

Boston Groundwater Trust

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October 24th, 2013

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Mr. John FitzGerald, Senior Project Manager
Boston Redevelopment Authority
One City Hall Square
Boston, MA 02201-1007

Subject: Landmark Center Redevelopment

Dear Mr. FitzGerald:

Thank you for the opportunity to comment on the Expanded Project Notification Form for the Landmark Center Redevelopment site. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in areas of Boston where the integrity of building foundations, especially those supported by wood pilings, is threatened by low groundwater levels and to make recommendations for solving the problem. Therefore, my comments are limited to groundwater related issues.

As noted in the EPNF, the project is located in the Groundwater Conservation Overlay District established in Article 32 of the Boston Zoning Code. The project has committed in the document to meeting the recharge requirements established for buildings in the GCOD.

Article 32 also requires that the project provide a certification, stamped by a professional engineer registered in Massachusetts, showing how it will not cause a reduction in groundwater levels on site or on adjoining lots. As stated in the EPNF, the required excavation will extend approximately 35-38 feet deep across the building footprint and approximately 50 feet deep adjacent to Park Drive. The depth of the excavation will extend below the largely impervious layer at the bottom of the aquifer that is critical to the preservation of wood piling foundations. It is vital that these foundations be designed so that they don't allow infiltration of groundwater and also that they don't create a path for groundwater to penetrate from this critical aquifer through the impervious layer to a lower level. This certification is particularly important and must be received, along with the letter from the Boston Water and Sewer Commission showing recharge requirements are met before the zoning approval process is completed.

The EPNF also states that an underdrainage system will be installed to eliminate hydrostatic uplift pressures from acting against the slab and that the piping system will lead groundwater to sump pits located under the lowest level slab. The most positive design to assure that the building will not cause a reduction in groundwater levels is to waterproof the slab thus eliminating the need for an underdrainage system. However, if the design does include an underdrainage system, any groundwater that is captured by this underdrainage system be directed back into the recharge system that will be installed in the upper aquifer.

The EPNF states that the proponent will conduct a groundwater survey prior to excavation at the project site. As part of this survey the proponent will review city records for the locations of pile supported buildings in the vicinity of the project site and perform a preconstruction locational survey of pile supported buildings within an appropriate range of the site. We ask that the proponent furnish the results of this survey to the Trust for our records.

I look forward to working with the proponent and the Authority to assure that the project will not cause any reductions in groundwater levels in the Fenway area.

Very truly yours,

Elliott Laffer
Executive Director

Cc: Kathleen Pedersen, BRA
Maura Zlody, BED