

# AMORY ENGINEERS, P.C.

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April 6, 2022

Halifax Board of Selectmen  
Town Offices  
499 Plymouth Street  
Halifax, MA 02338

Subject: **250 Lingan Street – Earth Removal Permit**

Dear Board Members:

This is to advise that we have reviewed the following documents in support of the proposed earth removal permit application at 250 Lingan Street, Parcel 29-1-0:

- Site Plan – Proposed Bog Reconfiguration (11 sheets), dated March 4, 2022, prepared by Grady Consulting, L.L.C. (Grady)
- Transmittal letter with attachments from Grady, dated March 4, 2022

The purpose of our review has been to evaluate conformance with the Halifax Soil Removal Bylaw (Chapter 144) Zoning Bylaw (Chapter 167) and good engineering practice.

## **Background**

The proposal calls for the removal of approximately 1,142,600 cubic yards of earth for the creation of cranberry bogs and water supply ponds. The site is currently used for cranberry farming and the proposal would reconfigure some of the existing irregularly shaped bogs. Existing wooded and gravel areas on site would also be converted to cranberry bogs. Total site disturbance would be about 67.1 acres. The new and reconfigured bogs would be 180 feet in width which would allow maintaining and harvesting the bogs from perimeter roads with specialized machinery that can reach 90 feet.

The site is located north of Plymouth Street, just west of Monponsett Pond. Most of the site is located within the Town's Zone II for the YMCA Wells 3 and 4 (Aquifer and Well Protection District). According to MassGIS part of the site is also within Zone A of a surface water supply.

## **Comments**

1. Based on the amount of earth to be removed and the rough timeline of a 4-5 year period, the average number of trailer truck loads removed from the site would be between 34-43 per day.

2. Due to the site being within the Aquifer and Well Protection District, a Special Permit from the Planning Board would be required to allow the work. We note the following issues related to that permitting process:
  - a. Zoning Bylaw (ZBL) §167-17.F.14 does not allow any use that would retain “less than 40% of lot area in its natural vegetative state.” The Applicant’s engineer should provide a calculation showing how much of the lot would remain natural.
  - b. ZBL §167-17.F.26 requires a Special Permit for the storage of commercial fertilizers.
  - c. ZBL §167-17.F.27 does not allow “the removal of soil, loam, sand, gravel or any other mineral material within four feet of the historical high groundwater table... unless the substances removed are redeposited within 45 days of removal on site to achieve a final grading greater than four feet above the historic high water mark.” Water table information should be provided to verify compliance with this bylaw. However, we suspect that the excavations for the water supply ponds will be well below historical high groundwater table and would not comply with the bylaw. We note that this is also a requirement of MassDEP for wellhead protection.
  - d. ZBL §167-17.F.28 does not allow the “removal of earth, loam, sand and gravel or any mineral in excess of 50 cubic yards, not incidental to construction of a building.”
3. MassDEP’s Source Water Assessment and Protection (SWAP) Report has ranked the susceptibility of Halifax’s water supply wells to contamination as ‘high’ due to the use or storage of pesticides related to cranberry bog operations within Zone II. The Applicant should explain how the expansion of cranberry operations would not further jeopardize the susceptibility of the wells to contamination.
4. We assume that the existing cranberry operation has a Water Management Act (WMA) permit for water withdrawal. For the additional cranberry bog acreage a new or modified WMA permit will be required through MassDEP.
5. If the Board approves the earth removal permit we recommend that the earth removal comply with ZBL §167-17.F.27 such that there is no removal of earth within four feet of the historical high water table.

Should you have any question, please give us a call.

Very truly yours,

AMORY ENGINEERS, P.C.

By:



Patrick G. Brennan, P.E.



PGB

cc: Halifax Planning Board  
Bill Lindsay, Water Superintendent