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May 18, 2022
VIA EMAIL

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

RE: 5-11 Washington Street
2nd Drainage and Stormwater Management Review (Task 2)

Mr. Ethan Parsons and Planning Board Members:

As requested, I have continued a drainage and stormwater management review of the above referenced project with respect to regulatory standards of the Planning Board and routine engineering design practice. In response to the March 25, 2022 (Task 1) review, I have received the following plans and documents as prepared by ASB Design Group LLC of Topsfield, MA (unless otherwise noted).

- Plan set entitled “Site Plan Review, 5-11 Washington Street...” consisting of nine (9) sheets number C-1, and C-3 to C-10, including Site Plans, Utility Plans, Grading & Drainage Plans, and Details, all dated October 4, 2021 and revised to April 11, 2022.
- Copy of correspondence from ASB Design to the Ipswich Planning Board, dated May 8, 2022, regarding “Response to Comments...” consisting of seventeen (17) pages, and attachments for:
 - An Operation and Maintenance Plan for Construction Phase and Post Construction dated May 9, 2022.
 - A map of soil borings taken at the site, entitled “Exploration Location Plan” dated June 9, 2021 and prepared by GZA GeoEnvironmental, Inc.
 - Hydrology calculations dated May 9, 2022.

At this time, the following comments and opinions are offered for your consideration relative to the proposed drainage and stormwater management design.

Overview: In my opinion, the material received in response to comments and opinions presented in the ‘Task 1’ review is insufficient. Several of the issues raised have not been adequately addressed, while other issues raised were not responded to whatsoever. A summary of the unaddressed and unresolved ‘Task 1’ comments and opinions are summarized below (note that comment numbers should be referenced to the ‘Task 1’ review, dated March 25, 2022).

Stormwater Management & Drainage: Of particular concern is the proximity of infiltration chambers to groundwater (Task 1 comment 4). Infiltration best management practices typically require a minimum separation of two feet from estimated seasonal high water table. Based on the submitted soil boring data, this separation is not adequately provided. In addition, mitigation of directional surface runoff impacts from the site have not been demonstrated (Task 1 comments 2 and 3). A summary of my opinion regarding the overall stormwater management/drainage response is as follows.

1. No calculation or supplemental technical information was offered in response to 'Task 1' comments 2a, 2b, 3, 4, 5, and 9. Supplemental and/or revised calculations are again requested to address these comments.
2. Additional clarification, details, and/or specifications are requested to fully address 'Task 1' comments 2c, 6, 7, 10, 11b, and 11d.
3. Additional discussion with the design engineer is requested to resolve comments 8 and 12b.i. The Applicant's current response is not persuasive relative to the comments expressed.

DEP Stormwater Management Standards: The Task 1 comments and opinions offered under this heading remain largely unaddressed by the Applicant's responses, with the singular exception of comment 5a.

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

Very truly yours,

R.E. Puff

Robert E. Puff, Jr., PE

cc: Thad Berry, PE (via email at thadberry2@verizon.net)