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July 10, 2009

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS  
ON THE  
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Whittier Bridge/I-95 Improvement Project  
PROJECT MUNICIPALITY : Newburyport, Amesbury, Salisbury  
PROJECT WATERSHED : Merrimack  
EEA NUMBER : 14427  
PROJECT PROPONENT : Massachusetts Highway Department  
DATE NOTICED IN MONITOR : June 10, 2009

Pursuant to the Massachusetts Environmental Policy Act (MEPA) (M.G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

Project Description

As described in the Environmental Notification Form (ENF), the proposed project involves the replacement of the existing structurally deficient Interstate 95 (I-95) six-lane John Greenleaf Whittier Memorial Bridge (Whittier Bridge) over the Merrimack River with an eight-lane bridge and the widening of 4.25 miles of I-95 to eight lanes from north of the I-95/Route 113 Interchange to just north of the I-495 entrance ramp in Newburyport, Amesbury, and Salisbury. The project proposes to add the two additional lanes to I-95 and the bridge crossing to provide a consistent eight lane configuration along the I-95 corridor within the project area. As stated in the ENF, the purposes of the project are: to replace the structurally deficient bridge and provide for an improved bridge crossing that meets current Federal Highway Administration (FHWA) Interstate Highway design standards; to improve overall safety by reducing the incidence of accidents and reducing peak hour traffic backups with a consistent eight-lane configuration and full breakdown shoulder in each direction; and to improve local and regional air quality by reducing congestion and improving traffic flow. The project is part of the Commonwealth's \$3 billion Accelerated Bridge Program (ABP), which consists of the replacement, reconstruction or modification of four to ten other bridges to accommodate eight lanes of traffic on I-95 and meet the FHWA Interstate Highway

design standards. The Whittier Bridge/I-95 Improvement Project is the most significant project that will be undertaken as part of that program.

The Massachusetts Highway Department (MassHighway) will be coordinating the state and federal review of the project under MEPA and the National Environmental Policy Act (NEPA) through the submission of a joint Environmental Assessment/Draft EIR (DEIR). I additionally ask that MassHighway coordinate all public comment and review periods under the state and federal processes (to the extent possible) to ensure coordinated and consistent review of this significant public project.

#### MEPA Jurisdiction and Required Permits

The project is undergoing review and requires the preparation of a mandatory EIR pursuant to Sections 11.03(1)(a)(2), 11.03(3)(a)(1)(a), 11.03(3)(a)(2) and 11.03(6)(a)(1)(b) of the MEPA regulations because it is a project being undertaken by a State Agency and because it will result in the creation of ten or more acres of impervious area, the alteration of one or more acres of salt marsh or Bordering Vegetated Wetlands (BVW), the likely requirement of a variance in accordance with the Wetlands Protection Act (WPA), and the creation of ten or more acres of impervious area. The project is also undergoing MEPA review pursuant to Section 11.03(10)(b)(1) because it involves the demolition of a historic structure listed in the Inventory of Historic and Archeological Assets of the Commonwealth.

The project will require: Orders of Resource Area Delineation and Orders of Conditions from the Newburyport, Amesbury, and Salisbury Conservation Commissions (and, on appeal only, Superseding Orders of Conditions from the Massachusetts Department of Environmental Protection (MassDEP)); a Chapter 91 License, Section 401 Water Quality Certificate (WQC), and possibly, a variance from the provisions in the WPA from MassDEP; Section 106 review by the Massachusetts Historical Commission (MHC); review under the Massachusetts Endangered Species Act (MESA) by the Natural Heritage and Endangered Species Program (NHESP); a National Pollution Discharge Elimination System (NPDES) Construction Stormwater and Dewatering General Permit from the United States Environmental Protection Agency (U.S. EPA); a Section 9 Bridge Permit from the United States Coast Guard; an individual Section 404 Permit from the United States Army Corps of Engineers; an Environmental Assessment (EA) under NEPA; and a Record of Decision from FHWA. The project may be subject to Coastal Zone Management (CZM) federal consistency review. A Construction Dewatering Permit and a Notice of Construction & Demolition may also be required from MassDEP. The Proponent may be required to prepare a blast design plan pursuant to the Board of Fire Protection Regulations (577 CMR 13.09) for the proposed construction of roads and replacement bridges within the project area. The project is subject to the EEA/MEPA Greenhouse Gas Emissions Policy and Protocol.

The project will be undertaken by and financed by MassHighway, a State Agency. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations.

## SCOPE

### General

The Proponent should prepare the DEIR in accordance with the general guidance for outline and content found in Section 11.07 of the MEPA regulations, as modified by this Scope. The DEIR should include a copy of this Certificate and a copy of each comment letter received on the ENF. The DEIR should contain a description of the purposes and need for the proposed project, a schedule for its implementation, and an estimate of the costs associated with the project.

### Project Description

The DEIR should include a thorough description of the entire project and all project elements and phases in clear non-technical language. The DEIR should clearly describe any changes to the project since the filing of the ENF. The DEIR should include an existing conditions plan that clearly locates and delineates existing conditions and resources on and adjacent to the project site. The DEIR should also include a proposed conditions plan (or plans) illustrating proposed elevations, structures, roads, and stormwater management systems associated with each phase of the project. The DEIR should include an overlay of the proposed project in the context of sensitive resources on and in the vicinity of the project site to facilitate review and assessment of potential impacts. Plans must be provided at a reasonable scale (e.g. 40 or 60 scale).

The DEIR should state whether land takings are necessary to implement proposed improvements and should identify the party responsible for such takings. It should also identify land donations by alternative which will provide improved access to development parcels.

### Permitting and Consistency

The DEIR should briefly describe each Federal, State and local permit or agency action required or potentially required for each phase of the project, and should demonstrate that the project meets applicable performance standards. The DEIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences related to the project. In accordance with section 11.01(3)(a) of the MEPA regulations, the DEIR should discuss the consistency of the project with any applicable local or regional land use plans. The DEIR should also address the project's consistency with the Office for Commonwealth Development's Ten Sustainable Development Principles and Executive Order 385 (Planning for Growth) and with local and regional planning. In addition, projects within the 100-year floodplain which involve federal action must comply with federal Executive Order 11988, Floodplain Management, and the DEIR should describe this requirement if applicable.

### Alternatives Analysis

The DEIR should include an evaluation of all feasible alternatives and describe how the preferred alternative will avoid, minimize and mitigate environmental impacts to the maximum extent feasible. The alternatives analysis should include a clear comparison (quantified to the extent feasible) of the impacts of each alternative and its project components (including but not limited to acres of land alteration, impervious area, wetlands, habitat impacts, traffic and parking). The DEIR

should provide a rationale to explain why certain alternatives are selected and others ruled out for further consideration.

The DEIR should analyze the following alternatives:

- No-Build Alternative;
- No Road Widening Alternative;
- Rehabilitation Option which includes alternatives to the proposed bridge demolition and includes a thorough examination of full rehabilitation, rehabilitation with retrofitting, and a combination of retention and adjacent new construction;
- Progressive Staging Option which includes the progressive construction of a new bridge (from west to east) in three phases;
- East Side Option which involves the construction of a new bridge on the east side of the existing structure with six lanes allowing traffic relocation, followed by demolition of existing bridge and construction of new four-lane bridge (for southbound (SB) traffic);
- West Side Option which involves the construction of a new bridge on the west side of the existing structure with six lanes allowing traffic relocation, followed by demolition of existing bridge and construction of new four-lane bridge (for northbound (NB) traffic); and
- East and West Single Phase Option which involves construction of new NB and SB four-lane bridge structures on either side of the existing bridge, followed by demolition of the existing bridge.

The DEIR should include alternatives relating to land, wetlands, transportation, historical resources and other potential impacts as further detailed in the Scope below. The alternatives analysis should also identify opportunities to minimize impervious area within the project layout.

As described elsewhere in this Certificate, the project requires a 401 Water Quality Certificate (401 WQC) from MassDEP, and may also require a Variance from MassDEP's wetlands regulations. I note that MassDEP's 401 WQC and wetlands variance review processes require an alternatives analysis that considers practicable alternatives to avoid, minimize, and mitigate impacts to wetlands resource areas. The EIR should provide an alternative analysis that complies with the requirements for MassDEP's 401 WQC and wetlands variance review processes, and MassHighway should consult with MassDEP with respect to this requirement.

#### Land Use and Alteration

The DEIR should quantify the total amount of alteration associated with the proposed project (including areas to be altered for roadways, breakdown lanes, stormwater infrastructure, landscaping and other project components). The DEIR should include a breakdown showing the amount of alteration for different project elements. The DEIR should clarify the location, type and amount of alteration in previously undisturbed areas.

#### Transportation

As presented in the ENF, the project has been designed, in part, to relieve congestion and improve traffic flow and safety along the project corridor. The project is not intended to increase

roadway capacity. The DEIR should be prepared in conformance with the EEA/EOTPW Guidelines for EIR/EA Traffic Impact Assessment, and should identify existing traffic conditions in the project area. The DEIR should identify traffic conditions associated with each alternative, and should identify appropriate mitigation measures for any impacts on local and regional traffic operations, especially where delays may increase at intersections along the project corridor.

The DEIR should include an updated Level-of-Service (LOS) analysis for interchanges and roadway intersections located within the entire project area for the morning and evening peak hours during project construction and post-construction. The Proponent should consult with Newburyport, Amesbury, and Salisbury officials to identify any additional local intersections and roadway sections to include in the updated LOS analysis. The DEIR should include a summary of average and 95th percentile vehicle queues for each intersection within the project area. It should also analyze weave and merge operations on I-95 and the I-495, Route 110 and Route 113 ramps.

The DEIR should include traffic projections from other future development proposals located in the vicinity of the project. The DEIR should identify current roadway improvement projects located in Newburyport, Amesbury, and Salisbury that could impact traffic flows during construction of the proposed improvements. The DEIR should discuss the Proponent's coordination efforts with the local municipalities as they address regional and local traffic concerns within this area and should provide the most current information on the proposed construction dates for any roadway improvements in the area. The DEIR should discuss the right-of-way (ROW) implications of possible widening and describe how such ROWs would be acquired.

#### Transportation Demand Management

The DEIR should include a description of any proposed Transportation Demand Management (TDM) improvements to reduce vehicle trips in the project area. The TDM plan should identify conceptual transit, park-and-ride, and Intelligent Transportation Systems (ITS) options that could benefit the project area. The DEIR should identify any potential transit-related improvements to be incorporated in its TDM plan, and should expressly consider the following options:

- Expand Park-and-Ride capacity in the project area;
- Add signage along Routes 110 and 113 to promote alternative transportation options;
- Extend the Merrimack Valley Regional Transit Authority (MVRTA) Route bus routes and any local bus routes to meet and create a timed transfer;
- Create new bus routes along Routes 110 and 113;
- Add Dynamic Message Signs (DMS) on I-95 promoting the existing Park-and-Ride Lot at Route 113 in Newburyport ;
- On-line carpooling and vanpooling sign-up program;
- Expanded outreach and incentives for carpooling and vanpooling; and
- Improved pedestrian, bike paths, and vehicle access at Newburyport Commuter Rail Station.

The DEIR should also identify existing TDM measures ongoing in the project area. I ask that all project contractors be required to participate in the proposed TDM plan to minimize construction period vehicle trips. The TDM plan should describe any construction and post-

construction monitoring necessary to ensure the success of the proposed transit improvements and TDM program.

### Transit

The DEIR should provide a map of public transit routes and shuttle bus service routes that may serve the project area. The Proponent should work with local officials from Newburyport, Amesbury, and Salisbury to identify potential Merrimac Valley Regional Transit Authority (MVRTA) bus connections and potential shuttle bus services from activity nodes and residential areas through the project area. The DEIR should identify any construction and post-construction impacts to existing or proposed transit services with this project, and should evaluate the feasibility of enhancing transit service as a component of the project, as noted above.

### Pedestrian and Bicycle Facilities

The DEIR should show where sidewalks currently exist and the locations of any new proposed sidewalks and/or walking trails. It should identify how proposed sidewalks would connect to the existing sidewalks in the project area. The DEIR should also identify any existing and/or proposed bicycle facilities in the project area and should investigate the feasibility of providing additional bicycle path and pedestrian connections.

According to the ENF, the project will support existing connections to existing recreational trails. The DEIR should describe how the project will support these connections. As evidenced by the numerous comment letters I have received citing the importance of integrating pedestrian and bicycle accommodations into the project planning, there is considerable public interest in significantly expanding the region's alternative transportation network. In addition, the communities of Newburyport, Amesbury, and Salisbury have been engaging in efforts to improve the rail trail network in the vicinity of the project. The DEIR should address all of the comments, suggestions and concerns provided regarding the improvement of pedestrian and bicycle connections in the project area, and should identify additional commitments to improved connections. The DEIR should also specifically address how the project will avoid adverse impacts to the municipal recreational trail efforts.

The Department of Conservation and Recreation (DCR) notes that several of the alternatives will require reconstruction of the Ferry Road/Pine Hill Road Bridge solely due to the proposed widening of I-95. The DEIR should evaluate impacts to the Ferry Road/Pine Hill Bridge which is a primary transportation link to DCR's Maudslay State Park. The DEIR should also evaluate opportunities to enhance pedestrian and bicycle access to Maudslay State Park from several state reservations to the east of the project and include details on the accommodation of pedestrian/bicycle access if the bridge requires replacement. The boundaries of Maudslay State Park should be shown on the maps provided in the DEIR.

### Wetlands

According to the information provided in the ENF, the 270-acre project corridor in the MassHighway right-of-way contains Bordering Vegetated Wetlands (BVW) and other wetland resource areas. Based on the Proponent's analysis of existing aerial photographs and digital

geographic information system (GIS) maps, the project is estimated to impact between 0 and 7.8 acres of BVW. In their comments, MassDEP has indicated that the project will require a 401 WQC from MassDEP and, likely, a variance from full compliance with MassDEP's Wetlands Regulations (310 CMR 10.00). The Proponent must also file Notices of Intent (NOI), including a Riverfront Alternatives Analysis, and Abbreviated Notices of Resource Area Delineations with the Newburyport, Salisbury and Amesbury Conservation Commissions for the project.

The ENF does not contain sufficient information to accurately identify wetlands resource areas and previously constructed stormwater management infrastructure within the project area. The project area may contain additional wetland resource areas that do not appear on existing GIS maps. All resource area boundaries, riverfront areas, applicable buffer zones, 100-year flood elevations, 500-year floodplains, vernal pools (both certified and potential), and public and private wellhead protection areas should be clearly delineated on a plan at a scale of not greater than one inch = 200 feet. Wetlands resource areas that have been delineated in the field should be surveyed, mapped, and located on the plans. Each wetland resource area and riverfront area should be characterized according to 310 CMR 10.00. The text should explain whether the local conservation commissions have accepted the resource area boundaries and any disputed boundary should be identified. For each of the alternatives, the DEIR should quantify the amount of direct wetland resource area alterations proposed, including shading of wetlands under bridges and removal or height reduction of tree and shrub canopy from forested wetlands (crown area, not basal area). The DEIR should include tables specifying the amount of resource area impacts and the watershed for each alternative and within each municipality. The DEIR should also identify cumulative wetland impacts from any expected additional real estate development generated by each alternative. The DEIR should discuss the potential impacts to wetland resource areas from proposed activities including interim and permanent construction activities, construction mitigation, erosion and sedimentation control, phased construction, and stormwater drainage discharges or overland flows into wetland areas. The DEIR should address each of MassDEP's requirements in their comment letter for construction period mitigation to limit impacts to wetland resource areas.

The locations of existing and proposed detention basins and their distances from wetland resource areas, and the expected water quality of the effluent from these basins should be evaluated. This analysis should address current and expected post-construction water quality (including winter de-icing and sanding analyses) of the predicted final receiving water bodies. Sufficient mitigation measures must be incorporated to ensure that no downstream impacts will occur. The drainage analysis must ensure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

Because wetlands impacts are predicted to exceed those allowable under the performance standards in the wetlands regulations, the project will likely require a variance. The Proponent may request a variance directly from the Commissioner of MassDEP, with a copy to each conservation commission. The DEIR should discuss whether the Proponent will submit a single-request variance for each alternative or separate variances in each municipality. As MassDEP has indicated in its comments, variances have historically been issued by MassDEP only in rare and unusual circumstances involving the protection of public health, the protection of public safety, and environmental improvements. The variance eligibility standards (310 CMR 10.05) require the Proponent to satisfactorily demonstrate:

- 1) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the Wetlands Regulations;
- 2) mitigation measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the WPA; and,
- 3) the variance is necessary to accommodate an overriding community, regional, state or national public interest.

The Proponent should use the DEIR to demonstrate how this highway and bridge improvement project will advance public safety interests while substantially reducing the project's direct and indirect environmental impacts compared to the potential environmental impacts associated with the No Build scenario and other previously considered project alternatives. I note that MassDEP's 401 WQC and the wetlands variance review processes require an alternatives analysis that considers practicable alternatives to avoid, minimize, and mitigate impacts to wetlands resource areas. Although the preferred alternative has not been identified, I strongly encourage the Proponent to consult with MassDEP in order to commence analysis of the project's consistency with the variance requirements under the WPA (310 CMR 10.05(10)) and the variance provisions of the 401 WQC pursuant to 314 CMR 9.06(4) given the potential for impacts to an Outstanding Resource Water (ORW). This information should be presented in the DEIR.

The Commonwealth has endorsed a "No Net Loss Policy" that requires that all feasible means to avoid and reduce the extent of wetland alteration be considered and implemented. The DEIR should examine alternatives that avoid impacts to wetland resource areas, their associated buffer zones, riverfront protection areas and 100-year flood plain areas. Where it has been demonstrated that impacts are unavoidable, the DEIR should demonstrate that impacts will be minimized, and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations.

If a variance is required, the Proponent must provide wetlands replication at a ratio of 2:1 for any unavoidable impacts to wetlands. Any floodplain filled should be replaced equally, at each one-foot increment of elevation in compliance with the WPA (310 CMR 10.57). The DEIR must identify the Proponent's plans for wetland restoration within the project area. For any amount of required wetlands replication, a detailed wetlands replication plan should be provided in the DEIR which, at a minimum, includes: replication location(s) delineated on plans at a scale no greater than one inch = 100 feet, elevations, typical cross-sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, lists of wetlands plant species of areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring. The Proponent should consult with the Massachusetts Wetlands Restoration Program of MassDEP concerning the wetland restoration plans.

The DEIR should explain any potential impacts on drinking water supplies. Specifically, MassDEP has indicated that the project is located within the drainage area, and potentially a portion of the Zone A area of protection, for Bartlett Spring Pond, which is a Class A Public Drinking Water Supply. The DEIR should address potential impacts to Bartlett Spring Pond and propose mitigation as appropriate.



MassDEP indicates that Chapter 91 jurisdiction is limited to the waters of the Merrimack River itself as there are little if any filled tidelands within the alignment of the existing bridge or the alternatives described in the ENF. The DEIR should evaluate the potential impacts to navigation of each of the alternatives, on both a short-term and permanent basis. The Proponent should consult with local harbor masters, recreational boaters, and the Coast Guard to help evaluate the relative impacts of the various construction sequencing alternatives identified in the ENF. The DEIR should review each alternative with respect to river closures that may be necessary, the length of the closures, the overall construction period, and the mitigation measures that could be implemented to maintain safe navigation during the construction period. The DEIR should also identify design elements that must be incorporated into the new bridge to allow for safe navigation, such as the vertical clearance of the bridge; spacing between piers; location of bridge piers, with special attention to any consideration due to vessel traffic routes through the Essex-Merrimack Bridge downstream of the project site; navigation aids; and localized current and tidal effects. The DEIR should also discuss any reasonable public access that can be accommodated with the project, such as continuous pedestrian access along the shoreline. The DEIR should detail how the bridge piers will be constructed to avoid adverse impacts to resource areas and avoid increased erosion as a result of hydraulic changes associated with the new bridge design.

#### Rare Species

According to comments received from NHESP, portions of the project site are located within *Priority Habitat* and *Estimated Habitat* for the Bald Eagle (*Haliaeetus leucocephalus*), Shortnose Sturgeon (*Acipenser brevirostrum*), and Atlantic Sturgeon (*Acipenser oxyrinchus*) as indicated in the 13<sup>th</sup> Edition of the Massachusetts Natural Heritage Atlas. The project therefore requires review through a direct filing with NHESP for compliance with MESA (321 CMR 10.00) and its implementing regulations. The Proponent must submit any NOI for this project to NHESP for review for compliance with the Wetlands Regulations and MESA. The Proponent should also continue to coordinate with the National Marine Fisheries Service regarding potential construction conditioning to avoid impacts to the Shortnose Sturgeon, a federally-listed Endangered Species.

Although NHESP is concerned that the project may negatively affect Sturgeon in the vicinity of the Whittier Bridge, it anticipates that potential impacts may be avoided through appropriate conditioning. The Proponent should coordinate with NHESP early to address potential concerns and to evaluate project alternatives. The DEIR should provide an update on consultation with NHESP and, if applicable, a determination as to whether a Conservation and Management Permit will be required under MESA. The DEIR should evaluate project alternatives to minimize impacts to rare species habitats. The DEIR should commit to mitigation measures such as the use of proper sedimentation controls, construction conditioning, and independent construction oversight associated with the project to avoid and minimize impacts to rare species habitat. The DEIR should also identify best management practices for erosion and sedimentation control to minimize potential impacts to fisheries resources, and should outline time-of-year (TOY) restrictions for work in the Merrimack River. NHESP recommends the existing grade be maintained if alterations to the riverbed are required.

The DEIR should also evaluate opportunities for: habitat improvement, including culvert enlargement to promote water flow and habitat connectivity; BMPs to avoid creating habitat for invasive species; and re-vegetation with resilient native species.

### Stormwater and Drainage

The DEIR should include a detailed description of the proposed project's construction and post-construction period drainage system design, including a discussion of the alternatives considered along with their impacts. For each of the proposed alternatives, the DEIR should identify any stormwater discharge points or existing stormwater management infrastructure, and describe any drainage impacts associated with roadway improvements. The DEIR should identify the quantity and quality of flows. The rates of stormwater runoff should be analyzed for the 10, 25 and 100-year storm events. It should also be demonstrated that the proposed drainage system would control storm flows at existing levels.

The Proponent should recharge treated stormwater runoff from roadways in order to retain as much as possible of the existing groundwater flows and drainage patterns. Groundwater recharge areas for stormwater infiltration should not be located within the Zone I of a public water supply. The DEIR should indicate and discuss where the stormwater drainage systems for I-95 and Routes 110 and 113 discharge in this area.

The locations of existing and proposed detention basins and their distances from wetland resource areas, and the expected water quality of the effluent from the said basins should be evaluated. This analysis should address current and expected post-construction water quality (including winter deicing and sanding analyses) of the predicted final receiving water bodies. Sufficient mitigation measures must be incorporated to ensure that no downstream impacts will occur. The drainage analysis must insure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

If the Proponent ties into an existing municipal stormwater system or its own drainage system, the DEIR should clarify the permits required and if there will be a recharge deficit on-site. The Proponent should provide calculations and supporting information sufficient to demonstrate that the design of the project's drainage system can accommodate stormwater flows during severe storm events without impacting adjacent BVW resources and land uses. The DEIR should address the performance standards of MassDEP's Stormwater Management Policy. The DEIR should demonstrate that the design of the drainage system for each of the proposed alternatives, including source controls, pollution prevention measures, erosion and sedimentation controls, and the post-development drainage system will be designed in compliance with MassDEP's Stormwater Management Regulations. Alternatively, the DEIR should explain why the Proponent is proposing a drainage system design not recommended by MassDEP. The Proponent should use the MassDEP Stormwater Management Handbook when addressing this issue.

The DEIR should also discuss consistency of the project with the provisions of the NPDES General Permit for Stormwater Discharges from Construction Activities from the U.S. EPA for land disturbance greater than one acre, especially regarding discharges to an ORW. The DEIR should provide a Construction Management Plan required by Stormwater Standard No. 8 fully explaining the construction period mitigation.

The Proponent is required to prepare a Stormwater Pollution Prevention Plan (SWPPP), which must clearly and reasonably delineate all areas to be 'altered', and describe the practices that will be implemented to protect the resources during construction as well as upon completion of the project. This includes Erosion and Sedimentation Control Plans and design calculations to assess all drainage leaving the site. The SWPPP must also include designation of areas where stockpiling of material and operations are to occur. The Proponent should consult with Newburyport, Amesbury, and Salisbury officials, MassDEP and others to ensure that the Proponent will meet any performance standards associated with a federal NPDES permit for all proposed project construction activities. The DEIR should identify any additional stormwater pollution control measures which will be required beyond the SWPPP to protect the ORW.

The DEIR should include a detailed description of the Proponent's plan to implement best management practices (BMPs) to address the stormwater runoff generated from any portion of the proposed project. In addition, the SWPPP should include a maintenance program for the drainage system that will be required to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems. The Proponent should commit to use a non-sodium based de-icer on pavement surfaces. Any de-watering of the construction site should include monitoring to ensure that there is no impact to groundwater levels. The DEIR should summarize existing pre-construction groundwater conditions, and propose groundwater monitoring to address any impacts.

#### Air Quality/Greenhouse Gas (GHG) Emissions

With regard to air quality impacts from transportation activities, the DEIR should identify how the project will conform to the purpose and requirements of the State Implementation Plan (SIP). As stated in MassDEP's comments, although the ENF indicates that the project conforms with the goals of the Merrimack Valley Regional Transportation Plan (RTP), the DEIR should confirm that the project will also be included in a future State Transportation Improvement Program and undergo a conformity review to ensure that the project conforms to the SIP. The DEIR should describe how the project will enhance the goals of the RTP and explore opportunities to work with regional planners and transit providers to ensure their implementation.

The project is subject to EEA's Greenhouse Gas (GHG) Emissions Policy and Protocol (the Policy). The DEIR should include an analysis of the project's GHG emissions and identify measures to avoid, minimize, and mitigate GHG emissions in accordance with the standard requirements of the Policy. The DEIR should outline and commit to mitigation measures to reduce GHG emissions. The Proponent should meet with representatives from MEPA and MassDEP prior to preparation of the DEIR.

The ENF indicates that one of the project's purposes is to improve local and regional air quality by reducing congestion on I-95. The Proponent must satisfactorily demonstrate how this project will result in a reduction of traffic congestion on I-95 through the project area and thereby reduce GHG emissions and improve air quality through improved traffic flow and reduced vehicle idling. Specifically, the DEIR should include a GHG emissions analysis that calculates and compares GHG emissions associated with the current and future no-build alternatives with each Whittier Bridge replacement or rehabilitation alternative and two roadway widening alternatives

(full-build out scenarios). The GHG emissions analysis should account for the potential mode shift away from commuter bus and rail service to private vehicles within the I-95 corridor as a result of latent travel demand induced by the added lane capacity.

The construction period for the project may result in increased congestion and increased vehicle emissions. The Proponent must ensure that construction period impacts of diesel emissions are mitigated to the maximum extent feasible. The DEIR should estimate GHG emissions associated with construction and corresponding GHG reductions subsequent to the implementation of traffic and construction-related mitigation measures. The DEIR should specifically identify TDM measures proposed and the corresponding GHG emission reductions expected.

### Historical and Archaeological Resources

According to comments received by MHC, the Whittier Bridge is a historically significant engineering structure included in MHC's *Inventory of Historic and Archaeological Assets of the Commonwealth* and was determined individually eligible for listing in the National Register of Historic Places in 2006 by MHC, FHWA, MassHighway and the Advisory Council for Historic Preservation (ACHP). MHC has indicated that the proposed demolition of the Whittier Bridge constitutes an "adverse effect" pursuant to 36 CFR 800.5(a)(2)(i) and 950 CMR 71.05(a).

The DEIR should identify how the project will avoid, minimize or mitigate the adverse effect of the potential demolition of a historic property. As outlined in this Certificate, the no-build condition should include a current conditions analysis detailing the structural state of the existing bridge. The Rehabilitation Option should include a thorough examination of rehabilitation and retrofitting options for the Whittier Bridge.

The Proponent should also conduct an archaeological reconnaissance/intensive survey and a cultural resources survey to determine if any significant historic or archeological resources will be affected. The Proponent should consult with MHC regarding the survey results and the preparation of the application for the State Archaeologist's Permit. The DEIR should discuss measures to avoid, minimize or mitigate any adverse effects to significant archaeological resources.

### Noise and Visual Impacts

Because portions of the project area are located adjacent to residential neighborhoods, the DEIR should discuss how this project would impact residential neighborhoods in the area. According to the information provided at the scoping session, a number of residential neighborhoods proximate to the existing bridge and highway corridor and may currently be experiencing noise levels that warrant the need for noise barriers. For each of the alternatives, the DEIR should identify any/all sensitive noise receptors within the project area. If there are sensitive receptors identified, the Proponent should identify and provide an analysis of existing and projected noise levels during project construction and post-construction at these receptors using federal noise standards for transportation projects. It should identify any mitigation measures proposed to reduce noise impacts from the proposed project. This section of the DEIR should include a detailed discussion of the Proponent's proposed interim- and long-term noise abatement mitigation for the construction and post-construction of the project.

The DEIR should include an analysis of the visual impacts of the proposed project, including renderings of the proposed alternatives. The DEIR should include a conceptual-level landscaping plan and bridge and highway elevations from all sides. It should include a proposed lighting plan and identify any lighting impacts from roadways on adjacent residential neighborhoods and commercial and industrially-zoned areas.

### Construction

The proposed demolition and reconstruction will generate a significant amount of construction and demolition (C&D) debris. The DEIR should commit to recycling construction debris. As further detailed in the MassDEP comment letter, demolition activities must comply with both Solid Waste and Air Pollution Control regulations, including those related to asphalt, brick and concrete (ABC) rubble, and asbestos-containing materials. The Proponent should work in consultation with staff of the Bureau of Waste Prevention's Asbestos Removal Program. The DEIR should discuss the project's consistency with applicable regulations and identify any additional MassDEP permits or approvals required.

The DEIR should include a Construction Management Plan (CMP) describing project activities and their schedule and sequencing, site access and truck routing, and BMPs that will be used to avoid and minimize adverse environmental impacts. The CMP should address potential construction period impacts (including but not limited to land disturbance, noise, vibration, dust, odor, nuisance, vehicle emissions, construction and demolition debris, and construction-related traffic) and analyze and outline feasible measures that can be implemented to eliminate or minimize these impacts. The CMP should discuss plans for reuse and recycling of construction materials. The CMP should discuss measures proposed to protect wetland resource areas during construction activities, including impacts from asbestos containing material (ACM) and lead based paint (LBP). The CMP should propose special handling requirements to be implemented at the work yard if these materials are to be temporarily stores there prior to disposal at an approved facility. The Proponent should consult with MassDEP on these issues. The CMP should include an erosion control component to address protection of water quality and wetlands resources.

The DEIR should discuss project compliance with the Massachusetts Idling Regulation (310 CMR 7.11). The Proponent should post idling restriction signs in all construction staging areas to remind all construction equipment operators and delivery personnel of the state's idling regulation.

MassDEP requires all MassHighway project contractors to install after-engine emission controls. The Proponent should commit to participation in the MassDEP Diesel Retrofit Program and to use ultra low sulfur diesel (ULSD) in off-road engines. The DEIR should describe how the Proponent will minimize construction-period diesel emissions to address concerns relating to fine particulate matter (PM<sub>2.5</sub>) and related health impacts.

The DEIR should clarify if any blasting is being proposed and if so, discuss measures to protect public water supplies in the project area. I refer the Proponent to the MassDEP Memorandum entitled "Potential Environmental Contamination From the Use of Perchlorate-Containing Explosive Products" available at <http://www.mass.gov/dep/cleanup/laws/blasting.htm>

### Hazardous Wastes

The DEIR should present a summary of the results of hazardous waste studies and remediation efforts undertaken in the project corridor by the Proponent to comply with the Massachusetts Contingency Plan (310 CMR 40.00). Specifically, the DEIR should briefly consider the contamination sites referred to in MassDEP's comment letter with respect to potential impacts and remediation within the highway corridor to be developed.

### Mitigation and Section 61 Findings

The DEIR should include a separate chapter summarizing mitigation measures for the proposed alternatives. This chapter on mitigation should include Draft Section 61 Findings for all state permits. The Draft Section 61 Findings should describe proposed mitigation measures, contain a clear commitment to implement mitigation, provide an estimate of the individual costs of the proposed mitigation and a schedule for the implementation of mitigation, based on the construction phases of the project, and identify the parties responsible for funding and implementing the mitigation. The proposed Section 61 Findings will serve as the primary template for permit conditions.

### Response to Comments

In response to the ENF, I have received numerous letters from state agencies, municipal officials, advocacy organizations and members of the public providing detailed comments on this significant public project. In order to ensure that the issues raised by commenters are addressed, the DEIR should include a detailed response to comments received to the extent they are within MEPA jurisdiction. This directive is not intended to and shall not be construed to enlarge the scope of the DEIR beyond what has been expressly identified in this Certificate. I recommend that the Proponent use either an indexed response to comments format, or a direct narrative response to provide clear answers to the concerns raised. The DEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

The Proponent should coordinate with Newburyport, Amesbury, and Salisbury officials to discuss their concerns with the project. The DEIR should address the requests of the municipalities to incorporate certain elements into the project that will facilitate future development for the municipalities, such as installment of utility sleeves under I-95 to accommodate future sewer and water lines.

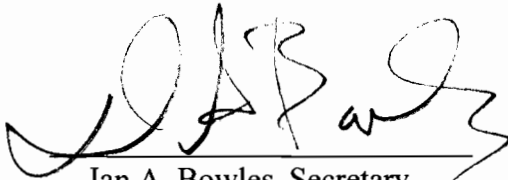
The DEIR should also specifically address the comments from MassAudubon and abutters expressing their concerns that there is insufficient justification for the replacement and widening of the Whittier Bridge and roadway in light of the project's potential to increase vehicular traffic and other environmental impacts.

### Circulation

The DEIR should be circulated in compliance with Section 11.16 of the MEPA regulations. Copies should be sent to those parties that submitted comments on the ENF, and to each federal, state and local agency from which the Proponent will seek permits or approvals. A copy of the

DEIR should be made available for public review at the Newburyport, Amesbury, and Salisbury Public Libraries.

July 10, 2009  
DATE

  
Ian A. Bowles, Secretary

Comments Received:

- 06/19/2009 Paula A. Chase, Newburyport
- 06/22/2009 Leonard W. Johnson, Amesbury
- 06/25/2009 Sean Sullivan, Director of Planning and Development, City of Newburyport
- 06/25/2009 Geordie Vining, Senior Project Manager, Planning Office, City of Newburyport
- 06/25/2009 Salisbury Conservation Commission
- 06/26/2009 James Shanley, President, Newburyport City Council, City of Newburyport
- 06/26/2009 Robert J. Straubel, Salisbury
- 06/26/2009 Jay Harris, Newburyport
- 06/28/2009 David Klapes, Newburyport
- 06/29/2009 Natural Heritage and Endangered Species Program
- 06/29/2009 Town of Salisbury
- 06/29/2009 John F. Moak, Mayor, City of Newburyport
- 06/30/2009 Massachusetts Historical Commission
- 06/30/2009 Massachusetts Department of Environmental Protection – NERO
- 06/30/2009 Massachusetts Office of Coastal Zone Management
- 06/30/2009 Massachusetts Audubon Society
- 06/30/2009 Coastal Trails Coalition, Inc.
- 06/30/2009 Merrimack Valley Planning Commission
- 06/30/2009 Ganson Purcell, Jr., Amesbury
- 06/30/2009 William and Judi Decie, Amesbury
- 07/02/2009 Massachusetts Department of Conservation and Recreation

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