## Commonwealth of Massachusetts

NF

Executive Office of Environmental Affairs 
MEPA Office

## Environmental Notification Form

| For Office Use Only                      |    |
|--|----|
| Executive Office of Environmental Affait | rs |

EOEA No.: 14431 MEPA Analyst: Pick Bource Phone: 617-626- 1130

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

| Project Name: Alewife Brook Greenway  |  |             |                 |  |
|---|--|-------------|-----------------|--|
| Street: Alewife Parkway and Local Streets   |  |             |                 |  |
| Municipality: Cambridge, Somerville, Arlington   Watershed: Mystic River Watershed    |  |             |                 |  |
| Universal Transverse Mercator Coordinates:  | nsverse Mercator Coordinates: Latitude: 42°24'15.52" N |             |                 |  |
| 4696874.98m Northing / 324342.13m Easting   | Longitude:71°08'04.35" W                               |             |                 |  |
| Estimated commencement date: Fall 2009  | Estimated completion date: 2010                        |             |                 |  |
| Approximate cost: Three (3) Million Dollars   | Status of project design: 75% complete                 |             |                 |  |
| Proponent: Department of Conservation and Recreation                                  |  |             |                 |  |
| Street: 251 Causeway Street, Suite 600, 7th Floor                                     |  |             |                 |  |
| Municipality: Boston  | State: MA  | Zip Code:   | 02114-2104      |  |
| Name of Contact Person From Whom Copies of this ENF May Be Obtained:<br>Jason Lederer |  |             |                 |  |
| Firm/Agency: The Bioengineering Group, Inc. Street: 18 Commercial Street              |  |             |                 |  |
| Municipality: Salem   | State: MA  | Zip Code:   | 01970           |  |
| Phone: 978-740-0096 X522 Fax: 978-740-  | 0097   E-mail: jl                                      | ederer@bioe | engineering.com |  |

| Does this project meet or exceed a mandatory E     | EIR threshold (see 301 CMR 11.03)? |     |
|--|------------------------------------|-----|
|  | ]Yes                               | ⊠No |
| Has this project been filed with MEPA before?      |                                    |     |
|  | ]Yes (EOEA No)                     | ⊠No |
| Has any project on this site been filed with MEP   | A before?                          |     |
|  | ]Yes (EOEA No)                     | ⊠No |
| Is this an Expanded ENF (see 301 CMR 11.05(7)) req | uesting:                           |     |
| a Single EIR? (see 301 CMR 11.06(8))               | ∐Yes                               | ⊠No |
| a Special Review Procedure? (see 301CMR 11.09)     | □Yes                               | ⊠No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11)     | □Yes                               | ⊠No |
| a Phase I Waiver? (see 301 CMR 11.11)              | ☐Yes                               | ⊠No |

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): <u>N/A - no land transfers, Entire project within Department of Conservation and Recreation land.</u>

Are you requesting coordinated review with any other federal, state, regional, or local agency?

List Local or Federal Permits and Approvals:

## MA DEP#: 91-200 (Arlington), MA DEP#: 123-0221 (Cambridge), MA DEP#: 287-0027(Somerville) MA DEP Order of Conditions from Conservation Commission;

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

| Land<br>Water<br>Energy<br>ACEC                                      | <ul> <li>Rare Speci</li> <li>Wastewate</li> <li>Air</li> <li>Regulations</li> </ul> | r 🗌         | Transportat<br>Solid & Haz | /aterways, & Tidelands<br>ion<br>ardous Waste<br>Archaeological |  |
|--|---|-------------|----------------------------|---|--|
| Summary of Project Size  | Existing  | Change      | Total                      | State Permits &   |  |
| & Environmental Impacts  |   |             |                            | Approvals   |  |
|  | LAND  |             |                            | Order of Conditions   |  |
| Total site acreage   | 15.74 AC±   |             |                            | Superseding Order of<br>Conditions                              |  |
| New acres of land altered  |   |             |                            | Chapter 91 License  |  |
| Acres of impervious area   | 0.61AC±   | 1.49AC±     | 2.1 AC±                    | 401 Water Quality<br>Certification                              |  |
| Square feet of new bordering vegetated wetlands alteration           |   | NA          |                            | MHD or MDC Access<br>Permit                                     |  |
| Square feet of new other wetland alteration                          |   | 89,975 ft²± |                            | Water Management Act Permit New Source Approval                 |  |
| Acres of new non-water<br>dependent use of tidelands or<br>waterways |   | 0           |                            | DEP or MWRA<br>Sewer Connection/<br>Extension Permit            |  |
| STR  | UCTURES   |             |                            | Other Permits   |  |
| Gross square footage   | N/A   | N/A         | N/A                        | ( <i>including Legislative</i><br>Approvals) – Specify:         |  |
| Number of housing units  | N/A   | N/A         | N/A                        | · · · · · · · · · · · · · · · · · · ·                           |  |
| Maximum height (in feet)   | N/A   | N/A         | N/A                        |   |  |
| TRANS  | PORTATION   |             |                            |   |  |
| Vehicle trips per day  | N/A   | N/A         | N/A                        |   |  |
| Parking spaces   | N/A   | N/A         | N/A                        |   |  |
| WATER/\  | WATER/WASTEWATER  |             |                            |   |  |
| Gallons/day (GPD) of water use                                       | N/A   | N/A         | N/A                        |   |  |
| GPD water withdrawal   | N/A   | N/A         | N/A                        |   |  |
| GPD wastewater generation/<br>treatment                              | N/A   | N/A         | N/A                        |   |  |
| Length of water/sewer mains (in miles)                               | N/A   | N/A         | N/A                        |   |  |

**<u>CONSERVATION LAND</u>**: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

□Yes (Specify\_\_\_\_\_) ⊠No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation

restriction, or watershed preservation restriction?

\_\_\_\_\_) 🖾No Yes (Specify

| RARE SPECIES: Does the project site inc                |                               | of Rare Species, Ver   | nal Pools, Priority         |
|--|-------------------------------|------------------------|-----------------------------|
| Sites of Rare Species, or Exemplary Natur Yes (Specify |                               | ⊠No                    |                             |
| HISTORICAL /ARCHAEOLOGICAL RESO                        | <b>DURCES</b> : Does the proj | ect site include any s | structure, site or district |
| listed in the State Register of Historic Place         | e or the inventory of Hist    | toric and Archaeolog   | ical Assets of the          |
| Commonwealth?  |                               | -                      |                             |
| Yes (Specify   | )                             | No                     |                             |
| If yes, does the project involve any demolit           | tion or destruction of any    | /listed or inventoried | I historic or               |
| archaeological resources?                              | •                             |                        |                             |
| Yes (Specify   | )                             | No                     |                             |

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify )

No

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

Introduction and Project Site Description: The Alewife Brook Reservation is managed by the Massachusetts Department Conservation Recreation (DCR). The Reservation lies downstream of the Massachusetts Bay Transit Authority (MBTA) Alewife Station, from where the Brook flows under MA Route 2 to its confluence with the Mystic River (Figure 1). The Reservation is bordered to the east by the Alewife Brook Parkway (MA Route 16) and to the west by a series of residential neighborhoods. Work as proposed would occur within the municipalities of Cambridge, Somerville and Arlington.

The Reservation and Parkway are part of the Metropolitan Park System, the first regional park system established in the United States. Established in 1893, the system today comprises almost 20,000 acres of woodland, rivers, coastline, wetlands and urban parklands. Over the last century, population pressures on Alewife Brook and the Reservation have increased. Water guality is degraded by untreated stormwater from its 9-square mile watershed including municipal sewer overflow at various locations in the project area.

In response to these pressures, Alewife Brook has been the center of a number of restoration studies. In October of 2000, the Friends of the Alewife Reservation released the findings and recommendations from a study of the Brook and the Little River. In 2004, the MA DCR released a Master Plan for the Reservation, which can be found on their internet website or on the enclosed CD (Appendix A). The Plan takes into account all of the ecological and social attributes of the Reservation and identifies improvement alternatives for Alewife Brook. Under existing conditions, the site lacks a coherent unified system to accommodate safe and effective recreational use and passage.

The project as proposed would provide greenway corridor improvements that include: restoration of the severely degraded riverfront area and urban forest within the three municipalities, improved recreational access through a series of new boardwalk and stabilized aggregate pathways and restored and improved asphalt pathways, improved traffic and pedestrian safety features, restored and new wood and steel guardrail and signage. In addition, the design proposes numerous of landscape applications including enlarged and restored wetlands, vegetated low impact development stormwater best management practices (LID/BMPs) designed to capture and infiltrate stormwater control and a variety of other treatments designed to encourage biodiversity and enhancement of the ecological and recreational value of the riparian corridor. Such LID stormwater and landscaping strategies will have a direct positive effect on improving the water quality of the Alewife Brook.

Alternative 1: No Action - A no-action scenario would allow the riparian corridor to remain in its current degraded condition. No ecosystem-appropriate native species would be installed to enhance the ecological exchange and the recreational value of the site would remain poor. Stormwater management would not be improved. Disconnected pedestrian access would remain unchanged and deterioration of existing facilities would continue indefinitely into an unsafe/unusable manner. Because this alternative is not in the best interest of the applicant's mission to protect public trust resources within its jurisdiction and use of the Alewife Brook Greenway is anticipated to increase in the immediate future, this alternative was dismissed.

Alternative 2: New Path Alignment Directly Adjacent to Alewife Brook - Installation of a hard-paved path with a new alignment immediately adjacent to both sides of the Alewife Brook would further increase the visibility and access to the Alewife Brook, however would also subject the adjacent resource areas (i.e. Riverfront, BLSF, Inland Bank) to unnecessary impact. Under this Alternative, nearly the entire length of the pathway would run through the Riverfront and Floodplain and have a maximum potential impact on resource area. Such a path alignment would also sacrifice opportunities for improved stormwater control with LID/BMPs and severely limit opportunities to improve and restore habitat and water quality.

Preferred Alternative 3: Strategic Path Design and Alignment, Forest Restoration, LID/BMP Stormwater - The selected alternative proposes an alignment that compliments the natural site topography avoids resource areas (i.e., wetlands, floodplain, Riverfront Area, bank) and existing trees to the maximum extent possible, provides maximum opportunity to restore the riparian forest, and provides the greatest opportunities for reducing existing site stormwater runoff existing with LID/BMPs The chosen alignment also limits disturbance to abutting residential property. The western path is a comprised of boardwalk and stabilized aggregate and targets passive recreational users (e.g., nature walkers, birders, etc.), which complements the natural elements of a restored native riparian forest. The eastern path is paved with bituminous concrete and is designed to target active recreational users (e.g., in-line skaters, bicyclists, etc.), complimenting the more urban setting. Ecosystem restoration will include extensive invasive plant removal, reforestation with a native plant palette, and removal of several hundred linear feet of chain link fence. Combined, these design elements will significantly improve onsite biodiversity by nurturing existing onsite flora and fauna, providing habitat for new species and improving migratory habitat and passage between Alewife Reservation and the Mystic River. Recreational access will be substantially improved with safe access locations that avoid impact to ecologically sensitive areas, provide access for elderly and disabled users, and promote connectivity with the natural environment. Finally, site stormwater improvements will help to reduce quantity and improve quality of stormwater entering Alewife Brook daily through strategic selection design, placement and installation of LID/BMPs.

**Potential on-site and off-site mitigation measures for each alternative -** A comprehensive site preparation and erosion and sediment control plan was developed to protect resource areas during the process of construction. The cornerstone of this plan is a detailed construction phasing sequence designed to limit the duration of destabilized soil exposure. Filter socks are proposed for perimeter (limit of work) control and will be installed to prevent offsite sedimentation towards resource areas and catch basins. The proposed construction staging and soil stockpile area will be sited to the north outside of the floodplain and Buffer Zone. Filter sock perimeter control will be placed around construction staging and soil stockpile areas to avoid offsite sedimentation. Compost filter socks will be used as inlet protection and will be installed around numerous catch basins immediately adjacent to or within the project area.

This project has received Orders of Conditions from the Cambridge, Arlington and Somerville Conservation Commissions thereby demonstrating compliance with the Wetlands Protection Act and associated regulations. Appendix A (enclosed CD) contains the full NOI submittal packages. All floodplain fill associated with this project is mitigated for in accordance with 310 CMR 10.57(4) and exceeds MassDEP performance standards by compensating at a ratio of >2:1 (see Appendix B for floodplain mitigation figures; figures are also included on the CD in Appendix A).

Also included with this submittal is a table (Table 1) summarizing the permanent impact to and restoration footprint of work associated with the proposed project to Riverfront Area. Permanent impacts include, grading associated with LID/BMP design and path design, chain link fence removal, new pathway surface and boardwalk footings, and new fence and guardrail footings. Restoration work includes native groundcover, tree and shrub planting and invasive species removal.