Ms. Kristin Kara, Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

Subject: Isabella Stewart Gardner Museum

Dear Ms. Kara;

Thank you for the opportunity to comment on the Project Notification Form for the Gardner Museum expansion. 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.

I was pleased to see the acknowledgement in the PNF that the project is located in the Groundwater Conservation Overlay District, and that the proponent plans to comply with all GCOD requirements. Of even more importance was the acknowledgement that wood pilings form the foundation system of the existing building and understanding of the potential of damaging consequences for the museum from lowered groundwater levels that was demonstrated during the scoping session. I look forward to receiving the promised copies of the records of groundwater readings that the museum has been conducting through its own onsite observation wells since the 1920's.

Because the project will involve underground construction with an excavation extending, according to the PNF, approximately 30 feet below the surface, care must be taken to assure that groundwater levels are maintained. I was pleased to read that the project will include a waterproofed mat foundation with no underdrains. At the scoping session, it was further confirmed that the below ground structure will be fully waterproofed, as it must be to avoid groundwater intrusion.

As noted in the PNF and further discussed in the scoping session, the project intends to install geothermal wells. It is critical that these wells be installed with a well designed sealing system so that groundwater that is in the perched upper aquifer that is vital for preservation of wood pilings

cannot find a path through the virtually impervious organic layer. If this path exists, it is highly likely that groundwater levels in the upper aquifer will drop.

In order to ensure that the measures that will be taken to maintain groundwater levels are having the desired impact, it is important to monitor groundwater levels before, during, and after construction. These readings should be reported to the Authority and to the Trust. Additional wells should be installed in the public sidewalk along Palace Road near the construction site. The wells should be installed at sites chosen in consultation with the Trust, should be installed in accordance with Trust specifications, and should be turned over to the Trust for monitoring after construction is complete.

I appreciate very much the interest and promised cooperation of the proponent on this critical issue. I look forward to working with the proponent and the Authority to assure that the project can have only positive impacts on groundwater levels in the area.

Very truly yours,

Elliott Laffer Executive Director

Cc: Kathleen Pedersen, BRA Maura Zlody, BED