

Boston Groundwater Trust

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May 27th, 2021

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Edward Carmody, Institutional Planner & Project Manager
Boston Planning & Development Agency
One City Hall Square
Boston, MA 02201-1007

Subject: 109 Brookline Avenue Project Notification Form (PNF) Comments

Dear Mr. Carmody:

Thank you for the opportunity to comment on the 109 Brookline Avenue Project Notification Form (PNF) which is located in the Fenway-Kenmore neighborhood. The Boston Groundwater Trust (BGwT) was established by the Boston City Council to monitor groundwater levels in sections of Boston where the integrity of building foundations is threatened by low groundwater levels and to make recommendations for solving the problem. Therefore my comments are limited to groundwater related issues.

The project is located in the Groundwater Conservation Overlay District (GCOD) established under Article 32 of the Zoning Code. As stated in the document and confirmed at the scoping session the project will be designed and constructed to comply with the requirements of Article 32.

The document states that lowest building floor level will be about 25 feet below groundwater levels. Temporary construction dewatering will be required within the limits of a watertight temporary excavation support system to conduct excavation and construction in the dry. Stormwater and groundwater within the excavation will be collected and discharged under appropriate City and State permits.



As stated in the document, the Project is planned to include underground parking. Excavations up to 40 feet below existing Project Site grades will be required for foundation and below grade construction. Dewatering will be required during construction of the below grade structure to complete the work in the dry. The temporary excavation support system will be designed as a groundwater cut-off wall to maintain groundwater levels outside the excavation. Dewatering during construction will be conducted within the impervious excavation support system.

The building foundation walls will be fully waterproofed and designed to resist hydrostatic pressures. A permanent, perimeter groundwater cut-off wall will be installed around the below grade garage and will extend into the impervious marine clay soils underlying the Project Site. The groundwater cut off wall will serve to both, limit seepage into a subslab pressure relief system, and maintain groundwater levels outside of the below grade garage. This system which is a commonly used in the Boston area results no impacts to area groundwater levels.

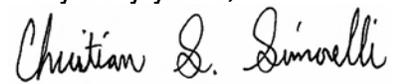
Compliance with the GCOD requires both the installation of a recharge system and a demonstration that the project cannot cause a reduction in groundwater levels on site or on adjoining lots. Before the GCOD zoning approval can be put in place, the proponent must provide the BPDA and the Trust a letter stamped by a professional engineer registered in Massachusetts that details how it will accomplish what is stated in the document and meets the GCOD requirement for no reduction in groundwater levels on site or on adjoining lots.

As stated in the document and at the scoping session, the Proponent recognizes the importance for maintaining and monitoring groundwater levels, as well as performance of the construction. A geotechnical instrumentation and monitoring program will be implemented to quantify potential impacts. The program will include preconstruction condition surveys, groundwater level, movement, and vibration monitoring. Performance criteria will be specified in the contract documents. The Project team will coordinate with the Trust and provide all necessary documentation to maintain and monitor groundwater levels throughout construction.



I look forward to continuing to work with the proponent and the Agency to assure that this project can have only positive impacts on area groundwater levels.

Very truly yours,



Christian Simonelli
Executive Director

CC: Kathleen Pederson, BPDA
Maura Zlody, EEOS

