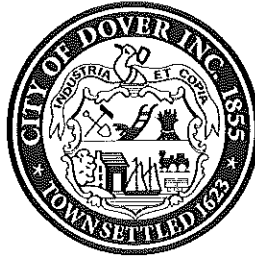


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# City of Dover, New Hampshire

## COMMUNITY SERVICES DEPARTMENT

December 28, 2020

**Re: Marcia Gasses  
Barrington Town Planner**

**Re: Barrington Planning Board Item 236-4-GR-20-SR  
Brox Industries, Inc. Application for Expanded Quarry Operations**

Ms. Gasses,

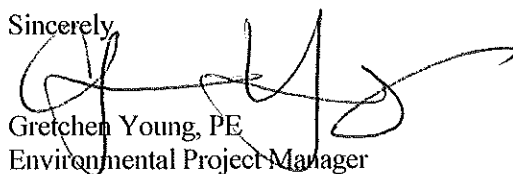
The City of Dover is writing in regard to the request by Sunset Rock LLC (Brox Industries, Inc) to increase their quarry operation in Barrington from 83.3 acres to a total of 88.8 acres on a property (Map 236, Lot 4) located to the west of the City's Hoppers Aquifer, and more specifically the Campbell Production Well. The Aquifer provides almost half of Dover's drinking water, and with the quarry work proposed to be within 500 feet of the Campbell well the City wishes to protect the Aquifer from potential lowering of the water table or contamination (See enclosed Figure 1). City staff and our consultants from Emery & Garret have reviewed the information submitted to the Barrington Planning Board, attended two Planning Board meetings, participated in a project site walk, and held an additional informational meeting directly with the Brox Industries, Inc staff and consultants. Based on these meetings and review of materials, we have compiled the following list of comments and questions:

- 1) The sand and gravel pit, along with current quarrying operations, has been excavated to a floor depth of approximately 120' MSL; based on the City's groundwater monitoring data, the groundwater elevation in the Aquifer to the east of the quarry is approximately 113' MSL. We have not seen any data to suggest that the existing operations have impacted current water levels. **We are requesting historic water level monitoring data from the three exploratory wells on the Brox Industries, Inc. property and/or permission to measure current water levels in these three wells.**
- 2) The operations plan calls for excavation to a depth of 36 MSL, which is below both the aquifer groundwater elevation and the bottom of the existing Campbell Well (See enclosed Figure 2). **We are requesting that Brox Industries, Inc. create a water level/water quality monitoring plan to help determine if an adverse impact to the water level/water quality in the Hoppers Aquifer occurs as a result of quarrying activities and an action plan to remediate any adverse impacts. This plan should identify the point at which operations would stop and outline how the aquifer will be protected or restored if damage does occur.**
- 3) During our site walk, we observed water being collected in a low-point of the existing quarry and pumped to a discharge point located to the east of the existing operations. **We are requesting historic on-site water discharge data, and any monitoring data that has been collected and/or submitted to the state as part of a groundwater discharge permit.**

- 4) We understand that there was pumping of collected water throughout the summer, during which time a severe drought occurred. **We request that Brox Industries, Inc. begin a more formalized water discharge monitoring program to help determine if discharge of groundwater from the bedrock into the quarry occurs as a result of the quarrying activities.**
- 5) Based on discussion during the recent virtual meeting, we understand that Brox Industries is planning on drilling borings in January 2021 in the proposed area of expansion and the existing permitted area that has not yet been excavated. We agree that this is an important step to determine more precisely the limit of excavation. **We are requesting copies of those results.**
- 6) During our conversation with Brox Industries, the city understands that there are no future plans to do gravel/sand pit or quarrying operations on Barrington lot 222-23. **We request that this lot be put into conservation or some other use restriction to ensure the long-term protection of this property.**
- 7) **We are requesting permission for the City to potentially install between two to four monitoring wells within the area of future expansion to monitoring water levels and water quality. The City would like to work with Brox Industries, Inc. to finalize the monitoring well locations based on the results of the borings to be conducted.**
- 8) **We are requesting that Brox Industries, Inc. initiate monitoring of water levels in the existing bedrock wells along the perimeter of their quarry using dataloggers so that comparison of water levels in the bedrock and the Hoppers Aquifer can be made.**
- 9) **We request copies of any historic water quality analysis that has been conducted, and that Brox Industries formalize a water quality monitoring program to ensure the continued protection of the groundwater and aquifer.**
- 10) **We request copies of all Town and Stage submittals concerning the application for the proposed excavation area.**
- 11) **We request copies of all operational, environmental, and blasting plans for the proposed expansion area.**
- 12) **We request copies of fracture fabric and lineament analyses conducted to date.**

The City of Dover appreciates the work and cooperation of both the Town of Barrington and the folks from Brox Industries, Inc., as we iron out the details of this project. We are glad that the significance of a potential impact to this aquifer is recognized and we believe that we can work together to ensure the long-term success of both the City as well as Brox Industries, Inc. in this location. We look forward to reviewing the requested information and continuing to work with Brox Industries and the Town of Barrington through this process.

Sincerely,



Gretchen Young, PE  
Environmental Project Manager