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July 13, 2022
VIA EMAIL

Ipswich Planning Board
Town Hall
25 Green Street
Ipswich, MA 01938

RE: 55 Waldingfield Road – Phase 1B
Site Plan Review & Special Permit Applications
4th Drainage and Stormwater Management Review (Task 4)

Mr. Ethan Parsons and Planning Board Members:

As requested, I have continued a drainage and stormwater management review of the above referenced project. In response to the third (Task 3) review dated May 11, 2022, I have received the following supplemental or revised plans and documents as prepared by Hancock Associates of Danvers, MA (unless otherwise noted).

- Copy of correspondence from Hancock Associates to the Ipswich Planning Board, dated June 29, 2022, regarding response to the ‘Task 3’ review.
- “Permit Site Plan Phase 1B (to accompany a Great Estate Preservation Development Special Permit) 55 Waldingfield Road...” consisting of plan sheets 1, 3, 4, 5, 6, and 7, all dated October 21, 2021, and revised to June 28, 2022.
- “Partial Existing Conditions Plan of Land in Ipswich, MA...” consisting of six (6) plan sheets (2A through 2F), all dated July 1, 2021.
- “Stormwater Report in Support of A Great Estate Preservation Development (GEPD) Special Permit for 55 Waldingfield Road Phase 1B...” dated October 2021, and revised to May 2022, including appendices for a Long Term Pollution Prevention Plan, a Construction Period Pollution Prevention Plan, and an Operation and Maintenance Plan.

After review of the above material, it is my opinion that the drainage and stormwater management design is satisfactory and adequately addresses previously stated comments and opinions. It is suggested that the following minor drafting items be provided as part of a final plan and document submission.

1. The rim elevation of proposed CB B-3 should be lowered to an elevation of 48.0 to improve runoff collection. In addition, the basin should be shifted off of the gravel surface such that it is located within a small sump/low area.
2. Add inspection and maintenance of the newly proposed catch basin to the ‘Operation and Maintenance Plan’ and the ‘Inspection Schedule and Evaluation Checklist.’

Additional Planning Board Considerations: The following items are suggested for consideration by the Planning Board in relation to quality assurance and long term care of the drainage and stormwater management infrastructure.

1. In the 'Long Term Pollution Protection Plan' under the heading 'Winter Road Salt and/or Sand use and storage restrictions' it is stated that salt storage piles be located outside of the 100 year buffer zone and shall be covered. It is strongly suggested that permanent on-site salt storage piles be discouraged by the Planning Board, but if salt storage is anticipated, a building enclosure should be required.
2. To ensure that construction of the stormwater management system is conducted in accordance with the design, an as-built plan of the completed project should be submitted to the Planning Board along with a report from the engineer of record indicating whether or not construction complies with the design intent. The as-built plan and engineering report should also be appended to the final version of the 'Operation and Maintenance Plan' prepared for the stormwater management system, for the property owner's future use and reference.
3. Because existing topographical depressions within the property are being utilized as part of the stormwater management system, any earthwork that would alter these depressions from what is proposed on the plans should be subject to appropriate hydrologic/hydraulic study and Planning Board review to ensure that the stormwater management design intent is not adversely impacted.
4. Consistent with the calculations, all roof runoff shall be conveyed to the Rain Garden. If cisterns are utilized to collect roof runoff, appropriate provision shall be made to convey overflow from the cisterns to the Rain Garden
5. The following documents are suggested to be incorporated as part of any Planning Board approval:
 - a. The 'Construction Period Pollution Prevention Plan' (CPPPP) and the Stormwater Pollution Prevention Plan (SWPPP) to identify actions and responsibilities relative to sedimentation and erosion control during construction.
 - b. The 'Operation and Maintenance Plan' to provide guidance for the long term inspection and maintenance of the drainage and stormwater management systems.
 - c. The 'Long Term Pollution Prevention Plan' (LTPPP) to provide guidance relative to long term management of the site.
6. Rain Garden planting should be done in accordance with recommendations contained in the MA DEP Stormwater Management Handbook and as generally specified in the "Ora at Waldingfield, Rain Garden Planting Plans" dated April 9, 2022 and prepared by Laura Gibson, ASLA, of Manchester, MA.

Please feel free to contact me if you have any remaining questions or require any additional clarification of the above comments and opinions.

Very truly yours,

R.E. Puff

Robert E. Puff, Jr., PE

cc: C. Wear, PE (via email)