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July 1, 2018

Sherre Greenbaum, Chair
Wayland Conservation Commission
41 Cochituate Road
Wayland, MA 01778

Jonathan Sachs, Chair
Wayland Zoning Board of Appeals
41 Cochituate Road
Wayland, MA 01778

RE: 24 School Street, Wayland, MA

Dear Ms. Greenbaum and Mr. Sachs:

As a follow-up to the last joint meeting of the ZBA and the Conservation Commission I have made some additional calculations to support my earlier comment that the Applicant should take into account the long-term effects of groundwater mounding that will result from the proposed stormwater infiltration. In addition to event-based mounding such as the 100-year event, it is my position the regular infiltration of smaller storms will cause a rise in the water table on the site and this should be added to the event-based mounding analyses.

To provide some perspective on this the Applicant's own groundwater mounding analysis of the proposed wastewater discharge, which is a continuous, daily flow will result in a water table rise of 0.24 feet. The proposed wastewater flow is 2860 gallons/day into a leaching area of 6192 square feet. This is a loading rate of 0.46 gallons/square foot-day.

Comparatively the stormwater infiltration facility will receive runoff from 19,507 square feet of impervious surfaces at a rate of 35 inches/year. This translates to an average daily input of 1169

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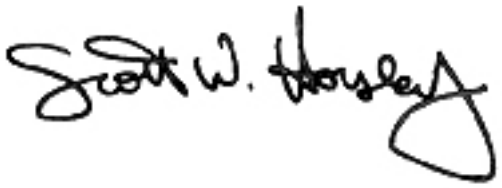
gallons/day that will be directed to the infiltration facility that measures 1260 square feet. This is a loading rate of 0.93 gallons/square foot-day. This loading rate is approximately double that of the wastewater facility.

Based upon this comparison it would seem likely that the groundwater mound from year-round runoff events might be at least double that of the wastewater facility. For this reason I am recommending that a groundwater mounding analysis of the long-term (year-round) stormwater infiltration be incorporated into the site design.

In accordance with my earlier comments I believe that this site is highly constrained and sensitive and that the project analysis and design should incorporate all relevenat hydrologic considerations using the most conservative assumptions.

Sincerely,



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