



Oct. 19, 2020

By Email: zba@town.arlington.ma.us

Dear Members of the Arlington Zoning Board of Appeals,

The Mystic River Watershed Association (MyRWA) has been following the plans for development of the Mugar Property since 2010. Our organization remains concerned that any development that occurs on the site is consistent with local and state wetland law, properly accounts for the floodplain, and does not degrade the local environment. This letter requests your attention to ensure an accurate wetland delineation is performed, that mitigation is required by the local wetland ordinance/bylaw and that the Committee is made aware of recent hydrologic modelling in the Mystic River watershed.

The Mystic River Watershed Association (MyRWA) is a non-profit organization dedicated to the preservation and enhancement of the Mystic River Watershed. The mission of MyRWA is to protect and restore the Mystic River, its tributaries, and watershed lands for the benefit of present and future generations and to celebrate the value, importance, and great beauty of these natural resources. This includes working to improve the water quality in the Mystic River and all of its tributaries.

The Mugar property is located within the sub-watershed for Alewife Brook, an impaired tributary to the Mystic River. Alewife Brook drains approximately 4,500 highly-urbanized acres, made up of 47-percent impervious cover in Arlington, Belmont, Cambridge, and Somerville. The Brook has consistently received a grade of D from the U.S. Environmental Protection Agency for its chronically poor water quality. Despite many challenges, MyRWA and its partners remain committed to improving the quality of the waterway and its surrounding floodplains, wetlands, and uplands.

The 17.7-acre Mugar property plays an important role in Arlington and the greater Mystic River Watershed by providing floodwater storage in the naturally pervious land and wetlands within its boundaries. Wetlands and floodplains such as those located on the Mugar property serve as natural sponges that not only store floodwater, but also filter pollutants and recharge groundwater, providing a slow release of groundwater to streams during dry weather. These functions are particularly important in this vulnerable, low-lying section of East Arlington, which already experiences flooding during storms. As one of the last undeveloped parcels in the impaired Alewife Brook sub-watershed, the Mugar property provides vital ecological services to the neighboring community and the Mystic River Watershed.

Current issues:

1. Wetland Delineation: The Arlington Zoning Board of Appeals should request that the current

survey and wetland delineation work underway include the evaluation of soil profiles for hydric soils in the area of the proposed development or in areas where there is evidence found of excavation, dumping of fill or solid waste on site.

One of the challenges of a proper wetland delineation on the Mugar property is that the site has a history of disturbance. Materials, debris and soils have been moved and dumped from the period of construction of Rt. 2 to more recent disturbance. The Town's peer reviewer (Nover/Armstrong) identified such disturbance on site:

"The long dormant site has been altered by excavations and dumping of fill over the years. Our inspection found old stockpiles of earthen material, solid waste in the northwest area of the Site and other debris throughout."

The problem is that these areas, if formerly wetland areas, will not demonstrate the characteristics of wetland indicator plants. The Arlington Wetland Regulations (v. June 4, 2015) Section 21.B.3.c makes express requirement that areas of land that have been disturbed, filled or cut should be evaluated for the prior presence of wetland areas.

See Section 21.B.3.c.:

"Where an area has been disturbed (e.g., by cutting, filling, or cultivation), the boundary is the line within which there are indicators of saturated or inundated conditions sufficient to support a predominance of wetland indicator plants, a predominance of wetland indicator plants, or credible evidence from a competent source that the area supported, or would support under undisturbed conditions, a predominance of wetland indicator plants prior to the disturbance or characteristic of hydric soils."

2. 100 year floodplain: Require project proponent request and evaluate results of updated hydrologic modelling from City of Cambridge to ensure up to date, calibrated modelling is used to inform the 100-year floodplain.

Section 4 of the Arlington Wetland Regulations (v. June 4, 2015) states:

*LAND SUBJECT TO FLOODING OR INUNDATION - shall mean the land within the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm; said boundary shall be that determined by reference to the most recently available flood profile data prepared for Arlington within which the work is proposed under the National Flood Insurance Program ("NFIP"). **Where NFIP data are unavailable or deemed by the Commission to be outdated or inaccurate or not reflecting current conditions, the boundary of said land shall be based on the maximum lateral extent of flood water which has been observed or recorded, or other evidence presented and considered by the Commission. (Bold mine)** Said land shall also include isolated areas which frequently or seasonably hold standing water; such areas may or may not be characterized by wetland vegetation or soil characteristics.*



The most recently presented plans from project proponents show the FEMA defined 100-year and 500-year floodplain. The FEMA floodplain is defined with a retroactive dataset that is backward looking in time and can be out of date with contemporary conditions. We would encourage the Arlington Zoning Board of Appeals and the Conservation Commission to have the proponent request updated modelling data from the City of Cambridge Infoworks Integrated Catchment Model (ICM). This model provides a recently calibrated snapshot of current and future flooding scenarios on the Alewife Brook and other areas of the freshwater Mystic. This Cambridge model is now the best available data on what determines the 100-yr flood elevation and land subject to floodwater. Appropriate contacts at the City of Cambridge are:

Cathy Watkins, City Engineer (kwatkins@cityofcambridgema.gov)

Catherine Woodbury, Stormwater Manager (cwoodbury@cityofcambridgema.gov)

3. Application of local regulation and mitigation. Ensure that local regulations are not waived and that a full 2:1 mitigation is required of this project. This is a critical requirement to offset the loss of wetlands as this parcel is developed. A 2:1 mitigation is a minimal requirement given the challenges of replicating a functioning wetland area and replacing it with a constructed version.

Referencing the Arlington Wetland Regulations (v. June 4, 2015) Section 21 E (2),

Projects involving Wetlands Filling and/or permanent Alterations shall meet the requirements of 310 C.M.R. 10.60(3) and 310 C.M.R. 10.55(4) and the following requirements of the Commission:

(a) The proposed replication area design must be submitted to the Commission for approval as part of the submittal of the project Notice of Intent.

(b) The replication area must be shown to sufficiently duplicate the functions and values of the wetland proposed to be altered.

(c) The area of the wetland replication shall be at a 2:1 ratio to that area of wetland loss.

Thank you for your consideration of these issues and the attention that the ZBA is focusing on this development. Please do not hesitate to reach out with any questions (patrick.herron@mysticriver.org).

Sincerely,

A handwritten signature in black ink that reads "Patrick Herron". The signature is written in a cursive, flowing style.

Patrick Herron
Executive Director