

Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

<i>For Office Use Only</i> <i>Executive Office of Environmental Affairs</i>	
EOEA No.:	<u>13311</u>
MEPA Analyst:	<u>LE ANDREA DAMES</u>
Phone: 617-626-	<u>1028</u>

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: Cormac Walsh Memorial Bridge (Neponset River Bridge)		
Street: Route 3A		
Municipality: Boston and Quincy	Watershed: Neponset	
Universal Tranverse Mercator Coordinates:	Latitude: 42° 17' 2.8" N Longitude: 71° 2' 23.1" W	
Estimated commencement date: 9/2004	Estimated completion date: 12/2005	
Approximate cost: \$17,000,000.00	Status of project design:	90 %complete
Proponent: Mass. Dept. of Conservation & Recreation, Div. Of Urban Parks and Recreation		
Street: 251 Causeway Street		
Municipality: Boston	State: MA	Zip Code: 02114
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Daniel Campbell		
Firm/Agency: CDW Consultants, Inc.	Street: 40 Speen Street, Suite 301	
Municipality: Framingham	State: MA	Zip Code: 01701
Phone: 508-875-2657 X15	Fax: 508-875-6617	E-mail: dcampbell@cdwconsultants.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)) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Special Review Procedure? (see 301CMR 11.09) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| a Phase I Waiver? (see 301 CMR 11.11) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> 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): Department of Conservation and Recreation is funding the project.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
 Yes (Specify: MA Dept. of Environmental Protection, Boston and Quincy Conservation Commissions, Chapter 91 Office, Mass. Coastal Zone Management, Army Corps of Engineers, U.S. Coast Guard)
 No

List Local or Federal Permits and Approvals: Orders of Conditions from Quincy and Boston

Conservation Commissions, U.S. Coast Guard Construction 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 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 checked="" 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 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	6.7			
New acres of land altered		0.12		
Acres of impervious area	4.8	0.12	4.92	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
STRUCTURES				
Gross square footage	180,300	5,400	185,700	
Number of housing units	0	0	0	
Maximum height (in feet)	35	0	35	
TRANSPORTATION				
Vehicle trips per day	111,600	0	111,600	
Parking spaces	0	0	0	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	

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_Please see Attachment 5 _____) 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: _Neponset River Estuary_____) 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 Department of Conservation and Recreation (DCR), formerly the Metropolitan District Commission (MDC), retained Dewberry-Goodkind, Inc. and their associated project team to assess the existing condition of, perform a structural analysis for, and evaluate structural rehabilitation and seismic retrofit alternatives for the "Cormac Walsh Memorial Bridge". The Bridge spans the tidally influenced Neponset River and connects Neponset Avenue in Boston with Hancock Street in Quincy. The Bridge is part of the Route 3A roadway layout and identified by DCR as Bridge No. 69.

EXISTING CONDITIONS

The Bridge is part of a Major Urban Arterial Roadway providing access to the cities of Boston and Quincy, MA. The south approach provides direct access to Route 3A/Hancock Street and includes on/off ramps to local Quincy streets and through traffic to Morrissey Boulevard, while the north approach carries traffic to and from the Interstate I-93 (Southeast Expressway) as well as to local Boston streets. The bridge is cast-in-place reinforced concrete deck on tangent and curved, longitudinal rolled beam stringers and plate girder spans. The beams are supported on cast-in-place piers and abutments, rising approximately 40 feet above the river at low tide.

The existing bridge abutments are located within filled and flowed tidelands adjacent to a tidally- influenced area of the Neponset River. The Boston side of the bridge currently has an MDC/DCR bike path running along the banks of the river adjacent to the existing wetlands area. The Quincy Side of the bridge is mainly roadways, on ramps and driveways adjacent to the existing wetlands area and riverbanks.

The Bridge and the surrounding environmental conditions were evaluated to determine the optimum method of testing and design prior to permitting of a proposed remedy. The work already completed includes the inspection of the bridge, a load rating, seismic analysis and retrofit design for the bridge. A structural condition associated with the hammerhead piers anticipated rehabilitation design of an external post-tensioning system for the river piers and a reinforced concrete pier shaft extension system for land-based piers.

PROPOSED DESIGN

Measures recommended for the structural rehabilitation, seismic retrofit and safety improvements of the bridge are included in the construction documents. These include:

- Replacement of existing steel bearings with Seismic Isolation Bearings.

- Confine columns with high strength fiber wrap to increase the capacity of the columns.
- Widening the reinforced concrete abutment stems to prevent collapse of the span.
- Interconnect adjacent spans by common support on isolation bearings.
- Reconstruction of the pier hammerheads as a seismic retrofit and structural capacity reconstruction, including reinforced concrete keeper blocks to prevent lateral superstructure movement.
- Stabilization of subsurface soils beneath specific piers.
- Strengthening the end diaphragms of plate girder spans.
- Replace key expansion joints with seismic expansion joints and all others.
- Remove and replace the bridge drainage system.
- Clean the existing storm drainage system from the bridge to the Neponset River.
- Improve the separation of the northbound and southbound bridge roadways.
- Reconstructing the approaches to the bridge, including sidewalks, wheelchair ramps, railings and median.
- Removing and replacing the bridge wearing surface and waterproofing membrane.
- Constructing new access ramps to the bridge sidewalks in compliance with ADA criteria.

ALTERNATIVES ANALYSIS

The term riverfront is used in the MDEP WPA to delineate an area of significant environmental interest adjacent to existing rivers within the Commonwealth. The typical riverfront area consists of two boundary areas, a 100' and 200' Riparian Zones which are offset lines horizontally from the Mean Annual High Water Line (MAHWL). Boston and Quincy are designated as Densely Developed Areas (DDA) which reduces the riverfront protection area to a 25' offset from the MAHWL. This general provision within the WPA was determined necessary due to the nature of a river and existing development in an urban area. Although DCR has had some influence in this area with 'repairs' to the 25' Riverfront area adjacent to the Neponset River in this area, it is still a degraded area. The area has been developed throughout the years and DCR has redeveloped the Boston side of the bridge to contain a bike path and greenway from its adjacent parklands. This is a connection of areas that were otherwise isolated by the highways in the area.

The design as proposed intends to extend these connections by providing improved handicapped access ways and sidewalks across the bridge. With this proposed reconstruction the residents of Quincy in this area may now be able to enjoy the parklands and bikepaths as was originally intended by DCR in their construction. With the reconstruction of the bridge being a Limited Project, having no greater adverse impact on the 25' riparian area or the waterway itself than the existing construction, the design as proposed does not have any pertinent alternatives.

Final design includes contract documents and construction phase services for the rehabilitation of concrete piers, retaining walls, superstructures, and retrofit modifications to accommodate a design seismic event.

CONCLUSION

With the replacement and upgrade of the existing drainage system within the bridge foot print and cleaning of the discharge areas from the bridge drainage the proposed design will be a vast improvement over the existing discharge to the Neponset River. The proposed pedestrian and ADA access improvements create the opportunity for a greater portion of the public at large within the project area to enjoy the Neponset River. The project is therefore in keeping with the overall intent of the Wetlands Protection Act to protect resource areas while encouraging public participation and public education regarding the protection of the resource area and the project's impacts to the area. The project as currently proposed accomplishes these intents.