

331 Waverley Street  
Belmont, MA 02478  
December 19, 2006

Zoning Board of Appeals  
Office of Community Development  
Belmont Town Hall Annex  
Belmont, MA 02478

Dear Mr. Chin and Members of the Zoning Board of Appeals:

As a member of the Uplands Advisory Committee and of the Conservation Commission I was asked by the former committee to provide a perspective to that group on the advisability of building the project proposed under the Comprehensive Permit Application for a 40B Project from an environmental standpoint. I submitted notes with my comments and concerns to UAC, and at this time I am taking the opportunity to write them up and submit them to the Zoning Board of Appeals for your consideration.

**Observations on environmental characteristics of the site:**

To gain a real familiarity with actual conditions on the property and the probable impacts of its development, a site visit by the Board of Appeals led by wetlands scientists and naturalists familiar with the sites, such as Mr. Katuska, David Brown, Peter Alden, or Patrick Fairbairn, (see Conservation Commission attached reports) is highly recommended. To my knowledge this has not been done. For a site visit to be effective the wetland delineations should be clearly marked and the perimeter of the project staked out, since the topography of the site makes evaluation somewhat challenging.

The bulk of the Uplands site for proposed development is located along Acorn Park Drive in Belmont. The property consists of a forest of predominantly silver maple trees and wetlands. Based upon reports received by the Conservation Commission and submitted to the Zoning Board of Appeals as attachments to its report, the property currently provides a

number of valuable characteristics:

- The wetlands, silver maple trees and other vegetation hold water on the site, mitigating storm water runoff in the Alewife floodplain area. The silver maple trees are commonly found in floodplain areas because of their affinity for wet soils. They grow quickly, creating storage of water within.
- The soils in the wetlands buffer and nearby forest vegetation filter and hold toxins that would otherwise be released to wetlands.
- The forest provides critical wildlife habitat intrinsically and acts as a critical adjunct to abutting wetlands for certain species, such as beaver and herons, requiring both upland and wetland habitats to live. The property links to neighboring areas of habitat and contributes to biodiversity in the Alewife area and in the region.
- The property provides a unique natural feature in the metro Boston area - a small floodplain forest abutting wetlands

### **HAC Criteria for Evaluation of 40B project**

I examined the site applying criteria on evaluating ZBA decisions taken from the “Local 40B Review and Decision Guidelines” published by the Massachusetts Housing Partnership and Edith Netter, Esq.

“.....the sole issue before HAC is whether the decision is consistent with local needs.....(which) means balancing the regional need for affordable housing with the local public health, safety and welfare concerns. HAC regulations establish high thresholds to establish consistency with local needs, including the degree to which the *health and safety* of the occupant or town residents is imperiled, the *natural environment* is endangered, *the design of the site and the proposed housing* is seriously deficient, *open spaces are critically needed*, and the local requirements and regulations bear a direct and substantial relationship to the protection of [health and safety, design

and open spaces]. 760 CM.R section 31.07(2)(b).”

(page 5, Local 40B Review and Decision Guidelines)

My apologies for any repetition under the topics below. Each general point addresses the particular criterion (title) but several points address more than one, and are therefore repeated.

### **Public Health and Safety**

1. Natural removal of toxins is a feature of current site. (See Katuska Report attachment to Conservation Commission comments.) The developers should be asked to identify how their project will provide the function of toxin removal. The new project can be expected to add pollutants such as substances from automobiles, fertilizers, and other substances to the water, which will flow down into the wetlands.
2. The site is surrounded by wetlands inhabited by ticks and mosquitoes. How will the residents, including children and pets, be protected in an area where the use of pesticides must be strictly controlled due to likelihood of wetlands contamination. What will the “pets” policy be? Should there be fencing between developed and non-developed areas? There should be strict guidelines on the use of pesticides.
3. Birds of prey, commonly found on the Uplands site, control rodent and other pest populations. They need the trees and snags (dead trees) to survey the adjacent wetlands for prey. Are there sufficient forested highlands in the area abutting the wetlands to serve this function once this site is largely deforested for development? Animals such as fox and coyote which currently prey on smaller creatures such as rodents are also at risk due to loss of habitat. (See the Normandeau report to the Conservation Commission and the Biodiversity Report submitted by The Friends of Alewife Reservation.) Will the loss of the uplands forest create an unwelcome imbalance of pests to predators in low lying neighborhoods near the Uplands?
4. The forested Uplands site abutting wetlands serves an important role in slowing the rate of rainfall runoff to the surrounding low lying

areas. The trees that would be cleared for the development currently store many gallons of water. Along with the large areas of impervious surfaces added to the site, detention and retention areas are planned by the developer to take care of roof and pavement runoff from rainwater. However these measures are not likely to fully address the loss of storage capacity of the combination of soils, trees and other plants on the site that mitigate flooding and contamination to nearby residential areas prone to flooding.

5. Acorn Park Drive has been covered by water during storm events. Should a severe storm event cause floodwaters to cover the road is there a danger that access to the site by emergency vehicles could be cut off?
6. The isolation of this site, surrounded by wetlands, with no good pedestrian connections to the nearest neighborhood or to the T, and with roadways that are highway access routes (rather than town streets), may make the residents more vulnerable to crime. It is a particularly difficult site for teenaged residents to live in.

### **Endangerment to Natural Environment**

1. If pets are allowed, where will the residents walk these pets? They will not be permitted to do so in abutting conservation land. Pet waste from more than a few pets would threaten ground water quality including runoff to Little Pond, Little River and the adjacent wetlands. Given the sensitive location of the development in the middle of wetlands, a prohibition on pets should be considered.
2. In addition, the project has planned very little outdoor recreational space for residents. Will they then be tempted to use the adjacent fragile adjacent wetlands for more than passive recreation? This should be discouraged, perhaps by requiring fencing, but primarily by improving recreational facilities and adding open space on the developed site for all ages.
3. An increase in toxins from automobiles and other products used by residents and the loss of the pollution mitigation provided by the

current forest may create threats to the natural environment (Katuska report).

4. Biodiversity in the adjacent Alewife Reservation, functionally including the Uplands, has been celebrated by the Department of Conservation and Recreation on its Biodiversity Days. The spectrum of animal life has been documented in the Biodiversity study. Clearly species that require uplands and lowlands to survive, such as beaver, muskrat, heron and wood ducks, will be lost to the area with this development. The developers should be asked to state any nearby locations where similar habitat is available to replace that which they are planning to destroy.
5. There is a possibility that by removing the predator species on the Uplands that cannot survive elsewhere in the area, there will be an increase of pest populations in the general area.
6. With development there will be permanent loss of the small river floodplain forest of silver maples, a resource unique in our area (see Katuska literature). Is there a nearby area that provides similar flooding mitigation and wildlife habitat within the Alewife area or is this one development wiping out the only local resource of this kind?
7. The development will mean loss of a critical "patch" (see Normandeau report) in the greenway system of wooded areas, one of the rare areas large enough to serve as a wildlife refuge. How close is the nearest similar area which can serve as a refuge for animals traversing the Alewife floodplain?
8. As conditions of approval, the ZBA should require a policy limiting the use of fertilizer to slow release and other products not toxic to the environment, and this plan should be subject to approval by the Conservation Commission; also snow removal from parking areas to offsite non-sensitive locations and limited use of salt should be required.

### **Deficiencies in Site Design**

1. This development would counter the stated policy goals of our Town, including a joint declaration by the Boards of Selectmen of Arlington

and Belmont on June 28 for preservation of the Uplands, the town vision 21 goals (see Conservation Commission Report), the Alewife Study Group's report, and the Belmont Open Space and Recreation Plan. Meanwhile efforts to meet town goals for increasing its affordable housing stock are moving ahead.

2. There should be requirements similar to those for the McLean site plan approvals covering full cutoff lighting, so that ambient light does not spill over into the wetlands, adversely affecting wildlife.
3. Tree preservation, screening and landscaping plans should be detailed.
4. The Hammett report from the Mystic River Watershed Association should be examined by the ZBA in detail to address all stated concerns. (This report was submitted before discussions of the sewer and stormwater issues, but was not cited in any ZBA hearing to our knowledge, though some of the issues may have been addressed.) The report includes engineering and environmental concerns in general (listed 1 to 30) on hydrology, infiltration chambers, and design of retention and detention basins. The ZBA should ensure that all concerns on stormwater management are addressed adequately as stated in the report - addressing the advisability of further action on listed concerns on hydrologic study page 3 – for example:

- invert elevations are needed for 8 inch emergency overflows in context of hydrological model,
- need for conservative design for infiltration systems,
- guarantee of aggressive cleaning and maintenance
- adequacy of projected invert elevations for overflow from detention tanks during 100 year flood should be checked
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The ZBA should consider these and other concerns listed by number in the report.

5. Attractive outside recreational space – landscaped play areas, walkways and benches, etc - should be provided for residents, especially because the development is a cul-de-sac and removed from parks and neighborhoods.

## **D. Threat to Critically Needed Open Space**

1. Opportunities for study of the natural flora and fauna will be reduced if development occurs. Reduction of terrain abutting the Alewife Reservation is nearly certain to cause an unfortunate devaluation of the natural assets of the reservation, since the two areas work together to provide a natural environment of greater value as a whole. This area is one of oldest birding areas in US dating back to the early 20th century.
2. The development of this property runs counter to Massachusetts' Smart Growth principals which are supposed to protect our valuable open spaces:
  - uses undeveloped land rather than redeveloping over previously developed areas
  - does not preserve Open Space; rather reduces it, further unbalancing mixed land use in the area and region, moving towards impervious uses
  - actively degrades the quality of habitat in Alewife Reservation open space

In sum, using HAC's own evaluation, there is ample reason to be concerned about the advisability of proceeding with this project. Should it be permitted, the permanent loss of the Uplands forest and natural terrain will create irreversible damage to the Alewife Reservation and to the greater Alewife floodplain area, with so many negative impacts in the Alewife floodplain area that I feel it is not justified, even for the important purpose of adding needed affordable housing in our community. Every effort is being made within our community at this time by the Belmont Housing Trust and others to find previously developed spaces for redevelopment in order to address this need, and I believe this is the only appropriate course for our fully built-out town.

Nevertheless, if the ZBA should decide to approve the project, it is imperative that it be done carefully with conditions to reduce the negative impacts. A substantial reduction in the size of the project would be the most effective means of reducing the many unfortunate impacts on the Town

and neighboring areas.

Particular conditions to protect the abutting wetlands environment and habitat should be negotiated at this time if the project is to go ahead. Full cutoff lighting and limiting road salt and tree locations are examples of conditions which may not have a large impact on the developer's bottom line, but which will make a difference to protection of the sensitive environment. Under the Wetlands Protection Act, the Conservation Commission is not empowered to require full cutoff lighting or pet prohibition, but the ZBA can do this. You can work to expand the on-site recreational space, including preservation of some existing trees where it is possible. You can require that the storm and waste water systems are carefully designed and properly maintained over time, and that the developer creates safe pedestrian connections to the town and public transportation in an area which creates an added subdivision of the town and that is as yet very poorly connected to the whole. The addition of needed affordable housing for the Town and adoption of the measures above would contribute some positives to a project that has a big downside for Belmont.

Certainly you are citizen volunteers with a difficult task. While the pressures from the developer (and perhaps even from some insiders eager to get on with other activities) to make a decision very soon will be great, the outcome needs to be the best decision for Belmont's future. I hope you will take enough time to determine Belmont's best course of action and to set the Town on that course.

Carolyn Bishop, Roger Wrubel and Martin Duffy of the Uplands Advisory Committee reviewed this letter and have requested that their names be added as cosignatories. Thank you for your consideration.

Yours truly,

Martha Moore

Member Uplands Advisory Committee  
Town Meeting Member Precinct 3

## Member Conservation Commission