

PGB ENGINEERING, LLC

CIVIL ENGINEERING DESIGN & CONSULTING

49 TUPELO ROAD
MARSHFIELD, Ma 02050-1739

Tel.: 781-834-8987
PGBEngineeringLLC@gmail.com

October 24, 2023

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 (4 sheets), dated September 20, 2023, prepared by Grady Consulting, L.L.C. (Grady)
- Transmittal letter with attachments from Grady, dated October 4, 2023
- Letter from Attorney Rosenberg, dated October 3, 2023

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 20,000 cubic yards (c.y.) of earth from the subject property for use in cranberry bog maintenance. The soil to be removed would be excavated from an existing hill onsite. The Applicant has historically excavated soil from this area and proposes to continue excavating the hillside. The vertical limits of excavation range from an existing elevation of about 54 at the bottom of the hill to about elevation 84 at the top of the hill. Total site disturbance would be about 1.4 acres.

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. The number of truckloads (350) listed in the Earth Removal Application Checklist for Applicant is incorrect based on the quantity of soil to be removed (20,000 c.y.) and the capacity of the trucks (28 c.y.). The number of truckloads would be about 715.
2. The Applicant maintains that Chapter 144 does not apply to this proposal due to the agricultural use of the site as cranberry growing operations. We understand that Town

Counsel's opinion is that Chapter 144 is applicable. Below we list the conditions that are typically included in a permit issued by the Board (per 144-2.D) in *italic text* along with the Applicant's position on each condition in plain text and our comments, if any, in **bold text**.

- (1) *No processing of earth and no operation involving earth materials other than the permitted removal shall take place on the subject premises during the period of time of the permit unless specifically permitted by law. The only processing proposed on the property is processing that is associated with the screening of sand from removed material for cranberry bog restoration.* **We believe that allowing screening of the sand on site to reasonable, provided that the screening operations are in close proximity to the proposed excavation operations, which are over 2,500 feet from the nearest abutter.**
- (2) *No earth or other materials foreign to the subject premises, including but not limited to boulders, asphalt, cement, road construction debris, demolition debris and tree stumps, shall be brought onto and deposited on the subject premises during the time period of the permit, except topsoil and living plant material for reclamation use. All stumps and debris shall be removed and disposed of in an approved location. The applicant will not bring earth materials onto the property, Stumps and debris may be disposed on site.* **We recommend that stumps and debris not be buried on site.**
- (3) *Earth removal shall be performed in phases on land areas of not more than five acres each, hereinafter referred to as "phase areas." Work of any sort connected with earth removal shall not be performed on more than one (1) phase area at a time. Work in a subsequent area shall not commence until all work, including restoration of the previous phase area, has been completed to the satisfaction of the Board or its representative. The Site Plan details the proposed Phase locations. The removal area is less than 5 acres.* **The project is proposed as a single phase on about 1.4 acres or area.**
- (4) *The permit grantee shall, to the satisfaction of the Board, stake or mark clearly all phase areas and buffer zones with Schedule No. 40 two-inch PVC pipe at one-hundred-foot intervals. These boundary markers shall be maintained at all times during the time period of the original and any renewed permits. The applicant agrees with these terms. The location of PVC markers is shown on the plan. The markers have been placed at the limits of cut.* **Project will comply.**
- (5) *Before excavation commences and at the expense of the permit grantee, monitoring wells shall be drilled at locations and in numbers determined by consulting engineers of the Halifax Water Department who will conduct initial tests to determine ground and well elevations. All excavation shall be at least seven (7) feet above the groundwater elevation as determined by the Halifax Water Department, except for permitted agricultural uses and excavation of areas for drainage as permitted by town boards. N/A. The property is a permitted agricultural use.* **Based on our review of another project proposed on this site in 2022, we understand that there are monitoring wells on the property. The Applicant should provide the**

- groundwater elevations and excavation should be kept a minimum distance above seasonal high groundwater, as determined by the Board. We recommend a minimum of four feet as specified in ZBL §167-17.F.27, however, greater separation will provide more protection for the aquifer.**
- (6) *No excavation below the natural grade of any boundary line shall be permitted closer than fifty (50) feet to such boundary unless written consent is given to the permit grantee by the issuing authority and the owner of the property abutting such boundary.* The applicant agrees with these terms. This project will be conditioned as such. The Site Plan details conformance with this condition. The limit of cut has been designed to be a minimum of 700 ft from any property boundary. **Project will comply.**
- (7) *No topsoil shall be removed from subject premises, unless it is determined by the Board to be excess, until reclamation of all disturbed areas is completed. Reclamation requires replacing of topsoil to a depth of not less than four (4) inches, seeding, planting, fertilizing, watering and attending in keeping with the best professional standards.* N/A. Site is part of applicant's ongoing agricultural operations and maintenance. Restoration/reclamation is inconsistent with its regular, ongoing, and future use of the site. **Due to the location of the proposed excavation and removal, we do not believe that reclamation is necessary because loose soil will not erode into any wetland resources. It is in the Applicant's interest to keep soil from eroding into the cranberry bogs. However, the Applicant should advise as to whether topsoil will be removed from the site.**
- (8) *The finished level and grading shall leave no slope exceeding a grade of three (3) feet horizontal and one (1) foot vertical. In all cases levelling and grading shall be performed so that the natural contours of the land shall be preserved to the extent possible. Excavating to a lower elevation than required by the plan for which the permit was granted is strictly prohibited and punishable by a fine of one hundred dollars (\$100) per cubic foot, revocation of permit and/or other penalties as determined by the Board.* Site is part of applicant's ongoing agricultural operations and leveling and grading is inconsistent with its regular, ongoing, and future use of the site. Applicant will not excavate to lower elevation than required by the plan accompanying this application or for which a permit is granted. **The proposed post-excavation grading is at a 3:1 slope so it will comply. The proposed excavation should be kept a minimum distance above the water table as recommended above.**
- (9) *The subject premises shall be kept free of any debris, including tree stumps. No debris generated on site shall be buried or otherwise disposed of on site without the prior written consent of the Board and the Board of Health. Stumps and debris may be disposed on site.* **We recommend that stumps and debris not be buried on site.**
- (10) *Records showing the amount of earth removed shall be provided monthly by the permit grantee, and quarterly reports certified by a registered professional engineer shall also be submitted to the Board. The method of measurement of materials removed shall be determined by the Board's engineer. The Board may require more*

frequent reports if it deems that circumstances warrant them. Reports to the Board by said engineer shall be at the permit grantee's expense. The applicant will provide monthly reports of volume of earth removed based on truck capacity and number of loads. Certified engineering reports are unnecessary and overly burdensome. **We believe that the trucking reports are acceptable along with an as-built survey of the removal area after project completion with a report from the Applicant's engineer stating the amount of soil that was removed from the site.**

(11) *No earth removal or related operations shall take place except between 7:00 a.m. and 5:00 p.m. Monday through Saturday and in no case on a legal holiday. Included among related operations are the starting of engines, loading and unloading of trucks and preparations for commencing of work which are audible over a distance. All loaded vehicles shall be suitably covered to prevent dust and contents from spilling and blowing from the load.* Applicant intends to take reasonable measures to reduce noise and any impacts on neighboring properties, but does not commit to limit the timing of its operations or to the vague requirement that trucks be "suitably covered." Applicant will abide by all applicable commercial vehicle and transportation-related federal, state and local laws and regulations. **We believe that the time constraints are warranted for trucking material offsite so as not to create a nuisance for the neighborhood.**

(12) *The preservation of trees, bushes and other vegetation and the erecting of fencing may be required to muffle objectionable noise and vibration.* Applicant intends to take reasonable measures to reduce noise and any impacts on neighboring properties, but does not commit to unspecified mitigation measures. **The proposed excavation location is about 2,500 feet from the nearest residence so vibration, except from trucking, should not be an issue. We believe that a condition prohibiting cutting/clearing within the existing tree buffer, coupled with the distance of the excavation from abutters, would provide adequate protection against noise.**

(12.1) *The permit holder shall be responsible for all spillage onto the public ways of the Town. If, for reasons of safety, it becomes necessary for the Town to clean up and remove such spillage, the cost shall be charged to the permit holder.* Applicant is responsible for spillage onto public ways to the extent otherwise required by existing applicable laws, and does not assume blanket responsibility or liability beyond such legal requirements to the extent any exist. **We recommend that if there is spillage, and the Applicant does not clean it up, the Town should notify the Applicant of the spillage to give him a chance to clean it. If the Applicant refuses to clean the spillage, the Town should be able to charge the Applicant for cleanup costs.**

(12.2) *The permit holder shall be responsible for all damage to public ways from traffic, occurring in connection with the permit, entering or exiting the site.* Applicant is responsible for damage to public ways to the extent otherwise required by existing applicable laws, and does not assume blanket responsibility or liability beyond such legal requirements to the extent any exist. **We recommend that the Board discuss this further with the Applicant so that a reasonable compromise may be reached.**

- (13) *This permit is subject to a fee of twenty-five cents (\$0.25) per cubic yard or more, as determined by the Board, payable to the Town of Halifax. Any inspections by an engineer of the Town's choice to ensure that the work being done follows the approved plans and this section shall be paid by the applicant. A fee shall not be paid by applicant. Applicant asserts that such fee would infringe applicant's right to engage in agriculture and would otherwise constitute an unlawful tax and/or fee. **We defer to the Board about any fees.***
- (14) *The earth removal permit is not transferable without approval of the Board. Transfer of equity ownership or legal interest in the subject property shall be considered a transfer; however, the pledging of such to secure a mortgage or other loan shall not be considered a transfer, but if the lender should acquire ownership or interest by foreclosure, it shall be deemed a transfer. The applicant agrees with these terms. **Project will comply.***
- (15) *The permit grantee shall notify the Board, in writing, within forty-eight (48) hours of any material change in his circumstances and/or plans as represented in his application, including change of ownership, general/operational contractors or purpose for removing earth. The applicant agrees with these terms. **Project will comply.***
- (16) *Reserved.*
- (17) *The applicant agrees by acceptance of the permit to allow the Board or its representative free access to the site to conduct inspections to determine compliance with the conditions of the permit at any time without prior notice. The applicant agrees with these terms. **Project will comply.***
- (18) *No permit will be issued until a performance bond, letter of credit or assignment of account has been posted with the Town in an amount deemed by the Board to be sufficient to repair and restore the land for future use as set forth in Subsection D(7) above, either by the permit grantee, after which the bond will be released or, if not, by the Town, using the proceeds from the forfeited bond for that purpose. As set forth in response to Subsection D(7) above, site is part of applicant's ongoing agricultural operations and maintenance. Restoration/reclamation is inconsistent with its regular, ongoing, and future use of the site, and performance bond or the like for "repair and restoration" is unnecessary. **As noted above, due to the location of the proposed excavation and removal, we do not believe that reclamation is necessary because loose soil will not erode into any wetland resources. It is in the Applicant's interest to keep soil from eroding into the cranberry bogs.***
- (19) *Any permit issued by the Board shall automatically expire upon the termination date stated therein. A special permit for any earth removal shall not be issued for more than one (1) year's duration and may be renewed thereafter with a public hearing legally advertised fourteen (14) days prior to the hearing. The applicant agrees with these terms. **Project will comply.***

*(19.1) Applications for renewal of permits must be made 45 days or more before expiration of the current permit. Applications shall include a current topographical plan detailing current status and restoration progress. The renewal, if granted, shall date from the day the current permit expires. Renewal shall not be granted if work and restoration under the current permit is unsatisfactory to the Board or its agent. The applicant agrees with these terms. **Project will comply.***

(20) The Board shall have the authority to waive any and all conditions when, in the discretion of the Board, said waiver shall be in the public interest and not inconsistent with the general intent of this chapter.

3. Due to the site being within the Aquifer and Well Protection District, we believe that a Special Permit from the Planning Board may be required to allow the work. We note the following issues related to that permitting process:
 - (1) 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.
 - (2) 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. We note that this is also a requirement of MassDEP for wellhead protection.
 - (3) 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.”
4. If the Board approves the earth removal permit we recommend that there is no removal of earth within a minimum of four feet of the historical high water table.

Please give us a call should you have any questions.

Very truly yours,

PGB Engineering, LLC

By:



Patrick G. Brennan, P.E.

