

July 27, 2005

Secretary Ellen Roy Herzfelder
Executive Office of Environmental Affairs
Attn: MEPA Office, Mr. William Gage
EOEA No. 6826/11707
100 Cambridge Street, Suite 900
Boston, MA 02114

Mr. Andrew D. Brennan
Director of Environmental Affairs
Massachusetts Bay Transportation Authority
10 Park Plaza, Room 6270
Boston, MA 02116

Subject: Silver Line Phase III

Dear Secretary Herzfelder and Mr. Brennan:

Thank you for the opportunity to comment on the SDEIS/SEIR on Silver Line Phase III. These comments are offered in addition to those made at the public hearing held at Emerson College on June 30.

The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in sections of the City where foundations supported by wooden pilings are threatened by lowered groundwater levels and to make recommendations for overcoming the problem. As such, my comments are limited to groundwater related issues.

The proposed project has the potential to impact groundwater levels in both the core section and in the portal sections. The potential portal impact varies widely, depending upon the route chosen.

While the core tunnel is located on the original Shawmut Peninsula, it actually begins at Atlantic Avenue right on the edge of the filled land. There are nearby late nineteenth century and early twentieth century buildings, probably including the South Station headhouse itself, that are supported on wooden pilings. The route itself passes within a block of the original shoreline until it approaches Washington Street. This stretch of the tunnel would be near Chinatown where buildings were demolished on Hudson Street in the 1980's because of failed pilings.

The tunnel routes to the New England Medical Center portal are generally located farther from the original shoreline, although the potential Charles Street route gets very close to it and is again very close to wooden piling supported buildings. Additionally, because this route would pass so close to wooden piling supported buildings in Bay Village, any leak would be likely to have a particularly rapid effect on groundwater levels under those buildings.

I was pleased to hear Andrew Brennan state at a meeting held by the Back Bay Association on July 25, 2005 to discuss the Silver Line project that the Columbus Avenue portal was now an unlikely choice. This portal would be located in the heart of the most significant groundwater depression that we have discovered in Boston to date. Adding an additional large underground structure in that location would add to the difficulty of solving the cause of the current depression and making sure that no new depression occurred.

I was pleased to see the recognition of the groundwater problem in the documents. I was also pleased to see the MBTA's intention to coordinate with the Trust on the location of groundwater observation wells, as well as the commitment to sharing the data from those wells during construction and to turning the wells over to the Trust for continued monitoring after the project is completed. Sharing of data will be crucial in establishing what is actually happening to groundwater levels around the project. The MBTA should also be commended for agreeing to establish criteria for the levels to which groundwater must be maintained during construction and corrective measures that would have to be taken if levels drop below those mandated. Most important, it should be mandatory that further construction will halt in an area where groundwater drops below the acceptable level until the problem is solved and levels return to above the established criterion.

In order to establish these criteria, the MBTA should be required to conduct a census of buildings within two blocks minimum of the proposed tunnels to determine which are supported on wooden pilings and where those pilings are cut off. This survey must be completed before the Authority meets with the Trust to determine the locations for observation wells.

Further, the MBTA should be required to file an annual report, stamped by a professional engineer registered in the Commonwealth, that shows

the extent of groundwater, if any, removed from the tunnels in the previous year, and the location of the removal. This reporting should be required as long as the tunnel remains in place and there remain wood piling supported buildings located within two blocks of it, or at a greater distance if after consultation with the Trust, it is determined that groundwater data indicates a potential impact.

The Silver Line Phase III tunnel has the potential to cause serious negative effects on groundwater levels in very sensitive areas. I look forward to working with the MBTA to help to make sure that those negative impacts don't occur.

Very truly yours,

Elliott Laffer
Executive Director

Cc:

Rep. Michael Capuano
Sen. Dianne Wilkerson
Rep. Salvatore DiMasi
Rep. Byron Rushing
Rep. Marty Walz