

ENF Environmental Notification Form

For Office Use Only
 Executive Office of Energy & Environmental Affairs

EEA No.: *14725*
 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: Town Brook Enhancement Project		
Street: Between Parking Way and Revere Road		
Municipality: Quincy	Watershed: Boston Harbor	
Universal Transverse Mercator Coordinates: 4679165(N) – 334890(E)	Latitude: 42° 14' 50" N	
	Longitude: 71° 00' 05" W	
Estimated commencement date: May 2012	Estimated completion date: November 2012	
Approximate cost: \$11,000,000	Status of project design: 25%complete	
Proponent: City of Quincy – c/o Dennis Harrington – Planning Director		
Street: 1305 Hancock Street		
Municipality: Quincy	State: MA	Zip Code: 02169
Name of Contact Person From Whom Copies of this ENF May Be Obtained:		
Jon D. Stephenson, PE, LEED AP		
Firm/Agency: Stephenson Design Group	Street: 51 Sleeper Street – Suite 600	
Municipality: Boston	State: MA	Zip Code: 02210
Phone: 617-695-7795	Fax: 617-254-7721	E-mail: jstephenson@sdg-eng.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): **The City of Quincy is pursuing public financing to fund the construction of the Town Brook Enhancement Project. At the time of this filing the City has not secured funding from any state or federal agency for the construction. The City anticipates that some form of public financing will be identified and allocated by the end of 2011.**

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

List Local or Federal Permits and Approvals:

Federal:

U.S. Army Corps of Engineers – Section 404 General Permit – Category 2

U.S. Environmental Protection Agency – NPDES Construction General Permit

Commonwealth of Massachusetts:

Department of Environmental Protection – 401 Water Quality Certification

City of Quincy:

Quincy Conservation Commission – Order of Conditions

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 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 type="checkbox"/> Other Permits (including Legislative Approvals) – Specify: Chapter 3 of the ENF contains details of the wetland resource area impacts. *Net change proposed as part of Town Brook re-alignment upon project completion. See Ch. 3 for details for calculations of impacts.
Total site acreage	NA			
New acres of land altered		1.5+/-		
Acres of impervious area	NA	NA	NA	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		-640 LF Bank -2,650 SF LUWW*		
Acres of new non-water dependent use of tidelands or waterways		0		
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	

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 _____) 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 Quincy Center Historic District) 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.*)

(a) The City of Quincy is proposing to enhance and re-align a portion of Town Brook within Quincy Center. The proposed re-alignment will remove perennial stream flow from approximately 1,700 linear feet of existing culverted sections of the Brook through Quincy Center, which are aged and sections of which are structurally compromised.

The re-alignment will be made by connecting a new culvert to the existing culvert alignment upstream of Quincy Center and conveying the existing flow, from west to east, along the south side of the Concourse Roadway Improvement project, which is currently under construction. This will divert Town Brook flow through approximately 1,200 linear feet of 11' wide x 6' high closed and open channel/day-lit sections of culvert to the proposed connection point downstream of Quincy Center where it will rejoin the existing Town Brook alignment.

The existing and proposed Town Brook alignments run through the Quincy Center area, with the westerly boundary of the project area at the southwest intersection of the Concourse Roadway and Parkingway and the easterly boundary of the project area southeast of the intersection of Revere Road and Mechanic Street.

(b) The City has gone through an extensive process in order to evaluate and determine a preferred alignment for the Town Brook Enhancement Project. As part of the evaluation process the City involved qualified City staff, consultants, members of the development team, and members of the Quincy Environmental Network (QEN), a local environmental advocacy group, to solicit relevant input as to the appropriate alignment and design enhancements associated with the project.

As part of the evaluation process the City evaluated seven (7) potential alignments (A through G) as well as the No-Build alternative and an alternative to re-build the culvert along its current alignment, for a total of nine (9) alternatives. In order to evaluate each of the alternative alignments, the project team developed ten (10) evaluation criteria:

1. Flood Control
2. Underground Conflicts
3. Property Constraints (Property Control)
4. Open Channel/Public Amenity
5. Enhance Smelt Fisheries Habitat
6. Consistency with URDP
7. Construction Schedule & Phasing

8. Cost
9. Environmental Enhancements
10. Code Compliance

In order to determine the preferred alternative, the nine alternatives to be considered were evaluated using the ten metrics and ranked from 1 through 9 subjectively based on the how the alternatives met the metrics, with a ranking of 9 being the best alternative for that metric and 1 being the worst. For evaluation criteria which were either a "go" or "no-go", a rating of 9 was applied to the alternative to document compliance with the metric and 1 documenting non-compliance with the metric. This methodology is a variation of the "Electre Method" for evaluating alternatives. In this evaluation of alternatives all the evaluation criteria were weighted evenly, although the Electre method algorithm allows each evaluation metric to be weighted differently. The City determined that all metrics be weighted evenly.

Through this evaluation process, the preferred alignment was determined. A detailed summary of the alternatives analysis is found in Chapter 2.

(b) While the project will result in many benefits to Town Brook, the project will require construction activities within resource areas regulated by the Wetlands Protection Act to include: Land Under Water Bodies and Waterways (LUWW); Bordering Land Subject to Flooding (BLSF); Bank; Fish Run; and Riverfront Area (RA). The project area is outside of tidally influenced sections of Town Brook and not located within an Area of Critical Environmental Concern (ACEC) or Outstanding Resource Water (ORW). The Proponent has committed to a series of mitigation measures as part of the project which include the following:

- Increasing the extent of open channel/ day-lit sections in Town Brook, proposing 185 linear feet of open channel
- Riverfront Area enhancements – Active public open space adjacent to open channel sections of the Brook on City owned land
- Fish Run - rainbow smelt habitat enhancements
 - Design of culvert with low flow trapezoidal channel (coordinated with the DMF Centre Street Junction Box modifications to increase low base flow) to achieve a flow depth of at least 6 inches to 12 inches
 - Spawning substrate in low flow trapezoidal channel, proposed 6" diameter rounded stone substrate for smelt eggs to adhere to
 - Spawning riffles achieved by designing the culvert to achieve attraction velocities of between 1.6 and 3.2 feet per second during low base flow conditions
 - Smelt resting pools off-line and adjacent to spawning riffle sections (alternate in-line option is being reviewed)
 - Temperature mitigation - proposing shade trees adjacent to open channel sections
- Flood Control – A larger uniform culvert section (11' wide x 6' deep) is being proposed to convey the design storm event through the project area replacing the existing limiting hydraulic sections.
- Water Quality improvements – Proposed rain gardens in open space parcels on east and west sides of Mechanic Street to treat surface runoff
- Removal of illicit sanitary sewer connections within the project area
- Removal of direct untreated stormwater surface runoff from the Quincy Center Area
- Town Brook Watershed Master Plan

These proposed mitigation items will reduce the environmental impacts associated with the project and will improve the regulated wetland resource areas associated with Town Brook. Refer to Chapter 8, "Mitigation" of this ENF, for a more detailed description of the proposed project mitigation.

Additionally, in order to mitigate the temporary construction related impacts the City is proposing these additional mitigation measures:

- Measures to reduce construction period impacts include controlling erosion and sedimentation, dust, and machinery traffic on local roadways
- Compliance with the EPA's National Pollution Discharge Elimination System (NPDES) General Permit Program for Stormwater Discharges from Construction Sites