

Town of

P.O. Drawer 519

Town Engineer

Alexander T. Klose, P.E.



East Lyme

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To: Gary Goeschel, Wetlands Enforcement Officer

From: Alex Klose P.E., Town Engineer

Date: September 13, 2022

Re: Atlantis Management Group, Proposed Development
190, 196, 202 Flanders Road
Application for Inland Wetlands Permit Review

Information submitted by the Applicant which was considered in this review:

- Application for Permit, East Lyme Inland Wetlands Agency
- Project Narrative, July 22, 2022, Prepared by: BL Companies
- Wetlands Report, November 11, 2021, Prepared by: Davison Environmental
- Stormwater Management Report, July 22, 2022, Prepared by: BL Companies
- Land Development Plan Set, July 22, 2022, Prepared by: BL Companies

This office has reviewed the above referenced information and provides the following comments:

1. Since this site is a land use with a higher pollutant load in the aquifer protection area, infiltration of the water quality volume will not be allowed. A vegetated bioretention filter system with an impermeable linear and pre-treatment should be provided to treat the water quality volume.
2. Infiltration systems, if used for stormwater attenuation, should be designed at least 3' above groundwater. With the wetlands and floodplain around elev. ± 30 I would recommend test pits to verify soil conditions and depth to groundwater. Additionally, a rate of 1 in/hr is proposed due to type B soils. The manual recommends a factor of safety of 2 and a min. rate of 0.15-0.30 in/hr. The soil report provided states the limiting k_{sat} is 0.00-1.98 in/hr. An infiltration test should be performed to verify the proposed conditions.
3. Calculations should be provided for riprap aprons or other proposed outlet protection.
4. Provide hydraulic calculations for the most significant design storm event that is modeled in the hydrologic model. For example, as proposed the catch basins are on-grade and the HydroCAD model assumes all of the stormwater runoff will make it to the underground system to attenuate the 100-year storm, therefore the 100-year hydraulic model should be provided to demonstrate this capture efficiency.
5. I recommend that the engineer of record (or a qualified agent) witness the installation of the subsurface elements of the stormwater management system and that the design engineer certify that it has been installed as intended by the design.