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March 27, 2025

Hingham Planning Board
210 Central Street
Hingham, MA 02043

Subject: 210 Hull Street & 311 Rockland Street, Site Plan

Dear Planning Board Members:

This is to advise that we have reviewed the following documents pertaining to the proposed raze and rebuild of the dwelling at 210 Hull Street and the proposed dwelling at 311 Rockland Street:

- Site Plan Review & Common Driveway plan (6 sheets), dated February 26, 2025, prepared by Merrill Engineers and Land Surveyors (Merrill)
- Stormwater Report, dated February 6, 2025, prepared by Merrill
- Applications for Major Site Plan Review, dated March 3, 2025, prepared by Merrill
- Fire Department letter, dated March 12, 2025
- Email comments from Mr. Silveira to the Applicant's team

The purpose of our review has been to evaluate conformance with Hingham Zoning By-Laws (ZBL), MassDEP Stormwater Management Standards (SMS) and good engineering practice.

Background

The existing lot lines are proposed to change and will provide 210 Hull Street with ±54,594 square feet (s.f.) and 311 Rockland Street with ±53,457 s.f. of area. The site is located within the Residence C zoning district. The 210 Hull Street property is currently developed with a single-family dwelling, detached garage, paved driveway, landscaping and hardscaping. The 311 Rockland Street property is currently undeveloped woodland. There are ledge outcroppings all over both properties. The Weir River, an Area of Critical Environmental Concern (ACEC) is across Rockland Street from the 311 Rockland Street property. The 311 Rockland Street property includes areas of FEMA regulatory flood zone, buffer zone to the wetlands associated with the river and the 200-foot Riverfront Area. A tributary to the Weir River crosses Rockland and Hull Streets and extends through properties across Hull Street from 210 Hull Street. The 200-foot Riverfront Area associated with this tributary extends onto the 210 Hull Street property.

The proposal calls for 1) razing the existing dwelling and garage at 210 Hull Street; 2) construction of new single-family dwellings with attached garages on both lots; 3) construction

of a gravel common driveway to access both dwellings; 4) construction of paved driveways in front of the garages on each lot; and 5) associated grading and landscaping. The stormwater analysis has been prepared for the total combined area of both lots. Four stormwater infiltration basins are proposed, two on each property. Stone diaphragms are proposed to pre-treat runoff from the paved driveways before it is discharged into infiltration basins. Roof runoff from portions of the roofs of both dwellings is proposed to be piped into infiltration basins and overland flow from much of the disturbed areas of the lots will also be directed to the infiltration basins. Runoff from most of the common gravel driveway will also be directed into the infiltration basins. The calculations indicate that the post development rates and volumes of runoff will not exceed existing conditions to any of the design points for each storm event.

Water service to the dwellings would be by connection to the existing distribution system in Hull Street. Sewer service for each dwelling would also be by connection to the existing sewer main in Hull Street. Underground electric and communication utilities would be connected to an existing utility pole located across Hull Street. All of these proposed utilities appear to be a shared line up to the point where the services to 210 Hull Street branch off. A silt sock is proposed as a perimeter erosion control barrier around the down-gradient limits of work and a construction entrance is proposed at the location of the existing driveway off Hull Street.

Comments

1. We note the following issues with the proposed grading and post-development stormwater analysis:
 - a. The 461 s.f. lawn area and most of the 1,016 s.f. gravel driveway area in subcatchment area P1-A will flow down the gravel driveway into subcatchment area P1-B and not into Basin #3.
 - b. The majority of the 3,938 s.f. of common gravel driveway in subcatchment area P3-A that is supposed to be graded to the crushed stone diaphragm and Basin #4 is graded away from the diaphragm and the basin.
2. There appears to be a pipe from the crushed stone diaphragm adjacent to the common gravel driveway that discharges into Basin #3, however, this is not labeled on the plan.
3. We question whether a pump system will be required for the sewer service to 311 Rockland Street. The first floor elevation is at 45.0, the basement floor elevation is at 35.0, and there is a highpoint in the driveway at elevation 48.5, which is about 190 feet (following the proposed sewer service route) from the house connection. Assuming that the sewer service is two feet below grade at the house (grade at the connection is about El. 43.5), and a minimum slope of 1/8 inch per foot, the invert of the sewer at the high point would be about 39.6, or nine feet deep. We suspect that this depth of excavation will require ledge removal.

4. The sewer service is shown with bends. Manholes should be installed at all bends unless the Sewer Department will allow cleanouts at changes in direction. Bends are acceptable with a force main (pumped system).
5. The Construction Sequencing should have installation of the infiltration basins before gravel and paved driveway construction.
6. Since the discharge of stormwater will end up in an ACEC, a critical area, the required water quality volume is one inch of runoff over the increase in paved surface area. The calculation should be corrected to reflect the discharge to the critical area. We note that Basin #3 provides more than the required water quality volume.
7. All protected trees proposed to be removed should be identified as well as mitigation trees and tree protection measures.

Please give us a call should you have any questions.



Very truly yours,

PGB Engineering, LLC

By:

A handwritten signature in cursive script that reads "Patrick G. Brennan".

Patrick G. Brennan, P.E.

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