

CITY OF NEWTON
ENGINEERING DIVISION

MEMORANDUM

To: Alderman Ted Hess-Mahan, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – 36-38 High Street

Date: October 30, 2013

CC: Lou Taverna, PE City Engineer
Linda Finucane, Associate City Clerk
Alexandria Ananth, Chief Planner
Dan Sexton, Sr. Planner

In reference to the above site, I have the following comments for a plan entitled:

*Proposed Plot Plan Showing Proposed Retaining Wall & Parking Spaces
#36-38 High Street
Newton Upper Falls, MA
Prepared by: Williams Sparages
Dated: August 7, 2012
Revised: 8/23/13*

Executive Summary:

The proposal calls for the creation of two new parking stalls that will be sited on an existing wooded embankment along the northern and western property lines. The plan indicates two sets of parallel retaining walls constructed of reinforced cast in place concrete, which will have a stone veneer exposed finish. The grade change from the City sidewalk to the bottom of the embankment is approximately 12-feet. The grade of the parking surface is at elevation 96.5-feet (near the wall) and the top of the wall is at elevation 98.5- feet; so the concrete wall will extend 2-feet above the proposed parking surface. This 2-foot extension will act as a barrier to stop the cars from going down the embankment; in concert with this wall extension, a safety fence should be installed on top of the wall to prevent anyone from falling over the walls.

The surface of the new parking area is to be pavers; the Engineering Department does not consider pavers as “*pervious*”; the reason being the pavers are not 100% pervious, the gap between the pavers ultimately becomes impervious with deposition & settlement overtime; and without “*vacuum cleaning*” of the surface, the pavers are therefore considered imperious.

The total impervious area added to the site is approximately 950 square feet based upon my calculations for the parking area, new stairway and retaining walls. Other than, weep holes within the walls there are no proposed drainage improvement for the new parking area. Based on the proposed grades the runoff from the new parking area will sheet flow towards High Street. Snow removal and snow storage is also a concern due to the embankment and the proximity of the lower retaining wall to the rear property line, which is only one foot.

Inspectional Services Department will require detailed drawings and calculations for the design, stability, and construction methodology for the proposed retaining walls. Due to the length and elevation differences for the stairs within the two walls, the designer should consider recessed lighting within the walls.

The new curb cut for the driveway apron needs to be dimensioned, the City apron detail is available on line and needs to be included in the final construction plans, all work within the sidewalk area (i.e. driveway apron must be ADA compliant).

Drainage:

1. A drainage analysis needs to be performed based on the City of Newton’s 100-year storm event of 6-inches over a 24-hour period. All runoff from impervious areas need to be infiltrated on site, for the project. The design of the proposed on site drainage system needs to comply with the MassDEP Stormwater Regulations and City Ordinances.
2. An on-site soil evaluation needs to be performed to obtain the seasonal high groundwater elevation, percolation rate in accordance to Title V. This information must be submitted with the drainage study. The locations of these tests need to be shown on the site plan and must be performed within 20-feet of a proposed system.
3. An Operations and Maintenance (O&M) plan for Stormwater Management Facilities needs to drafted and submitted for review. Once approved the O&M must be adopted by applicant, incorporated into the deeds; and recorded at the Middlesex Registry of Deeds. A copy of the recording instrument shall be submitted to the Engineering Division.

4. It is imperative to note that the ownership, operation, and maintenance of the drainage system and all appurtenances including but not limited to the drywells, catch basins, and pipes are the sole responsibility of the property owner(s).

General:

1. As of January 1, 2009, all trench excavation contractors shall comply with Massachusetts General Laws Chapter 82A, Trench Excavation Safety Requirements, to protect the general public from unauthorized access to unattended trenches. Trench Excavation Permit required. This applies to all trenches on public and private property. *This note shall be incorporated onto the plans*
2. All tree removal shall comply with the City's Tree Ordinance.
3. The contractor is responsible for contacting the Engineering Division and scheduling an appointment 48 hours prior to the date when the utilities will be made available for an inspection of the drainage system installation. The system shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval. *This note should be incorporated onto the plans*
4. The applicant will have to apply for Street Opening, Sidewalk Crossing, and permits with the Department of Public Works prior to any construction. *This note must be incorporated onto the site plan.*
5. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.
6. Prior to Occupancy Permit being issued, an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities and final grades, any easements and final grading. *This note must be incorporated onto the site plan.*
7. If a Certificate of Occupancy is requested prior to all site work being completed. *This note must be incorporated onto the site plan.*

Note: If the plans are updated it is the responsibility of the Applicant to provide all City Departments [Conservation Commission, ISD, and Engineering] involved in the permitting and approval process with complete and consistent plans.

If you have any questions or concerns please feel free to contact me @ 617-796-1023.