

**ENF Environmental Notification Form**

<i>For Office Use Only</i>	
<i>Executive Office of Environmental Affairs</i>	
EOEA No.:	13214
MEPA Analyst:	KeAndrea Dames
Phone:	617-626-1028

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: <b>Locke Street Salt Marsh (Mill Creek) Restoration Project</b>		
Street: <b>54 Locke Street</b>		
Municipality: <b>Chelsea</b>	Watershed: <b>Boston Harbor</b>	
Universal Transverse Mercator Coordinates: <b>4696718N, 333238E (Zone 19 North)</b>	Latitude: <b>42°24'18" N</b>	Longitude: <b>-71°01'35" W</b>
Estimated commencement date: <b>May 04</b>	Estimated completion date: <b>August 04</b>	
Approximate cost: <b>\$100,000</b>	Status of project design:	<b>95</b> %complete
Proponent: <b>Chelsea Green Space and Recreation Committee</b>		
Street: <b>300 Broadway Street</b>		
Municipality: <b>Chelsea</b>	State: <b>MA</b>	Zip Code: <b>02150</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>Ken Fields</b>		
Firm/Agency: <b>BSC Group</b>	Street: <b>15 Elkins Street</b>	
Municipality: <b>Boston</b>	State: <b>MA</b>	Zip Code: <b>02127</b>
Phone: <b>617-896-4300</b>	Fax: <b>617-896-4301</b>	E-mail: <b>kfields@bscgroup.com</b>

- 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 project does not involve any financial assistance or land transfer from an agency of the Commonwealth.**

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 – Programmatic General Permit (Army Corps of Engineers – Section 404 Program)**  
**Local – Order of Conditions (Chelsea Conservation Commission)**

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 type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:  <b>- Chapter 91 Dredging Permit</b>
Total site acreage	3.57 acres			
New acres of land altered		0.5 acres		
Acres of impervious area	0 acres	0 acres	0 acres	
Square feet of new bordering vegetated wetlands alteration		0 s.f.		
Square feet of new other wetland alteration		30,000 s.f. salt marsh restored		
Acres of new non-water dependent use of tidelands or waterways				
<b>STRUCTURES</b>				
Gross square footage	N/A			
Number of housing units	N/A			
Maximum height (in feet)	N/A			
<b>TRANSPORTATION</b>				
Vehicle trips per day	N/A			
Parking spaces	N/A			
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	N/A			
GPD water withdrawal	N/A			
GPD wastewater generation/treatment	N/A			
Length of water/sewer mains (in miles)	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 (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 \_\_\_\_\_ )  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.)

This project is a community-based pro-active effort to restore a native salt marsh. The project is being undertaken by the Chelsea Green Space and Recreation Committee with support and guidance provided by the Urban Ecology Institute, BSC Group, ERM New England, the Natural Resource Conservation Service, the NOAA Habitat Restoration Center, and MA CZM's Wetlands Restoration Program, The Chelsea Conservation Commission, U.S. Environmental Protection Agency Region 1, and the Massachusetts Department of Fish and Game - Riverways Program.

Mill Creek was once surrounded by large expanses of salt marsh, which thrived in the estuarine environment created by periodic inundation of the area by tidal flows. The salt marsh is situated next to the interchange of Route 1, Route 16, and the Parkway Plaza. The highway drainage system empties from a 72-inch storm drainpipe directly into a channel adjacent to the salt marsh. Over time the storm water from this drainpipe has deposited sediments that it carried. These sediments have blocked the channel and the out flow of fresh water from the salt marsh to Mill Creek. As a result of this channel blockage and increased sediments in the low-lying areas of the marsh, the salt marsh has been filled by settled stormwater sediments and degraded by the invasive wetlands plant *Phragmites*.

The restoration of the salt marsh will occur in two phases:

1. Phase One will consist of removing sediments from the Mass Highway drainage ditch. This will allow the storm water to again flow freely to Mill Creek, as designed. Phase One will be undertaken independently by Mass Highway as part of their regular maintenance program and is not associated with this ENF or any other permits being sought for the restoration project. The Chelsea Conservation Commission has indicated that Mass Highway's work is an expected part of on going maintenance of their stormwater system.
2. Phase Two will involve dredging sediment and *Phragmites* from the degraded salt marsh in order to reestablish proper salt marsh elevations and facilitate tidal inundation and freshwater drainage. Approximately 1,300 cubic yards of material will be removed from about 30,000 square feet. The targeted elevation to grade to is approximately 5.0 feet NGVD, which will require dredging from one to two feet deep. This elevation will be sufficient to support a high salt marsh plant community dominated by *Spartina patens*, *Juncus gerardii*, and *Distichlis spicata*. These native plant species are expected to recolonize the site naturally. Regular inundation of the marsh with seawater will raise soil salinity throughout the marsh and prevent reestablishment of *Phragmites*. Two small areas will be graded slightly deeper in order to create two salt panes, which will retain salt water, provide

habitat for estuarine fish and a feeding area for waterfowl. Areas of existing healthy salt marsh will be protected by hay bales and silt fence and left undisturbed.

In consultation with MA DEP and the Chelsea Conservation Commission, a sediment sampling program was designed and executed in order to characterize the dredged material and identify a proper disposal location. The sampling program was carried out by ERM, Inc. on a pro bono basis under agreement with the Corporate Wetlands Restoration Partnership. ERM's sampling plan and report are attached. Based on the sampling results, the material is appropriate for disposal at an asphalt batch facility or a lined landfill. With ERM's guidance the project team is currently researching the most cost-effective disposal option. DEP approval of the dredged material handling will be secured through the 401 Water Quality Certification process. Additional sampling and documentation will be conducted prior to off-site removal in accordance with DEP's solid waste and dredged materials management regulations and guidelines. An abutting property owner has allowed a portion of a parking lot to be used as a dewatering area. The dewatering design and process will be dependent on the sediment sampling results and will be coordinated with the DEP and Chelsea Conservation Commission.

Alternatives considered by the project team included:

1. Open Marsh Water Management (OMWM) – The Northeast MA Mosquito Control and Wetlands Management District has proposed an OMWM system for the Locke St. salt marsh. This treatment would involve strategic ditching, channeling, and panne creation in order to increase tidal circulation and salt water habitat. Dredge spoils would remain on site. After consideration by the project team, this option was rejected because it was concluded that the limited dredging and lack of spoil removal would not result in the elevations necessary to support high salt marsh vegetation.
2. *Phragmites* Control with Herbicide – *Phragmites* on the site could be controlled by applying a glyphosate-based herbicide, such as Rodeo. However, it is likely that repeated treatments would be necessary for several years. Tidal flow would not be restored and the habitat would remain impaired for estuarine plant and animal species.
3. No Action – Without the proposed project the site would remain in its degraded condition. *Phragmites* would continue to invade the small patches of existing salt marsh. Water quality would be compromised and habitat utilization would remain poor. The degraded condition of the marsh would maintain the overall “out of sight/out of mind” character of the area and continue to encourage illegal dumping, brush fires, and other abuses.

Mitigation Measures:

The impacts of the proposed alternative are all temporary in nature. To mitigate temporary impacts during construction, the proponent will:

1. Protect areas of existing salt marsh with haybales and silt fence. Existing salt marsh will remain undisturbed.
2. Employ standard erosion and sediment control practices throughout the project area.
3. Establish a staging area and lay down area for equipment and vehicles.
4. Establish a dewatering area for stockpiling of sediment. The dewatering area will be staked with haybales and silt fence and run-off will be directed back into the dredged area before entering the Mass Highway drainage ditch.
5. Work with the Parkway Plaza and neighborhood residents to ensure minimal disturbance by trucking traffic.

Post Construction activities include a community based planting effort, monitoring of sediment accumulation, and water quality sampling to be used as an education program to promote awareness and “ownership.”