

**CREATIVE LAND & WATER ENGINEERING, LLC****Environmental Scientist and Engineers****Mailing address**P.O. Box 584  
Southborough, MA 01772**Technical Office**303 Worcester Road  
Framingham, MA 01701

508-281-1694 (office)

774-454-0266 (cell)

508-281-1694 (Fax)

CLWEL@CREATIVE-Land-Water-Eng.com

[WWW.CREATIVE-Land-Water-Eng.com](http://WWW.CREATIVE-Land-Water-Eng.com)

Effective, Affordable, and Sustainable Solutions for Land &amp; Water Environment

November 16, 2017

To: Town of Wayland- Conservation Commission  
Ms. Linda Hansen  
41 Cochituate Road  
Wayland, MA 01778

Re: Soil Condition in Disturbed Area and WPA Performance Analysis, **NOI, 24 School Street**

Dear Ms. Hansen and Commissioners:

At the last hearing, the Commission requested that any activities on the abutting land needs to co-file the application and that we need to provide a written response to Ms. Hasen's comments on wetland interest performance analysis. This letter presents our responses.

**Activities on the Town Land**

The applicant took the ownership of the property in the past year or so and has not done anything on the abutting land as filling or construction. The purchase of the land only limited to the property. We have done soil testing as requested by the Commission and find no oil or hazardous materials (OHMs) in our four test holes or on surface. The soil supports good vegetation growth now. Therefore, it is our professional opinion that the applicant does not have the right or responsibility to alter the abutting land or conduct any further work in this kind. The area should be let go naturally or the owner can chose to do what is deemed their right with proper permit.

***Wetland Interests Impact***

The Conservation Agent, Ms. Linda Hansen, has commented on our wetland interest impact analysis in writing. Per the Commission's request, we are providing our response in writing. For the convenience of reading, we will keep the original analysis table and provide a separate response in Table 2 to Ms. Hansen's comments.

Table 1. Wetland interests impact analysis summary

Interest	Existing	Proposed	Remarks
Public and private water supply	No public water supply within limit of disturbance	No public water supply within limit of disturbance, residential houses will be serviced by onsite septic and <b>public water supply through pipe.</b>	There will be more groundwater recharge (up to 100-year storm). See stormwater report for details.
Groundwater Supply	Public water supply. No applied	Increased groundwater recharge by stormwater infiltration system	No negative impact
Food control	No flood control in upland area for existing	Stormwater management system	Less flooding to wetlands and down

	condition.	meet all nine DEP stormwater management standards	stream
storm damage prevention	No know stormwater damage	Better stormwater management	No significant impact
prevention of pollution	Some solid construction debris in buffer zone. Old septic system out of date.	Wastewater treatment exceed Title 5 requirements. All stormwater runoff treated through infiltration	Improved pollution prevent for stormwater and wastewater.
protection of fisheries	No direct fisheries on site	Increased ground water recharge will increase base flow for downstream water body for fisheries	No significant impact some improvement
wildlife habitat	No MESA protected habitat on site. Entire lot are mostly disturbed	Some trees will be removed.	Buffer zone mitigation and enhancement planting are provided. No significant impact to wetland habitat.

Table 2. Response to Wetland interests impact analysis Comments

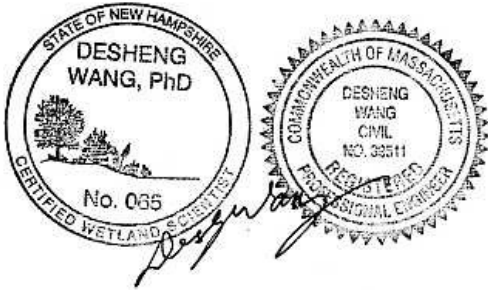
Interest	Hansen's comments	Response by CLawe
Public and private water supply	The site plans do not indicate that the residential units will be serviced by private wells. The protection of public and private water supplies is intended to protect downgradient water supplies, not just the immediate area. Natick has public wells adjacent to Lake Cochituate and the Stream adjacent to 24 School Street is a tributary. Groundwater recharge only addresses volume, not protection of water quality.	<b>It is a typo.</b> The house will be serviced by public water. Lake Cochituate itself is not considered public water supply surface water. Natick public water supply well does not have an impact zone (Zone II or IWPA, see MGIS map) to the project site per applied standards and regulations. The project design will comply with DEP applied regulations and standards, which is devised to protect both groundwater and surface water in water quality and water quantity.
Groundwater Supply	The volume of leachate generated by the onsite leach field could produce approximately 2800 gallons of water/day. This amount of water within a small footprint could negatively impact groundwater quality.	The wastewater treatment design exceeded applied environmental code therefore shall not have significant impact on groundwater quality per applicable state regulations 310 CMR10.00 and standards 310CMR15.000.
Food control	Flood control on this property is related to the increase in impervious surfaces, stormwater management controls, climate, etc. Half the roof runoff is not captured by the onsite stormwater management. A stormwater peer	As we know, stormwater management system design meets all nine DEP stormwater management standards and is reviewed by Town hired third party reviewer.

	review will determine if the SW management system is properly designed and sized.	
storm damage prevention	Again, until the proposed SW system is reviewed, a statement of no significant impact cannot be verified.	Agreed
prevention of pollution	The statement that wastewater treatment exceeds Title 5 requirements is not supported. (I assume the author meant to say the onsite septic system). The septic system design has not been submitted to the BOH for their review. Again, not All runoff is being treated. Any substances from parking lot runoff needs to be treated.	Wastewater treatment (conventional system plus A/I treatment FAST system) exceed Title 5 requirements for the site conditions. Almost all stormwater runoff (roof is considered clean runoff) treated through Stormceptor and infiltration while the existing site has no stormwater management system. Great improvement for the proposed condition.
protection of fisheries	The statement that there is not significant impact without understanding the impact of untreated runoff, or the impact of the leach field on the unnamed tributary in unsupported. Lake Cochituate supports a robust fish habitat and this resource needs to be protected.	Our statement is based on the assumption that all stormwater and wastewater treatment design are confirmed in compliance with all applicable state regulations and standards.
wildlife habitat	The protection of wildlife habitat includes all wildlife, not just threatened or endangered species. Buffer zone mitigation that includes seeding a wetland buffer area that was previously filled with unknown material is not considered enhancement. Installing a 7 foot retaining wall to limit wildlife movement or removal of mature trees are also not considered enhancements.	No proposed activities will occur in regulated resource areas per 310 CMR 10.600. All buffer zone and outside buffer zone work are designed to meet all applicable state standards including wildlife habitat per 310 CMR 10.60. Wildlife has left adequate area to live and move around the project site. Landscaping will be incorporated to improve the site condition for post construction.

We will be happy to answer any questions at the public hearing and address concerns and questions according to technical merits and as governed by applicable laws and regulations.

Please feel free to contact us if you have any questions.

Sincerely,  
Creative Land & Water Engineering, LLC  
by



Desheng Wang, Ph.D., P.E.  
Civil/Environmental Engineer and  
Certified Wetland Scientist

cc: DEP NERO, Wetland Division, 205B Lowell Street, Wilmington, MA 01801  
Chris D'Antonio, Chadwick Homes, LLC.  
Mark Kablack, esq., M.A. Kablack & Associates, P.C.  
Brian Nelson, Metrowest Engineering





By: Desheng Wang, Ph.D., P.E.  
Creative Land & Water Engineering, LLC  
P.O. Box 584  
Southborough, MA 01772  
508-281-4370