town Engineer for the types of catch basins and stormwater chambers on the septic plans to verify the associated setbacks given the type of basin or chamber.

Storm water management appears to include an infiltration pond on Lot 2; information on mosquito control will be important. Who will be the responsible party for maintaining this infiltration pond?

Lot 4 "proposed equipment storage". The SAS should be staked prior to construction to prevent staging and traffic over the area. Avoid compacting the soil.

Lot 5 has steeper topography contours; is ledge anticipated during construction? It appears the septic system will be under the driveway. Under pavement should only be when unavoidable per code. Given this is new construction, how it is unavoidable? How will it meet H20 loading?

In general, standard care and accepted practices should be implemented to control noise and dust during site work, drilling, blasting activities (if any), and construction. Blasting is not permitted for the septic-soil absorption system installations.