



September 8, 2023

Stow Planning Board
380 Great Road
Stow, MA 01775

Re: 63-65 White Pond Road
Site Plan Peer Review
Places Project No. 5210

Dear Board Members:

As requested, this office has reviewed the site plan submitted for 63-65 White Pond Road. This review is based on the information submitted by Hannigan Engineering as listed below, the 2016 Planning Board decision and the related 2016 plan set by Stamski and McNary and our observations on the site walk on August 24, 2023.

1. Cover letter by Hannigan Engineering dated July 10, 2023 including the submittal items listed.
2. Plans entitled "Site Development Plan, Contractor Yard, 65 White Pond Rd" by Hannigan Engineering dated June 16, 2023 containing 6 sheets.
3. "Drainage Analysis for Commercial Building with Contractor's Yard" prepared for Bransfield Tree Company LLC prepared by Hannigan Engineering dated June 19, 2023.

The site has expanded beyond the 1.5 acres subject to the 2016 site plan approval without the construction of the building and paved parking area. The disturbed area (inside the tree line) scales approximately 5.2 acres. The site currently operates as a contractor's yard which appears to include at least 8 companies in addition to Bransfield Tree Co. These contractors appear to have defined areas around the site which are gravel areas defined by tree logs or other barriers.

During our site walk, we observed an open container of acetone, discarded containers of pool shock, pallets of multiple brands of de-icing chemicals in plastic bags and obvious automotive fluid stains beneath multiple vehicles, and the open storage of vehicles in various stages of disrepair. Our concern is the potential for groundwater contamination from any of these observed potential hazards observed on site and any that we may not have seen. These potential contaminants were located directly on gravel or crushed stone, with no barrier to prevent direct infiltration into the water table.

It is our recommendation that the applicant create and implement a Pollution Prevention Plan for this site which should include education of the tenant contractors and their employees, prevention, inspection, notification of spills and cleanup procedures. Some items may be as simple as keeping de-icing materials in a covered area/storage trailer or putting a tray under a vehicle that has automotive fluid leaks or draining snow blowers in the off season. We are willing to work with the applicant and his engineer to look at alternatives to address this concern.

We have the following comments based on our plan review:

1. The industrial floor drain holding tank cannot be located on the plans as stated in the cover letter. A detail is shown but it is not a floor holding tank with lining, leak detection, pipe penetration boots, vent, pump out insertion and alarm system including a warning alarm and high water alarm. It should also clearly indicate where the alarm panel will be located and the responsible party for the maintenance of the system.
2. Drainage:
 - a. The drainage system design relies heavily on overland flows to function as designed. Pavement grindings will compact well and minimize dust but generally remains permeable. Given the high permeability of the soils on site, it is likely that the only runoff making its way to the basin will be from the roof and paved parking area except under high intensity rains and rain on frozen ground. It will be imperative that the flow paths do not get blocked by contractor materials or snowbanks etc. The plan should clearly identify areas where no storage is allowed.
 - b. The Time of Concentration (Pre & Post) to the Elizabeth Brook is not correct. Portions of the front of the site drain onto White Pond Road and then to a depression on the n/f J. Melone property. The tributary areas (Pre & Post) are not reflective of the depression behind the carpools on the northerly property line (elev. 206 located in P105).
 - c. The proposed basin is proposed to have pea stone along the bottom. We agree with this and would also support the use of $\frac{3}{4}$ "-1 $\frac{1}{2}$ " stone if it is more economical. We would not recommend any substitution of larger stone for the bottom.
3. The plans show a sidewalk across the frontage of the site. Two sidewalk details are provided, one with curbing and one without. The plans do not indicate any grading for either the sidewalk along White Pond Road or adjacent to the building, implying that the sidewalk is on grade, without a curb. We recommend that the plans clearly label the need for a curb to improve pedestrian safety and that sidewalk have a 1.5% cross slope for drainage.
4. The proposed septic system leaching field is in an area currently in use for access and storage. It is our recommendation that the system be designed for H₂O loading and once installed and completed, be protected with bollards.
5. We noted 8 different contractors in addition to Bransfield Tree on the site. It is unclear as to whether any of these other contractors will have access to the bays and bathroom facilities in the proposed building. From the Planning Board permits perspective, it could have an impact on the amount of parking needed to support the building. Typically, workers will arrive in their own vehicles, leaving in a company vehicle resulting in a higher parking demand than 1 per employee. If there are more than 25 people potentially using the facilities, then the water system is considered a "public water supply" and would have to be re-located to where the well radius had only passive uses in it.
6. The application indicated that there would be no change in the proposed traffic generated between the initial 1.5 acre site development and the current proposal with at least 9 companies using the site. We disagree, the more intense use of the site with multiple companies presents the potential for more traffic and should be addressed accordingly for both passenger vehicles as well as company vehicles.

7. We note that the site plan does not show any site lighting around the new building, even on the building. It is recommended that the Board require building lighting and product cut sheets so they can assess whether the lighting is sufficient/excessive and in compliance with the Zoning By-laws. The applicant should also clarify the interior site lighting for compliance and any limitations on the use of the electrical outlets around the site for lighting.
8. The area adjacent to the parking spaces on the southerly side of the building indicates that it will be landscaped lawn. Given the proximity to pavement and the use of the site, consideration should be given to naturalizing the area with a conservation mix or other less water dependent vegetation.
9. Dumpsters should be placed on concrete pads, where feasible, and should be covered and subject to inspections.
10. The O&M Plan and Long-Term Pollution Prevention Plan are very generic. We recommend that these items be beefed up to be specific to this site and the concerns about groundwater protection. We recommend that the Board consider a condition prohibiting the use of pesticides (LTPPP no. 6) except as after all non-chemical methods have been attempted and only applied by a licensed professional specific to the pest.

Please contact this office should you have any questions.

Thank you.

Sincerely,
Places Associates, Inc.

BY:



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President, Director of Engineering