

SHERBORN CONSERVATION COMMISSION



19 Washington Street, Sherborn, MA 01770

MEMO

TO: Sherborn Zoning Board of Appeals (ZBA)
cc: Jeremy Marsette, Town Administrator

FROM: Michael Lesser, Commissioner

DATE: January 22, 2025

RE: Comments and Recommended Conditions for the Brush Hill Home Development

I apologize for the lateness of this submittal as I did not realize that this was not done previously. As has been noted, a wetlands-related permit application will be submitted to the Conservation Commission if/when a ZBA Comprehensive Permit is issued. I have identified issues that involve ZBA consideration.

Two of the largest issues for this project's wetlands protection are:

1. the restoration of all of the proposed altered wetland buffer zone, and
2. the quality of any fill used in the wetland buffer zone – REQUIRES ZBA conditioning in order to enforce local regulations and protect local water and environmental quality.

There are also some property management issues listed below in this memo that would help protect the wetlands as well as water quality, some of which will require ZBA conditioning.

RESTORATION PLAN FOR ALTERED WETLANDS BUFFER ZONE – Conservation Commission Conditioning

An area of the current natural buffer zone will be altered by grading and possibly other work related to the septic system. A restoration plan will be addressed under the application to the Conservation Commission under the State Wetlands Protection Act. Possible mitigation will also be explored. Therefore, the ZBA does not have to address this issue in any detail other than it can note that such restoration and mitigation for buffer zone alterations will be undertaken by the applicant in accordance with the Conservation Commission permitting.

FILL QUALITY – ZBA Conditioning for (i) at least local wetlands regulations and (ii) possibly local health considerations

(i) The local wetlands protection regulations specify fill quality for material that will be used in Conservation Commission jurisdiction and significant fill quantities will be used in the buffer zone related to grading for the septic system. In Attachment 1, the current Sherborn wetlands protection regulation for fill quality is presented and its use as a ZBA condition is recommended.

Given the large quantity of fill, Attachment 2 presents a draft of a revision to this fill quality regulation to be more protective of wetlands, which play a role in water quality protection. Due to water quality and health concerns, this draft revision could be used. As this issue falls under local regulations, the ZBA will need to include such conditioning as the Conservation Commission cannot do so under the State Act.

(ii) The ZBA can provide greater water and environmental quality protection by conditioning fill quality beyond wetlands-related jurisdiction. The TetraTech review, while noting the net import of about 6,000 cubic yards of fill, only addresses the need for and the review of a Construction Management Report to address a range of fill-related issues (including sediment control, fill storage locations and delivery arrangements). It is suggested that fill quality conditioning be extended to all fill used on this project site.

Additional Recommendations To Support Wetlands and Other Environmental Protections – Some Require ZBA Conditioning

- → De-icing chemicals: No sodium chloride will be used. (Consider whether to specify acceptable types.)
 - This would have to be a ZBA condition to protect water quality.
- → Snow Storage: No snow storage shall be permitted in the buffer zone, and any run-off from snow storage shall be appropriately treated before entering the buffer zone.
 - This can likely be handled as part of wetlands protection permitting.
- → Coal-tar based asphalt sealants will not be used on the driveways/road due to the direction of stormwater run-off into the wetland buffer zone. (As in past emails with attached information, coal-tar sealants are very hazardous and there are readily available much less hazardous sealants, though still hazardous. The Conservation Commission recently has this condition for a new home in Sherborn where the driveway drainage enters the buffer zone. Furthermore, this condition will be part of upcoming revision of local wetland regulations.)
 - This would have to be a ZBA condition to protect overall water quality and health.
- → Pesticides and Fertilizer: No pesticide (which includes herbicides) or fertilizer use in buffer zone.
 - This can likely be handled as part of wetlands protection permitting.
- Outdoor/Exterior Lighting can disrupt wildlife habitats. Lighting should be designed to avoid illuminating wetland areas, buffer zones and potential wildlife corridors. Suggested conditions are:
 - All outdoor and street lighting related to Unit #1 will: (i) be directed away from wetland resource and buffer zone, (ii) be of the minimum wattage and numbers to achieve safety needs, (iii) be of a warm color of 3000K or less (which is better for humans as well), (iv) have timers to turn off or greatly reduce wattage overnight, and (v) have photocells to turn off lighting when ambient lighting is sufficient.
 - This would have to be a ZBA condition.

Septic System Related Concerns

The development proposes a large septic field with a capacity for 12 bedrooms located in close proximity to the wetlands buffer zone and upgradient of the wetland resource. There is concern about possible adverse wetland impacts from the plume of septic effluent over time.

Attachment 1

From the Sherborn Wetlands Regulations: 5.3 Fill

All fill used in connection with any project under the jurisdiction of the Commission will be clean fill, containing no garbage, refuse, rubbish, industrial or commercial or municipal fill or waste, demolition debris, or septic sludge, including, but not limited to lumber, wood, stumps, plaster, wire, rubbish, pipes, lathe, paper, cardboard, glass, metal, tires, ashes, appliances, motor vehicles or parts of any of the foregoing. No fill containing levels of oil or hazardous materials above GW-1/S-1 Method 1 Standards, as described in the Massachusetts Contingency Plan (MCP) environmental regulations as revised, will be used in connection with any project under the jurisdiction of the Commission.

The source of any fill will be made known in writing to a member of the Commission at least one week prior to placement at the site. All environmental reports and results of chemical testing of such fill will be filed with the Commission at this time. The Commission reserves the right to require specific additional chemical testing of fill by a third party, at the applicant's expense, prior to placement at the site.

Attachment 2

Draft Revision to the Sherborn Wetlands Regulations for Fill

All fill used in connection with any project under the jurisdiction of the Commission will be clean fill, containing no garbage, refuse, rubbish, industrial or commercial or municipal fill or waste, demolition debris, or septic sludge, including, but not limited to lumber, wood, stumps, invasive plants, plaster, wire, rubbish, asphalt, coal, slag, asbestos, pipes, lathe, paper, cardboard, glass, metal, tires, ashes, appliances, motor vehicles or parts of any of the foregoing. Furthermore, no fill containing levels of oil or hazardous materials above RCS-1 Reportable Concentrations and GW- 1/S-1 Method 1 Risk Based Standards, as described in the Massachusetts Contingency Plan (MCP, 310 CMR 40.0000) environmental regulations as revised, will be used.

The source of any fill will be made known in writing to the Commission at least one week prior to placement at the site. A certification statement from the material supplier shall be provided stating that the fill material is free of debris and contamination as stated above, and that the source is not a disposal site under the MCP, 310 CMR 40.0000.

If more than 20 cubic yards of imported fill material will be brought on site, in addition to the above certification, sampling by a qualified environmental professional and analytical laboratory characterization testing of each source of material shall be required, with comparison of the data to the RCS-1 Reportable Concentrations and an opinion by an environmental professional as to whether the material meets the town's standards (below RCS-1) and the Massachusetts anti-degradation provisions in the MCP 310 CMR 40.0032(3). This data and opinion shall be provided to the Commission for review. Analytical testing shall be completed by a certified laboratory and shall include MCP 14 metals, volatile organic compounds (EPA Method 8260), semi-volatile organic compounds (EPA Method 8270), extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH), PCBs and pesticides (EPA Method 8081 and 8082) and asbestos. The Commission reserves the right to require additional analyses. Additional samples and analytical test data and certifications shall be provided if at any time the consistency of the offsite material changes in the opinion of an agent of the Commission. In addition, not less than one complete suite of analytical testing will be completed for every 100 cubic yards of material imported to the site. Chemical laboratory data on the imported materials will be submitted to the Commission throughout the course of the work.

Crushed stone, peastone and clean septic sand related to septic fields or soil absorption systems will be exempt from all analytical testing requirements but shall be free of all debris.

On a project-specific basis, the Commission can waive any requirements.

All fill shall be properly compacted to adequately stabilize the soil and as part of ensuring that there is no erosion, washout from precipitation, and windblown dust. Erosion control measures and best management practices shall apply to all soil management, excavation, and temporary staging and stockpiling areas.