

**Commonwealth of Massachusetts**  
**Executive Office of Environmental**  
**Affairs ■ MEPA Office**

**ENF Environmental**  
**Notification Form**

*For Office Use Only*  
*Executive Office of Environmental Affairs*

EOEA No.: 14463  
 MEPA Analyst: Purvi Patel  
 Phone: 617-626-1029

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: River Road Bank Stabilization and Reconstruction, and Cobbler's Brook Culvert Replacement (Emergency Relief)		
Street: River Road		
Municipality: Merrimac	Watershed: Merrimack	
Universal Transverse Mercator Coordinates:	Latitude: 42°49'54" Longitude: 70°59'55"	
Estimated commencement date: July, 2010	Estimated completion date: October, 2010	
Approximate cost: \$600,000	Status of project design: 75% Complete	
Proponent: MassHighway and the Town of Merrimac		
Street: 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Gregory Dlubac		
Firm/Agency: MassHighway	Street: 10 Park Plaza	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: 617-973-8280	Fax: 617-9738879	E-mail: Gregory.Dlubac@mhhd.state.ma.us

- 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):

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 from the Merrimac Conservation Commission; Army Corps of Engineers Section 404 Programmatic General Permit; National Environmental Policy Act Categorical Exclusion Determination; Section 106 of the National Historic Preservation Act Review/Effect Finding.**

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

- Land
  Rare Species
  Wetlands, Waterways, & Tidelands: **301 CMR 11.03 (3)(b)1.f.**
- Water
  Wastewater
  Transportation
- Energy
  Air
  Solid & Hazardous Waste
- ACEC
  Regulations
  Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input 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 type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:
Total site acreage	1.2			
New acres of land altered		1.2		
Acres of impervious area	0.42	0	0.42	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		52,000 (Riverfront Area)		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	N/A	N/A	N/A	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
<b>TRANSPORTATION</b>				
Vehicle trips per day	Unknown	-0-	Unknown	
Parking spaces	N/A	N/A	N/A	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/ treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

**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?

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  No

**Estimated Habitat of Rare Species and Priority Habitat of Rare Species has been identified along the Merrimac River near the project site. However, the MA Division of Fisheries & Wildlife stated in a letter dated November 14, 2008 that “at this time the site is not mapped as Priority or Estimated Habitat and the Natural Heritage and Endangered Species Program does not have any rare species concerns associated with this site.” The MA Division of Fisheries & Wildlife has also indicated that Cobbler’s Brook is a coldwater resource, and that the project should not in any way diminish the ability of the brook to support coldwater fish species or the river to support anadromous species. Best management practices for erosion and sedimentation control must be adhered to for all phases of construction to minimize potential impacts to the fisheries resources.**

**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 \_\_\_\_\_ )  No

If yes, does the project involve any demolition or destruction of any listed or inventoried 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.)

**The Massachusetts Highway Department (MassHighway) and the Town of Merrimac propose to repair approximately 720 feet of River Road, including stabilizing the adjacent bank and replacing a portion of a structurally compromised bridge, in the Town of Merrimac. The project limits extend from the River Road Bridge over Cobbler’s Brook, near the intersection of River Road and Middle Road, to the intersection of River Road and Skunk Road.**

### **Purpose**

**The purpose of this project is to repair damaged portions of River Road and return the road to its pre-flood damage vehicular operation. During the spring of 2006, significant flood events caused portions of the embankment between River Road and the Merrimack River to erode, compromising the structural integrity of the roadway. A section of River Road between Bancroft Lane and Skunk Road has been closed to vehicular traffic since the floods, because of the road’s compromised integrity.**

The flood events also caused, or exacerbated, damage to the culvert carrying River Road over Cobbler's Brook. This bridge, listed by MassHighway as bridge number M-16-001, is located just west of the embankment failures and remains open to traffic. This project will also replace the damaged portion of the bridge structure.

*The project is being funded primarily by the Federal Highway Administration's Emergency Relief Program, and is being considered an emergency road repair. The scope of the project has been dictated by the Emergency Relief Program's requirements and limitations.*

### **Proposed Construction Activities**

Two independent sections of embankment failed and will be repaired as part of this project. The first section, located approximately 1,900 feet east of the intersection of River Road and Middle Road, contains approximately 50 linear feet of embankment and will be repaired by re-grading the slope and using an erosion control mat to prevent future erosion. Additionally, trees, shrubs, and grasses, will be planted along the slope to increase stability. The second section, located approximately 500 feet east of the first section, involves approximately 150 linear feet of embankment and will be stabilized with a buried, permanent steel sheeting wall. The sheeting will be vertically driven into the ground, replacing the wooden pilings that are currently present. The eastbound and westbound lanes will be repaved with Hot-Mixed Asphalt (HMA) overlay, except where wash-away has occurred. In these sections, there will be full-depth reconstruction to the eastbound travel lane. Additionally, the obsolete, damaged, steel-cable guardrail between the roadway and the top of the embankment will be replaced with a new, MassHighway standard steel w-beam guardrail. This will involve approximately 2,000 feet of guardrail replacement.

The existing bridge that carries River Road over Cobbler's Brook consists of two bridge structures. The westbound travel lane is carried by a stone-arch culvert, which was expanded to the south with the addition of an independent, corrugated pipe-arch on concrete strip footings. The concrete strip footings supporting the metal arch have settled due to scour most likely caused or exacerbated by the same flood events in 2006. The existing metal arch section of the culvert and its associated footings, headwall, and wingwalls will be replaced with a pre-cast concrete arch, cast-in-place headwall and wingwalls, and deeper concrete strip footings designed to resist scour. The stone-arch portion of the bridge, which does hold historic value, will not be disturbed and will be protected during construction.

### **Wetland Impacts**

Both the Merrimack River and Cobbler's Brook are classified by the Department of Environmental Protection as perennial streams. Work will occur within the 200' Riverfront Area and below the Mean High Water line at the culvert replacement site on Cobbler's Brook. Land Under Water will be disturbed as a result of demolition of the existing bridge and construction of the proposed foundations at Cobbler's Brook.

Work in the Riverfront Area at the embankment stabilization will include grading and the installation of an erosion control mat, installation of sheeting, replacement of obsolete

**guardrail, and full-depth pavement construction and pavement overlay. The construction of the stabilized slope will essentially replace the volume of the bank that eroded during the 2006 flood events; therefore there is no net loss of flood storage.**

**Work within the Riverfront Area at the bridge will consist of demolition to portions of the existing structure and replacement with a new structure that will be approximately the same size and in a similar alignment to the existing structure. Disturbance of Land Under Water will occur while removing the existing foundations, and while constructing the proposed components. All Land Under Water Impacts at Cobbler's Brook will be temporary in nature.**

**In accordance with the Massachusetts Environmental Policy Act (MEPA) regulations (in 301 CMR 11.03(3)(b)1.f.) an Environmental Notification Form (ENF) is required because the project involves the alteration of greater than one-half an acre of other wetlands.**