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December 15, 2022

Hingham Planning Board
210 Central Street
Hingham, MA 02043

Subject: **222 South Pleasant Street, Site Plan**

Dear Planning Board Members:

This is to advise that we have reviewed the following documents pertaining to the proposed raze and rebuild of the dwelling at the subject site:

- Civil Plan set (8 sheets), revised December 14, 2022, prepared by Site Engineering Consultants, Inc. (SEC)
- Pre-Development HydroCAD calculations, dated December 3, 2022, prepared by SEC
- Post-Development HydroCAD calculations, dated December 14, 2022, prepared by SEC
- Test hole logs, dated December 12, 2022, prepared by SEC
- Stormwater Management Report, revised December 5, 2022, prepared by SEC
- Post-development watershed plan, dated September 19, 2022, prepared by SEC
- Recharge and Water Quality Volume calculations, dated December 9, 2022, prepared by SEC

The documents have been prepared to address comments contained in our November 22, 2022 letter to the Board. Below are our original comments in plain text, followed by the current status of each in **bold text**.

1. A post-development watershed plan should be provided. **Addressed – the post-development watershed plan has been submitted.**

2. The Stormwater Management Analysis should include the full, unedited HydroCAD report for each storm event and not just edited excerpts from the report for the 100-year event. **Addressed – the pre- and post-development HydroCAD calculations include the requested information and the analysis indicates that post-development rate and volume of runoff will not exceed existing conditions.**

3. The design of the proposed subsurface infiltration system and the porous pavement for the sports court are based on an assumed groundwater elevation and soil texture. Test pits should be excavated in the footprint of each of the facilities to verify adequate depth to seasonal high groundwater and soil texture. This is important because the soil maps indicate that the soils in the front of the lot where the test pits were excavated for the

septic system are a different soil type (Hinckley) than the soils where the proposed drainage facilities are located (Canton). **Addressed – the December 12, 2022 test hole logs indicate sandy soils and no groundwater to a depth of at least ten feet below existing grade.**

4. Recharge and water quality volume calculations should be provided. **Addressed – the recharge and water quality volume calculations have been provided and indicate that the stormwater infiltration facilities will provide the required recharge and water quality volumes.**

5. In the NPDES Summary (Stormwater Checklist), under Standard 6, it is stated that the project is not located within a critical area. However, since the site is within Zone II to a public well it is located within a critical area and the required water quality volume is equal to one inch of runoff from paved surfaces. **Addressed – the water quality volume calculation is based on one inch of runoff as required.**

6. There is a proposed 4-inch PVC roof drain lateral that is shown under the proposed attached garage. This appears to only be connected to one downspout near the front entrance to the dwelling. We recommend that this lateral connect to the lateral on the other side of the entrance so that a pipe is not needed under the garage. **Addressed – this lateral has been re-routed as recommended.**

7. The location of the inspection port(s) on the subsurface infiltration system should be shown in plan. We recommend a minimum of one inspection port on each row of chambers. **Addressed – the inspection ports are shown in plan with one on each row of chambers.**

8. A stabilized construction entrance should be shown on the plans and a detail provided. **Addressed – a stabilized construction entrance is shown on the plans and a detail has been provided.**

9. There is a proposed catch basin within the auto court. This should be specified to have a hood and four foot sump and a detail should be provided. **Addressed – a catch basin detail has been added to the plans and it specifies a hood and four foot sump.**

10. There are bathrooms proposed in the garage/office building and the pool house. The connections of these buildings to the proposed septic system should be shown on the Utilities Plan (Sheet CIV3). Water service and other utility services to these structures should also be shown. **Utilities to the structures are shown on the revised plans. In our December 5, 2022 email[1] to Mr. Anthony Stella we questioned whether there would be a septic tank for the pool house and how it would be discharged into the septic system since the pool house is lower than the other septic components. In today's email response[1] Mr. Stella states that they "propose using a sewage ejector to pump any waste flow from the pool house into the plumbing system inside the**

[1] Copies of emails attached.

main home. From there, it will be conveyed to the property's septic system." The Board of Health has jurisdiction over this and we trust they will determine whether the proposed system is acceptable.

11. As noted above, aside from water and septic, there are no other utilities shown on the plans. All proposed utilities should be shown on the Utilities Plan (Sheet CIV3). **Proposed electric utilities have been added to the plans. In our December 5, 2022 email we questioned whether natural gas was proposed. In today's email response, Mr. Stella advised that he is not aware if natural gas is available in South Pleasant Street.**

12. Some of the proposed retaining walls are over four feet high, which will require building permits and design by a professional engineer. **In today's email response, Mr. Stella states "the wall heights have been specified on the Landscape Architects plan." And "There is a Structural Engineer on the project who will address these issues."**

13. The Construction Management / Operation & Maintenance Plan has a section entitled "After Construction" which describes inspection and maintenance of some of the components of the proposed stormwater system. It should include more detailed information on the inspection and maintenance of the subsurface infiltration system and also information on inspection and maintenance of the catch basin and drain manholes that have sumps. **Addressed – the Construction Management / Operation & Maintenance Plan has been updated to include the additional information as requested.**

14. Proposed exterior lighting is shown on the Hardscape Plan (Sheet L1). A photometric plan should be provided to verify that there will not be light spillover onto adjacent properties. A photometric plan has been provided for the sports court lighting and this shows that there will not be spillover from those lights. **In today's email response, Mr. Stella advised that the Landscape Architect will address this issue.**

Please give us a call should you have any question.

Very truly yours,

AMORY ENGINEERS, P.C.

By:

Patrick G. Brennan, P.E.

PGB
enc.

Pat Brennan <pbrennan@amoryengineers.com>

222 South Pleasant Street Site Plan, Hingham, MA

Pat Brennan <pbrennan@amoryengineers.com> Mon, Dec 5, 2022 at 1:48 PM
To: lastella78@aol.com
Cc: "kheffernan@sulsul.com" <kheffernan@sulsul.com>, "wsullivanjr@sulsul.com" <wsullivanjr@sulsul.com>, "rsillery@citypointcapital.com" <rsillery@citypointcapital.com>, "Silveira, Michael" <silveiram@hingham-ma.gov>, Emily Wentworth <wentworthe@hingham-ma.gov>

Hi Tony,

I've reviewed the items you emailed on Friday and have the following comments (numbering matches my November 22, 2022 letter):

1. Post-development watershed plan is not included with the calculations.
2. I understand that you are completing the additional calculations and will provide those when complete.
3. The Board may want the test pits completed before acting on the proposal (I'm not saying that they will but they might).
4. Based on the HydroCAD calculations, I come up with 1,717 s.f. of additional pavement in 'A' soils; 11,456 s.f. of additional pavement in 'B' soils; 1,242 s.f. additional impervious in 'A' soils and 15,712 s.f. additional impervious in 'B' soils. Therefore, the required recharge volume would be 520 c.f. and the required water quality volume (WQV) would be 1,098 c.f. The storage below the lowest outlet (8" at El. 88.0) in the chamber system is 300 c.f. (see attached), which would be the WQV provided.
5. Addressed.
6. Addressed.
7. Addressed.
8. Addressed.
9. Addressed.
10. Is there a septic tank for the pool house and where does the 2" PVC force main discharge?
11. Is there natural gas proposed? If so, please show on the plans.
12. I understand that wall heights will be specified on the Landscape Architects plans.
13. The cleaning of deep sump catch basins and manholes should be when the sediment is at two feet of depth, not when it reaches the outlet invert.
14. I got the photometric plan for the sports court lighting and that looks fine. Your response says that the Landscape Architect will address site lighting. Do you know if additional photometrics will be provided?

I'll provide a more formal letter when the remaining calculations are submitted and reviewed. Thanks,

Pat

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15K

Pat Brennan <pbrennan@amoryengineers.com>

222 South Pleasant Street, Hingham, MA - Site Plan Modifcations

lastella78@aol.com <lastella78@aol.com> Thu, Dec 15, 2022 at 9:34 AM
Reply-To: lastella78@aol.com
To: "pbrennan@amoryengineers.com" <pbrennan@amoryengineers.com>
Cc: "rsillery@citypointcapital.com" <rsillery@citypointcapital.com>, "wsullivanjr@sulsul.com" <wsullivanjr@sulsul.com>, "kheffernan@sulsul.com" <kheffernan@sulsul.com>, "silveiram@hingham-ma.gov" <silveiram@hingham-ma.gov>, "glenn@gmthomedesigns.com" <glenn@gmthomedesigns.com>, "sean@seanpapich.com" <sean@seanpapich.com>, "scott@seanpapich.com" <scott@seanpapich.com>

Hi Patrick,
I'm attaching the revised plans and documents that address your questions/concerns per your December 5, 2022 e-mail. The changes include (the numbering reflects the item numbers per your e-mail):

1. A postdevelopment watershed plan is being forwarded.

2. I am e-mailing the completed calculations for the 2-year and 10-year storms, in addition to the 100-year storm.

3. We completed test pits this past Monday (12/12/2022) within the stormwater recharge areas. The results of this testing is included with the calculations.

4. The calculations for water quality volume and required recharge volume have been revised and are attached. The proposed stormwater recharge system has been enlarged from 30-ft. long to 45-ft. long and from a 1-ft. depth of crushed stone to a 2.5-ft. depth of stone (below the recharge chambers, Elev. 88.0) to meet these requirements.

10. There is no septic tank for the pool house. There are no bedrooms in the pool house. However, there will be plumbing within the structure. The elevation of the structure is lower than the elevation of the main home. We propose using a sewage ejector to pump any waste flow from the pool house into the plumbing system inside the main home. From there, it will be conveyed to the property's septic system.

11. At this point, I'm not sure if natural gas exists within South Pleasant Street.

12. The wall heights have been specified on the Landscape Architects plan. There is a Structural Engineer on the project who will address these issues.

13. The Operations and Maintenance Plan has been revised to require cleaning of the basins and manholes when sediment is at two feet of depth.

14. I'm not aware of any other photometric plans for the site. This is also being addressed by the Landscape Architect. If any additional photometric plans are available I will forward them.

Due to file size limitations, I've had to separate the calculations in separate sections. I will forward the plans and calculations in separate e-mails.

We hope this satisfactorily addresses all your concerns. Let me know if you have any questions.

Best Regards,

Tony

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