

**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.: **12889**  
 MEPA Analyst: **Deirdre Buckley**  
 Phone: 617-626-**1026**

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>Ballard Street Salt Marsh Restoration and Flood Improvement Project</b>		
Street: <b>Ballard St., Salem Turnpike (State Rt. 107), Eastern Ave., and Bristow St.</b>		
Municipality: <b>Saugus</b>	Watershed: <b>North Coastal (Saugus River)</b>	
Universal Transverse Mercator Coordinates: X=242,337.25; Y=910,901.48 meters NAD83, State Plane (MA Mainland)	Latitude: <b>42 26 50.96 N</b> Longitude: <b>70 59 07.28 W NAD 83 Geographic</b>	
Estimated commencement date: <b>TBD</b>	Estimated completion date: <b>TBD</b>	
Approximate cost: <b>Phase 1-\$100,000; Project TBD</b>	Status of project design: <b>50% complete</b>	
Proponent: <b>Town of Saugus – Town Manager’s Office</b>		
Street: <b>298 Central Street</b>		
Municipality: <b>Saugus</b>	State: <b>MA</b>	Zip Code: <b>01906</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>Ann McMenemy</b>		
Firm/Agency: <b>ESS, Inc.</b>	Street: <b>888 Worcester St., Suite 240</b>	
Municipality: <b>Wellesley</b>	State: <b>MA</b>	Zip Code: <b>02482</b>
Phone: <b>(781) 489-1130</b>	Fax: <b>(781) 431-7434</b>	E-mail: <b>amcmenemy@essgroup.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. 8369 \_\_\_\_\_)**  **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): **No state funds have been secured to date. However, due to its highest priority status with EOEAs Massachusetts Wetlands Restoration Program and other designations, the Project is eligible for a number of grants and government funding sources (see Sections 1.3 and 1.6 of ENF Narrative). Federal funding was provided for the preparation of several permit applications including this ENF.**

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: **Order of Conditions, Section 404 Individual Permit, Coastal Zone Federal Consistency Review, National Pollutant Discharge Elimination System General Construction Permit**

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

- |  |                                       |   |
|--|---------------------------------------|---|
| <input checked="" 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 checked="" type="checkbox"/> ACEC | <input type="checkbox"/> Regulations  | <input checked="" type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> <b>Order of Conditions</b> <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> <b>Chapter 91 License</b> <input checked="" type="checkbox"/> <b>401 Water Quality Certification</b> <input checked="" type="checkbox"/> <b>MHD or MDC Access Permit</b> <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"/> <b>Other Permits</b> <i>(including Legislative Approvals) – Specify:</i>  <b>MA Surface Water Discharge Permit</b>
Total site acreage	57			
New acres of land altered		57		
Acres of impervious area	0	0	0	
Square feet of new bordering vegetated wetlands alteration		494,068		
Square feet of new other wetland alteration		1,611,720		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	0	1,200	1,200	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	0	10 ft	10 ft	
<b>TRANSPORTATION</b>				
Vehicle trips per day	N/A	N/A	N/A	
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 (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: Unknown Native American Site )(see attached correspondence)  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_)  No **Phase 1; Full Project: survey to come**

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify: Rumnev Marshes )  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.*)

*Project Site Description:* The Ballard Street Salt Marsh Restoration and Flood Improvement Project (Project) is categorically included for preparation of an Environmental Impact Report (EIR). This document also includes a Request for a Phase One Waiver of an EIR review threshold, to allow the Applicant to proceed with construction of a new culvert equipped with a self-regulating tide gate (SRTG) across an unnamed tidal creek upstream of Ballard Street, prior to preparing the EIR. Prior to completion of the entire project described in this ENF, the new SRTG will remain open and activated only by the Town of Saugus to provide additional flood protection to the low-lying adjacent East Saugus neighborhood. This application will demonstrate that construction of the new SRTG meets the standards for all waivers and standards for Phase One waivers specifically, as described in 301 CMR 11.11 (1) and (4).

The 57-acre Project Area is bordered by Eastern Avenue on the west, Ballard Street on the north, Route 107 on the south and the abandoned Bristow Street right-of-way to the south. The Project Area contains two areas of former and degraded Ballard Street salt marshes, which are separated by a large linear berm of sand and gravel fill from former I-95 construction activities, abandoned in 1972. Lands within the Project Area are owned by either the Metropolitan District Commission (MDC) or by the Town of Saugus, subject to a care and control agreement.

Completion of the Project will accomplish two goals: 1) restoration of acres of former and degraded salt marsh in an ACEC; and 2) provide improved flood protection for area residents. The Project proposes to increase tidal flow and flushing within the two areas of former and existing Ballard Street salt marshes, thereby restoring coastal salt marshes, wildlife habitat,

fisheries and potentially shellfish habitat functions and values in these resource areas within the Rumney Marshes ACEC. The Project also proposes to provide additional flood protection to the low-lying adjacent East Saugus neighborhood.

### ***Project Alternatives***

***Alternative 1 – No Action:*** If there is no attempt at tide gate replacement or relocation, and the current situation remains, the existing temporary gate on the Ballard Street culvert could fail, allowing full tidal access to the marsh. With this alternative, some of the existing flood storage area for the neighborhood west of Eastern Avenue would be periodically occupied by saltwater and not available for freshwater runoff. Complete failure or removal of the Ballard Street tide gate would increase the risk of flooding in the residential neighborhood.

***Alternative 2 – Tide Gate Replacement (Standard Tide Gate) at Ballard Street:*** Installation of a new flap tide gate (allowing outflow only) at Ballard Street would prevent tidal access to the salt marsh area until tide elevations were high enough to flow over Ballard or Bristow Streets. From a flood control perspective only, this represents the best and simplest alternative. With this alternative, all existing storage in the marsh is available for freshwater runoff. However, this alternative would result in continuing degradation of the marsh ecosystem and eventual loss of the remaining salt marsh fragments.

***Alternative 3 - Tide Gate Replacements (Self-Regulating Tide Gate) at Ballard Street:*** Alternative 3 involves the installation of a Self Regulating Tide Gate (SRTG) at the Ballard Street culvert. A SRTG gate installed on the existing 48-inch pipe at this location was considered, however, a second SRTG would be needed in this alternative at the Bristow Street 5-foot by 7-foot box culvert to provide an equivalent level of flood protection to the East Saugus neighborhood west of Eastern Avenue. This alternative would allow for flood protection for the East Saugus residential neighborhood. However, this is a more costly alternative and would not promote salt marsh restoration on either side of the I-95 berm.

***Alternative 4 - Tide Gate Relocation (Standard Tide Gate) North of I-95 Berm:*** Alternative 4 involves the installation of a new flap-type tide gate across the existing creek just north of the I-95 fill berm, which would allow outflow only. This alternative would provide the additional protection from regular tidal flooding for the East Saugus residential neighborhood. Alternative 4 would allow for increased tidal access to the southern portion of the marsh (between the I-95 berm and Route 107), but would prevent salt water flow into the area west of I-95 and therefore salt marsh restoration in that area would not be feasible. Also, to achieve the flood storage presently available on the east side of the berm that would be taken up by tidal waters, excavation of additional flood storage is necessary.

***Alternative 5 – Tide Gate Relocation (Preferred Alternative):*** This alternative involves installing a new self-regulating tide gate structure and culvert at the north end of the I-95 berm. Relocation of the tide gate would reduce the amount of storage available for freshwater runoff during storms. In order to offset this loss, compensatory storage must be excavated in the area bounded by Eastern Avenue, Ballard Street, the I-95 embankment and Bristow Street. The required excavation volume to construct the storage area as described is estimated to be 51 acre-feet (82,800 cubic yards). A proposed new 48-inch auxiliary culvert under Eastern Avenue and maintenance of existing Eastern Avenue culverts are also necessary to improve drainage from the adjacent residential area. Following excavation, the existing steel sheet on the tide gate at the Ballard Street culvert will be removed as well as the steel sheet blocking the culvert beneath the Bristow Street right-of-way. This will restore tidal exchange between the Saugus River to the north and the Pines River to the south, enhancing the salt marsh area east of the I-95 berm and Route 107, and providing off-site benefits to the Pines River salt marshes as well.

**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 more detailed description of the project alignment alternatives is included in Attachment 8)

In February 2002, the New Tyngsborough Bridge Transportation Study, Feasibility Study and Conceptual Design for a Second Bridge Crossing of the Merrimack River (the Study) was published by MassHighway. The purpose of the Study was to assess the need for and feasibility of a second bridge across the Merrimack River in the Town of Tyngsborough and to evaluate the local and regional implications of a new bridge. The impetus for this study came from continuing growth in both local and regional traffic and concerns about the ability of local public safety agencies to cross the river in emergencies. The first part of the study was to evaluate 14 different alternatives for bridge crossings. The Feasibility Study indicated that, out of the original fourteen (14) bridge alternatives that were identified, alternatives 5/6 and 14 show the most promise to best serve the overall study goals and the interests of the citizens of Tyngsborough with the least environmental impacts. Copies of the Study are available for public review at several locations; see Attachment 9.

The next step in the project development process is the filing of this Environmental Notification Form (ENF) with the Massachusetts Environmental Policy Act office (MEPA Unit) of the Executive Office of Environmental Affairs. The project team, with the valuable assistance of the Public Working Group members, public agencies, the town administrators, and the citizens of Tyngsborough, identified the two alternatives to be developed to the conceptual design level and advanced through the MEPA process. In addition, two short-range improvements also were identified that help to alleviate some of the traffic congestion and safety concerns at the existing Tyngsborough Bridge.

The selection, design, permitting and construction of an additional bridge crossing of the Merrimack River will require several years to complete. Therefore, as part of the Study, certain short-range improvements were identified. These short-range improvements can be completed regardless of whether or not a second bridge is built. The proponent is requesting a Phase I waiver for the short-range improvements because they have independent utility and they do not exceed any of the MEPA thresholds. The short-range improvements are relatively low-cost and readily implemented improvements designed to alleviate traffic congestion in and around the existing bridge. The range of improvements examined included intersection geometries, signal re-timings and re-phasing, and complete roadway realignments. On the east side of the river the short-range improvements include the relocation of Pawtucket Boulevard such that the roadway departs from its current alignment along the riverbank about 2,000-feet south of the existing bridge, curving easterly in an arc that runs to an intersection with Sherburne Avenue, thence curving back to the west to first intersect Frost Road before approaching the existing bridge. On the west side of the river the short-range improvements include the widening of the westbound approach of the Middlesex Avenue/Kendall Road intersection. These improvements help to alleviate some of the major traffic and safety problems in and around the existing bridge. The existing Tyngsborough bridge is scheduled to undergo needed repairs beginning later this year. This work will include the installation of a temporary bridge adjacent to the south side of the existing span.

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Municipality: <b>Saugus</b>	State: <b>MA</b>	Zip Code: <b>01906</b>
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Municipality: <b>Wellesley</b>	State: <b>MA</b>	Zip Code: <b>02482</b>
Phone: <b>(781) 489-1130</b>	Fax: <b>(781) 431-7434</b>	E-mail: <b>amcmenemy@essgroup.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. 8369 \_\_\_\_\_)**  **No**

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Are you requesting coordinated review with any other federal, state, regional, or local agency?  
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Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
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Acres of impervious area	0	0	0	
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Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	0	1,200	1,200	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	0	10 ft	10 ft	
<b>TRANSPORTATION</b>				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
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***Alternative 3 - Tide Gate Replacements (Self-Regulating Tide Gate) at Ballard Street:*** Alternative 3 involves the installation of a Self Regulating Tide Gate (SRTG) at the Ballard Street culvert. A SRTG gate installed on the existing 48-inch pipe at this location was considered, however, a second SRTG would be needed in this alternative at the Bristow Street 5-foot by 7-foot box culvert to provide an equivalent level of flood protection to the East Saugus neighborhood west of Eastern Avenue. This alternative would allow for flood protection for the East Saugus residential neighborhood. However, this is a more costly alternative and would not promote salt marsh restoration on either side of the I-95 berm.

***Alternative 4 - Tide Gate Relocation (Standard Tide Gate) North of I-95 Berm:*** Alternative 4 involves the installation of a new flap-type tide gate across the existing creek just north of the I-95 fill berm, which would allow outflow only. This alternative would provide the additional protection from regular tidal flooding for the East Saugus residential neighborhood. Alternative 4 would allow for increased tidal access to the southern portion of the marsh (between the I-95 berm and Route 107), but would prevent salt water flow into the area west of I-95 and therefore salt marsh restoration in that area would not be feasible. Also, to achieve the flood storage presently available on the east side of the berm that would be taken up by tidal waters, excavation of additional flood storage is necessary.

***Alternative 5 – Tide Gate Relocation (Preferred Alternative):*** This alternative involves installing a new self-regulating tide gate structure and culvert at the north end of the I-95 berm. Relocation of the tide gate would reduce the amount of storage available for freshwater runoff during storms. In order to offset this loss, compensatory storage must be excavated in the area bounded by Eastern Avenue, Ballard Street, the I-95 embankment and Bristow Street. The required excavation volume to construct the storage area as described is estimated to be 51 acre-feet (82,800 cubic yards). A proposed new 48-inch auxiliary culvert under Eastern Avenue and maintenance of existing Eastern Avenue culverts are also necessary to improve drainage from the adjacent residential area. Following excavation, the existing steel sheet on the tide gate at the Ballard Street culvert will be removed as well as the steel sheet blocking the culvert beneath the Bristow Street right-of-way. This will restore tidal exchange between the Saugus River to the north and the Pines River to the south, enhancing the salt marsh area east of the I-95 berm and Route 107, and providing off-site benefits to the Pines River salt marshes as well.