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February 8, 2008

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

PROJECT NAME : I-93/Lowell Junction Interchange Project  
PROJECT MUNICIPALITY : Andover, Tewksbury, and Wilmington  
PROJECT WATERSHED : Merrimack River  
EOEA NUMBER : 14159  
PROJECT PROPONENT : Massachusetts Highway Department & Executive Office  
of Housing and Economic Development  
DATE NOTICED IN MONITOR : January 9, 2008

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) 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, the proposed project consists of the construction of a new highway interchange on I-93 in the Towns of Andover, Tewksbury and Wilmington. The new interchange is proposed between the I-93/Route 125 Interchange in Wilmington and the I-93/Dascomb Road Interchange in Andover in an area referred to as the Lowell Junction. The purpose of the project is to relieve traffic congestion on I-93 and adjacent local roadways and to improve access to industrial and commercial developments, as well as undeveloped land suitable for industrial and commercial development. The access from the south to businesses in the Lowell Junction area (east of I-93) is via the I-93/Route 125 Interchange (Interchange 41) to Ballardvale Street (a local, partially residential roadway north of Route 125). From the north, access to the Lowell Junction area is via the I-93/Dascomb Road Interchange (Interchange 42) to Dascomb Road, Clark Road, Andover Street, River Street, and Ballardvale Street. These narrow, winding residential roads are unsuited for the volume of commuter traffic using them.

During the morning peak period, I-93 southbound traffic between Interchanges 41 and 42 operates at Level of Service (LOS) E. During the evening peak period, traffic volumes on I-93 in this area operate at LOS D. In the year 2025, the morning and evening peak period traffic

volumes on I-93 are estimated to operate at LOS F. There is severe traffic congestion at the exit and entrance ramps of Interchanges 41 and 42 (LOS D and F respectively). MassHighway recently constructed an I-93 northbound entrance ramp from Route 125 westbound at Interchange 41. Other improvements proposed include the widening of Route 125 and improved signalization at the Route 125/Ballardvale Street intersection.

MassHighway and the Merrimack Valley Planning Commission (MVPC) have completed the Interstate 93 Corridor Study. An Interchange Justification Study (IJS) was also prepared to determine if a new interchange on I-93 is consistent with the Federal Highway Administration's (FHWA) criteria for allowing a new interchange. MassHighway established a Study Advisory Task Force as part of the IJS effort. The IJS effort reviewed ten alternatives, plus a No-Build Alternative. After the evaluation of interchange concepts, six of the nine build alternatives were eliminated from further consideration because of excessive environmental resource impacts, increased traffic on local roads, or costs. The IJS recommended that three Alternatives, Alternative 3, Alternative 4, and Alternative 9, should be studied further. Each of these alternatives proposed the widening of I-93 from three to four lanes in each direction between Interchanges 41 and 42.

The project requires 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)(2) of the MEPA Regulations because it creates ten or more acres of impervious area, alters one or more acres of Bordering Vegetated Wetlands (BVW), requires a variance in accordance with the Wetlands Protection Act, and includes a new interchange on a completed limited access highway. The project will require a Section 401 Water Quality Certificate and a Variance in accordance with the Wetlands Protection Act from the Department of Environmental Protection (MassDEP). It might need a Superseding Order of Conditions from MassDEP if a local Order is appealed. The project must comply with the National Pollution Discharge Elimination System (NPDES) General Permit from the United States Environmental Protection Agency (EPA) for stormwater discharges from a construction site. It will require an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA), and a Record of Decision from the Federal Highway Administration (FHWA). A Section 404 Programmatic General Permit will be required from the U.S. Army Corps of Engineers. The project may need to obtain Orders of Conditions from the Andover, Tewksbury, and Wilmington Conservation Commissions. A Construction Dewatering Permit and a Notice of Construction & Demolition may be required from MassDEP. The project may have to undergo Section 106 Review by the Massachusetts Historical Commission (MHC) and review under the Massachusetts Endangered Species Act (MESA) by the Natural Heritage and Endangered Species Program (NHESP). 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. Because the project uses Commonwealth funds, MEPA jurisdiction is broad and extends to all aspects of the project that may cause significant damage to the environment.

#### SCOPE

The EIR should follow the general guidance for outline and content contained in Section 11.07 of the MEPA regulations, as modified by this Certificate. It should contain a copy of this

Certificate and a copy of each comment received. The proponent should circulate the EIR to those parties who commented on the ENF, to any state agencies from which the proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations.

### Project Description

The EIR should include a thorough description of the full project and all project elements and phases (including any future potential for additional development.) It should also include a brief description of each Federal, State and local permit or agency action required or potentially required for the project, and it should demonstrate that the project meets applicable performance standards. The EIR should contain sufficient information to allow the permitting agencies to understand the environmental consequences related to the project.

### Growth/Regional Planning

While I recognize that each development project within the Lowell Junction Area must complete its own environmental review process, the EIR for the interchange project should identify the growth potential that the interchange alternatives would solidify. Executive Order 385 (Planning for Growth) applies to this project because of the use of state funds. The EIR should discuss how the project complies with the provisions of the Executive Order, including consistency with local and regional planning.

The EIR should identify the upwards of 700 acres of either landlocked or poorly accessed land in the Lowell Junction area and which alternative provides access. It should establish a Lowell Junction study area with specific borders agreed to by the communities and MassHighway. The EIR should identify the maximum zoning potential of this land, and discuss any local efforts to rezone portions of the area. A map should be provided showing the land use, and another figure should show ownership, town-owned property, open space, and conservation land in the Lowell Junction study area. The EIR should summarize the Unified Development Vision, which is being refined by the three town task force and how this fits into the overall Lowell Junction study area borders. It should provide any potential land use figures developed by the task force.

The Merrimack Valley Economic Development Council (MVEDC) has estimated that these 700 acres could potentially support up to 3.6 million square feet of development and perhaps as many as 12,000 new jobs. MassHighway should discuss the project within a larger regional planning context, and should, for example, include brief summaries of any regional studies of the I-93 Corridor and growth within the Lowell Junction area. In addition, the EIR should identify other projects within the I-93 corridor what may induce additional growth within the Lowell Junction study area. The proponent should evaluate any proposals to widen I-93 in Massachusetts and in nearby New Hampshire and to improve commuter rail service.

The Tewksbury Board of Selectmen identified the commercial development of 750,000 sf on the Simon parcel with Alternative 9. Another 700,000 sf of office, retail and housing would be developed by RJ Kelly on the east side of I-93 with Alternative 9. Alternatives 3 and 4 substantially utilize these parcels (Simon and Kelly) for the transportation infrastructure leaving

minimum economic development potential.

### Alternatives Analysis

The EIR should analyze the following alternatives:

- No-Build Alternative;
- **Alternative 3 with the potential for redevelopment of the adjacent lands as envisioned by the three communities;**
- No Interchange Alternative that is designed to improve the remaining existing and projected transportation problems without adding a new interchange (e.g.; a bridge over the railroad tracks that would provide access to Wyeth via Ballardvale Street through the existing industrial park from Route 125, adding a lane to both directions of I-93, and Dascomb Road improvements);
- Alternative 4 with the full-build out of 700 additional acres both east and west of I-93 (between 1.7 and 3.6 million sf of mixed use space);
- Alternative 9 with the full build out of 700 additional acres both east and west of I-93 (between 1.7 and 3.6 million sf of mixed use space); and
- Consensus Alternative Developed by the Proponents and the three communities and other interested parties that combines the best attributes of the above alternatives.

The No-Build Alternative includes the widening of I-93 to four lanes in each direction north of the Wilmington/Tewksbury town line to the Dascomb Road Interchange; the construction of the Dascomb Road PWED Improvements; the extension of Burt Road; the construction of the I-93/Route 125/Ballardvale Street Interchange Improvements; and the construction of feasible intersection improvements at intersections in the Ballardvale area.

The EIR should present the alternative roadway configurations for each of the interchange alternatives. It should describe the process and criteria by which the proposed alternatives were developed and summarize the alternatives already rejected by the proponent. The EIR should provide a comparative analysis that clearly shows the differences between the environmental impacts associated with each of the alternatives for all areas scoped by this Certificate. This comparative analysis should estimate the cost of each alternative, including the estimated land acquisition cost and the value of donated land proposed for Alternative 9. It should identify the cost of relocating the electrical substation and any other infrastructure that would be relocated. The amount of roadway built with Alternative 9 is described as “unreasonably circuitous”. The EIR should estimate the increased miles driven, air pollution, and maintenance costs incurred from the construction of more roadway.

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.

The use of an at-grade temporary ramping system to I-93 would assist in the remediation of the Sutton Brook Disposal Area Superfund Site. This remediation currently calls for the utilization of over 16,000 truck trips on the local roadway system through the South Street residential neighborhood of Tewksbury. The Town of Tewksbury is opposed to a west side connection from I-93 to this local road network.

### Traffic

The project is presented in the ENF as a project to relieve traffic congestion on I-93 and adjacent local roadways and to improve access to industrial and commercial developments, as well as undeveloped land suitable for industrial and commercial development in the Lowell Junction area.

The project is at the early design stage and many design considerations for each of the proposed alternatives will continue to undergo evaluation (including environmental impacts, layout, intersection capacity, and signal placement) as design progresses. The EIR should be prepared in conformance with the EOEA/EOTC Guidelines for EIR/EIS Traffic Impact Assessment. The proponent should utilize the year 2011 as the opening year analysis and year 2025 as the future analysis year to be consistent with previous planning and prior federal documentation. The EIR should identify existing traffic conditions in the Lowell Junction study area. It should identify traffic conditions with each alternative. The EIR should include an updated Level-of-Service (LOS) analysis for the interchanges and the local roadway intersections located within the project area for the morning and evening peak hours during the year 2011 and post construction (2025) including but not limited to:

- I-93/Route 125 (Interchange 41);
- I-93/Dascomb Road (Interchange 42);
- Route 125/Ballardvale Street;
- Ballardvale Street/Research Drive;
- River Street/Andover Street;
- Andover Street/Clark Road;
- Clark Road/Dascomb Road;
- Salem Street/Middlesex Avenue;
- Frontage Road/Dascomb Road; and
- Ballardvale Commuter Rail driveways/Clark Road.

I ask that MassHighway consult with Andover, Tewksbury, and Wilmington officials to identify any additional local intersections and roadway sections to include in the updated LOS analysis. The EIR should examine the feasibility of constructing a double cul-de-sac via Lowell Junction Road to reduce traffic volumes through the Ballardvale neighborhood. It should include a summary of average and 95th percentile vehicle queues for each intersection within the study area. It should also analyze weave and merge operations on I-93 ramps. It should include traffic projections from other future development proposals located in the vicinity of the proposed new I-93 interchange project. The EIR should identify current roadway improvement projects located in these three communities that could impact traffic in these communities during construction of

the proposed new interchange. The proponent should consult with town officials regarding other roadway improvement projects and development proposals in the area when developing future build area traffic scenarios. The EIR should discuss the proponent's coordination efforts with the local municipalities as they address regional and local traffic concerns within this area. It should address Tewksbury concerns regarding the Alternative 9 design that introduces traffic and connects to the west side road network at South Street. It should provide the most current information on the proposed construction dates for any roadway improvements in the area. The EIR should discuss the suitability of any proposed roadway widening, new roadway construction, and signage and signalization changes. It should discuss right-of-way (ROW) implications of possible widening and describe how such ROW's would be acquired. The EIR should identify these improvements and their schedule for implementation. The EIR should include a discussion of the need for construction and post-construction traffic monitoring that may be required as part of project approvals and Section 61 Findings.

### Transportation Demand Management (TDM)

As described in the ENF, the proponent has proposed transit improvements and a comprehensive Transportation Demand Management (TDM) plan that incorporates a number of measures designed to help increase regional mobility and reduce vehicle trip congestion in the project area including:

- Enhance MBTA commuter rail service on the existing Haverhill Commuter Rail Line/a new commuter rail station with a park and ride facility;
- Consider the double tracking of the Haverhill Commuter Rail Line;
- On-line carpooling and vanpooling sign-up program;
- Expanded outreach and incentives for carpooling and vanpooling;
- Formal park & ride program at Ballardvale Commuter Rail Station or at new commuter rail station;
- Add peak and off-peak I-93 shuttle service serving employers in the Lowell Junction area;
- Improved pedestrian, bike paths, and vehicle access at Ballardvale Commuter Rail Station or new commuter rail station;
- Expanded marketing of transit;
- Enhance the Junction Transportation Management Organization;
- Improved static and electronic transit signage; and,
- Continued participation with Transit Works, MBTA, MassRIDES and Executive Office of Transportation (EOT) to increase transit opportunities and the utilization of the Ballardvale Commuter Rail Station.

The EIR should identify existing TDM measures ongoing in the Lowell Junction study area. It should identify the TDM measures proposed for each alternative. All project contractors should be required to participate in the proposed TDM plan. 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 EIR should provide a map of public transit routes and shuttle bus service in the project area that currently connects to employers and the Ballardvale Commuter Rail Station or another nearby station and/or on the west side of I-93. The proponent should work with local officials from Andover, Tewksbury, and Wilmington to identify bus connections and potential shuttle bus services from activity nodes and residential areas through the project area. The EIR should identify the transit improvements proposed with each alternative. It should list any construction and post-construction impacts to existing or proposed transit services with this project. The EIR should evaluate the feasibility of enhancing transit service as a component of the project. It should investigate a new Commuter Rail Station within the development area on the Haverhill Line with park and ride facilities, double tracking, and serviced by shuttle buses.

#### Pedestrian and Bicycle Facilities

The EIR should show where sidewalks and walking trails currently exist in a map of the Lowell Junction project area. It should identify the locations of any new proposed sidewalks and walking trails for each alternative. The EIR should identify how proposed sidewalks would connect to the existing sidewalks in the project area. It should identify any existing bicycle facilities in the study area. The EIR should show the proposed bicycle facility amenities with each alternative. It should investigate all bicycle path and hiking trail connections and opportunities in the project area and determine where there are any linkage possibilities with the project.

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

The EIR should identify MassHighway's process to ensure the project conforms to the air quality State Implementation Plan. The construction period may cause increased congestion and increased vehicle emissions. MassHighway should identify and describe the greenhouse gas emissions associated with each alternative and identify measures to avoid, minimize and mitigate these emissions, particularly as that mitigation relates to TDM and construction period impacts.

Because this is a state-funded project that requires a mandatory EIR, the project is subject to the EEA's GHG Emissions Policy and Protocol. The EIR must demonstrate consistency with the analysis and mitigation provisions therein. This Policy is available on-line at <http://www.mass.gov/envir/mepa/pdffiles/misc/GHG%20Policy%20FINAL.pdf>.

The EIR should quantify GHG emissions associated with the full-build out scenario that accompanies each interchange alternative. It should identify the total emissions of carbon dioxide (CO<sub>2</sub>) associated with each alternative and evaluate measures to reduce GHG. The EIR should identify the additional GHG emissions that will be generated from vehicle congestion, which is projected to result from the no-build alternative, and compare it to the CO<sub>2</sub> generated by the alternatives that the proponents contend will reduce congestion, in order to make an informed choice of a Preferred Alternative. It should estimate the build-out scenarios on the accessible parcels for each alternative. Even at the conceptual stage, an estimation of GHG generation and potential mitigation options should be identified. The EIR should identify vehicle miles traveled (VMT) associated with the build out of each alternative.

## Wetlands

According to the information provided in the ENF, the 315-acre interchange project site contains Bordering Vegetated Wetlands (BVW) and other wetland resource areas. Based on the proponent's analysis of existing aerial photographs and GIS maps, the project is estimated to impact between 2.9 and 6.0 acres of BVW. The EIR should identify the wetland resource areas within the Lowell Junction study area. It should identify the wetland resource area impacts for each alternative within the study area. In their comments, MassDEP has indicated that the project will require a 401 Water Quality Certificate (401 WQC) from MassDEP, and a Variance from full compliance with MassDEP's wetlands regulations.

The ENF does not contain sufficient information to accurately identify wetlands resource areas within the project area. 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 readable plans. Wetland resource areas, which 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 commission has accepted the resource area boundaries and any disputed boundary should be identified. For each of the alternatives, the EIR should quantify the amount of direct wetland resource area alterations proposed, including shading of wetlands under bridges, removal or height reduction of tree and shrub canopy from forested wetlands (crown area, not basal area). The EIR should include tables specifying the amount of resource area impacts and the watershed for each alternative and within each town. Proposed activities including interim and permanent construction activities, construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, must be evaluated.

The Commonwealth requires that all feasible means to avoid and reduce the extent of wetland alteration be considered and implemented. The EIR 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 EIR should demonstrate that the impacts have been minimized, and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00).

The proponent should consider providing wetlands replication at a ratio of a minimum of 2:1 for any unavoidable impacts to wetlands which is typically required for projects requiring a Variance. Any floodplain filled should be replaced equally, at each one-foot increment of elevation. The EIR 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 EIR, 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, list of wetland plant species in the areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards

and monitoring.

The Variance provisions are applicable to all alternatives in the ENF because wetlands impacts exceed those approvable under the performance standards in the wetlands regulations. The proponent may request a Variance directly from the Commissioner, with a copy to each conservation commission. The EIR should discuss the regulatory issues relating to whether the proponent will submit a single-request Variance for each alternative or separate Variances in each town. The EIR should be identifying cumulative wetland impacts from the development generated by each alternative. It should present a discussion and analysis of any Variances required for wetland impacts.

### Wildlife Habitat

The EIR should prepare a Wildlife Habitat Study to identify impacts from each alternative within the study area. The proponent should consult with the Natural Heritage and Endangered Species Program (NHESP) regarding the Priority and Estimated Habitat for endangered species, and the EIR should identify the results of this consultation. NHESP has identified the following state-listed rare species in the vicinity of the project site: New Jersey Tea Inchworm, Frosted Elf, Twilight Moth; and Triangle Floater.

The EIR should identify any wildlife connections proposed from the west side of I-93 to the east side; e.g. from the Sanborn Reservation to Andover Conservation Commission land in the East and passageways along both sides of the Shawsheen River.

The most significant habitat areas should be identified in advance of finalizing the Preferred Alternative and in advance of making any zoning changes that could be required to facilitate the proposed development. The proponent and the key landowners should undertake habitat assessments and surveys across the entire potential Lowell Junction study area. The proponent and the landowners should conduct the necessary habitat surveys this spring, as recommended by the NHESP. They should consult with NHESP on the interchange alternatives before a Preferred Alternative is chosen. The EIR should summarize the results of the habitat surveys.

### Stormwater

If the Preferred Alternative is not selected during the DEIR process, the proponent should provide a summary table of the drainage system design, impacts, and mitigation measures for each alternative. The EIR should include a detailed description of the proposed project's drainage system design, including a discussion of the alternatives considered along with their impacts. For each of the three proposed interchange alternatives, the EIR should identify any stormwater discharge points, existing stormwater management infrastructure, and describe any drainage impacts associated with required off-site roadway improvements. The EIR 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 EIR should indicate and discuss where the Dascomb Road, Ballardvale Street, Route 125, Burt Road, and Routes I-93 drainage systems 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 the MassHighway system, the EIR 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 EIR should address the performance standards of MassDEP's Stormwater Management Policy. The EIR should demonstrate that the design of the drainage system for each of the proposed alternatives is consistent with this policy. It should also demonstrate that the stormwater management control plan minimizes runoff impacts to the Shawsheen River, and is in conformance with the NPDES Phase II Storm Water Permit Program.

In the alternative, the EIR 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 EIR should also discuss consistency of the project with the provisions of the National Pollution Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. The EIR 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 new I-93 interchange. This discussion of BMPs should include a draft Pollution Prevention Plan. In addition, a maintenance program for the drainage system will be needed 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 deicer on pavement surfaces within any watershed protection areas.

Any dewatering of the construction site should include monitoring to ensure that there is no impact to the groundwater level. The EIR should outline the monitoring program of groundwater levels. It should summarize existing pre-construction groundwater conditions, and propose groundwater monitoring to address any impacts.

#### Potable Water/Wastewater

The EIR should explain any potential impacts from the proposed interchange alternatives on

drinking water supplies. Specifically, MassDEP has indicated that the proponent's proposed construction activities may be located in close proximity to an Interim Wellhead Protection Area (IWPA) for a public drinking water supply for the Town of Wilmington. The EIR should respond to MassDEP's comments on the project and propose mitigation as appropriate.

The EIR should estimate water consumption and wastewater generation that would be generated by development that is proposed with each of the alternatives by community. It should provide the source for the numbers (Title 5), the supply source for potable water, and public sewer or private wastewater system.

### Noise

For each of the proposed interchange alternatives, the EIR should identify the sensitive noise receptors within the project area. If there are sensitive receptors identified, the proponent should identify existing and proposed noise levels during project construction and post-construction at these receptors using Federal noise standards for transportation projects. The EIR should provide an analysis of existing and proposed noise levels. It should identify any mitigation measures proposed to reduce noise impacts from the proposed project. This section of the EIR 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 proposed I-93 interchange.

Depending on the interchange alternative, the Jennies Way residential neighborhood in Tewksbury would be adjacent to a local access road, the southbound off-ramp for the new interchange, or the circulation loop road providing access to and from the southbound ramps. Alternatives 4 and 9 would impact residential areas along South Street in Tewksbury and Salem Street in Wilmington. The EIR should also estimate the potential increase in noise levels from the development of an additional 700 acres with the removal of significant tree cover from within the development area. Will the proposed Alternative 9 flyover increase noise pollution in adjacent neighborhoods such as Jennie's Way and the Ballardvale area?

### Visual/Aesthetics

The EIR should include an analysis of the visual impacts of the proposed project, including renderings for each of the proposed interchange alternatives. It should include a conceptual-level landscaping plan and interchange and highway elevations from all sides. It should include a proposed lighting plan and identify any lighting impacts from roadways on adjacent neighborhoods and commercial and industrially-zoned areas. Because portions of the project site are adjacent to residential neighborhoods, the EIR should discuss how this project and each alternative would impact individual residential properties and residential neighborhoods in the area.

### Construction Period Impacts

The project has potentially significant construction impacts, including extensive earth moving. The EIR should evaluate construction period impacts for each alternative, including

impacts from earth moving and likely blasting, impacts to vegetation, potential impacts from erosion and sedimentation, traffic impacts on adjacent roadways, and impacts to adjacent land uses from all phases of the proposed project. It should address the need to incorporate construction and demolition (C&D) recycling measures into the proponent's construction plans. The proponent should require its contractors to retrofit diesel-powered equipment with emissions controls, such as particulate filters or traps, and use low-sulfur diesel fuel. The proponent should also commit to specific TDM measures that can be implemented during construction. The EIR should identify the amount of filling and soil removal, the number of truck trips, and the potential truck routes for each alternative.

### Hazardous Wastes

The EIR should present a summary of the results of hazardous waste studies and remediation efforts undertaken in the Lowell Junction study area by the proponent to comply with the Massachusetts Contingency Plan, 310 CMR 40.0000. It should identify alternative access options for truck traffic generated by the Sutton Brook Disposal Area Superfund Site/Rocco landfill in Tewksbury for each alternative.

### Mitigation

The EIR should include a separate chapter on mitigation measures for the proposed alternatives. It should describe transportation demand management (TDM) measures to reduce single passenger automobile trips in the project area and encourage ridesharing by employees. The EIR should include the conceptual plans for roadway improvements with sufficient detail to verify the feasibility of constructing such improvements. The plans should show proposed lane widths and offsets, layout lines and jurisdictions, and the land uses (including access drives) adjacent to areas where improvements are proposed. The EIR 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.

This chapter on mitigation should include Draft Section 61 Findings for all state permits. Any proposed traffic mitigation must conform to MassHighway standards, including but not limited to, lane, median and shoulder widths, bicycle lanes and sidewalks. The Draft Section 61 Findings should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included.

### Response to Comments

In order to ensure that the issues raised by commenters are addressed, the EIR should include a Response to Comments section. This directive is not intended to enlarge the scope of the EIR beyond what has been expressly identified in this Certificate. Each comment letter should be reprinted in the EIR. I defer to the proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to the questions raised. The EIR

should present any additional narrative or quantitative analysis necessary to respond to the comments received.

### Circulation

The EIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Andover, Tewksbury, and Wilmington municipal officials. A copy of the EIR should be made available for public review at the Andover, Tewksbury and Wilmington Public Libraries.

February 8, 2008

Date



Ian A. Bowles

### Comments Received:

MassHighway, 1/8/08  
MassHighway, 1/15/08  
MassHighway, 1/16/08  
Tewksbury Board of Selectmen, 1/22/08  
JW South Street Realty Trust, 1/23/08  
R.J. Kelly Company, 1/23/08  
Bay Circuit Alliance, Inc., 1/23/08 Wyeth Biotech, 1/24/08  
The Junction Transportation Management Organization, 1/24/08  
Merrimack Valley Economic Development Council, 1/24/08  
JW South Street Realty Trust, 1/24/08  
Tewksbury Planning Board, 1/25/08  
Massachusetts Biotechnology Council, 1/25/08  
Shawsheen River Watershed Association, 1/27/08  
Susan Garth Stott, 1/27/08  
The Andover Village Improvement Society, 1/27/08  
MassWildlife, 1/28/08  
Andover Director of Planning, 1/28/08  
Massachusetts Taxpayers Foundation, 1/28/08  
David J. Wahr, 1/28/08  
U.S. Environmental Protection Agency, 1/28/08  
The League of Women Voters of Andover/North Andover, 1/28/08  
Foster's Pond Corporation, 1/28/08  
Residents of Andover's Olympic Village Development/c/o Kerry O'Kelly, 1/28/08  
Associated Industries of Massachusetts, 1/28/08  
MassDEP/NERO, 1/29/08  
Mass Insight, 1/29/08

NMCOG, 1/29/08  
Wilmington Board of Selectmen, 1/29/08  
Conservation Law Foundation, 1/29/08  
Andover Conservation Director, 1/29/08  
Merrimack Valley Planning Commission, 1/29/08  
Environmental league of Massachusetts, 1/29/08  
MAPC, 1/29/08  
The Andover Village Improvement Society, 1/29/08  
Suzanne M. Sullivan, 1/29/08  
Andover Board of Selectmen, 2/5/08

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