



TOWN OF ARLINGTON

MASSACHUSETTS

CONSERVATION COMMISSION

July 10, 2020

Zoning Board of Appeals
Town of Arlington
730 Massachusetts Avenue
Arlington, MA 02474

**RE: Thorndike Place – Application for Comprehensive Permit
Second Set of Comments from Conservation Commission
Applicant's March 2020 submittals**

Dear Chairman Klein and Members of the Board:

The Arlington Conservation Commission (hereinafter "ACC") provides this second set of comments to the ZBA, this time addressing the information Arlington Land Realty LLC (the "Applicant") filed in March 2020 to supplement its Comprehensive Permit Application, filed with the Town on or about August 31, 2016 (the "Application"). The ACC provided initial comments to the ZBA on the Application by letter dated September 26, 2016. The Supplemental Information fails to address many of the Commission's initial comments.

SUMMARY OF COMMENTS

The Applicant needs to provide:

- a wetlands delineation that is performed during the growing season rather than the winter;
- data forms to support the wetlands delineation its consultant performed in January 2020, outside of the growing season;

- an explanation of why areas previously identified and approved by the ACC (in 2001) as isolated wetlands are not shown on the project plans and their relationship to the 100-year floodplain delineated by FEMA in 2010;
- a narrative wetlands report and back-up data sheets, describing all wetland resource areas protected under the Act and the Bylaw;
- stormwater management calculations and report to address compliance with Stormwater Management Standards;
- calculation of flood storage volume that will be lost under the proposed project configuration, alternative configurations, and calculation of compensatory flood storage at each elevation;
- a wildlife habitat evaluation;
- a more detailed and specific request for waivers and justification for waivers under each specific provision of the Town's wetlands regulation (June 4, 2015);
- what specifically it means by terms such as "green landscaping" and "rain gardens" and ability to implement such measures on the site taking into account water table and site conditions;
- more information about landscaping, justifications for tree and vegetation removal, and details of proposed mitigation in relation thereto and in consideration of the resource area values of the Town's Wetlands Bylaw and wetlands regulation; and
- an Alternatives Analysis as required by the Town's wetlands regulation for work within the Adjacent Upland Resource Area.

Once the above information is provided, the ZBA's peer review consultant should be engaged to review:

- Wetland delineations
- Flood plain delineations, flood storage volume lost, and compensatory flood storage
- Stormwater information and calculations
- Potential impact of the project on water quality, ecological diversity including vegetation and wildlife habitat, and adaptation to anticipated climate change effects of extreme weather including increased precipitation and extreme heat

1. Introduction

The ACC comments from two perspectives or capacities. First, in its regulatory role, as the usual administrators of the state's Wetlands Protection Act, G.L. c. 141, s. 30 (the "Act" or "WPA") (and implementing regulation) and the Town of Arlington Wetlands Protection Bylaw, Title V, Article 8 (the "Bylaw") and implementing regulations dated approved June 4, 2015 (a copy of which is attached to our September 26, 2016 letter). Second, pursuant to its broader duties under Massachusetts G.L. c. 40, s. 8C to promote and protect the Town's natural resources and watershed.

Pursuant to the Comprehensive Permit law, Mass. Gen. Laws ch. 40B, the **Zoning Board will be administering the Bylaw (not the Act) when reviewing the Thorndike Place application.** We thus provide the following background information and comments to assist the Zoning Board in this role. The Applicant will have to file an application with the Conservation Commission to review the project under the Act.

2. Wetland Resource Areas including Floodplain

As you may know, under state and local wetlands laws and regulations, anyone wishing to do work in or near areas called “wetland resource areas” must first receive permission of the ACC. Wetland resource areas include swamps, bogs, meadows, forested wetlands, vernal pools, isolated land subject to flooding and also streams, rivers, ponds, lakes, banks of those water bodies, land within 100 feet of those areas, and the 100-year floodplain.¹ State and local regulations define each of these areas including their boundaries.

Arlington Town Meeting many years ago adopted the Town of Arlington Wetlands Protection Bylaw (“Bylaw”) to protect more areas than protected under the Act and to provide greater protection of those areas. The Bylaw usually is administered by the ACC. The ACC has adopted regulations to complement and implement the Bylaw. The ACC’s June 5, 2015 Wetland Regulations, which implements and interprets the Bylaw. The Commission revised its regulations after the Applicant submitted its 40B application, so understands that the June 5, 2015 regulations apply (as attached to our September 26, 2016 letter to the ZBA).

Wetland resource areas provide many important functions and values, such as public or private water supply, ground water supply, flood control, erosion control and sedimentation control, storm damage prevention, other water damage prevention, prevention of pollution, protection of surrounding land and other homes or buildings, wildlife protection, plant or wildlife habitat, aquatic species and their habitats, the natural character or recreational values of the wetland resources, and climate change resilience.

The purpose of the Act and Bylaw are to protect these areas so they can continue to provide these functions and values.

A. Wetland Areas On Project Site Should Be Delineated

Updated wetland resource area delineations performed during the active growing season are necessary to evaluate the project. Additionally, we recommend a peer review of the Applicant’s wetland resource area delineations.

There are four wetland resource areas identified so far on the Thorndike Place application, which include the following:

¹ The 100-year floodplain is often described generally as an area which is expected to flood once every one hundred years. Another way it is described as the area that has a 1% chance of flooding once a year.

1. bordering vegetated wetlands (called “BVW”);
2. isolated wetlands (protected under Bylaw only);
3. areas within 100 feet of BVW and isolated wetlands, called either:
 - a. Buffer Zone (under the Act), or
 - b. Adjacent Upland Resource Area (“AURA”) (under the Bylaw); and
4. the 100-year floodplain (also called “bordering land subject to flooding” or “BLSF”).

We know from the Application as well as prior proceedings concerning the Mugar property that wetland resource areas are extensive on the site. Even the developer acknowledges this fact (see pp. 16 of Application).

However, despite the wetland delineations performed in January 2020, there is no current legally valid delineation under either the Act or Bylaw of the boundaries of these resource areas. The Applicant has not yet filed the necessary application with the ACC to receive such determinations of the locations of the wetland resource area boundaries.

The Zoning Board will have to determine whether the Applicant’s delineation of wetland resource areas under the Bylaw are valid. When it receives an application under the Act, the ACC will determine whether the delineations are valid under the Act.

Because so much of the Mugar property consists of wetland resource areas, it is difficult for the ZBA or the ACC to review the project unless and until the wetland resource areas are accurately delineated and clearly depicted on plans showing existing and proposed conditions. For example, the southeast corner of the proposed apartment building is very close to the BVW shown on the project plan (see Sheet C-101 “Overall Site plan,” rev. March 13, 2020, showing proposed structures over existing conditions), but the border of that BVW has not been approved by the ACC under state and local wetland laws, so its location may not be accurate. If the boundary of the BVW is in fact farther to the west, that could require a change to the building footprint to move it outside of the BVW, which in turn could change other aspects of the proposed project.

The wetlands information provided by the Applicant to date is incomplete or even inaccurate:

1. **Problematic Winter Time Delineation:** Note 5 on Plan Sheet V-100, Existing Conditions, states that a wetlands delineation was done on January 15, 2020, which was winter time. Winter time delineations are difficult and thus lack accuracy because vegetation is not leafed out or even present, and soils often are frozen. Wetlands are defined by the type of vegetation that grows in a particular area and the soils that support such vegetation. It is much harder to identify vegetation without their leaves and examine soils if the ground is frozen. Like other conservation commissions, the ACC strongly discourages wintertime wetland delineations, by stating that resource area delineations will be reviewed only between April 1 and December 1 of each year. Regulations, § 10.G.

2. **Missing Data Forms:** The Applicant needs to provide the data, often on forms called “Appendix G,” that the Applicant’s consultant should have prepared to support the delineation of the BVW’s. These forms will be needed when the Applicant applies to the ACC under the Act, so there is no reason not to share them now.
3. **Isolated Wetlands are Not Shown.** In 2000, a developer interested in the Mugar site filed with the ACC an Abbreviated Notice of Resource Delineation seeking approval of wetland resource delineations. The ACC in 2001 approved the BVW and isolated wetland delineations, but not the delineation of the 100-year floodplain (due to then-outdated FEMA maps; the FEMA maps were revised in 2014 <verify>?). The ACC’s peer review consultant, the BSC Group, Inc., identified four areas of isolated wetlands, which were added to the plans as Wetlands F, G, H & I. An excerpt of the plan is attached hereto, along with the October 17, 2000 letter from Rizzo Associates (the developer’s consultant) memorializing those additions. The areas of Wetlands H & I should now be examined for presence of isolated wetland as they are located where the current development is planned. If the isolated wetlands previously delineated are located within the 100-year floodplain on revised FEMA maps, this should also be noted.
4. **100-year Floodplain Line.** On all plans, especially the Existing Environmental Resources Plan (C-100), Overall Site Plan (C-101), and the Grading and Drainage Plans (C-104 and C-105), the 100-yr floodplain line needs to be clearly marked.

We strongly urge the Zoning Board to have its peer review consultant review the resource area delineations, especially BVW and isolated wetlands, before December 1, consistent with the Town wetland regulations (Section 10.G).

B. Regulation of Work In and Near Resource Areas – “Performance Standards”

Once the wetland resource area boundaries are known, then the question is whether the work in those areas meets specific requirements. Work must meet the requirements of the Bylaw.

The local (as well as state) wetland regulations contain standards to determine whether work can be done in each resource area, and, if so, under what conditions. An applicant has the burden of proving that the proposed work meets the applicable standards, often called “performance standards.” If the ACC – or here, the Zoning Board - determines it does, then work could be allowed in those areas provided conditions can be imposed to ensure the resource areas are protected. As noted above, the performance standards under the Bylaw and its regulations are stricter than those under the state Act and regulations. Each of the above-listed resource areas have unique requirements that must be met.

Since the ZBA is responsible in the Comprehensive Permit process for administering the Town’s Wetlands Protection Bylaw (but not the Act which remains the ACC’s jurisdiction under state law), we

provide the following table that outlines the applicable performance standards under the Bylaw and its regulations, has the citation to the Town's wetland regulations, and notes how the state wetlands standards in the Act differ, if at all.

Table 1. Comparison of Town Bylaw/Regulations and State Act for Applicable Performance Standards

Resource Area	Standards (summary) in Town Bylaw or Regulations	Citation to Town Wetland Bylaw / Regulations	How Town Standard Differs from State Standard in the Act
Bordering Vegetated Wetland (BVW)	No work allowed in wetlands though can allow up to 5,000 sq. ft. be lost if replicated at 2:1 ratio (replicated to lost)	Section 21 of Town wetland regulations	State requires only 1:1 replication whereas Town requires 2:1
Wetland (isolated)	Same as above	Section 21 of Town wetland regulations	State does not protect these
100-foot Adjacent Upland Resource Area ("AURA")	No work within 25 feet; work within 25-100 feet shall be avoided and alternatives pursued – allowed only if no reasonable alternatives; 4 "Disturbance Areas" defined	Section 25 of Town wetland regulations Section 24 Vegetation Removal and Replacement	State standards much less protective; State calls this area the "Buffer Zone"
Bordering Land Subject To Flooding (BLSF 100-year Floodplain)	Prohibits work that will: 1. Cause flood damage due to lateral displacement of water; 2. Adversely effect on public and private water supply or groundwater supply, or 3. Cause an adverse effect on the capacity of said area to prevent pollution of the groundwater. Compensatory flood storage allowed at 2:1 (created vol:lost vol)	Section 23 of Town wetland regulations	- Boundary definition differs - State's compensatory flood storage requirement of only 1:1 where Town requires 2:1 (created vol: lost volume)

Even with the unverified wetland boundaries proposed by the Applicant, it looks like some portions of buildings, roadways, parking areas, and other infrastructure may be within wetland resource areas, especially floodplain and isolated wetlands. The proposed trails in the 11+ acre area proposed for conservation are near or possibly in wetlands; therefore, the placement of these trails also need to be

evaluated once the wetland boundaries are updated. Portions of buildings are within BLSF and the Applicant has not shown it meets compensatory flood storage standards.

Furthermore, the project proposes alterations within the AURA, which is a resource area under the Bylaw and recognized as important by the Massachusetts Association of Conservation Commissions (MACC) Buffer Zone Guidebook, 2019: "Massachusetts is experiencing increased incidence of heavy precipitation events and increased drought because of climate change. This increases the need for flood storage capacity and water providing ecosystem services provided by wetlands, supported by adjacent buffer and riparian corridors." While the MACC Buffer Zone Guidebook was published in 2019, it summarized fundamental scientific studies and principles known and accepted well before then.

C. Vegetation Removal and Replacement Requirement

Trees and vegetation to be removed must be counted and replaced in accordance with the Bylaw and Town regulations and additional details on landscaping plans need to be provided.

The Application does not include sufficient information to evaluate adequate replacement of the trees and other vegetation planned to be removed.

Vegetation in a resource area provides wildlife habitat, flood and storm damage control, and improves water quality. Plant size, abundance, and variety are generally proportional to habitat value; thus, large wooded areas with a variety of native trees and understory plants, such as this property, are of greatest habitat value. "Vegetation slows runoff velocity so that it has greater potential to infiltrate into soil and has less erosion potential. Most studies find that buffers dominated by trees or a mix of vegetation cover types (e.g., trees, shrubs, and grasses) are most effective in removing nutrients and sediment pollution...in addition to removing pollutants, vegetation improves water quality by stabilizing banks and moderating water temperature through shading" (Massachusetts Association of Conservation Commissions Buffer Zone Guidebook, 2019). In these ways, vegetation is critically important to climate change resilience, as well, which is an important criterion for ZBA review of proposed projects (Section 6.3 of ZBA Comprehensive Permit Regulations).

The characterizations of this property in the Application are highly subjective and purpose-driven, trying to minimize the important role of existing vegetation. The Applicant points out that there are invasive plant species on the property. That is true; however along with the invasive plants of phragmites, Norway Maples and multiflora rose, there are hundreds of other beneficial native and non-native species such as willow, cottonwood, red maples, and greenbrier.

To use this condition of the land as an excuse to build permanent buildings, structures and required mitigations that will definitely impact the natural resources, while describing them as improvements, is not accurate or appropriate and should not be accepted. The western part of the site proposed for buildings including the "West Wing" could accurately be described as "Forested Adjacent

upland with shallow ground water.” This description is supported by the dominant tree in the woods in this area, cottonwood, which is a floodplain species.

Applicable to work in all local wetland resource areas is the requirement that any vegetation removed or extensively pruned cannot be done without permission of the ACC and “in-kind replacement.” Section 24.C. of the Town’s wetland regulations details this requirement. “In-kind replacement:”

Refer[s] to a combination of species type and surface area as defined by the area delineated by the drip line of the affected plant(s). "In-kind" means the same type and quantity of plant species that was removed, extensively pruned, or damaged, unless compelling evidence is presented in writing that explains why the resource area values under the Bylaw are promoted through an alternative proposal (such as biomass equivalent), and planted within the same resource area or another resource area located in close proximity on the project site. Notwithstanding the foregoing, only non-invasive plant species shall be planted as replacements.

The Applicant must provide specific information, including but not limited to the reason for removal and a detailed planting plan showing the location, size, and species of vegetation to be removed as well as the proposed replacements.

Former plan sheet C-1.0B “Existing conditions” plan, updated 8/12/15, shows tree counts for removal, with “T” numbers (updated plan sheets do not include a count of trees planned for removal). There are hundreds of trees planned to be removed. It is not clear where the required mitigation for these trees is going to be planted, in accordance with Section 24.E.5 of the Town’s wetland regulations. They cannot be placed in the adjacent resource areas as these are currently occupied by trees.

While landscaping plans are provided in the updated materials (C-102 and C-103), they do not describe the species, numbers, exact locations and care instructions of all plants in the design. Currently, the landscaping plans include symbols for either a “deciduous” or “evergreen” tree with no other details. Furthermore, the narrative in the original application under “Landscaping,” which was not updated, states that the purpose of the landscaping throughout the property is to be strategically located to “screen views” including to “block headlights.” In other words, there is no consideration in the landscape design for lost wildlife habitat or ecological diversity.

The Applicant needs to describe how the proposed plantings will compensate for the numbers, density, species and variety of vegetation (trees, shrubs, grasses, etc.) that will be removed for the Project and how the resource area values lost due to vegetation removal (including wildlife habitat, storm water / flood control from mature trees, pollution prevention, etc.) will be mitigated.

D. Stormwater

The applicant must provide additional information so that stormwater management can be evaluated. Additionally, we recommend a peer review of stormwater information and calculations once details are provided by the Applicant.

The ACC reviews, in coordination with the Engineering Department, stormwater management during its review of projects under the Bylaw (and Act). The state (MassDEP) has Stormwater Management Standards that apply under the Bylaw (and Act). See Section 32 of the Town's Wetland Regulations. The Town Engineer implements the Town's Stormwater Bylaw, so we defer to him for compliance on that.

The ACC cannot determine whether the Thorndike Project meets the Stormwater Management Standards, because the Applicant has not submitted the necessary detailed stormwater management analysis that includes results of computer modeling using HydroCAD software. Such modeling is required for the 2-year, 10-year, and 100-year storm events. Also, no groundwater information has been provided. Runoff and calculations should use the "Cornell" precipitation estimates (based on 2008 data) or, even better, the NOAA's Atlas 14 estimates (based on 2015 data), which the Commission has the discretion to require. For the stormwater evaluation, TP-40 precipitation values should not be used as MassDEP has acknowledged that its Stormwater management regulations pertaining to precipitation intensity and frequency need to be updated because the TP40 precipitation values developed in 1961 do not reflect current or future precipitation patterns. We understand that MassDEP soon will be requiring the use of NOAA-14 precipitation estimates.

The Application does not include this required stormwater information.

Based on the limited information provided, we have the following comments:

1. The project design does not appear to reflect consideration for environmentally sensitive areas such as wetlands.
2. The Applicant should undertake a more comprehensive environmental evaluation before the project is considered.
3. Sufficient hydrologic testing should be conducted to ensure that this project will not adversely impact water levels in the adjacent wetland area, sanitary sewage system, and neighborhood already stressed from flooding events.
4. For proposed areas of pervious pavement - the Applicant should provide details of pervious pavement design, including elevations of sub-base and relationship to groundwater elevations, to demonstrate whether or not these areas will retain rainfall, or merely exacerbate flooding on adjacent properties.
5. For the proposed Bioretention Cell, water quality/detention area, floodplain compensation, and drainage culvert - the Applicant should provide details of these

features on the plan, including elevations and the relationship of these features to the groundwater elevations throughout the year.

6. Northeast corner berm - This proposed mitigation is within the floodplain, so will not function properly as it already will be full of water during a flood event.

E. Floodplain and Floodplain Storage

The applicant must provide additional information so that impacts on flooding and the floodplain can be evaluated. Additionally, we recommend a peer review when details are provided.

The Application states that the site is 17.7 acres and approximately 11.5 acres of the site consists of floodplain, and that 100-year floodplain and elevations defined by FEMA will be utilized in design. Clear documentation should be provided showing the relationship and elevations of proposed buildings, paved areas, and compensatory flood storage areas to the 100-year floodplain. The drawings submitted do not show site development features overlaid on the 100-year floodplain boundary defined by FEMA.

While the application notes that buildings are generally located in areas above the 100-year floodplain, this is not clearly evident from the information submitted to date, since it appears that portions of both the east and west wings, one or more of the townhouses overlap with the 100-year floodplain. The ACC is concerned that the structured parking area of the apartment building is proposed for the ground floor or basement level of the new building. This parking garage should be constructed in such a manner that it is above the 100-year flood elevation. For areas of the building located in the flood zone, flood water should be allowed to enter and exit without impediment, through open grates or vents in the building walls.

In addition to site plans, the Applicant should provide calculations of flood storage volume that would be lost as a result of the proposed project. For projects in or near floodplain, any starting point for meaningful discussion requires an engineer's analysis of estimated fill and excavation and cross sections of graded area. Therefore, the ACC requests that the Applicant provide the requested documentation of incremental volume of fill at each elevation in the floodplain that is associated with the Development layout, as well as alternative configurations that avoid encroachment on the floodplain.

Any volume of floodplain taken up by structures, columns, stairs, elevators, walls, footings or such should be compensated for by provided by compensatory flood storage from some area outside of the current floodplain. The Applicant should provide calculations showing the foot-per-foot basis for the proposed compensatory flood storage; that is, for each cubic foot filled at each foot of elevation, there will be replacement storage volume created for each volume lost at the same elevation at the ratio required by the Bylaw (2:1).

While the Application also states that there are areas on the site that can be used for mitigation for building on the floodplain, it appears that areas marked on the Sheet "Grading and Drainage Plan - East" (Plan Sheet C-103) as compensatory flood storage are located in the floodplain, so will not function properly as it already will be full of water during a flood event and thus does not count as compensatory

flood storage. Another area marked as flood compensation areas is located in or near a wetland, on “Sheet Grading and Drainage Plan – West” (Plan Sheet C-104). This will further impact natural resources and not function as storage during a flood event.

3. Requested Waivers

The Applicant should provide further details on waivers requested. The ACC recommends that no waivers of local wetland requirements should be granted.

We urge the ZBA not to grant any waivers of the Bylaw or town wetland regulations because of the important functions provided by the wetland resource areas on the Mugar property. There is a history of major flood events in this part of Arlington that causes extensive property damage. Floodwaters contain sewage from Sanitary Sewer Overflow (“SSO”) discharges and contaminated floodwaters. Flooding in this part of town is a major concern of local residents. Prevention of additional flooding is a valid “Local Concern” (as defined in 760 CMR 56.02) that warrants denying waivers of the Bylaw and local wetland regulations.

Specifically, we oppose the requested waivers of Section 23 C & D, Section 24, and Section 25 B-D of the local wetland regulations. Section 23 “Land Subject to Flooding (Bordering and Isolated)” is critical to flood control and storm damage prevention as discussed above. Section 23.C requires written permission of the Conservation Commission for any activity (other than maintenance) which results in building within or upon, removing, filling, dredging, or altering land subject to flooding. Section 23.D requires 2:1 compensatory flood storage ratio for each volume of flood storage lost at each elevation. These requirements should not be waived.

Section 24 “Vegetation Removal and Replacement” has been discussed above as critical to many resource values, including but not limited to: flood control, wildlife habitat, pollution control, and climate change resilience. The specific requirements for vegetation replacement and mitigation should not be waived.

Section 25 “Adjacent Upland Resource Area” subsections B through D define the AURA as a resource area (as opposed to a “buffer zone” in the Act). This gives the Town stronger protections for these vulnerable upland areas that can provide a multitude of resource benefits including wildlife habitat functions, pollution control, heat control, flood control, protection from erosion, storm damage prevention, among others. There is scientific consensus that significant physical, chemical, or biological alterations to the AURA will have significant physical, chemical, or biological impacts on the associated /adjacent wetland resource areas (see MACC Buffer Zone Guidebook, 2019). The ability of the AURA to provide these functions increases with increasing buffer width and continuity. The requirements set forth in Section 25 B through D should not be waived.

In addition, we find the Applicant's requested waiver of the consultant fee provision to be confusing. Because the consultant fee assessed equals the price of the selected peer reviewer's contract, we do not understand how a portion (25%) of that cost could be waived.

4. Other Comments on the Application

The ACC provides the following additional comments on the Application.

A. Flooding

FEMA mapping is not current (from 2014). Large-scale development and urbanization in the proximate Alewife area have resulted in an increase in impervious area and this coupled with extreme precipitation events and changing precipitation patterns could increase the frequency and severity of flooding in the area. Given the size of the proposed development and the area's vulnerability to flooding, development in the floodplain should be minimized and mitigation measures should be robust and fully analyzed. Flood waters may be contaminated with contaminated stormwater runoff and sewage from Combined Sewer Overflows in the Cambridge Alewife area.

B. Open Space

Regarding statements that 11 acres of the property are to be preserved in perpetuity as open space; these wetlands, areas within 100 feet of wetlands, and the floodplain should be maintained in a natural state and not turned into a "park." The wetland creation across Route 2 in Cambridge with its boardwalks is a nice example, but it should be noted that not all wildlife tolerate the proximity of the public on these paths. Seclusion for nesting, feeding and breeding behaviors are also necessary for most wildlife.

C. Environmental Impact

The Applicant should provide a narrative explanation of how the proposed project meets the "Limited environmental impact" review criteria specified in the ZBA Comprehensive Permit Regulations (adopted 7/08/2015) Section 6.2 and specific details about how the development demonstrates that it will "improve water quality, control flooding, maintain ecological diversity, promote adaptation to climate changes" if not already addressed in the above submittals, consistent with the ZBA Comprehensive Permit Section 6.3 criteria.

D. Outside parking

The parking spaces and driveways of the proposal should be constructed using porous paving methods or have these impervious areas go directly to stormwater treatment and detention areas (along with the roof drainage) so that flooding in the area is not aggravated. A parking lot is located in

the northeast corner of the property and Plan Sheet C-1.0B shows two small wetlands in this location. This is a permanent impact to these wetlands and should be avoided.

E. Sanitary Sewers

All proposed new houses and apartments should have backup prevention valves and allow for storage of sanitary sewage during flood events. The existing sanitary sewer system in the neighborhood is old with significant leakage during rain events when stormwater enters the system through infiltration/inflow. To lessen the potential for sanitary sewer overflows which may result in discharges to wetland resource areas (or back-ups in residential basements), a capacity analysis of the wastewater transport system should be conducted and appropriate mitigation undertaken, whether it be storage of sanitary sewage during flooding events, new or replacement sewers, or removal of inflow.

F. Exterior Lighting

All street lights, exterior lighting, and lighting for parking areas should be minimized, timed, and directed downward so as not to shine into vegetation and wetland resource areas. The developer should adopt "Dark Sky" and LEED standards in their bid documents such measures will be protective of habitat (nocturnal migratory birds).

G. Sidewalks to the Alewife T Station

The layout of the proposed sidewalk is directly through a wetland, the one that is contained in the old sawmill foundation. This should not be allowed. Pedestrians can instead use the street and its sidewalk and leave the wetland and AURA alone.

H. Direct Access to Route 2

Overall Site Plan C-2.0 shows a proposed on and off ramp to Rt 2. This site plan is marked with "Proposed Lake St. off ramp driveway access," which shows an access road directly off and onto Route 2 westbound, but it is not discussed in the project narrative. This possible access road appears to go through wetland resource areas and it is unlikely to be approved if it goes through BVW or isolated wetland.

5. Conclusion

Many years of neglect, misuse, abuse, and the increasing development pressures in the adjacent urban areas have impacted this property to its detriment. The Applicant, as the owner of this property, has allowed it to degrade and should be required to restore the natural resource. At a minimum to preserve the resource area functions and mitigate potential harm to those functions, the Arlington Conservation Commission respectfully requests that the ZBA:

- require the Applicant to provide the information specified above so that the impacts on wetlands and other natural resources can be evaluated;
- not grant any waivers from the Town of Arlington Wetlands Protection Bylaw and implementing regulations;
- direct the Applicant to apply for Conservation Commission approval of both (i) the boundaries of wetland resource areas and (ii) any proposed work in and near those areas;
- require the Applicant to provide stormwater information; and
- require peer review of the wetland delineation, floodplain delineation, compensatory flood storage, stormwater information, and calculations.

We hope the ZBA finds the above comments and information helpful. Please contact us should you have questions. ACC members plan on attending the ZBA's hearings on the Application, the next of which we understand to be scheduled for July 14, 2020.

Very truly yours,

Susan Chapnick, Chair
Arlington Conservation Commission

Enclosures:
2015 Arlington Regulations for Wetlands Protection (43 pages).

Abbreviated Notice of Resource Area Delineation for Mugar Parcel, Arlington, Massachusetts, prepared by Rizzo Associates, Inc., dated July 11, 2000 (9 pages).

Abbreviated Notice of Resource Area Delineation Plan for Mugar Parcel, Arlington MA, Sheet No. A-1, prepared by Rizzo Associates, Inc., dated 05/18/2000, revised 10/18/2000 (6 pages).