

*For Office Use Only*  
 Executive Office of Environmental Affairs  
 EOEA No.: 13559  
 MEPA Analyst: Aisling Eglinton  
 Phone: 617-626-1024

# ENF Environmental Notification Form

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: Muddy Pond Road over Stillwater River Bridge Replacement, Bridge No. S-25-008		
Street: Muddy Pond Road		
Municipality: Sterling	Watershed: Nashua	
Universal Transverse Mercator Coordinates: UTM 19 270331E 4699167N (NAD83)	Latitude: 42d-24m-39s N	Longitude: 71d-47m-28s W (NAD83)
Estimated commencement date: March 2006	Estimated completion date: June 2007	
Approximate cost: \$1,000,000	Status of project design:	90 %complete
Proponent: Department of Conservation & Recreation, Div. of Water Supply Protection		
Street: 180 Beaman Street		
Municipality: West Boylston	State: MA	Zip Code: 01583
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Vincent P. Vignaly, P.E.		
Firm/Agency: DCR	Street: 180 Beaman Street	
Municipality: West Boylston	State: MA	Zip Code: 01583
Phone: (508) 792-7423 x203	Fax: (508) 792-7805	E-mail: Vincent.Vignaly@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): 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 Notice of Intent filed in Sterling, MA; 401 Water Quality Certification filed with MA DEP.

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
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" 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 checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: Watershed Protection Act Exemption
Total site acreage	154			
New acres of land altered		0.05		
Acres of impervious area	0.51	0	0.51	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		135		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	-	-	-	
Number of housing units	-	-	-	
Maximum height (in feet)	-	-	-	
<b>TRANSPORTATION</b>				
Vehicle trips per day	2850	0	2850	
Parking spaces	0	0	0	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	-	-	-	
GPD water withdrawal	-	-	-	
GPD wastewater generation/treatment	-	-	-	
Length of water/sewer mains (in miles)	-	-	-	

**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 (Specify Triangle Floater, Wood Turtle )  No

**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

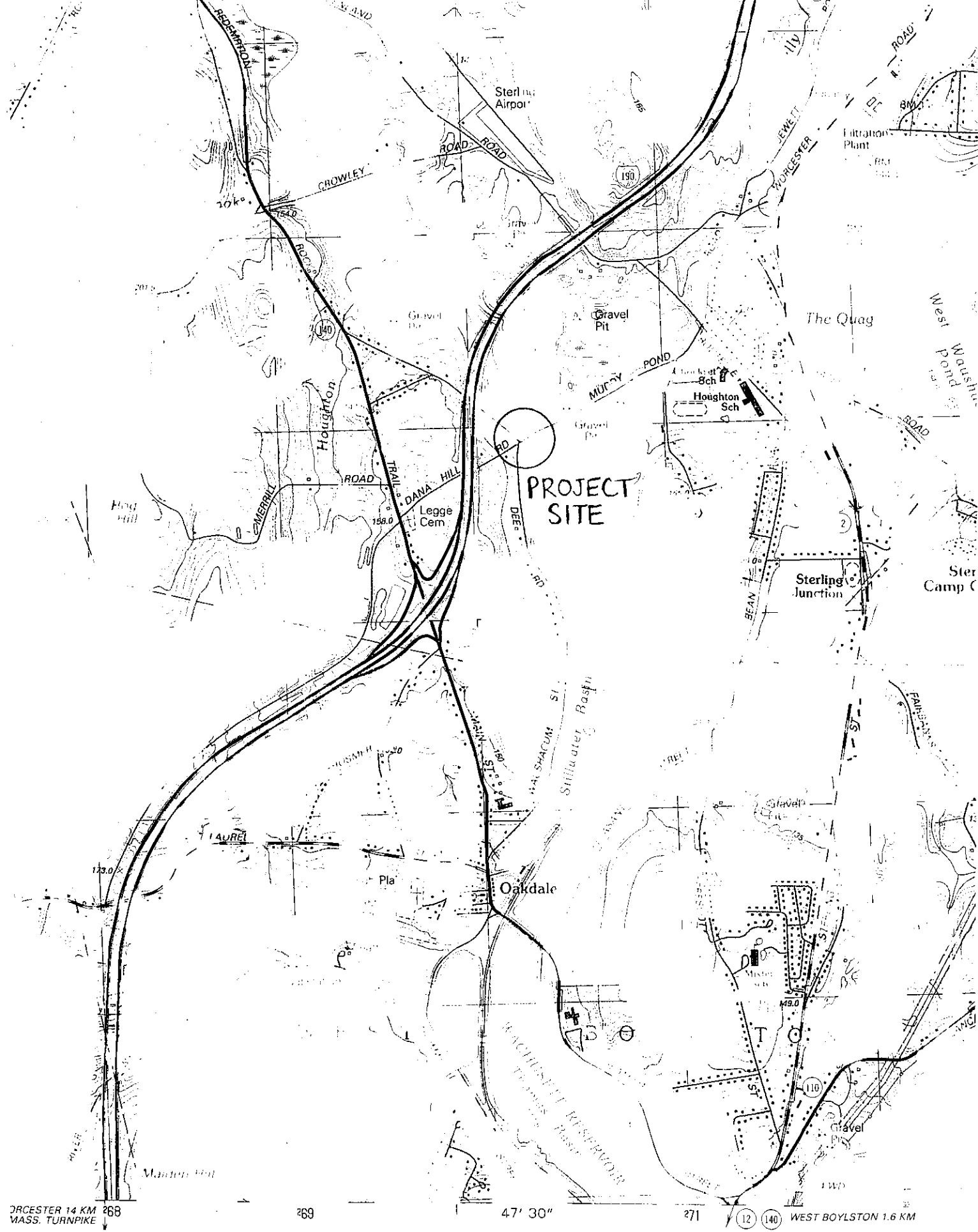
**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (*You may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

The proposed project includes replacement of the existing Muddy Pond Road Bridge over Stillwater River, existing roadway reconstruction, drainage improvements, and relocation/improvement of an existing U.S. Geological Survey (USGS) flow monitoring station currently mounted on the Muddy Pond Road bridge. The bridge replacement is proposed to improve safety and meet current Massachusetts Highway Department bridge standards. The bridge and roadway will retain their existing size and alignment, and the roadway drainage improvements will reduce the volume of untreated stormwater discharges to Stillwater River and wetland resources. See Figure 1 for project locus map.

Relocation of the existing USGS flow monitoring station is required before the bridge can be replaced. This monitoring station provides real-time data on Stillwater River depth, streamflow, water temperature, specific conductance, and precipitation (see website, [http://waterdata.usgs.gov/ma/nwis/uv/?site\\_no=01095220](http://waterdata.usgs.gov/ma/nwis/uv/?site_no=01095220)). The flow data are used as part of routine operations of the Wachusett Reservoir, including flood control and Massachusetts Water Resources Authority planning for water treatment operations, with a continuous data record starting in 1994. Flow measurements at the existing monitoring station are periodically subject to backwater effects from aquatic vegetation and beaver dams, resulting in inaccurate flow measurements with errors of 50 percent or more.

Proposed improvements to the flow monitoring station include installing a stone riffle approximately 20 feet downstream (south) of the Muddy Pond Road Bridge, which would establish a set elevation for stream depth, not influenced by aquatic vegetation or beaver dams. The riffle would be installed in Stillwater River using double-washed stone, individually hoisted and placed, to a maximum height of 30 inches above the streambed. No dredging or alteration of the existing streambed elevation is proposed, and the banks will be restored and stabilized after riffle installation. The riffle installation will be completed in two stages, to allow continuous river flow, with the work area contained within an impermeable polyethylene turbidity curtain. The entire installation is expected to take no longer than 4 days to complete. All in-stream work will be performed during low-flow conditions, when no rain is forecast for 5 days. See Figure 2 for proposed construction plan.

Since in-stream measurement is necessary for routine, accurate flow monitoring, off-site alternatives are not acceptable. Other on-site alternatives include constructing a control dam of a similar size as the stone riffle. However, the greater area of land and vegetation impacts, longer construction period, and increased costs required by the control dam alternative do not provide any additional benefit for flow monitoring. Routine clearing of aquatic vegetation and removal of beaver dams are not practicable for the level of accuracy and reliability improvements required for managing the public drinking water supply.



Sterling, MA, Quadrangle

FIGURE 1  
Locus Map  
Scale 1:25,000 (1 inch ~ 2083 feet)