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MEMORANDUM

DATE: June 6, 2013
TO: Board of Aldermen
Mayor Setti D. Warren
FROM: Candace Havens, Director of Planning and Development
Alexandra Ananth, Chief Planner, Current Planning
Katy Hax Holmes, Senior Planner
SUBJECT: **Potential Purchase of Waban Hill Reservoir**
Cc: Robert R. Rooney, Chief Operating Officer
Maureen Lemieux, Chief Financial Officer
Dave Turocy, Commissioner of Public Works
Members of the Waban Hill Reservoir Advisory Group

EXECUTIVE SUMMARY

The Massachusetts Water Resources Authority (MWRA) is seeking to decommission and sell the Waban Hill Reservoir property located on a parcel bordered by Ward Street, Woodlawn Drive, Reservoir Drive, and Manet Road in Ward 7, Chestnut Hill. To gather community input, the City organized an advisory group comprised of Chestnut Hill and greater Newton residents (WHRAG), to develop their vision for future uses of the property. This group mirrored a JAPG-style format in its proceedings and its meetings were attended by the Ward 7 Aldermen, Planning Department staff, Parks and Recreation Department staff, and the public. In its final report, the WHRAG recommended that the City purchase this parcel as dedicated open space. Potential uses for this site were



envisioned by the WHRAG to be consistent with the City of Newton Open Space Plan, *Comprehensive Plan*, and the funding goals for the Community Preservation Act (CPA), and to enable public use and access to open space that has been off limits to the public for decades. Planning staff agrees that its best use is for open space and recreation, and further suggests consideration of a broad range of potential such uses to serve the needs of the community.

BACKGROUND

Known as the Waban Hill Reservoir Advisory Group (WHRAG), this group is comprised of 14 members, 12 of whom are Ward 7 residents and included two professional planners, local neighbors, representatives from active recreation organizations, and advocates for affordable housing, conservation, and public art. This group met bi-monthly from February to May 2013 and its efforts have culminated in a separate report. Though not an official JAPG, the group was nevertheless assembled using the JAPG format. Two members attended most of the meetings but resigned from the group before the report was completed, and one member did not attend any meetings. Hence, the report lists the names of 11 individuals.

The WHRAG was conscious of the need to create a space that would serve the community at large and actively worked to devise a vision for the site that it believed met the needs of the Newton community, particularly the young and the elderly. Members of the Planning Department who worked on the acquisition of the Hannon property on Crystal Lake recall concerns of this nature arising when the Newton Center house lot was acquired for open space. This site has subsequently become a lovely lakeside park for picnickers, swimmers, and walkers and in a short time has become a year-round destination in Newton. In neither case was the City in the position to choose where these open space opportunities occurred. The Planning Department believes the City should continue to position itself in such a way as to take advantage of unexpected open space opportunities when they arise.

The WHRAG report is not intended to design the new open space, but to recommend a course of action for the reservoir property. The Planning Department supports the consideration of planning mechanisms to allow for universal access, such as connections between the reservoir and buses along Commonwealth Avenue, and parking and transportation improvements to the village that further enliven the area and potentially contribute to the City's tax base over time. Both the WHRAG and the Planning Department hope that appropriate use of what could be a City-owned parcel will encourage continued communication and cooperation amongst property owners and the high number of renters in the neighborhood.

The Planning Department recognizes this as a unique opportunity to create active and passive recreational opportunities to serve the community and recommends the City purchase this property for open space.

I. SIGNIFICANT ISSUES FOR CONSIDERATION

When deciding whether to allocate money toward the purchase of this site, the Board should consider whether:

- purchase of the site would provide universal access to open space that no one has legally been able to enjoy for decades;
- this parcel might act as a catalyst for the enlivenment of the commercial corridor along Commonwealth Avenue;
- the project could add revenues to the City, either in the short- or long-term or, preferably, both;
- the project would assist the City in meeting its goal for creating and providing opportunities to enjoy open space in the City as stated in the *2007 Comprehensive Plan* and the 2013-1019 Open Space Plan; and
- the use of this land will require additional parking to satisfy the anticipated increased demand for parking expected with the creation of new, accessible open space that can be met either on-site or off-site.

II. CHARACTERISTICS OF THE SITE AND NEIGHBORHOOD

A. Neighborhood and Zoning

The Waban Hill Reservoir site is surrounded by a residential neighborhood that is densely developed on relatively small lots. Staff agrees with the WHRAG that usage of the reservoir property should be compatible with its residential context, including but not limited to compatibility in visual scale.

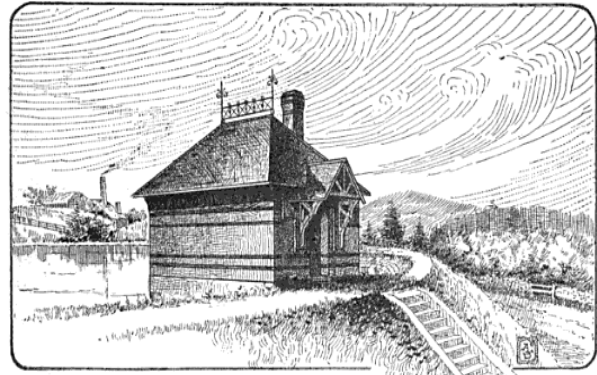
This site is currently zoned Public Use. The surrounding neighborhood is zoned Single Residence 2 and Multiple Residence 1, which allows for single and two-family dwellings, and uses such as a congregate living facility, hospital, cultural center, riding school, stock farm, and private garage. However, these uses do not seem to immediately fit in to this Chestnut Hill neighborhood. In the MR1 zone, subject to a special permit, uses such as boarding houses, non-profit organizations, single-family attached dwellings and ‘cluster developments’ may be allowed, provided the site meets dimensional and parking controls.

The Planning Department believes that the Public Use zone most closely resembles what is suitable for this site, and allows by right much of what was envisioned by the WHRAG, including commons, public gardens, parks, conservation areas, playgrounds, public parking lots, waterworks reservations, public purposes, and accessory uses to those listed above. Allowed uses in the Public Use zone also include railroads, public streets and highways, and public cemeteries, though these latter uses are less likely for this five-acre site. As the property owner, the City could limit the intensity of the uses allowed on the site to only those believed to meet its goals for the area. The Board of Aldermen may also vote to approve temporary licenses for farm stands, markets, fairs and festivals at the site except where other City departments may have jurisdiction.

B. Site

Built in 1877, the Waban Hill Reservoir is a 1,100-foot long earthenware embankment dam. The dam is 22 feet tall at its highest point and has a crest width of approximately

15 feet. The large embankment surrounds approximately three quarters of the total site. The City owned and operated this water repository until it sold it to the Massachusetts Water Board (now the Massachusetts Water Resources Authority) in 1900. At that time, the reservoir served to regulate water pressure during periods of high use and as a backup water supply during times of emergency. The reservoir stores water off-stream, has no watershed area, and does not store water for human consumption. A brick gatehouse currently standing at the south end of the reservoir was built c.1900 and replaced a frame structure at this location that stood until at least 1889. This dam is located in a residential neighborhood and has been rendered inaccessible to pedestrian traffic by a tall protective fence.



Gate at Waban-Hill Reservoir, Chestnut Hill.

Image from King's Handbook of first gate house on Reservoir site

III. REUSE ANALYSIS

A. Land Use

The Division of Capital Asset Management (DCAM) could declare this parcel open space under Article 97, thus reducing its value as non-developable land and cutting the purchase price of the property. As this site is not currently envisioned as an income-producing property, the sale of the City-owned Pump House lot (photo at left), located in Chestnut Hill and currently landlocked by house lots on the west side of Woodlawn Drive (SBL 63005-0002), could generate income toward the reservoir property's long-term maintenance. This lot could be rezoned and sold as a house lot or divided into smaller parcels to be sold to adjacent neighbors. This parcel is approximately 7,750 square feet in size and is zoned Public Use, with an assessed value of \$163,600.



B. Open Space

The WHRAG recommends that 100% of the site be devoted to open space. This requirement may include small pocket parks or pedestrian ways in and around the site and need not be in one contiguous portion of the site. The Planning Department agrees with this recommendation.

Purchase of this parcel as open space meets the primary objective of the Open Space Plan, which addresses the City's "ongoing need to preserve, protect and provide additional open space including pocket parks in the more densely populated neighborhoods of Newton." (Section 1 – Plan Summary, page 1 of 2). The Open Space Plan acknowledges a deficit of available land for passive and active recreation, particularly for the growing populations of the very young and the very old in Newton. Although the Open Space Plan also acknowledges a deficit in active playing fields in the City, the Planning Department believes further study is necessary to assess whether the site is conducive to funding and accommodating athletic fields and the necessary amount of parking and accompanying vehicular traffic that comes with team athletic events. The WHRAG noted this deficit but in its report stated its belief that due to issues related to increased traffic and noise the site was not conducive to use by sports teams.

In the City of Newton's *Comprehensive Plan*, the Open Space element incorporates four goals for its non-developed parcels. Beneath each goal is a listed example in the Plan which would be met on the Waban Hill Reservoir site.

- a. To recognize, preserve and maintain the City's important natural assets and resources
 - *Distinctive landscapes- land with scenic character and land that affords vistas and panoramic views.* The Waban Hill Reservoir has one of the highest scenic vantage points in Newton.

- b. To protect and preserve remaining large open spaces, including golf courses and parcels owned by institutions and private entities
 - The Waban Hill Reservoir, though not a large parcel, is one of the few remaining in the City for possible purchase.

- c. To ensure an adequate amount, variety, and distribution of open space for both public benefit and biodiversity
 - *Distribution– opportunities to enhance and expand active and passive recreation sites in northern parts of the city.* The Waban Hill Reservoir would provide open space in a neighborhood that currently has no public land available for passive or recreational use.

- d. To integrate compatible recreation and conservation uses.
 - *Passive recreation- sensitively manage the increased demand for playing fields with the increased popularity of passive activities (walking, bird-watching, cross-country skiing etc.) and interests (plant identification, scenic effects, etc.)* The Waban Hill Reservoir has been envisioned as a destination for all of the passive activities listed in the Plan.

The site features steep berms topped with a wide, flat rim and historic vestiges of turn-of-the-century water engineering. The reservoir is on one hand a holding tank for rainwater, while also notable as providing one of the highest natural vantage points in Newton. The Advisory Group wrestled with ways in which the site could be adapted to more active use, which included considering the financial commitment necessary to

convert the site to something other than passive use. The Planning Department agrees that the subject parcel is a valuable asset in the City and that it would appeal to visitors both City- and region-wide, particularly during the Boston Marathon.

With the reservoir's location at the top of Heartbreak Hill, this site has attracted marathon audiences for over a hundred years, all of whom technically trespass on MWRA land in order to obtain the best views of the race on Commonwealth Avenue below. The group discussed future ways in which Marathon fans could continue to view the race from the reservoir property, as well as ways in which the reservoir might become part of a national memorial to those injured or lost in the Marathon bombings in Boston on April 15, 2013. The Planning Department supports this idea and encourages citizen's efforts to incorporate the reservoir site into the Boston Marathon zeitgeist on a local, regional, and national level.

Based on the broad requirements of the Massachusetts Community Preservation Act, and the slightly narrower ones in the Newton Community Preservation Committee's current Funding Guidelines, this project may be eligible for CPA funds in three categories. CPA funds could be used to acquire this reservoir as open space or as recreation land, for active or passive recreational use, to protect pond frontage (albeit man-made), or to preserve scenic vistas from the uppermost rim of the dam. Protection of the historic gatehouse on this site could also qualify for funding under the CPC category for Historic Resources, though that would require either adding the dam and gatehouse to the State Register of Historic Places, or having the Newton Historical Commission declare them locally significant.

A representative from the Newton Girls' Soccer organization served on the WHRAG and contributed thoughtful ideas for consideration as potential income-producing and active recreation activities at the site. The Newton Farm Commission also submitted a letter advocating for additional farmland in the City. The Planning Department believes that the possibilities for the City to produce income at this site should continue to be considered over time as additional funding for site improvements becomes available. The Planning Department also believes that not all vacant land in the City is suitable for every type of use and that further discussion and consideration be given to the reservoir site's unique development possibilities.

The Planning Department recommends that the net fiscal benefit to the City of acquiring this parcel, whether it is used for passive recreation in the short-term or long-term, be taken into consideration. Possible sale of the Pump House lot and potential income-generating uses on the site, in whole or in part, should also be studied as part of a fiscal analysis of the site.

To ensure the lowest purchase price for the reservoir property, the Planning Department recommends that the City buy the reservoir property from the MWRA as land which qualifies as open space under Article 97 of the Article of Amendment to the

Constitution of the Commonwealth of Massachusetts, voted into place in 1972. Land classified under this article is to be left in its natural state for the people's right to enjoy natural open space settings.

Contingent upon review by the Law Department, the reservoir property appears to qualify as open space under Article 97. Legal interpretations over time have allowed that playgrounds and active recreation sites have also qualified as Article 97 uses. The Planning Department supports this purchase strategy for the reservoir site, leaving open the possibility for changes in the level of recreational intensity of its usage over time.

C. Affordable Housing

In consultation with the Departments of Law, and Parks and Recreation, the Planning Department reviewed possible development of the site for housing. Newton has a unique developmental history of pocket parks, which have dotted the Newton landscape since the 1840s. Planning staff worked on the concept of creating house lots on the reservoir parcel that surround a central small park. In an attempt to create housing that would be in keeping with the surrounding neighborhood, the Planning Department mirrored the existing lot sizes of the adjacent lots, which were approximately 8000 square feet in size.

Although housing on the site was not ruled out by the Planning Department as a long-term use in principal, the Department is concerned that the time and money necessary to make this argument while devising a purchase strategy for this parcel would raise the purchase price for the lot and potentially jeopardize the sale of the parcel to the City. Any effort to make the site viable for development would involve paying market price for the parcel, having it rezoned by the Board of Aldermen, and putting the project out to bid. Protecting the site as open space would keep the purchase price low, expedite the transfer, and allow for the existing zoning (Public Use) to remain in place. Since this property is currently open space, rezoning it for housing would likely require legislative review and action by the State under the provisions of Article 97 of the Article of Amendment to the Constitution of the Commonwealth of Massachusetts.

The challenge for the City will be to prioritize its needs in tandem with the challenges posed by the reservoir site, and balance them to ensure a financially feasible project. The Planning Department supports submitting an application to the Community Preservation Commission (CPC) to obtain funding to purchase the parcel.

D. Building and Site Design

The WHRAG rated preservation of the site and design as one of its most important issues. Chief among the WHRAG's concerns is that any proposed use of the site respect the density and scale of the surrounding neighborhood and be compatible with its

context. The group also recommended locating most recreation activities at the northwest corner of the site, where the land is at grade and easily accessible.

If the site were to remain a holding pond with walking trails above, as has been initially proposed, the Planning Department agrees with the proposed placement of these activities. The Department also recommends that on-street parking be allowed around the site in such a way as to ensure that the pedestrian experience is not interrupted by vehicular traffic, and local residents are able to enter and exit their driveways unimpeded.

E. Infrastructure

The site is accessed by four surrounding streets and from steps leading up to the gatehouse from the south. The City should conduct baseline traffic counts at intersections in the area that are likely to be affected by increased pedestrian and vehicular access to the site (in particular Ward St./Woodlawn Drive, Woodlawn Drive Rd/Reservoir Rd, Reservoir Rd/Manet Road, and Manet Road/Ward Street). In the event the existing body of water is to be retained on site, the City should conduct a baseline study of the site's water capacity, drainage and soil tests to determine whether there is contamination that must be addressed, as well as the structure's long-term viability as a retention pond. While these studies will incur a cost in the short-term, their long-term benefits will be measurable for the best future development of the site.

Unlike other acquisitions of open space in Newton, understanding the engineering implications of this site are of paramount importance, both for historical reasons and for the long-term viability of the site as a usable, safe destination for active and passive recreation. MWRA has categorized this reservoir as a High Hazard dam due to its service as a retention pond in a densely developed neighborhood. Though maintenance reports for this reservoir identified its deteriorated condition and minimal maintenance invested over the years, the dam in its current condition has not been deemed to be dangerous. If the reservoir is to be preserved in its present condition and converted to passive use, the structural stability of the site should be thoroughly examined by an engineering firm or professional engineering staff prior to any public access to the site.

IV. RECOMMENDATION

As a tightly encircled urban space in a neighborhood that lacks parks and recreation areas for its residents, the Planning Department recognizes the unique opportunity to purchase the parcel. The City's Open Space Plan identifies this parcel as a future acquisition, and the reservoir property is included in the CIP priority list for the Parks and Recreation Department.

The Planning Department recommends that the Board of Aldermen direct the City staff to pursue purchase the decommissioned Waban Hill Reservoir from the MWRA and

devote the site to protected open space consistent with the recommendations of the WHRAG and the Planning Department.