

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOEA No.: 13046
 MEPA Analyst: Deirdre Buckley
 Phone: 617-626-1044

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: Town of Winchester Flood Control		
Street: Various Locations throughout the Town of Winchester		
Municipality: Winchester	Watershed: Boston Harbor	
Universal Transverse Mercator Coordinates: Various	Latitude: Various	Longitude: Various
Estimated commencement date: 2003	Estimated completion date: 2006	
Approximate cost: \$13,098,000	Status of project design:	10 %complete
Proponent: The Town of Winchester, Massachusetts		
Street: Various Streets throughout the Town along the Aberjona River		
Municipality: Winchester	State: MA	Zip Code: 01890
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Philip C. Kennedy, Vice President		
Firm/Agency: Camp Dresser & McKee Inc.	Street: 50 Hampshire Street	
Municipality: Cambridge	State: MA	Zip Code: 02139
Phone: 617/452-6000	Fax: 617/452-8000	E-mail: kennedypc@cdm.com

- Does this project meet or exceed a mandatory 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 MEPA before?
 Yes (EOEA No. _____) No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- 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):
Not applicable.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify _____) No

List Local or Federal Permits and Approvals:
Wetlands Protection Act Order of Conditions; Army Corps of Engineers Section 404 Approval

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

- | | | |
|---------------------------------|---------------------------------------|--|
| <input type="checkbox"/> Land | <input type="checkbox"/> Rare Species | <input checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input type="checkbox"/> Water | <input type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Air | <input type="checkbox"/> Solid & Hazardous Waste |
| <input type="checkbox"/> ACEC | <input type="checkbox"/> Regulations | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input checked="" type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i> Notification for work adjacent to railroad property (MBTA).
Total site acreage ¹	18.22			
New acres of land altered		5-10		
Acres of impervious area	Not Applicable (NA)	NA	NA	
Square feet of new bordering vegetated wetlands alteration		50,750 (2,046 for Phase I)		
Square feet of new other wetland alteration		110,000 (2,350 for Phase I)		
Acres of new non-water dependent use of tidelands or waterways		NA		
STRUCTURES				
Gross square footage	NA	NA	NA	
Number of housing units	NA	NA	NA	
Maximum height (in feet)	NA	NA	NA	
TRANSPORTATION				
Vehicle trips per day	NA	NA	NA	
Parking spaces	NA	NA	NA	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	NA	NA	NA	
GPD water withdrawal	NA	NA	NA	
GPD wastewater generation/ treatment	NA	NA	NA	
Length of water/sewer mains (in miles)	NA	NA	NA	

¹ Total site acreage calculated by multiplying the length of the river between the northernmost and southernmost projects and multiplying by an estimated width of 40 feet. Not all 18.22 acres will be altered as a result of this project.

CONSERVATION LAND: 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?

The project will involve work on Parkland, but it will not change the use of the land.

Yes (Specify _____) No

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

Yes (Specify _____) No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify _____) No

A letter requesting information was sent to the Natural Heritage and Endangered Species Program (NHESP) on February 26, 2003. A review of the Massachusetts Natural Heritage Atlas 2000-2001 Edition, Lexington Quad, indicated no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife and Certified Vernal Pools in the proposed project areas along the Aberjona River. The NHESP anticipates no adverse impacts to state-protected rare wildlife or plants as a result of this project (see attached correspondence). The NHESP requests that Best Management Practices (BMPs) are used for erosion and sedimentation control; that culverts be placed so as not to impede upstream fish movement; and that the existing grade of the streambed be maintained.

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes (Specify Mount Vernon Street Bridge listed in National Register of Historic Places) No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify _____) No

According to a letter dated April 2, 2003 from the Massachusetts Historical Commission (MHC) the Mount Vernon Street Bridge is listed in the National Register of Historic Places as a contributing element of the Winchester Center Historic District. The MHC has requested that current, original photographs be sent in for MHC's review, as well as plans for removal and replacement of the bridge. CDM will compile photographs and prepare plans for MHC and forward them for review as soon as they are available. The MHC has determined that the other 14 individual projects comprising the Aberjona River Flood Improvements Program are unlikely to affect significant historical or archaeological resources. MHC requests additional information on Phase 2 and 3 projects as details become available. Please refer to Attachment B Agency Correspondence to review the letter in full.

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.*)

(A) Project Site: As depicted in Figure 1, Project Location Map, the 15 individual flood improvement projects that comprise the Program are located at various points along the Aberjona River between Washington Street and Bacon Street in Winchester, Massachusetts. A more detailed location map depicting the location of each of the 15 projects is provided in the ENF. The projects include channel widening, replacing existing bridge opening structures, and relief culvert installation to facilitate flow along the Aberjona River.

(B) Project Alternatives: While the No Action Alternative is an option, leaving conditions as they are is clearly not in the best interest of the Town. In addition, the No Action Alternative does not protect the health, safety, and property value of residents and businesses along the Aberjona River. Many of the homes and businesses along the river are located at elevations low enough to subject them to severe and frequent flooding even during relatively minor storm events. The No Action Alternative is no longer being considered.

To avoid flooding in the Town of Winchester, water must either flow more quickly through the Aberjona River, or water must be stored upstream of the Town. Upon review of existing conditions, increased water storage in upstream communities within the river basin is not feasible. Dense development as well as political and permitting issues associated with upstream storage eliminated the Upstream Storage Alternative from consideration.

The Aberjona River Flood Improvements Program, is the strategy described in this ENF as the preferred alternative and includes a suite of projects to be implemented independently and as Town funds become available. While maximum flood relief will not be realized until all 15 projects are complete, each individual project will afford a certain degree of relief to the area local to construction, as well as upstream of the project location. This strategy works well for the Town, as funds are not readily available to take on the entire program at once, the Town can choose which projects it has funds to complete, and prioritize the implementation of the improvement projects according to resources, funding, and need.

(C) Impacts and Mitigation: This project will result in impacts, both temporary and permanent, to certain wetland resource areas including Inland Bank, Land Under Water, and Bordering Vegetated Wetlands, as well as temporary impacts to traffic flow in certain proposed project areas. Preliminary assessments of both impacts and proposed mitigation for each project is provided in the ENF. The major impact resulting from this project, and the reason for implementing the project, is the reduction in the severity and frequency of flooding along the Aberjona River through the Town of Winchester as described in the 1999 “Aberjona River Flood Study” (see Attachment F). Improving the river’s hydraulics by implementing the various projects comprising the Aberjona River Flood Improvements Program will protect the property value of residences and businesses along the river, particularly those in low-lying areas, by reducing, or even eliminating the flooding that occurs during even minor storm events. In addition, the improvements proposed for the river will provide the opportunity to make improvements to parks, open space, and various recreational areas, through the use of plantings and bioengineered banks and slopes along the river banks.

While the objective of the project is to facilitate river flow through the Town of Winchester, the potential impacts to downstream communities associated with this proposed work must be addressed. As hydraulic improvements along the Aberjona River in Winchester could result in increased flow through the Mystic River, the hydraulic relationships between the Aberjona River, the Mystic Lakes, and the Mystic River were evaluated. CDM concluded that the Mystic Lakes serve as a buffer between the Aberjona River and the Mystic River and furthermore, the Upper Mystic Lake Dam and Lower Mystic Lake control the flow to communities downstream of Winchester. The dam controls flow from the Aberjona River, to the Upper Mystic Lake, and further flow attenuation occurs in the Lower Mystic Lake, which discharges water to the Mystic River.

Additional hydraulic models were developed to determine the impact on the Mystic River of completing all of the proposed projects in Winchester along the Aberjona River. These models show that for the design storms used in the models, when the peak discharge in Winchester occurs, the increase in water level at the downstream indicator site is negligible. The flood elevation downstream occurs much earlier in the storm and is several feet higher than the conditions when the peak from Winchester occurs.