

Boston Groundwater Trust

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July 29, 2011

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

Subject: 1282 Boylston Street

Dear Mr. FitzGerald:

Thank you for the opportunity to comment on the Project Notification Form and Planned Development Area for 1282 Boylston Street. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of the city where low groundwater levels threaten the integrity of building foundations and to make recommendations for solving the problem. Therefore, my comments are restricted to groundwater related issues.

I appreciate the acknowledgement in both the PNF and the PDA Development Plan that the project is located in the Groundwater Conservation Overlay District and the commitment to meet the requirements of Article 32 of the Zoning Code. As was discussed in the scoping session, in addition to the mandated recharge of captured rainwater into the ground (to be confirmed, according to the PNF and Development Plan, in a written determination by the Boston Water and Sewer Commission), Article 32 requires that a project show how it will not have a negative impact on area groundwater levels and that such certification be included in a stamped communication from a Massachusetts registered Professional Engineer. I appreciate the commitment by the proponent at the scoping session to provide such a certification and to confirm that commitment in writing.

The project includes a three level underground garage. The excavation for this garage will extend through the fill and the organic layer that underlies it; therefore it presents a potential path for groundwater to drain from the trapped upper aquifer that is crucial for the protection of wood piling supported foundations into a lower aquifer. It is critical that the project be designed and constructed in such a way that this potential leak path cannot occur.

The project design includes underdrains below the bottom slab. In order to minimize the possibility that groundwater is drawn away from the site, we would always prefer to see a design that does not employ underdrains. Although the PNF states that groundwater flow out of this system will be minimal, if the design is to employ underdrains, it may be useful to follow the precedent set by other recent projects and recharge any water drained from the underdrain system into the upper aquifer through the recharge system furnished to meet Article 32 mandates.

While the PNF states that groundwater levels near the site, as measured by BGWT observation wells, are generally between Elevation 7 and 8 measured

against Boston City Base, this is true only for the one well that we have located on Boylston Street in front of the site. Other nearby BGwT observation wells more typically show groundwater levels that are around two feet lower, which can be a critical difference. It would probably be useful to add one or two groundwater observation wells on public property adjacent to the project. These wells, along with nearby BGwT wells, should be monitored before and during construction to confirm that groundwater levels outside the site are being maintained. The readings should be reported promptly to the Authority and the BGwT; they should be taken at least monthly for six months before excavation to establish a baseline and at least weekly while dewatering is taking place. The new wells should be located in consultation with the BGwT, constructed to BGwT standards, and turned over to the Trust for incorporation into our monitoring network after project completion, in accordance with Public Improvement Commission policy.

I look forward to working with the proponent and the Authority to assure that this project can have only positive impacts on local groundwater levels.

Very truly yours,

Elliott Laffer
Executive Director

Cc: Kathleen Pedersen, BRA
Maura Zlody, BED