

July 10, 2018

Sheila Page, Town Planner
Town of Ashland
101 Main Street
Ashland, Massachusetts 01721

Re: 60 Pleasant Street Site Plan Review - Peer Review

Dear Ms. Page and Members of the Board:

Professional Services Corporation, PC (PSC) has conducted a peer review of the submitted 60 Pleasant Street Site Plan. This letter is provided to summarize our findings, comments and recommendations.

BASIS OF REVIEW – SITE PLAN REVIEW

This office has received the following materials which will serve as the basis for the review:

- **A plan set entitled “60 Pleasant Street Site Plan” prepared by J.D. Marquedant & Associates, Inc. of Hopkinton, Mass. dated March 22, 2018 containing 7 sheets**
- **“Stormwater Report and Drainage Calculations 60 Pleasant Street in Ashland, MA” dated April 2, 2018 prepared by Mark F. Piermarini, P.E.**
- A Google street view program – From the Town coUrbanize website
- A GIS overview plan – from the Town coUrbanize website

Review by PSC also includes evaluation of the following:

- ***Ashland Code, Division 2, Part II, Chapter 282 Zoning*** (Ashland Code, D. 2, P. II, Ch. 282)
- ***Ashland Code, Division 6, Chapter 343 Stormwater Management***

PSC visited the site to observe existing conditions onsite and its environs on November 29, 2016.

SITE AND PROJECT OVERVIEW

The site is located on the south side of Pleasant Street approximately 1,160 feet from Main Street and is bounded on the north by Pleasant Street, the east by 5 residential properties that front on Pleasant Street or Tilton Avenue, the south by railroad tracks that support MBTA commuter rail and on the west by Forest Avenue. Forest Avenue supports a mixed use of residential and commercial uses. The site contains 194,013 s. f. or 4.45 acres with a multi-story mixed-use commercial building. There are approximately 150 parking spaces on the property. Additional paved areas are proposed on the site to create a total of 169 spaces. The majority of the additional parking spaces are to be added at the front of the building. The site is served by two (2) curb cuts on Pleasant Street and two (2) poorly defined curb cuts on Forest Avenue. All the curb cuts are to be retained and better defined.



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Stormwater management facilities are required to meet best stormwater management practices as outlined in the Stormwater Policy and Technical Handbooks prepared by Massachusetts Department of Environmental Planning and Massachusetts Coastal Zone Management (per Ashland Code, D. 6, §344-14 A). Further, all industrial and commercial projects or discharges from such projects in resource areas or buffer zones shall comply with the Stormwater Management Standards” (v1.c2.p2). For the Proposed Project, work is proposed within the 100 ft. buffer zone and there will be reuse of a stormwater discharge within the bordering vegetated wetland. Accordingly, the Proposed Project is subject to the Stormwater Management Standards. The Proposed Project is being designed as a “new” project and therefore should fully comply with the Stormwater Management Standards 310 CMR 10.05(6) (k).

Under the formerly submitted project, stormwater improvements consisting of a stormwater infiltration system and two (2) stormwater treatment units were proposed. The currently proposed Project does not include the stormwater management upgrades.

SITE PLAN CONTENTS

1. The Stormwater Management Report should be stamped and signed by the PE.
2. The provided Registered Professional Engineers Certification should be executed by the PE.

STORMWATER MANAGEMENT

3. The Stormwater Report indicates that the project will be treated as a “new development” in terms of meeting the performance standards of the Stormwater Management Standards. The design, however does not comply with the peak rate attenuation standard (Standard 2) or the recharge standard (Standard 3).
4. Standard 8 in the Stormwater Report states that locations of proposed erosion control measures are provided on the site plans. The information is missing on the plans and they should be updated accordingly.
5. The Town requires that volumetric increases in runoff for the 25-year frequency storm event be controlled in order to maintain the ratio of runoff to infiltration (Ashland Code, D. 6, §344-14 F (1)). The hydrology calculations, summarized in Table IV of the narrative indicates the project results in increases to offsite stormwater volumes for the twenty-five year storm.
6. At the southwest corner of the site two (2) invert elevations are identified on the plan, the first of which is likely the drain from Forest Avenue (I=189.43). The second invert (I=192.14) is likely the westerly terminus of the Trolley Brook Culvert System. Please provide additional information for both pipes (diameters, general alignments, flow direction, etc.).



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7. Post development stormwater management systems are required to provide no untreated discharges - All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment. (Ashland Code, D. 6, §343-8.1.1). The overland discharge to the existing ditch southwest of the building is an untreated discharge. While this exists today, the runoff volume appears to have increased. This is an important consideration as a pipe at this location may be the most westerly extent of the Trolley Brook Culvert System.
8. An amended filing under the Town of Ashland Stormwater Management Bylaw will be required for the Conservation Commission. This filing should include a Sedimentation and Erosion Control Plan.
9. The post development stormwater management system does not result in a measurable upgrade vs predevelopment conditions in terms water quality treatment, and represents a downgrade in terms of recharge.
10. The stormwater report states that the post development peak rate of stormwater discharge is greater than the predevelopment peak rate of stormwater discharge for the 2-year, the 10-year, the 25-year, and the 100-year frequency storm events. The stormwater report also states that the post development volume of stormwater discharge is greater than the predevelopment volume of stormwater discharge for the 2-year, 10-year, 25-year, 50-year, and the 100-year frequency storm events. Accordingly, the proposed stormwater management system does not comply with the requirement that the peak rate of runoff and the volume of runoff shall not be increased (Ashland Code, Division 2, Part II, Ch. 282: Zoning, §9.4.9) (Ashland Code, D. 6, §344-14 E).
11. Detention facilities shall accommodate the 100-year frequency storm event (Ashland Code, D. 6, §344-14 F (2)). The current project does not propose detention to attenuate increased site runoff.
12. The post development stormwater management system is required to provide downstream overbank flood and property protection by attenuating the post-development peak discharge rate to the pre-development rate for the 10-year, 24-hour return frequency storm event as required by the MA DEP Stormwater Management Standards (Ashland Code, D. 6, §343-8.1.3). The Proposed Project does not attenuate peak flowrate increases.
13. The proposed design does not promote recharge. The stormwater management system is required to comply with the requirement that "...groundwater recharge is maximized..." (Ashland Code, Division 2, Part II, Ch. 282: Zoning, §9.4.9).



14. Site design and materials and construction processes shall be designed to avoid erosion damage, sedimentation or uncontrolled surface water runoff (Ashland Code, Division 2, Part II, Ch. 282: Zoning, §5.7.3). Further, the proposed stormwater management system must be designed such that "...neighboring properties will not be adversely affected (Ashland Code, Division 2, Part II, Ch. 282: Zoning, §9.4.9). The outlet condition adjacent to the Bordering Vegetated Wetlands should be documented and any potential for erosion from the increased site flows should be remediated.
15. The previous design provided a number of test pits and test information to demonstrate the location of spring high groundwater elevation in areas where stormwater runoff was proposed to be infiltrated into the ground. The design was unable to provide at least 2-feet of separation from the bottom of the infiltration device to the maximum groundwater elevation as required; (Ashland Code, D. 6, §343-7.6.10.7). Although the current design does not directly cite this hardship, no subsurface facilities are proposed. As a result, relief will be required from several local and state regulations regarding runoff.
16. Post development stormwater management systems are required to maintain annual groundwater recharge rates, by promoting infiltration through the use of structural and non-structural methods. At a minimum, annual recharge from the post-development site shall mimic the annual recharge from pre-development site conditions (Ashland Code, D. 6, §343-8.1.5). The proposed site does not comply.
17. Post development stormwater management systems are encouraged to meet water quality standards through the use of low impact techniques (Ashland Code, D. 6, §343-8.1.6). The Planning Board must determine compliance. However, we believe that opportunities for low impact design are limited due to the existing extensive site development.
18. Post development stormwater management systems are required to provide structural best management practices (BMPs) that remove 80% of the average annual post-development total suspended solids (TSS) and 40% for total phosphorus (TP), and 30% for total nitrogen (TN). It is presumed that a BMP complies with this performance goal if it is: a) Sized to capture the prescribed water quality volume; b) Designed according to the specific performance criteria outlined in the Massachusetts Stormwater Management Manual; c) Constructed properly; and d) Maintained regularly (Ashland Code, D. 6, §343-8.1.6). The current design does not, but should address stormwater quality in terms of nutrient removal.
19. The site plans are required to show erosion, sedimentation and siltation control devices to be utilized during construction (Ashland Code, D. 6, §343-7.6.10.11). Although presented in notes this information is not shown on the plans.



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20. The Conservation Commission may require an emergency response plan (Ashland Code, D. 6, §343-7.6.15). This is not currently provided.
21. An Operation and Maintenance Plan has been provided (Ashland Code, D. 6, §343-7.6.17). The following additional information must be provided: The Name and 24hr/7day contact information of the person responsible for the site's O&M Plan (§343-7.6.17.1.b)). The estimated operation and maintenance budget has not been provided (per DEP Standard 9); A map showing the location of the systems and facilities including catch basins, manholes/access lids, and stormwater devices should be included in the Plan (Ashland Code, D. 6, §343-7.6.17.1.c).
22. The type and condition of the four (4) existing catchbasins east of the building which are to be reconnected should be verified. Catchbasins should have 4 ft. deep sumps and hoods. Replacing the existing catchbasins should be considered.

Very Truly Yours,
Professional Services Corporation, PC

A handwritten signature in blue ink, appearing to read 'D. Sanderson', written in a cursive style.

David W. Sanderson, PE
Sr. Vice-President