

TOWN OF DURHAM 8 NEWMARKET RD DURHAM, NH 03824-2898 603/868-8064

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Town Planner's Recommendation Wednesday, November 18, 2015

- X. Public Hearing 4 Griffiths Drive Nitrogen-Containment Project.
 - Conditional use to implement a new passive technology on a single-family lot under a grant-funded pilot project. Installation of a permeable reactive barrier to prevent nitrogen from septic systems migrating to watersheds. The activity will occur within the Wetland and Shoreland Overlay Districts. Danna Truslow, Truslow Resource Consulting, consultant; Jessa Doleac, property owner. Map 14, Lot 1-2. Rural Zoning District.
- I recommend approval as stated below. The applicant has requested a waiver for the application fee, below.

Please note the following

- 1) <u>Conditional use</u>. This is a conditional use application so it will require an affirmative vote of 5 Planning Board members after the board reviews the conditional use criteria. The applicant addressed the criteria in her application.
- 2) Application fee. The applicant has requested a waiver for the application fee. The \$125 application fee was paid by the Rockingham County Conservation District. The applicant has requested a waiver to reimburse the District for the application fee (but not for the fees for notifications). Technically, this is not a "waiver" since there is no reference to this type of waiver in the Zoning Ordinance, but the Planning Board can waive the fee if it sees fit. The criteria for a "waiver" from Site Plan requirements are one of the following:
 - (1) Strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of the regulations; OR
 - (2) Specific circumstances relative to the site plan, or conditions of the land in such plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.
- 3) <u>Technical Review Group</u>. This was presented to the TRG on November 10. There were no particular concerns. Since this project is so small and technical I did not ask for sign offs from the TRG members. The TRG staff members Police, Public Works, Building, and Economic Development all voiced support at the meeting. The Fire Department has not expressed any concerns.

- 4) Other aspects of project. The applicant presented the project to the TRG. They have installed 5 monitoring wells to measure prospective changes in the nitrogen. It will be monitored for 1-1/2 years, about once every 4 months. There is no maintenance involved. The oldest system in place is 15 years old and still working fine according to the applicant. Because the system is anaerobic there is little decomposition of the wood chips. There are 6 milligrams per liter of nitrates now (Drinking water standard is a maximum of 10 milligrams per liter). They expect the system to reduce this to about 1 milligram per liter.
- 5) <u>Conservation Commission review</u>. The conditional use requires comments from the Conservation Commission. Here is the Commission's comments (sent earlier as well):

October 12, 2015 To the Planning Board

The Conservation Commission supports the plan to install a permeable reactive barrier to a septic system located on Griffith Drive. It would meet the requirements for a Conditional Use Permit.

Our rationale is:

1. We view the installation as a conservation activity, a permitted use (175-60A3).

The purpose of the installation, the reduction of nitrogen flowing into the creek, and then the Oyster River and Great Bay, follows the intention of the first article (175-58A) of the purpose of the Wetland Overlay District: "Protect the water quality of wetlands by appropriately managing stormwater runoff, siltation and sedimentation, and the construction or alteration of allowed or pre-existing buildings and structures."

- 2. The project is intended to "protect wildlife and fisheries habitat and wetlands vegetation" (175-58E) by reducing nitrogen runoff.
- 3. The design of the project is straightforward and after the initial construction, the site will be restored to a natural condition on the surface.
- 4. The project is an innovative attempt to improve an existing septic system and its impacts on the adjacent wetlands using best available technology.

Overall, we strongly support this project and its aim to reduce the nitrogen impact of septic systems. We believe that the short-term impact created by construction will be offset by the long-term operation of the system.

Again, we strongly support this project.

Ann Welsh, Chair
Durham Conservation Commission

(over)

Draft NOTICE OF APPROVAL

Address: 4 Griffiths Drive

Project Name: Nitrogen Containment Project – Conditional Use **Consultant:** Danna Truslow, Truslow Resource Consulting

Property Owner: Jessa Doleac

Map and Lot: Map 14, Lot 1-2

Zoning: Rural Zoning District

Date of approval: November 18, 2015

The conditional use was approved by the Durham Planning Board on November 18, 2015 with the following terms and conditions.

- 1) The project is approved as submitted in the application materials.
- 2) It is the applicant shall coordinate with the Building Official should any local permit be required (No permit is required through NHDES).

<u>Findings of fact</u>: The project was approved as a conditional use as the proposed activity will occur within the Shoreland and Wetland Overlay Districts. The project is not subject to site plan review since the affected property is a single family residence. The Conservation Commission reviewed the project and provided favorable comments. The project was presented to the Technical Review Group on November 10; the TRG members had no particular concerns. The Planning Board held a site walk on November 13, 2015. The Planning Board held a public hearing on November 18. The Planning Board determined that the proposal meets the required criteria for a conditional use and duly approved the application.