

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

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: Whittier Bridge I-95 Improvement Project		
Street: Interstate Route 95		
Municipality: Newburyport, Amesbury, Salisbury	Watershed: Merrimack River	
Universal Transverse Mercator Coordinates: Start: 4743131 N, 343375 E End: 4748996 N, 346096 E	Latitude: Start: 42°49'29" N End: 42°52'41" W Longitude: Start: 70°54'41" N End: 70°53'4" W	
Estimated commencement date: 2011	Estimated completion date: 2014	
Approximate cost: \$285 million	Status of project design: 5% %complete	
Proponent: Massachusetts Highway Department		
Street: 10 Park Plaza		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this ENF May Be Obtained: John Fallon, Supervisor of Major Projects		
Firm/Agency: MassHighway	Street: 10 Park Plaza – Room 4260	
Municipality: Boston	State: MA	Zip Code: 02116
Phone: (617) 973-7408	Fax:	E-mail: john.fallon@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): None

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

Yes (Specify NEPA review with Federal Highway Administration) No

List Local or Federal Permits and Approvals: Section 404 - US Army Corps of Engineers; Section 9 Bridge - US Coast Guard; NPDES Construction Storm Water and Dewatering General Permits-EPA; Section 106 Memorandum of Agreement - Mass Historical Commission ; Orders of Resource Area Delineations and Orders of Conditions from Newburyport, Amesbury, Salisbury Conservation Commissions

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 checked="" 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 checked="" type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
				<input checked="" type="checkbox"/> Order of Conditions
Total site acreage (Highway right-of-way)	270	0	270	<input checked="" type="checkbox"/> Superseding Order of Conditions
New acres of land altered	0	4 -70*	4-70	<input checked="" type="checkbox"/> Chapter 91 License
Acres of impervious area	51	0 – 10.6*	51-62	<input checked="" type="checkbox"/> 401 Water Quality Certification
Square feet of new bordering vegetated wetlands alteration ¹	0	0 – 7.8* Acres	0 – 7.8* Acres	<input type="checkbox"/> MHD or MDC Access Permit
Square feet of new other wetland alteration	0	Coastal Bank; Bank; Land Under Ocean; Salt Marsh; LSCSF** BLSF*** TBD	TBD	<input type="checkbox"/> Water Management Act Permit
Acres of new non-water dependent use of tidelands or waterways	0	0	0	<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:
Gross square footage	N/A	N/A	N/A	Orders of Resource Area Delineation – Newburyport, Amesbury, Salisbury
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
				Wetlands Variance Order of Conditions
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
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	

* Area of impact represents the range of potential impact (see attachment 2, including the No Build Alternative).

** LSCSF – Land Subject to Coastal Storm Flowage

*** BLSF – Bordering Land Subject to Flooding

¹ Wetland area impacts are calculated based on MassGIS mapping for BVW, other resource area impacts cannot be estimated at this time. Wetlands are being delineated in the field and Abbreviated Notices of Resource Area Delineation (ANRADs) will be filed to confirm the wetland limits.

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

The project spans the Merrimack River which is designated as both Estimated Habitat of Rare Wetlands Wildlife (EH65) and Priority Habitat of Rare Species (PH1321), including the Shortnose Sturgeon and Bald Eagle.

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 see below _____) No

The John Greenleaf Whittier Memorial Bridge is included in the Inventory of Historic and Archaeological Assets of the Commonwealth. The bridge also has been determined to be eligible for individual listing in the National Register of Historic Places as one of three bridges in Massachusetts on the Federal Highway Administration's "Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System," which was adopted by the Advisory Council on Historic Preservation and published in the Federal Register on December 19, 2006.

One property listed in the State Register of Historic Places is located immediately adjacent to the project area—Smith's Chain Bridge Filling Station No. 3 at 520 Main Street in Amesbury, which is the subject of a preservation restriction held by the Massachusetts Historical Commission (MHC). In addition, the Salisbury Point Area (AME.C), which is located along Main Street in Amesbury immediately northwest of the project area, is included in the Inventory of Historic and Archaeological Assets of the Commonwealth and has been determined by MHC to be eligible for listing in the National Register of Historic Places as a historic district. The Essex-Merrimac Bridge-Chain Bridge (AME.538), which crosses the Merrimac River approximately ¼ mile east of the Whittier Bridge, also is included in the Inventory of Historic and Archaeological Assets of the Commonwealth and has been determined by MHC to be eligible for individual listing in the National Register of Historic Places. Lowell's Boat Shop, which is listed in the State Register of Historic Places and is a National Historic Landmark, is located approximately ½ mile west of the project area at 459 Main Street in Amesbury. Historic resources reconnaissance and intensive surveys will be conducted within the project area of potential effect to verify and evaluate other historic resources in the Inventory of the Historic Assets of the Commonwealth and to identify any potentially eligible resources that have not been previously recorded.

There are no State Register-listed archaeological sites in the immediate vicinity of the project area. There are no recorded archaeological sites within the direct project impact area, including the rights-of-way for the highway widening or bridge replacement/rehabilitation work areas. A review of the archaeological base maps at MHC revealed two recorded prehistoric archaeological sites along the Merrimac River within ½ mile of the project area: Site 19-ES-273 west of the project area and Site 19-ES-279 east of the project area. Additional archaeological studies may be warranted as the project design develops. CRU staff will evaluate project impacts to NR-eligible properties within the project's Area of Potential Effect (APE), and will coordinate their review with MHC under the terms of the amended Section 106 Programmatic Agreement

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

Yes (Specify _____) No

The project proposes to replace the existing I-95 six-lane John Greenleaf Whittier Memorial Bridge over the Merrimack River. The Whittier Bridge is eligible for listing in the National Register of Historic Places (see above).

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 Massachusetts Highway Department (MassHighway) is proposing to replace the existing I-95 six-lane John Greenleaf Whittier Memorial Bridge over the Merrimack River to remedy the structural deficiencies and functional obsolescence of the existing bridge. The purpose of the project is: to provide for an improved bridge crossing of the Merrimack River which meets current Interstate Highway design standards; to reduce congestion and improve the flow of traffic on I-95 through the project area; to improve safety by reducing the incidence of accidents and reducing peak hour traffic backups by providing for a consistent eight-lane cross-section through the project area; and to improve local and regional air quality by reducing congestion on I-95.

The Whittier Bridge was opened with four lanes of traffic in 1954 with the relocation of US Route 1. The existing bridge is in need of extensive repairs to remain in service and cannot be rehabilitated to accommodate an eight-lane cross section. The bridge does not meet current traffic volume requirements, is the location of an elevated number of accidents and fails to meet current FHWA Interstate Highway Standards. The project proposes to replace the existing bridge with a new structure(s) on a parallel alignment.

In addition, the project will improve I-95 in Newburyport, Amesbury and Salisbury by widening the highway from its current six-lane configuration to eight lanes, from immediately north of the I-95/Route 113 Interchange in Newburyport to just north of the I-495 entrance ramp to I-95 in Salisbury, a distance of approximately 4.25 miles. This widening will match the eight-lane configuration of the proposed bridge replacement and the existing I-95 eight-lane cross-section south and north of the project area.

The project is included in the Accelerated Bridge Program (ABP) currently being implemented by MassHighway.

Four to ten other bridges within the project corridor will be replaced, reconstructed or modified to accommodate eight lanes of traffic on I-95 and to meet current design standards as much as practicable. These bridges include:

- Ferry Road (Pine Hill Road) over I-95 in Newburyport: This bridge was constructed in 1976 and is not structurally deficient. Widening of I-95 may require reconstruction of the bridge to accommodate the wider I-95 roadway.

- I-95 over Evans Place in Amesbury: This bridge was constructed in 1954 and reconstructed in 1977. This bridge is also not structurally deficient, but must be reconstructed and widened to accommodate eight lanes of traffic on I-95.
- I-95 NB and SB over State Route 110 (Elm Street) in Amesbury: These bridges were constructed in 1967. Each bridge carries three lanes of traffic on I-95 over State Route 110 and each bridge must be rehabilitated and widened to accommodate the additional two lanes of traffic on I-95.
- Three railroad bridges just north of State Route 110 (Elm Street) in Amesbury: These bridges were constructed in 1967. Two of the bridges carry three lanes of traffic on I-95 over the railroad right of way and one carries Route 110 on ramp traffic to I-95 over the railroad right of way. The I-95 bridges will be widened to accommodate an additional lane of traffic on I-95. The on ramp bridge will be widened based on the mainline widening final alignment.
- Additional Overpass Bridges: Three additional overpass bridges at the northern terminus of the project will be improved under a bridge preservation program or modified or reconstructed based on the final lane I-95 widening alignment, and these include:
 - 1) Route I-495 North two lane ramp over I-95
 - 2) State Route 286 (Main Street) over I-95
 - 3) Toll Road over I-95

From 1967 to 1969, I-95 was widened to provide six lanes of traffic from Danvers over the Merrimack River north to I-495 in Salisbury, and eight lanes of traffic from I-495 north to the Massachusetts-New Hampshire border. The bridge traffic lanes were reconfigured to two 2 foot shoulders and three 12-foot travel lanes in each direction. The reconstructed I-95 was designed to handle the traffic loads of the newly completed I-495, as well as the then-proposed expansion of the New Hampshire Turnpike (I-95). From 1973 to 1977, I-95 was widened further to provide eight lanes of traffic from the Merrimack River south to US Route 1 in Danvers.

Project Area

The project area extends from Interchange 57 (State Route 113/Storey Avenue) in Newburyport to the south, north across the Merrimack River, through Interchange 58 (State Route 110/Elm Street), Interchange 59 (I-495) and on to Interchange 60 (State Route 286/Main Street overpass and the Toll Road overpass) to the north in Salisbury, south of the New Hampshire state line. The project limits are illustrated in Attachment 3, Figure 3-1.

Project Alternatives

MassHighway has initiated environmental and engineering investigations to determine the preferred bridge replacement and roadway widening alternatives for the project area. Several project alternatives are under consideration and will be evaluated in the Environmental Impact Report (EIR). These alternatives include those for the highway widening to the south of the river and the Merrimack River crossing; and for both the location and northern limit of the highway widening north of the river. The alternatives described below are compared in terms of land area requirements, potential wetland impacts, and traffic and engineering factors in Attachment 2. Figures illustrating the alternatives are also included in Attachment 2.

Highway Widening South of the River and Bridge Crossing Alternatives: Options for the highway

widening south of the river and the river crossing include the following alternatives. Note that all of these options include a widening of I-95 to an eight-lane cross-section from the new bridge crossing to the southern project limits, the only difference is the alignment of the highway on the immediate approach to the bridge:

Progressive Staging Option – This option would include the progressive construction of a new bridge (from west to east) in three phases:

- Phase I, a new three-lane southbound (SB) bridge would be constructed just west of the existing structure, and, once completed; the SB traffic would be transferred to the new structure in an interim lane configuration.
- Phase II, would include the strengthening and extensive modifications to the NB half of the existing bridge to prepare it for the incremental load transfer and demolition of the SB half of the existing bridge, while the NB half remains in service. The phase I section of the new bridge would then be widened to accommodate three (NB) lanes of traffic within the SB portion of the old bridge footprint. NB traffic would then be relocated to the new structure in an interim lane configuration.
- Phase III would include demolition of the NB half of the existing bridge and completion of bridge construction to its full width and traffic would be placed in its final lane configuration.

East Side Option – This option would involve the construction of a new bridge on the east side of the existing structure with six lanes, enabling both NB and SB traffic to be relocated to the new bridge upon completion. The old bridge structure would then be demolished, and a new four-lane bridge for SB traffic would be constructed.

West Side Option – Similar to the alternative above, this option would involve the construction of a new SB bridge on the west side of the existing structure with six lanes, enabling all traffic to be relocated to the new bridge upon completion. Once the old bridge structure is removed, the NB Bridge can be constructed.

East and West Single Phase Option – This option would involve construction of new NB and SB four-lane bridge structures on each side of the existing bridge. Once all traffic is diverted to the new bridges, demolition of the existing Whittier Bridge would occur.

Highway Widening North of the River: Options for the highway widening north of the river include the following. These alternatives are largely independent of the bridge crossing alternative; any individual alternative could be implemented with any of the bridge crossing alternatives.

- Widening of the NB & SB roadways to the inside, in the existing median;
- Widening of the NB & SB roadways to the outside of the existing alignment;
- Inside NB lane and outside SB lane; and
- Outside NB lane and inside SB lane.

Northern limits of work for the widening being evaluated include:

- Continue widening to Route 286 interchange; and
- Terminate widening prior to I-495 interchange ramps.

Full Project Alternatives

No Build Option – In compliance with MEPA requirements, the No Build alternative will be analyzed in the Environmental Impact Report. This option would involve limited maintenance rather than replacement or rehabilitation of the Whittier Bridge with no accommodation for additional travel lanes or breakdown shoulders. The existing Whittier Bridge would not be improved to meet Interstate Highway Design standards, nor would I-95 be widened to an eight-lane cross-section in the project area. The No Build Alternative would not address the existing safety deficiencies in the project corridor, and would not reduce existing peak hour congestion on I-95. No other improvements would be made in the project area.

Rehabilitation Option – The Rehabilitation Option will be analyzed in compliance with Section 106 historic preservation requirements and includes the implementation of repairs and upgrades to the Whittier Bridge intended to extend the service life of the structure. These repairs and improvements would include removing lead paint and repainting the bridge, replacing the roadway deck and making seismic upgrades to the structure. The bridge would not be improved to current Interstate Highway design standards. This option would not include any widening of the I-95 corridor to an eight-lane cross-section in the project area and would not address existing safety deficiencies or relieve peak hour congestion in the project corridor.

Environmental Concerns

It is anticipated that technically sound alternatives for the proposed improvements can be developed that will allow the proposed improvements to be constructed entirely within the existing I-95 right-of-way and that no permanent property takings will be necessary to accommodate the construction of a new bridge or highway widening. Depending on the alternative selected, temporary construction period takings may be required in order to construct the project, these will be identified during the design process.

Impacts to wetland resources may result from highway widening north of the Merrimack River, and from bridge construction in and adjacent to the Merrimack River, including salt marsh along the banks of the river. Depending on the alternative selected as the Preferred Alternative, the project may require a Variance from the Wetlands Regulations. Potential wetland impacts are presented as a range of impacts to Bordering Vegetated Wetlands, based on MassGIS mapping. Wetlands are being delineated in the field and Abbreviated Notices of Resource Area Delineations will be filed with the Newburyport, Amesbury and Salisbury Conservation Commissions to determine the extent of jurisdictional wetlands. Other jurisdictional wetland resources in the project area include Salt Marsh, Land Subject to Flooding and Land Subject to Coastal Storm Flowage, Riverfront Area, Bank and Coastal Bank, Land Under Water, and Land Underlying an Anadromous Fish Run. Potential wetland impacts of each alternative are compared in Attachment 2.

Collection and treatment of storm water runoff from the project will meet the DEP Storm Water Management regulations at 310 CMR 10.05(k) and the DEP Storm Water Management Policy, using appropriate Best Management Practices included in MassHighway's Storm Water Handbook. Infiltration of storm water runoff will be maximized as much as practicable.

The I-95 alignment in Newburyport passes across land controlled by the Newburyport Water Department and within the Zone II of a municipal water supply well. Currently, MassHighway institutes a reduced salting program on this portion of I-95 to minimize the potential of impacting the water supply. This

policy will be continued after the highway widening is completed. I-95 also runs through the Zone II of a Town of Salisbury municipal water supply well north of I-495.

As previously noted, the John Greenleaf Whittier Memorial Bridge is included in the Inventory of Historic and Archaeological Assets of the Commonwealth. The bridge also has been determined to be eligible for individual listing in the National Register of Historic Places as one of three bridges in Massachusetts on the Federal Highway Administration's "Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System" (along with the I-93 Leonard P. Zakim – Bunker Hill Bridge between Boston and Cambridge and the I-95 Central Avenue Bridge in Needham). MassHighway will complete a full Section 106 consultation and evaluation of alternatives for the bridge with the Massachusetts Historic Commission and the State Historic Preservation Officer (SHPO).

The Shortnose Sturgeon, listed as endangered by both the US Fish and Wildlife Service and the Massachusetts Natural Heritage and Endangered Species Program, is known to exist in the Merrimack River. Protected habitat for the Bald Eagle, listed as endangered by the NHESP, is also located along the Merrimack River. MassHighway will evaluate measures to avoid potential impacts to the sturgeon resulting from construction of a new bridge crossing. MassHighway will consult with the NHESP to identify mitigation measures to avoid any potential impacts to bald eagle habitat.

Potential navigational impacts to the existing Merrimack River federal navigation channel will be assessed and coordinated closely with the US Coast Guard through the Section 9 Bridge Permit program and with the Massachusetts Department of Environmental Protection through the Chapter 91 licensing process.

Demolition of the Whittier Bridge will result in the generation of demolition debris which will be properly disposed of at licensed disposal or recycling facilities. Lead paint will be removed from the bridge structure prior to demolition in accordance with applicable laws and regulations.

Public Outreach

MassHighway has also initiated a public outreach program to solicit public involvement and comment on the proposed highway improvement and bridge replacement project. MassHighway is not aware of any substantial public controversy regarding the project. There is considerable public knowledge of the need to address the deteriorated condition of the existing Whittier Bridge.

Meetings with municipal officials in Newburyport, Amesbury and Salisbury have been held to date:

1. Amesbury – March 11, 2009. Attendees included: Mayor Thatcher Kezer; Kendra Amaral; Chief of Staff; and Robert Desmarais, DPW.
2. Newburyport – March 19, 2009. Attendees included: Mayor John Moak; City Councillors Donna Holaday, Gregory Earls, James Shanley and Brian Derrivan; Brendan O'Regan, Department of Public Services; Geordie Vining, Sr. PM, Office of Planning and Development; Thomas Howard, Police Department; Mark Kavanaugh, IT Director; Julia Godtfredsen; Sean Sullivan, Director of the Office of Planning and Development.
3. Salisbury – April 1, 2009. Attendees included: Neil Harrington, Town Manager; and Selectmen Don Beaulieu, Ed Hunt and Henry Richenburg.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1))
 Yes No; if yes, specify each threshold:

301 CMR 11.03(1)(a)2: Creation of ten or more acres of impervious area.

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	<u>0</u>	<u>0</u>	<u>0</u>
Roadways, parking, and other paved areas	<u>51</u>	<u>0-10.6</u>	<u>51-62</u>
Other altered areas (describe)	<u>0</u>	<u>4-70</u>	<u>4-70</u>
Undeveloped areas	<u>0</u>	<u>0</u>	<u>0</u>

(Area dependent on specific alternative selected.)

B. Has any part of the project site been in active agricultural use in the last three years?
 Yes No; if yes, how many acres of land in agricultural use (with agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
 Yes No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a DEM-approved forest management plan:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? Yes No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? Yes No; if yes, does the project involve the release or modification of such restriction? Yes No; if yes, describe:

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? Yes No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes No ; if yes, describe:

H. Describe the project's stormwater impacts and, if applicable, measures that the project will take to comply with the standards found in DEP's Stormwater Management Policy:

The project will be designed to meet the DEP Storm Water Management regulations at 310 CMR 10.05(k) and the DEP Storm Water Management Policy, using appropriate Best Management Practices included in MassHighway's Storm Water Handbook. Measures used to comply with the regulation and policy may include catch basins, drainage channels, water quality drainage swales and other BMPs appropriate for roadways and bridges.

I. Is the project site currently being regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes No ; if yes, what is the Release Tracking Number (RTN)?

J. If the project site is within the Chicopee or Nashua watershed, is it within the Quabbin, Ware, or Wachusett subwatershed? ___ Yes No; if yes, is the project site subject to regulation under the Watershed Protection Act? ___ Yes ___ No

J. Describe the project's other impacts on land:

Depending on the alternative, the project will alter 4 to 70 acres of land directly adjacent to the existing highway within the right-of-way.

III.. Consistency

A. Identify the current municipal comprehensive land use plan and the open space plan and describe the consistency of the project and its impacts with that plan(s):

Newburyport

2001 Master Plan – The *Master Plan* is a policy guide that provides a framework for future land use and development. The *Master Plan* establishes guiding principles, goals, policies, strategies and actions for Land Use, Housing, Open Space and Recreation, Natural and Cultural Resources, Economic Development, Public Facilities and Transportation.

The proposed improvements by MassHighway to I-95 and the Whittier Bridge relate to and are consistent with several of these goals, policies and strategies, as summarized below:

- **Economic Development** – The Master Plan’s Goal ED-3, “Preserve Newburyport’s leadership as a regional economic center,” is directly related to its accessibility to the regional transportation network. The proposed project will improve mobility in the corridor by removing an existing traffic bottleneck, and is therefore considered consistent with this goal. The navigation channel in the Merrimack River will not be affected in the long-term and will remain open to vessels during construction.
- **Natural Resources** – Goal NCR-1, “*Protect and enhance the natural resources and systems of the City.*” The Master Plan also addresses the importance of the Merrimack River to the community as an open space and recreational resource: “The Merrimack River is an outstanding resource that is heavily used by recreational boaters.” The proposed project will maintain the open space and recreational resources associated with the Merrimack River. The new bridge will be wider than the existing bridge because of the addition of a travel lane in each direction. The new bridge will be at a very high elevation (the existing bridge has 56 feet clearance in the main channel), which reduces concern for shadow impacts.
- **Open Space and Recreation** – Specific Master Plan goals that address open space and recreation include: Goal OSR-1, “*Increase the amount of public and private open space that is protected*” and Goal OSR-2, “*Enhance the existing open space system that protects and links important environmental resources and scenic vistas*”. Strategies that support OSR-2 include continuing the planning and development of a multi-use recreational trail, support for development of the Border to Boston Trail, and enhancing the Merrimack River Trail. Goal OSR-5 addresses the use of Merrimack River, “Manage water-related facilities and uses on the Merrimack River to enhance the quality of the experience along the River. The proposed project is consistent with these goals.
- **Transportation** – Transportation goals of the Master Plan relate to maintaining the efficiency of the existing roadway network (TC-1), maintaining and improving vehicular

traffic safety levels on City streets (TC-2), providing for pedestrian and bicycle circulation throughout the City (TC-6). The proposed project improvements would improve the efficiency and safety of the roadway network and are consistent with these goals.

Newburyport Open Space and Recreation Plan – The *Open Space and Recreation Plan* for the years 2005-2010 provides for open space protection and recreational opportunities. Listed in the Resource Protection Needs, “The Merrimack River waterfront is part of a major bird migration route. The wooded banks of the river in the northwestern part of the city provide habitat for bald eagles, fishers and other animals. Fish and other sea creatures swim and spawn in the river.” Preserving land in the Old Ferry Road area along the Merrimack River is a goal of the Open Space and Recreation Plan. This area, which is a designated heritage landscape and is bordered by the Merrimack River and Maudslay State Park, is part of a largely unfragmented habitat, including bald eagle nesting areas.

Of the remaining undeveloped land, a large portion is preserved from development by public or nonprofit ownership or physical constraints. The 480-acre Maudslay State Park and the 16-acre Moseley Woods in the West End are important conservation and recreational resources with scenic views of the Merrimack River and recreational trails. The project will have no direct impacts on these open space resources.

Amesbury

The Town of Amesbury *Master Plan*, 2004 and *The Golden Triangle, Route 110 Economic Development Study*, 2007 are the two most relevant plans that pertain to the Whittier Bridge project.

The *Master Plan* recognizes the importance of I-95 and I-495 as access points for Amesbury to the interstate region of northeastern Massachusetts and southeastern New Hampshire and Maine. Of particular note in the Transportation Action Plan map in the *Master Plan* is recognition of three projects of relevance:

- The Route I-95 Bridge Rehabilitation Project (i.e., the Whittier Bridge);
- The Main Street Bridge Reconstruction Project approximately 1,000 feet east of the Whittier Bridge. It, like the Whittier Bridge, crosses the Merrimack River; and
- The Route 110 Reconstruction and Widening Project. State Route 110 is aligned east-west through Amesbury and has an interchange with I-95 approximately 3,200 feet north of the Whittier Bridge.

Moreover the Transportation Goals, Strategies and Actions section of the *Master Plan* lists Route 110 as a gateway roadway and intends to “maintain and improve...aesthetic qualities, safety conditions, and traffic operations.”

The Whittier Bridge project is consistent with Amesbury’s 2004 Master Plan.

The “Golden Triangle” study relates to the 135-acre triangular tract of land shaped by the merge of I-95 and I-495 located approximately 6,000 feet north of the Whittier Bridge. The extreme north point of the tract of land is in Salisbury, which is physically separated from the rest of the town since there is no way to cross either interstate highway in this area. The “bottom” of the triangle is Elm Street, which intersects State Route 110 just west of the interchange with Route I-95. The purpose of the study was to maximize development potential of the buildable portions of the triangle that has wetlands and rare species habitat yet minimize transportation impacts on the surrounding community. A developer proposed 520,000 square feet of retail and office development. The study concluded that a reduced development program of 134,000 square feet of retail and 203 residential units could be accommodated without the need to widen Route 110. However, signalization was needed at Route 110 and all I-95 off-ramps (with queue detection) and at two other nearby intersections.

The signalization of Route 110 and all I-95 off-ramps is not part of the scope of this proposed project.

Salisbury

The 2008 *Master Plan* was prepared to provide a framework to guide the town's future growth. The Master Plan addresses Land Use, Housing, Economic Development, Public Facilities, Transportation, Natural Resources, and Open Space and Recreation. The Master Plan includes goals, strategies, and an action plan for implementation.

The town wide Goals and Strategies include:

Land Use – Land Use Goal 1 is to “Transform the town’s major transportation corridors and other commercial areas by enhancing their appearance and by encouraging different identities and uses as appropriate to the historic or desired character of Salisbury.” Among the strategies related to this goal is “Carry out corridor studies for Elm Street, Main Street, to address land use, design standards, transportation and circulation needs...” Improvements to bridges at Elm Street and Main Street as part of this project would support the intent of these goals and strategies.

Economic Development – The Master Plan encourages economic development in key “Opportunity Areas, which includes the Main Street commercial area and the Elm Street/Route 110 area. The Master Plan acknowledges that “Salisbury’s location at the intersection of Interstate Highways 95 and 495 provides a unique advantage for commercial growth, in particular in areas with direct access, such as Elm Street and Main Street. The project’s proposed improvements to bridges at Elm Street and Main Street would support the intent of these goals and strategies.

Transportation – The Master Plan’s Goal 1 for Transportation, “Maintain and improve vehicular traffic safety and circulation throughout Salisbury,” is supported by the project’s proposed improvements. The proposed project improvements will improve safety and circulation and does not impact the planned connection between the Pow Wow Trail in Amesbury and the Ghost Trail in Salisbury via the old B&M Railroad alignment under I-95.

Natural and Cultural Resources – The Town of Salisbury contains significant natural resources and the Master Plan provides for protection of these resources (Goal 1 – Natural and Cultural Resources). The proposed project improvements are consistent with this goal.

Open Space and Recreation – Protecting important open spaces and natural areas is the Master Plan’s Goal 1 for Open Space and Recreation. Access to the town’s trails and recreational use of the Merrimack River are considered important activities to town residents. The project would not interfere with the linking of existing trails in Salisbury and Amesbury via the old B&M Railroad alignment under I-95.

B. Identify the current Regional Policy Plan of the applicable Regional Planning Agency and describe the consistency of the project and its impacts with that plan:

Newburyport, Amesbury and Salisbury are part of the Merrimack Valley Regional Planning Commission area. The 2007 *Merrimack Valley Regional Transportation Plan* and 2008 *Comprehensive Economic Development Strategy* assesses the long range transportation and economic development planning needs of the Merrimack Valley planning region through the year 2030. The project and its impacts are consistent with both of these plans, as described below:

2007 Merrimack Valley Regional Transportation Plan – The *Regional Transportation Plan* establishes the following goals that relate to the proposed Whittier Bridge/I-95 improvements:

- *“Maximize the efficiency and quality of the existing highway and transit systems.”* As stated in the Regional Transportation Plan’s goals, the state’s “Fix if First” policy places a priority on the repair of existing facilities. “...steps must be taken to ensure that these facilities function as efficiently as possible to accommodate the growth expected in the Valley over the next 25 years”. The proposed project improvements would increase the efficiency and quality of the highway system and is consistent with this goal.
- *“Repair/replace the region’s bridges.”* Bridge closings would disrupt the movement of goods and people and bridge failure could cost lives. The proposed Build Alternatives for the project would replace the deteriorated Whittier Bridge with a new bridge as well as replacement or reconstruction of up to four bridges over I-95 and is consistent with this goal.
- *“Preserve the integrity of the region’s Interstate and NHS roadways.* The growth in employment and population that occurred in the Merrimack Valley region during the last 30 years is largely attributable to the construction of I-93, I-95 and I-495 during the 1950s and 1960’s. These roadways have vastly improved access within the region and have been instrumental in linking the region with the rest of New England and the nation. This plan recognizes that continued growth in the Valley in large measure will depend on how well these facilities operate over the next 20 years. The Build Alternatives for this project, which involve the replacement of the Whittier Bridge and widening of I-95, are consistent with this goal.
- *“Undertake efforts to improve the safety of the transportation network and ensure that it is as secure as possible.”* Maintaining a safe, secure transportation system is a paramount goal of the Merrimack Valley MPO. The proposed project improvements will improve the safety of the transportation network and are consistent with this goal.
- *“Ensure that the transportation system supports the region’s continued economic vitality and development.” “As the development of the interstate roadway system in the Valley during the 1950’s and 1960’s spurred economic development and growth, the region’s existing transportation system must be maintained and improved in such a way that it facilitates the attainment of our communities’ economic development goals and land use policies.”* The proposed project improvements will enhance the interstate roadway system and are consistent with this goal.

Comprehensive Economic Development Strategy (CEDS) – The CEDS notes that the region is strategically located at the “Crossroads of New England” with accessibility to Interstates 93, 95 and 495. The SWOT (Strengths-Weaknesses-Opportunities-Threats) Analysis completed for the CEDS identified Transportation and Accessibility as one of the leading strengths of the Merrimack Valley. Specifically, the Merrimack Valley’s location along the Route 495 North corridor between I-95 and I-93 is a primary strength. The CEDS also lists the Rail Trail Project, a recreational trail that would connect the towns of Newburyport, Amesbury and Salisbury, as an important public works project that would enhance tourism and recreational opportunities as well as a sense of unity among the neighboring towns. The proposed project does not impact the planned connection between the Pow Wow Train in Amesbury and the Ghost Trail in Salisbury.

The CEDS indicates that repairs to Amesbury’s major roadways are needed to support the business community in the downtown and strip mall development along Route 110 between I-495 and I-95. Improvements to the Route 110 bridge over I-95 as part of this project would support the intent of these economic development and transportation plans.

Newburyport Route 113 Park and Ride Lot – The Newburyport Park and Ride Lot, located on Route

113 (Storey Avenue) near Exit 57 of I-95, currently has 510 parking spaces and an average occupancy of 100 percent. MassHighway held a public hearing on February 17, 2009 on proposed improvements to expand the Park and Ride facility. The proposed expansion of the Park and Ride facility would add 105 parking spaces. The proposed improvements to the Whittier Bridge and I-95 would also improve travel conditions for commuters and are therefore consistent with the plan to expand the Park and Ride Lot.

Bicycle and Pedestrian Trails – The communities of Newburyport, Amesbury, and Salisbury have a coordinated interest in their local plans for development of several trails. The proposed project would not interfere with planned improvements to existing recreational trails. The following describes these trails and their status.

- **Border to Boston Bike Trail** – This proposed off-road trail would extend from Maine to Florida. In the MVPC region, the trail would follow abandoned rail lines in Salisbury, Newburyport, Newbury, Georgetown and Boxford.
- **Amesbury Powow River Trail** – Amesbury began construction of the Powow Riverwalk and Bicycle Path along the banks of the Powow River. The path uses an old railroad right of way along the east side of the River and connects the Lower Millyard of downtown Amesbury with the Carriage Town Market Place shopping plaza on Route 110. Phase II of the project will extend the Powow River Trail via a raised boardwalk to link Main Street in the center of downtown Amesbury with the completed portion of the Powow Riverwalk on Water Street.
- **Clipper City Rail Trail** – In Newburyport, the Clipper City Rail Trail is part of the Coastal Trails Network, which is an extensive system of trails in development linking Amesbury, Newbury, Newburyport, and Salisbury. Construction began in the summer of 2008 and is scheduled to be completed in 2010. Maudslay State Park is a destination on the Newburyport bicycle route map.
- **Salisbury Rail Trail** – As part of the Coastal Trails Network, the Salisbury Rail Trail would connect Salisbury with neighboring towns. The project is on the 2009 TIP for the design and construction of the first section of the trail from the Merrimack River to Mudnock Road. The Town of Salisbury’s Community Development Plan identifies the development of the rail trail as a high priority.
- **Salisbury Point Ghost Trail** – This 1-mile improved gravel trail leads west from Cushing Street in Salisbury. In 2008, the Town of Salisbury began construction of an extension of the Salisbury Point Ghost Trail to Lion’s Park.

In addition, the Clipper City Rail Trail, Salisbury Rail Trail, the Salisbury Point Ghost Trail and the Amesbury Powow River Trail are all included in the 2008 Massachusetts Bicycle Transportation Plan. The proposed 60-mile Merrimack River – Charles River Corridor would serve Amesbury and Salisbury and the 55-mile North Shore Corridor would serve Newburyport. The Massachusetts Bicycle Transportation Plan recommended a 740-mile Bay State Greenway network in seven corridors to improve bicycle transportation within Massachusetts.

C. Will the project require any approvals under the local zoning by-law or ordinance (i.e. text or map amendment, special permit, or variance)? Yes ___ No X ; if yes, describe:

D. Will the project require local site plan or project impact review? ___ Yes X No; if yes, describe:

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **rare species or habitat**? ___ Yes No

C. If you answered "No" to both questions A and B, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? Yes ___ No. If yes,

1. Which rare species are known to occur within the Priority or Estimated Habitat (contact: Environmental Review, Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, allowing 30 days for receipt of information):

Shortnose Sturgeon (*Acipenser brevirostrum*) and Bald Eagle (*Haliaeetus leucocephalus*)

2. Have you surveyed the site for rare species? ___ Yes No; if yes, please include the results of your survey.

3. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes No; if yes, describe:

C. Will the project alter "significant habitat" as designated by the Massachusetts Division of Fisheries and Wildlife in accordance with M.G.L. c.131A (see also 321 CMR 10.30)? ___ Yes No; if yes, describe:

D. Describe the project's other impacts on rare species including indirect impacts (for example, stormwater runoff into a wetland known to contain rare species or lighting impacts on rare moth habitat):

Incorporation of appropriate Best Management Practices (BMPs) into the project design will mitigate any potential adverse impacts to rare species habitat in the project area. Coordination with NHESP to identify any potential mitigation measures will be initiated during the environmental impact review process. MassHighway will investigate the use of construction period mitigation measures such as cofferdams, silt curtains, and other appropriate BMPs to avoid impacts to rare species and habitat.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? Yes ___ No; if yes, specify, in quantitative terms:

301 CMR 11.03(3)(a)1.a: Alteration of one or more acres of salt marsh or bordering vegetated wetlands

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? Yes ___ No; if yes, specify which permit:

- Orders of Conditions from Newburyport, Amesbury and Salisbury Conservation Commissions
- Superseding Order of Conditions from DEP
- Variance Order of Conditions from DEP

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Describe any wetland resource areas currently existing on the project site and indicate them on the site plan:

The project corridor includes areas of Bordering Vegetated Wetlands, Isolated Land Subject to Flooding, Riverfront Area, Coastal Bank, Salt Marsh, Bordering Land Subject to Flooding, Land Subject to Coastal Storm Flowage and Fish Runs. Wetlands along the project corridor have been delineated in the field. MassHighway will confirm the wetland boundaries with the filing of Abbreviated Notices of Resource Area Delineation with the Newburyport, Amesbury and Salisbury Conservation Commissions. Attachment 2 further describes the potential wetland impacts for each project alternative.

B. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

<u>Coastal Wetlands</u>	<u>Area (in square feet) or Length (in linear feet)</u>
Land Under the Ocean	_____ TBD _____
Designated Port Areas	_____ N/A _____
Coastal Beaches	_____ N/A _____
Coastal Dunes	_____ N/A _____
Barrier Beaches	_____ N/A _____
Coastal Banks	_____ TBD _____
Rocky Intertidal Shores	_____ N/A _____
Salt Marshes	_____ TBD _____
Land Under Salt Ponds	_____ N/A _____
Land Containing Shellfish	_____ N/A _____
Fish Runs	_____ TBD _____
Land Subject to Coastal Storm Flowage	_____ TBD _____
<u>Inland Wetlands</u>	
Bank	_____ TBD _____
Bordering Vegetated Wetlands	_____ 0 – 7.8 acres _____
Land under Water	_____ TBD _____
Isolated Land Subject to Flooding	_____ TBD _____
Bordering Land Subject to Flooding	_____ TBD _____
Riverfront Area	_____ TBD _____

C. Is any part of the project

1. a limited project? ___ Yes No
2. the construction or alteration of a dam? ___ Yes No; if yes, describe:
3. fill or structure in a velocity zone or regulatory floodway? Yes ___ No
4. dredging or disposal of dredged material? Yes ___ No; if yes, describe the volume of dredged material and the proposed disposal site: TBD – dredging may be required to construct new bridge support piers within the Merrimack River
5. a discharge to Outstanding Resource Waters? Yes ___ No

Surface waters within the Newburyport Water Department land located to the west of I-95 and south of the Merrimack River are designated as ORWs by the DEP.

6. subject to a wetlands restriction order? ___ Yes No; if yes, identify the area (in square feet):

D. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? Yes ___ No; if yes, has a Notice of Intent been filed or a local Order of Conditions issued? ___ Yes No; if yes, list the date and DEP file number: _____.
Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a variance from the Wetlands regulations? Yes ___ No.

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes No
2. alter any federally-protected wetlands not regulated under state or local law? ___ Yes No; if yes, what is the area (in s.f.)?

F. Describe the project's other impacts on wetlands (including new shading of wetland areas or removal of tree canopy from forested wetlands):

Depending on the project alternative selected, the project will alter varying amounts of jurisdictional wetland resource areas adjacent to the project corridor. Construction of a new and expanded bridge crossing of the Merrimack River may result in additional indirect shading impacts to extant salt marsh along both the south and north banks of the river at the I-95 crossing. Trimming of tree canopy for safety purposes may be necessary in BVW resource areas located along the project corridor. Additional volumes of treated storm water runoff may be directed to certain resource areas along the project corridor. These, and other potential impacts to jurisdictional wetland resource areas, will be evaluated in the Environmental Impact Report to be prepared for the project.

III. Waterways and Tidelands Impacts and Permits

- A. Is any part of the project site waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? Yes ___ No; if yes, is there a current Chapter 91 license or permit affecting the project site? ___ Yes No; if yes, list the date and number:

Initial research has not identified an existing Chapter 91 license for the Whittier Bridge. In 1947, the Massachusetts Department of Public Works (now MassHighway) announced plans for a "Relocated US 1" to serve as the freeway for Boston and its northern suburbs to northern New England. This work was performed under legislative authorization as the Accelerated Highway Program, approved by the Acts of 1949, Chapter 306, an emergency law, under which \$100-million dollars were appropriated for the laying out, construction, reconstruction and relocation of highways and bridges. This special legislative authorization is considered to include authorization for the Whittier Bridge.

- B. Does the project require a new or modified license under M.G.L.c.91? Yes ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water dependent use?

Current 0 Change 0 Total 0

C. Is any part of the project

1. a roadway, bridge, or utility line to or on a barrier beach? ___ Yes ___ **X** No; if yes, describe:
2. dredging or disposal of dredged material? **X** Yes ___ No; if yes, volume of dredged material _____ TBD – dredging may be required to construct new bridge support piers within the Merrimack River
3. a solid fill, pile-supported, or bottom-anchored structure in flowed tidelands or other waterways? **X** Yes ___ No; if yes, what is the base area? **TBD**
4. within a Designated Port Area? ___ Yes **X** No

D. Describe the project's other impacts on waterways and tidelands:

Depending on the project alternative selected, the project may result in the construction of additional bridge support piers below the Mean High Water line in the Merrimack River and the construction of an enlarged roadway crossing at the location of the existing Whittier Bridge. The new bridge piers and roadway crossing are considered to be a water-dependent infrastructure crossing under the provisions of the Chapter 91 Waterways Regulations. The location of the bridge piers will be carefully planned to avoid impacts to the existing navigational channels in the river, and the new and/or enlarged bridge crossing is anticipated to maintain the existing vertical and horizontal navigational clearances.

IV. Consistency:

- A. Is the project located within the Coastal Zone? **X** Yes ___ No; if yes, describe the project's consistency with policies of the Office of Coastal Zone Management:

Listed below is a brief summary of the project's conformance to the relevant regulatory policies and management principles of the approved CZM program. The MassCZM regulatory policies and management principles are applied to projects subject to federal Consistency Review and Chapter 91.

Water Quality

Water Quality Policy #1 - Ensure that point-source discharges in or affecting the coastal zone are consistent with federally approved state effluent limitations and water quality standards.

Conformance: The project will be designed to meet the DEP Storm Water Management regulations at 310 CMR 10.05(k) and the DEP Storm Water Management Policy, using appropriate Best Management Practices included in MassHighway's Storm Water Handbook. Measures used to comply with the regulation and policy may include catch basins, drainage channels, water quality drainage swales and other BMPs appropriate for roadways and bridges.

Habitat

Habitat Policy #1 - Protect coastal resource areas including salt marshes, shellfish beds, dunes, beaches, barrier beaches, salt ponds, eelgrass beds, and fresh water wetlands for their important role as natural habitats.

Conformance: The project will be designed to avoid direct impacts to salt marsh along the Merrimack River to the maximum extent practicable. Potential impacts to other jurisdictional wetland resources will be minimized to the greatest extent practicable. Appropriate wetland replication will be implemented as required to mitigate unavoidable wetland impacts.

Protected Areas

Protected Areas Policy #3 - Ensure that proposed developments in or near designated or registered historic districts or sites respect the preservation intent of the designation and that potential adverse effects are minimized.

Conformance: MassHighway will consult with the Massachusetts State Historical Preservation Officer under Section 106 of the National Historic Preservation Act to identify appropriate project specific mitigation measures to avoid adverse impacts to the adjacent historic districts and individually listed sites in Newburyport and Amesbury.

Coastal Hazards

Coastal Hazard Policy #1 - Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean.

Conformance: The project will not alter land subject to coastal storm flowage or salt marsh so as to result in adverse impacts to the storm damage and flood control functions. The existing hydraulic opening under the existing Whittier Bridge will be maintained with construction of the new bridge crossing. Bridge piers to be constructed in the river will be designed to minimize potential wave refraction which might impact adjacent river bank landforms.

Coastal Hazard Policy #2 - Ensure construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Approve permits for flood or erosion control projects only when it has been determined that there will be no significant adverse effects on the project site or adjacent or downcoast areas.

Conformance: Construction of new bridge piers or other structures in the Merrimack River will be designed to minimize local impacts to water circulation and sediment transport.

Coastal Hazard Policy #3 - Ensure that state and federally funded public works projects proposed for location within the coastal zone will:

- *not exacerbate existing hazards or damage natural buffers or other natural resources,*
- *be reasonably safe from flood and erosion related damage, and*
- *not promote growth and development in hazard-prone or buffer areas, especially in Velocity zones and ACECs, and*
- *not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with the Coastal Barrier Resource/Improvement Acts.*

Conformance: The project will be constructed so as to not exacerbate any existing hazards or damage natural resources so as to cause hazards.

Coastal Hazard Policy #4 - Prioritize public funds for acquisition of hazardous coastal areas for conservation or recreation use, and relocation of structures out of coastal high hazard areas, giving due consideration to the effects of coastal hazards at the location to the use and manageability of the area.

Conformance: This policy is not applicable.

Public Access

Public Access Policy #1 - Ensure that developments proposed near existing public recreation sites

minimize their adverse effects.

Conformance: The project is expected to be constructed within the limits of existing highway right-of-way and will not result in direct impacts to existing public recreation sites. The project will support planned connections to existing recreational trails, such as the planned connection between the Pow Wow Trail in Amesbury and the Ghost Trail in Salisbury.

Public Access Management Principle #1 - Improve public access to coastal recreation facilities and alleviate auto traffic and parking problems through improvements in public transportation. Link existing coastal recreation sites to each other or to nearby coastal inland facilities via trails for bicyclists, hikers, and equestrians, and via rivers for boaters.

Conformance: As noted above, the proposed project will support planned connections to existing recreational trails, including the planned connection between the Pow Trail and the Ghost Trail.

Growth Management Principle #2 - Ensure that state and federally funded transportation and wastewater projects primarily serve existing developed areas, assigning highest priority to projects that meet the needs of urban and community development centers.

Conformance: The project is considered to be in conformance with the 2007 Merrimack Valley Regional Transportation Plan (RTP). The goals and objectives stated in the RTP include:

- Maximize the efficiency and quality of the existing highway and transit systems. This includes the repair and/or replacement of the region's bridges, often located in critical locations on the regional highway system. Also included is the preservation of the integrity of the region's Interstate and National Highway System highways, which have contributed to the region's growth in employment and population and link the region to the rest of New England and the nation.
- Undertake efforts to eliminate congestion on the region's transportation system.
- Ensure that the transportation system supports the region's continued economic vitality and development.

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes X No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **water supply**? ___ Yes No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons/day, the volume and source of water use for existing and proposed activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____
Municipal or regional water supply	_____	_____	_____

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? ___ Yes ___ No

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source,

1. have you submitted a permit application? ___ Yes ___ No; if yes, attach the application
2. have you conducted a pump test? ___ Yes ___ No; if yes, attach the pump test report

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons/day)? _____ Will the project require an increase in that withdrawal? ___ Yes ___ No

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Water supply well(s) (capacity, in gpd)	_____	_____	_____
Drinking water treatment plant (capacity, in gpd)	_____	_____	_____
Water mains (length, in miles)	_____	_____	_____

F. If the project involves any interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

G. Does the project involve

1. new water service by a state agency to a municipality or water district? ___ Yes ___ No
2. a Watershed Protection Act variance? ___ Yes ___ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes ___ No

H. Describe the project's other impacts (including indirect impacts) on water resources, quality, facilities and services:

III. Consistency -- Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe, in gallons/day, the volume and disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater (Title 5)	_____	_____	_____
Discharge to groundwater (non-Title 5)	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Municipal or regional wastewater facility	_____	_____	_____
 TOTAL	 _____	 _____	 _____

B. Is there sufficient capacity in the existing collection system to accommodate the project? ___ Yes ___ No; if no, describe where capacity will be found:

C. Is there sufficient existing capacity at the proposed wastewater disposal facility? ___ Yes ___ No; if no, describe how capacity will be increased:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No. If yes, describe as follows:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Wastewater treatment plant (capacity, in gpd)	_____	_____	_____
Sewer mains (length, in miles)	_____	_____	_____
Title 5 systems (capacity, in gpd)	_____	_____	_____

E. If the project involves any interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed?

F. Does the project involve new sewer service by an Agency of the Commonwealth to a municipality or sewer district? ___ Yes ___ No

G. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (in tons per day):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the project's other impacts (including indirect impacts) on wastewater generation and treatment facilities:

III. Consistency -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to wastewater management:

A. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EOE number for the plan and describe the relationship of the project to the plan

TRANSPORTATION -- TRAFFIC GENERATION SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):			

B. What is the estimated average daily traffic on roadways serving the site?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

C. Describe how the project will affect transit, pedestrian and bicycle transportation facilities and services:

III. Consistency -- Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

ROADWAYS AND OTHER TRANSPORTATION FACILITIES SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? Yes ___ No; if yes, specify, in quantitative terms:

301 CMR 11.03(6)(a)1.b: Widening of an existing roadway by one or more travel lanes for two or more miles.

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities at the project site:

	Existing	Change	Total
Length (in linear feet) of new or widened roadway	22,150	0	22,150
Width (in feet) of new or widened roadway	100	24	124
Other transportation facilities:			

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)?	TBD
2. Cutting of living public shade trees (number)?	0
3. Elimination of stone wall (in linear feet)?	0

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

Newburyport, Amesbury and Salisbury are part of the Merrimack Valley Regional Planning Commission area. The 2007 *Merrimack Valley Regional Transportation Plan* (RTP) examines the long-range transportation needs, through the year 2030, for the Merrimack Valley planning region. The goals and objectives stated in the RTP include:

- **Maximize the efficiency and quality of the existing highway and transit systems.** This includes the repair and/or replacement of the region's bridges, often located in critical locations on the regional highway system. Also included is the preservation of the integrity of the region's Interstate and National Highway System highways, which have contributed to the region's growth in employment and population and link the region to the rest of New England and the nation.
- **Undertake efforts to eliminate congestion on the region's transportation system.**
- **Promote the development of an integrated network of on-road, off-road and water trails in the region.**
- **Ensure that the transportation system supports the region's continued economic vitality and development.**

The project is considered to be in conformance with the goals listed above and will enhance the achievement of these goals.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))?
___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are
1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___ Yes ___ No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency -- Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes **X** No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes **X** No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes X No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes X No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos?

___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency--Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? Yes ___ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? Yes ___ No; if yes, please describe:

The John Greenleaf Whittier Memorial Bridge is included in the Inventory of Historic and Archaeological Assets of the Commonwealth. The bridge also has been determined to be eligible for individual listing in the National Register of Historic Places as one of three bridges in Massachusetts on the Federal Highway Administration's "Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System," which was adopted by the Advisory Council on Historic Preservation and published in the Federal Register on December 19, 2006.

One property listed in the State Register of Historic Places is located immediately adjacent to the project area—Smith's Chain Bridge Filling Station No. 3 at 520 Main Street in Amesbury, which is the subject of a preservation restriction held by the Massachusetts Historical Commission (MHC). In addition, the Salisbury Point Area (AME.C), which is located along Main Street in Amesbury immediately northwest of the project area, is included in the Inventory of Historic and Archaeological Assets of the Commonwealth and has been determined by MHC to be eligible for listing in the National Register of Historic Places as a historic district. The Essex-Merrimac Bridge-Chain Bridge (AME.538), which crosses the Merrimac River approximately ¼ mile east of the Whittier Bridge, also is included in the Inventory of Historic and Archaeological Assets of the Commonwealth and has been determined by MHC to be eligible for individual listing in the National Register of Historic Places. Lowell's Boat Shop, which is listed in the State Register of Historic Places and is a National Historic Landmark, is located approximately ½ mile west of the project area at 459 Main Street in Amesbury.

There are no recorded archaeological sites within the direct project impact area including the highway rights-of-way for the highway widening or bridge reconstruction/replacement work areas. There are nine recorded prehistoric archaeological sites and one recorded historic archaeological site within a two-mile radius of the highway corridor. The closest prehistoric site consists of a possible fish weir (MHC #19-ES-279) on the shore of the Merrimack River at the terminus of Ferry Lots Land in the town of Salisbury. This site lies within 0.2 miles of the project highway corridor. It appears to date to the Archaic and Woodland periods, although no formal survey or evaluation has been undertaken (MHC site files). The remaining prehistoric sites in the project vicinity consist primarily of Archaic and Woodland period camps and village sites located on elevated terraces overlooking the Merrimack River in the towns of Amesbury, Newbury/Newburyport, and Salisbury. The one historic archaeological site is located about two miles from the project corridor, along the waterfront area in Newburyport. It consists of potential buried wharf side stores, warehouses, and workshops including in the Market Square National Register Historic District (MHC site files).

The project includes the demolition of the existing Whittier Bridge.

B. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

See above.

C. If you answered "No" to all parts of both questions A and B, proceed to the **Attachments and**

Certifications Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

D. Have you consulted with the Massachusetts Historical Commission? ___ Yes X No; if yes, attach correspondence

E. Describe and assess the project's other impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

At this stage of project design, no other direct or indirect impacts to listed or inventoried historical or archaeological resources can be assessed. Project alternatives will be assessed for impacts as part of the Environmental Impact Report.

II. Consistency -- Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

MassHighway will consult with the Massachusetts Historical Commission and the Massachusetts State Historic Preservation Officer in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, and M.G.L. Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 to determine effects to properties that may be listed in or eligible for listing in the State or National Registers of Historic Places. MassHighway will determine if additional archaeological or architectural surveys are necessary as the project design progresses.

ATTACHMENTS:

1. Plan, at an appropriate scale, of existing conditions of the project site and its immediate context, showing all known structures, roadways and parking lots, rail rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
2. Plan of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase). **Project Alternatives Drawings and Comparative Matrix**
3. **Original** U.S.G.S. map or good quality **color** copy (8-½ x 11 inches or larger) indicating the project location and boundaries
4. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
5. **Reportable Release Information**

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

<u>Boston Herald</u>	_____
<u>Newburyport Daily News</u>	_____
(Name)	(Date)

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

_____	Signature of Responsible Officer or Proponent	_____	Signature of Responsible Officer or Proponent
Name (print or type)	<u>Luisa M. Paiewonsky, Commissioner</u>	Name (print or type)	<u>Kevin Walsh, Director of Environmental Services</u>
Firm/Agency	<u>Mass Highway Department</u>	Firm/Agency	<u>Mass Highway Department</u>
Street	<u>10 Park Plaza</u>	Street	<u>10 Park Plaza</u>
Municipality/State/Zip	<u>Boston, MA 02116</u>	Municipality/State/Zip	<u>Boston, MA 02116</u>
Phone	<u>617-973-7811</u>	Phone	<u>617-973-7484</u>

_____	Signature of person preparing ENF (if different than above)
Name (print or type)	<u>Joseph Freeman</u>
Firm/Agency	<u>Tetra Tech Rizzo</u>
Street	<u>One Grant Street</u>
Municipality/State/Zip	<u>Framingham, MA 01701</u>
Phone	<u>508-903-2050</u>