

October 8, 2021

Kevin Ellis
Chairman
Hingham Planning Board
Planning@hingham-ma.gov

Emily Wentworth
Senior Planner
Hingham Zoning Board of Appeals

Hingham Town Hall
210 Central Street
Hingham, MA 02043

RE: **Response to Review Comments Dated 10/6/21
Hingham Yacht Club
208 Downer Avenue - Hingham, MA 02043**

Dear Mr. Ellis and Ms. Wentworth:

The purpose of this letter is to respond to review comments provided by Mr. Patrick Brennan of Amory Engineers on 10/6/21.

Below is a copy of the review comments in normal font followed by our responses in ***bold italics***:

Comments from Amory Engineers, dated 10/6/21

1. The Drywell and Overflow at Downspout Detail on the Site Plan indicates that groundwater elevation will be verified prior to construction (i.e. test pits). If groundwater elevation is not determined prior to the Boards closing the hearings, and the Boards approve the project, we recommend a condition of approval requiring test holes at each proposed drywell to verify depth to seasonal high groundwater and/or soil textural analysis. The condition should require that if depth to groundwater and soil texture are not as assumed then the drywell design shall be modified and the modified design be peer reviewed.

Response: The note was revised to require groundwater elevation and soil conditions to be verified prior to construction.

2. The proposed crushed stone diversion trench is designed as an infiltration trench which would bring surface into contact with the foundation. We recommend an impervious membrane be installed along the foundation where the trench is adjacent. Alternatively, the trench could be lined with an impervious membrane to keep runoff from infiltrating next to the foundation.

Response: We revised the surface water diversion trench to call for an impervious membrane along the bottom and sides of the trench. Additional subsurface foundation drains and waterproofing shall be included with a foundation design by others.

3. There is a six inch perforated pipe proposed at the bottom of the diversion trench. The discharge location of this pipe should be shown.

Response: The location and invert elevation at the two pipe outlets have been added to the plan. A 2'x2' crushed stone spreader is also called for at both pipe ends.

4. The proposed silt sock erosion barrier should be extended about fifty feet west along Marion Street to the limit of proposed grading so that sediment does not get onto Marion Street during construction.

Response: The silt sock was extended as requested.

5. Due to the slope, there is potential for erosion of the gravel walk/drive between Marion Street and the second floor of the barn. A geocellular confinement system, or similar product, should be considered to hold the gravel in place (see attached brochure).

Response: A callout was added to include a geocellular confinement system in the installation of the porous walk/drive.

6. We note that the drainage calculations indicate that post-development rate of runoff will be slightly increased from existing conditions but post-development volume of runoff will not be increased. The MassDEP Stormwater Standards do not require mitigation of post-development runoff when discharge is to a tidal waterbody. Therefore, the project is in compliance with the Stormwater Standards. We note that the increase in the peak rate of runoff is minimal at only 0.01 cubic feet per second (cfs), which equates to about 4.5 gallons per minute. We also note that if the diversion trench is utilized as an infiltration trench then the rate of runoff in the post-development condition will likely be less than existing because the trench was not modeled in the analysis.

Response: No comment.

7. Construction of the foundation for the proposed barn will likely require temporary shoring of the uphill side of the excavation to limit disturbance of the slope.

Response: Temporary shoring details shall be included with the foundation design prepared by others prior to issuance of a building permit.

Cavanaro Consulting, Inc.
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We look forward to presenting the revised work to you and both Boards at the next scheduled public hearing on 10/12/21 (Joint Meeting with Planning Board & ZBA). If any questions arise in the meantime, please do not hesitate to let us know.

Sincerely,

Cavanaro Consulting, Inc.

A handwritten signature in black ink that reads "John Cavanaro". The signature is written in a cursive, flowing style.

John C. Cavanaro, P.E.
Managing Principal

Enclosures

cc: C. Burns, HYC Commodore
T. Connerly, HYC Secretary
J. Braley, HYC Manager
Jenn Gay-Smith, HYC
M. Whittmore, AIA
File 21034