

March 12, 2008

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

Subject: Emmanuel College Fenway Residence Hall

Dear Mr. FitzGerald:

Thank you for the opportunity to comment on the Notice of Project Change for the Emmanuel College residence hall project. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of the City where the integrity of building foundations is threatened by lowered groundwater levels and to make recommendations for solving the problem. As such, my comments are restricted to groundwater related issues.

As noted in the NPC, the project is located within the Groundwater Conservation Overlay District established under Article 32 of the Zoning Code, which was adopted after the original Institutional Master Plan was approved in 2000. I appreciate the commitment by the proponent to comply with the standards of the GCOD both for recharge and in designing the project so that it cannot cause reductions in groundwater levels.

From a groundwater point of view, the outwash sand deposit found under the site, as described in the NPC, creates a greater vulnerability to groundwater lowering over a fairly large geography if adequate precautions are not taken. The presence in the design of an underslab pressure relief system increases the concern. While the proponent characterizes the expected flow from that system as "minimal", the 10-15 gallons per minute listed as the likely flow equals 14,000-21,000 gallons per day. A withdrawal estimated at no more than 40 gallons per minute has been identified as a major culprit in reducing groundwater levels in a multi-block area in the South End.

We feel that the project is likely to be detrimental if it is designed with an underdrain system as proposed. More preferable is a foundation system similar to those included in multiple other projects in the area specifically selected by their proponents in order to protect groundwater levels. If the

proponent continues to propose an underdrain system, it is critical that there be no possible path between the groundwater in the upper fill layer and the outwash sand deposit. We are concerned that the current proposal to backfill with an impervious “clayey” soil may not offer adequate protection. Review of a more refined engineering plan would be necessary to establish that such a barrier can be designed to be secure. Because of the sensitive nature of the specific site and to protect known wood piling supported buildings in the vicinity, such as the main building at Simmons College and the Isabella Stewart Gardner Museum, additional foundation information is necessary.

I appreciate the proponent’s plans to monitor groundwater levels before, during, and after construction. This monitoring will require at least two additional observation wells. These should be installed to meet the Trust’s specifications at locations to be agreed on in discussions between the proponent and the Trust. The readings should be transmitted to both the Authority and the Trust within a short time after being taken, and the wells should be turned over to the Trust after construction for incorporation into our monitoring well network.

This site will require a serious effort to assure that the project can have only a positive impact on area groundwater levels. I look forward to working with the proponent and the Authority to assure that outcome.

Very truly yours,

Elliott Laffer  
Executive Director

Cc: Kathleen Pedersen, BRA  
Maura Zlody, BED