



CITY OF CAMBRIDGE

EXECUTIVE DEPARTMENT

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*Robert W. Healy, City Manager*

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May 8, 2003

Secretary Ellen Roy Herzfelder  
EOEA, Attn: MEPA Office  
Attn: Arthur Pugsley, EOEA No. 12376R  
251 Causeway Street, Suite 900  
Boston MA 02114

Re EOEA No.12376R; Belmont Office/R&D Building  
Comments on Draft EIR

Dear Secretary Herzfelder:

The City of Cambridge submits the enclosed comments on the Draft Environmental Impact Report for the Belmont Office/R&D Building. This project, which is located on the Belmont/Cambridge border with a small portion of the work within the City.

The City appreciates this opportunity to comment. If you have any questions, please contact John Bolduc of the Community Development Department at 617-349-4628.

Very truly yours,

Robert W. Healy  
City Manager

RWH/dls  
Enclosure

**City of Cambridge**  
**COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT**  
**EOEA No.12376R**  
**Belmont Office/R&D Building**

General Comments

The proponent was responsive to many of the Secretary's comments and requirements contained in the ENF Certificate. However, the proponent has not taken advantage of the project site's proximity to transit, bicycle, and pedestrian facilities. Specifically, the proponent needs to evaluate the feasibility of achieving a higher (60%) single-occupancy vehicle (SOV) mode share and modifying the plans accordingly, or provide an acceptable rationale to justify the proposed 80% SOV mode share.

Regarding the provision of sewer service to the site, the City is considering the request for the connection into Cambridge and will make a decision after the MEPA process is concluded.

Alternatives Analysis

The Secretary stated in the ENF Certificate that "it is clear that the principal issue to be addressed in the alternatives analysis is the amount and location of parking to be provided on-site." The proponent responded to the Secretary's requirement to analyze the parking requirements associated with different SOV mode shares. In the DEIR, the proponent is proposing to achieve an SOV mode share of 80%. However, the proponent did not respond to the Secretary's or the City's comments that a lower SOV mode share is achievable (the Secretary commented that a "considerably higher reliance on transit ... should be achievable"; the City commented that the proponent should be able to reach a 60% SOV mode share given the transit, bicycle, and pedestrian alternatives available in the area). The selection of the 80% target was not explained or justified. The proponent should provide a plan based on a 60% SOV mode share or justify the 80% share.

In the alternatives analysis, the proponent did not show the site planning implications of the reduced on-site parking levels that would be needed under the range of SOV mode shares analyzed. The City believes, based on experience with transportation demand management in Cambridge, that the proponent should be able to eliminate an additional 286 parking spaces. Since the proponent did not evaluate the site planning implications of reducing parking, it is unclear to what degree the project footprint could be reduced by reducing parking on the site. The Secretary should require the proponent to show these implications in the Final EIR. The proponent should also show the options for

locating different parking, as the Secretary required in the Certificate. For example, are there options for locating some parking across the street?

The proponent did not conduct a baseline analysis based on a no-build scenario, particularly in terms of wildlife habitat, nor did the proponent compare the impacts to the preferred alternative. It is not possible to compare the impacts of the preferred alternative to a no-build baseline analysis.

### Transportation Demand Management

The DEIR states that the proponent is committed to the development of a comprehensive transportation mitigation plan that is designed to reduce single occupant vehicle (SOV) travel to the project site and encourage alternative modes of transportation. The City supports and encourages this goal. However, the proposal to provide parking for 100 percent of the site's employees and visitors seriously undermines the proponent's commitment to a meaningful transportation mitigation program. Constrained parking supply is a key component of reducing the likelihood of employees choosing SOV as their commute mode. The provision of ample low-cost or free parking is known to encourage SOV commuting, even when incentives for non-SOV use are in place.

- Given the project site's proximity to the MBTA Alewife Station and to regional bicycle paths (e.g., Minuteman Bike Path), the City believes the proponent should be able to achieve, at a minimum, a SOV mode split of 60 percent. This expectation is based on the Journey to Work census data for the area and the experiences of nearby businesses.
- If the proponent proceeds to construct 793 parking spaces, any efforts made to increase non-SOV travel to the site will be negated. The City believes that the parking supply should be reduced by at least 286 spaces to a total of no more than 507 spaces (based on 245,000 square feet x 3 employees per 1000 s.f. x 0.59 SOV mode split x 1.17 adjustment factor for visitor and HOV trips).
- While the proposal is to construct 61 of these spaces only if a potential tenant documents demand, this does not go far enough. Allowing for this possibility will create strong pressure to provide additional parking in order to secure lease agreements and little incentive from either the tenant or property owner to minimize single occupant vehicle travel. Moreover, even if the 61 spaces are never built, it is very likely that there will still be a significant oversupply of parking.

The DEIR includes an extensive list of TDM commitments that will be implemented as a part of the development. Some of the details of these commitments need to be further enumerated (i.e., what percentage of MBTA passes will be subsidized for full-time employees?). However, the TDM program

as outlined represents a good first effort at planning for encouraging multi-modal commuting to the site.

However, there is no provision for monitoring the success of these programs or for seeking to achieve a particular goal. It is the City's experience that this type of accountability is important in ensuring that TDM programs are implemented vigorously over time and that traffic impacts on neighbors are kept to a minimum. Again, the City recommends that a 60% single occupant vehicle commute mode share be made an explicit goal for this project and that annual monitoring be undertaken to ensure that this goal is being met. If it is not, the proponent should implement additional reasonable TDM measures to try to reduce the traffic impact, rather than initially responding by adding parking.

### Traffic

Regarding mitigation of traffic impacts:

- Improvements to pedestrian and bicycle access to the Alewife Station and the Minuteman Bikeway from the project site were not evaluated by the proponent. The existing facilities are poor, deteriorated or nonexistent. Access by alternative modes is an essential part of reducing traffic and air pollution. First, the plans provide no sidewalk or crosswalk connection from the Acorn Park sidewalk to the building's front door. The proponent also should be expected to install any needed sidewalk improvements along Concord Turnpike towards the Alewife MBTA station where MAAB guidelines are not met or where surface materials have deteriorated. Improved pedestrian and bicycle amenities along Acorn Park Drive should be installed as well, including – at the very least – new pavement markings to delineate a shoulder with maximum 11-foot travel lanes the length of this local-access roadway, plus bicycle symbols in the travel lanes to indicate shared use. The proposed 4-foot shoulder near Frontage Road should not be only on the west side as proposed, as bicycles must travel directionally like vehicles. Finally, clear signing for visitors arriving by transit should be provided from the Alewife MBTA station along the West Boulevard and Concord Turnpike sidewalks.
- While the provision of secure bicycle parking is appropriate, the quantity of proposed spaces (20) will not begin to accommodate the potential demand demonstrated in the adjacent Alewife census tract or by nearby Cambridge businesses. At least one bicycle parking space per 10 automobile spaces should be provided on the site. Secure bicycle parking spaces should be provided with a majority covered and appropriate for commuter use. In addition, the proponent should provide adequate changing and showering facilities for bicycle commuters.

- The City welcomes the changes to the Frontage Road intersection with Acorn Park Drive and Route 2, but certain elements should be modified. The right-turn ramps from Frontage Road to Acorn Park Drive and from Acorn Park Drive to Frontage Road encourage high speeds at the approaches to a signalized intersection, threatening pedestrians and increasing the chances of angular vehicle crashes. These ramps are unnecessary and should be eliminated in favor of traditional approaches. In addition, all crosswalks at this intersection should utilize highly-visible zebra-style or “international” crossbars to improve the visibility of pedestrians in an environment that is close to a major high-speed roadway. Finally, the use of concurrent pedestrian signal phasing as opposed to exclusive push-button activation will encourage greater pedestrian compliance, as well as ensuring regular “walk” indications. This phase can be accommodated during the Frontage Road phase.

### Wetlands

Broadly speaking, there are two areas of concern to the Cambridge Conservation Commission:

1. Potential negative impacts to the adjacent resource areas under the jurisdiction of the Cambridge Conservation Commission, including but not limited to the neighboring Little River and associated wetlands within the 100' buffer zone;
2. Potential negative impacts to the downstream resources under the jurisdiction of the Cambridge Conservation Commission, including but not limited to the Alewife Brook and the Alewife Reservation.

#### *Potential Negative Impacts to Adjacent Resource Areas Subject to Protection under the Wetlands Protection Act (WPA)*

Although most of this 16 acre site lies in the Town of Belmont, its southeastern corner lies within the city boundary of Cambridge. In addition, the remaining eastern property line of the parcel abuts the Cambridge city line. The portion of the site that lies in Cambridge is roughly 1.5 acres. This area abuts the Little River, and we know from our own familiarity with the area that the following resource areas protected under the WPA lie within the site: land under water (Little River), riverfront area, land subject to flooding (100-year floodplain), inland bank, bordering vegetated wetland, and buffer zones to the two latter areas.

We understand that most of the development will occur in Belmont. However, the DEIR describes some portions of work within Cambridge, including a new trail to provide access to open space, a new parking area to serve the proposed trail, sidewalk improvements on Acorn Park Drive, and possibly sewer and water mains. While the proponent has delineated the wetland resource areas, a

request has not been submitted to the Cambridge Conservation Commission for verification of the delineation within the city. Therefore, the delineation is still subject to review and approval by the Commission.

The Commission will review the portions of the work that will occur within Cambridge. When the Notice of Intent for the portions of the primary project are submitted to the Belmont Conservation Commission, the Cambridge Conservation Commission would like to be notified so that it may submit comments for consideration.

Potential direct impacts include impairment of water quality, wildlife habitat, endangered species habitat, and flood control. According to the DEIR, the watershed contributing to the adjacent Cambridge resource area is Basin 3 as shown on Figure 5.3-1 and 5.3-3. As a result of the proposed development the basin is expected to decrease in size from 2.42 acres to 1.77 acres. The loss of land contribution is a dense area of silver maples proposed to be converted to impervious area.

The drainage analysis was provided in Appendix D; however, the calculations provided are incomplete. Specifically, the proposed development does not include a watershed routing diagram or the peak discharge for all watershed sub-catchments. This information must be provided for adequate comparison of pre-construction and post-construction drainage.

*Potential Negative Impacts to Downstream Resource Areas Subject to Protection under the Wetlands Protection Act (WPA)*

In addition to reviewing the direct impacts of the proposed development on the resource areas that lie within the Cambridge portion of the site, the Conservation Commission is also concerned about the potential impacts of the development on protected resource areas downstream of the site. The downstream areas include the Little River and Alewife Brook, the portions of Alewife Reservation and Alewife Brook Parkway that lie in Cambridge, and the wetland complex that abuts the site to the east. This latter wetland complex is commonly referred to as the "ADL [Arthur D. Little] Wetland."

These areas contain the full array of protected wetland resource areas, namely land under water (Little River, Alewife Brook, and open water wetland in the ADL wetland), riverfront area, inland bank, bordering vegetated wetland, and land subject to flooding (100-year floodplain).

Potential direct and indirect (downstream) impacts to these resource areas include:

- Impairment of water quality from overland stormwater runoff, discharges of stormwater from point sources, and increased volume and frequency of combined sewer overflows into Little River and Alewife Brook. Stormwater and CSO discharges may introduce sediment, nutrients, pesticides, herbicides, pathogens, road salt, oil and grease, and debris into the water. Any impairment of water quality may negatively impact resident and anadromous fish species that use Little River and Alewife Brook. Two species of anadromous fish, namely alewife and blueback herring, are known to use Alewife Brook and Little River for spawning.
- Impairment of aquatic and terrestrial wildlife habitat. Aquatic habitat may be impaired by decreased water quality. Terrestrial wildlife habitat “downstream” may also be significantly impaired by loss of habitat on the site. Currently the undeveloped site is home to fifteen species of mammals, including two species for which the site is a protected refuge, namely eastern coyote and white-tailed deer (see recent Wildlife Inventory by David Brown and Inventory of Resources at Alewife Reservation and Alewife Brook Parkway by the Metropolitan District Commission). In addition, the site provides a continual population of several species of small mammals that can continually recolonize the south bank of the Little River. Finally, the Alewife Reservation and contiguous natural areas, including the Belmont Uplands and nearby Fresh Pond, is a significant migratory bird stopover location.
- Impairment of biological diversity: The Belmont Uplands site contains approximately seven acres of forested upland habitat, a habitat type not otherwise present in the Alewife Reservation. Because the site is contiguous with the reservation, it functions ecologically as part of the reservation, and increases the overall habitat and species biodiversity found within this natural area. Loss of the Belmont Uplands will further fragment the remaining relict ecosystem of the once “Great Swamp” that stretched from Fresh Pond to the Mystic River.
- Impairment of endangered species habitat: Although the Massachusetts Natural Heritage and Endangered Species Program does not have official records of rare, endangered, or special concern species using the site, veteran birdwatchers have observed that a number of protected bird species use the Alewife area. These include Bald Eagle, Peregrine Falcon, Cooper’s Hawk, Sharp-shinned Hawk, Pied-billed Grebe, American Bittern, Least Bittern, Blackpoll Warbler, Northern Parula, Grasshopper Sparrow, and Vesper Sparrow.
- Construction impacts: In addition to potential permanent impacts to protected resource areas and valued ecological functions, construction may result in temporary impacts. Therefore the Conservation Commission

also needs to review the construction plan and ensure that construction-related impacts are avoided, minimized, or mitigated.

### Open Space

According to the Executive Office of Environmental Affairs' BioMap, the area comprised of Fresh Pond, Alewife, and Mystic River is the largest contiguous open area in the Boston Basin (between Middlesex Fells to the north and Blue Hills to the south). The land mass of the Alewife Reservation and Alewife Brook Parkway is more than doubled in size when joined with adjacent natural areas as well as abutting undeveloped properties including the Belmont Uplands.

Specifically, there is a unique opportunity in this area to link the natural areas and undeveloped properties in an urban context to provide a gateway from the Charles River to the Mystic River. The Belmont Uplands (the subject property) are strategically located in the center of this opportunity. Development of this property to the extent proposed in the DEIR not only jeopardizes the existing natural habitats but also the potential to secure valuable open space for the future.

### Infrastructure

#### *Water*

The DEIR states that the water supply will enter the project site from Acorn Park Drive. Under the assumption that the City of Cambridge is supplying water for this project, the proponent should be aware that the Cambridge water infrastructure in this area is in poor condition and as such may require extensive improvement (e.g. replacement of several hundred feet of water main) before a connection to the project can feasibly be made. In the event that a request is made to Cambridge to supply water to the project, the proponent would be required to conduct a detailed analysis, including hydraulic modeling as appropriate, of the area infrastructure, with the methodology and results coordinated with the Water Department.

#### *Sewer Service and Connections*

The City of Cambridge Department of Public Works has met on two occasions at the invitation of Belmont town officials with Rizzo Associates who represented the Development Company, O' Neill Properties, in these discussions. The purpose of these meetings was to discuss the viability of connecting the proposed development's sanitary discharge into the City of Cambridge sewer system on Acorn Park.



At present there exists a City of Cambridge 10" sewer pipe that conveys flows in a westward direction to a pump station located on the northern bank of the Little River at the Acorn Park Office site. This pump station discharges flows under the Little River to the MWRA owned Belmont Branch Sewer which then connects into MWRA 48" line that serves the northwestern area of the City of Cambridge. There are 8 CSOs on or beside the MWRA interceptors as they convey flow along the Alewife Brook between Cambridge and Somerville. The City of Cambridge is presently working with the MWRA on a program to reduce by 84% the CSO activations along this corridor.

Typically, in instances where a development is proposing a connection into our sanitary systems we look at the project in a holistic way so that we can fully assess the benefit or detriment to our systems with regard to service levels and combined sewer overflow (CSO) volumes and activations. In Cambridge there is sufficient dry weather capacity so as not to cause sanitary sewer overflows (SSOs). The introduction of the proposed flows by this project will not cause any SSOs. Our concern is whether the proposal will increase the volume or number of CSO activations. Typically in the City of Cambridge the majority of our projects are redevelopment projects where both storm and sanitary flows collectively can impact CSO volumes and activations. Our policy in these instances has been that the developer must significantly reduce the storm water discharge to the combined sewer system through storage and/or infiltration. This practice usually has a significant positive impact on CSOs. If there is a level of service impact on the sanitary system the developer will also be required to remove inflow from the sanitary system or store and then pump sanitary waste during off-peak conditions into our sewer system.

The infrastructure circumstances for this project are different. This is not a redevelopment project with an existing storm service connection into the Cambridge system. Storm drainage will be handled by a series of swales, overland flows and infiltration/detention systems that discharge to the Little River. Thus there is no potential reduction in storm flows from this project to the combined sewer system that will have a beneficial impact on CSOs to the Alewife Brook. Rather, the sanitary flows to Cambridge must be fully mitigated so there is no increase in CSO activations as a result of this project. At this point we have had no detailed discussions with the developer regarding the required mitigation for a sewer connection into Cambridge. The proposed contribution for mitigation to Belmont is insufficient as mitigation if they propose discharging sanitary flow into the Cambridge system.

It is unclear as to whether the proposed force main will be within the public right of way or will be on private property as it abuts the public right of way. This needs to be clarified. It would be preferable to design the force main to be as short as possible. The project proponent should investigate how far the existing gravity sewer line can be extended before they have to use pressure pipe.

### *Stormwater Management*

The City of Cambridge Department of Public Works requests that the developer demonstrate through simulation that floodwater from the Little River has access to the proposed detention and infiltration facilities as efficiently as floodwater today has access to the existing 100 year floodplain in the same area.

### Sustainable Design

The proponent was responsive to the Secretary's Certificate regarding the consideration of sustainable design measures. We would like to emphasize that it is important for the proponent to integrate the consideration of these measures into the design process and that a process be established from the beginning that includes the architect, engineer, and client as well as the occupants and maintenance personnel where possible. Applying for official LEED certification is less important than conducting a design process that effectively integrates sustainable design goals. The proponent should consider working with the Green Roundtable, the regional affiliate of the U.S. Green Building Council, if guidance is needed on conducting such a process.