# **CITY OF NEWTON**ENGINEERING DIVISION

#### **MEMORANDUM**

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

From: John Daghlian, Associate City Engineer

Re: Special Permit – 14 Roland Street

Date: April 30, 2012

CC: Lou Taverna, PE City Engineer (via email)

Linda Finucane, Associate City Clerk (via email)

Eve Tapper, Chief Planner (via email) Derek Valentine, Planner (via email)

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

Proposed Garage
Newton, MA
Prepared by: Essex Survey Inc.
Dated: February 26, 2010
Revised: Dec 8, 2010
January 10, 2011
January 31, 2011
August 17, 2011
March 5, 2012
March 19, 2012
March 21, 2012

#### Executive Summary:

The design entails a two stall garage and drainage improvements to an existing single-family dwelling and retaining walls within the front setback. The engineer of record has based his drainage design assuming just storage, and no infiltration; yet credit is taken for infiltration. Based on the engineer's calculations there should be **two dry wells** (if storage is only to be taken into account); this needs to be clarified. There is a concern for water breakout from the dry well given the steep embankment of 2:1 (horizontal: vertical) in which it is shown. An impervious vertical barrier should be installed along the easterly side of the infiltration system to ensure water does not breakout towards the neighbor's

property. No proposed grading is shown within the area of the dry-well system. The only elevation is the rim grade of 98.0-ft of the dry well. Based on this elevation, the dry well will be buried approximately 3.5 feet. Future maintenance of the dry well needs to be accessed via a manhole frame and cover (not shown on the site plan) set to finished grade. Any walls over 4-feet in height require a safety fence along the top of the wall.

Given the fact that a new curb cut (which scale 18' wide and labeled 20' on the plan) will be required for the proposed garage and the old curb cut closed and remodeled as a sidewalk; as a Public Benefit the entire frontage of the existing sidewalk should be replaced to meet current City and ADA Standards. Several of the exiting sidewalk panels are already cracked or heaved.

## Construction Management:

- 1. A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction equipment, construction material, construction worker's vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of contractor.
- **2.** Stabilized driveway entrance is needed during construction to ensure Roland Street is kept clean.

### <u>Drainage</u>:

- 1. An Operations and Maintenance (O&M) plan for dry well system 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.
- 2. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all apparentness including but not limited to the drywells, catch basins, and pipes are the **sole responsibility of the Homeowner**.
- 3. The plan has a note that states "Alternative: 4 H2O PVC Infiltrators" with no explanation. This needs clarification.

### 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 water services, sewer service, and drainage system installation. The utility is question 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 Utilities Connecting 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, the applicant will be required to post a Certified Bank Check in the amount to cover the remaining work. The City Engineer shall determine the value of the uncompleted work. *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.