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

PROJECT NAME : Proposed Lowe's, Walmart and Meineke Expansions  
and Future Camp Lion Improvements  
PROJECT MUNICIPALITY : Salem  
PROJECT WATERSHED : North Coastal  
EEA NUMBER : 14532  
PROJECT PROPONENT : Kennedy Development Group  
DATE NOTICED IN MONITOR : January 6, 2010

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Environmental Impact Report (EIR). In accordance with Section 11.05(7) of the MEPA regulations, the Proponent has submitted an Expanded Environmental Notification Form (ENF) with a request that I allow the Proponent to fulfill its EIR obligations under MEPA with a Single EIR. This request is being denied based on the need to evaluate additional alternatives to minimize wetlands impacts. The Proponent must prepare a Draft and Final EIR.

The proposed project includes two major retail stores: a Walmart and a Lowe's Home Improvement Store. Both companies already have many stores throughout Massachusetts and will likely continue to expand here. "Big box" stores such as the proposed Lowe's and Walmart are large energy users and generate considerable traffic, both of which result in significant emissions of greenhouse gases (GHGs) that contribute to global climate change. Fortunately,

both Walmart and Lowe's have made public commitments to reduce energy use and minimize the environmental impacts of their stores nationwide. For example, Walmart has a publicly stated goal of being 100% supplied by renewable energy and has touted large-scale installations of solar photovoltaic (PV) electric generating capacity at Walmart facilities in California. Walmart has also set a notable goal of designing a prototype store this year that will increase overall energy efficiency by 25-30% and stated that it is committed to developing and implementing innovative energy efficient technology for use in both existing and new stores. For its part, Lowe's was recognized by the U.S. Department of Energy in 2009 as the Partner of the Year for ENERGY STAR retailing, and the Expanded ENF includes a proposal from Lowe's to incorporate GHG mitigation measures into a Lowe's prototype store for Massachusetts that would make energy efficiency measures standard for all new stores in this state. I applaud both companies on these long-term goals and early successes.

With respect to these two new stores proposed for Salem, the Expanded ENF identifies measures both stores have proposed to incorporate into their respective design and operations to minimize GHG emissions. The measures included in this filing represent a good start for these efforts. However, I was surprised that the proposal from Walmart did not include measures it has employed and promoted at stores in other states, such as the use of solar PV to generate renewable energy on-site. The analysis submitted also indicates that the proposed Walmart store will decrease its energy usage by an estimated 8% below what is required under the state building code. This falls well short of the 25-30% goal Walmart has set for itself. As the project moves forward through development of its EIR, I expect both Lowe's and Walmart to consider measures that would make their Massachusetts stores more energy efficient than what was presented in the Expanded ENF. In addition, I expect that the EIR submitted for this project will thoroughly explore the viability of incorporating on-site systems to generate renewable energy. In addition to furthering with Walmart's goal of utilizing 100% renewable energy, such measures would help meet Governor Patrick's established goal of achieving universal adoption of solar power and super-efficient building designs for new large retail stores in Massachusetts. Big box stores, which typically have large flat roofs with unobstructed access to sunlight, are often well suited for installation of solar panels. The Proponents should also be aware that, consistent with the Governor's goals for increased use of solar state-wide, the Commonwealth has established a new solar carve-out program to promote the use of PV systems and improve their economic viability. Both retailers should explore the options afforded under the new system carefully and strongly consider incorporating PV systems into their Salem store designs.

Efforts by national retailers to provide leadership by increasing their reliance on renewable energy sources while reducing energy consumption and greenhouse gas emissions are going to be critical to moving towards a clean energy economy and a sustainable future. Actions on these items now will also help companies like Walmart live up to the laudable goals they have set for themselves and actively promoted to the public.

### Project Description

As described in the Expanded ENF, the project consists of redevelopment of a 91.6 acre site on Highland Avenue (Route 107) in Salem. It includes the development of a 153,063 square foot (sf) Lowe's store (including a 31,204 sf garden center), demolition of the existing Walmart

store and replacement with a 152,192 sf Walmart, expansion of the Meineke Car Care Center (consisting of an additional service bay and storage), site preparation for future improvements to Camp Lion and construction of a water tower by the City of Salem. The project will be served by municipal water and sewer service. The project will include construction of 1,047 parking spaces, access drives, associated infrastructure and landscaping. The project is proposed on land owned by the City of Salem, Camp Lion and the Highland Avenue Limited Partnership.

### Project Site

The site currently contains a Walmart, Meineke Car Care Center, Camp Lion day camp facility and existing radio and cell towers. The Walmart and abutting retail uses are located on a 14.1 acre parcel and occupy a 109,460 sf building. The camp site includes a one story lodge, a two-story house, a swimming pool, picnic table area and a parking area west of the lodge. The site is bounded by Highland Avenue to the east, undeveloped land to the south and west and a retail development and a residential area to the north. The site includes several driveways that connect to Highland Avenue, an internal connection to the abutting retail use to the north and a gravel access drive. The site is currently served by the Massachusetts Bay Transportation Authority (MBTA) Bus Routes 450/450W and 456. Undeveloped portions of the site include rock ledge faces created during previous construction, heavily wooded areas, an intermittent stream and bordering vegetated wetlands (BVW).

### Jurisdiction and Permitting

The project is undergoing MEPA review and is subject to preparation of a Mandatory Environmental Impact Report (EIR) pursuant to 301 CMR 11.03 (1)(a)(2) and 301 CMR 11.03 (6)(a)(6) because it requires state Permits and consists of creation of 10 or more acres of new impervious area and generation of 3,000 or more new average daily vehicle trips (adt) on roadways providing access to a single location. The project requires an Access Permit from the Massachusetts Department of Transportation (MassDOT) and a 401 Water Quality Certificate from the Massachusetts Department of Environmental Protection (MassDEP). The project may also require a Beneficial Use Determination (BUD) from MassDEP. The project requires an Order of Conditions from the Salem Conservation Commission (and a Superseding Order of Conditions from MassDEP in the event the local order is appealed). The project is subject to the EEA/MEPA Greenhouse Gas Emissions Policy and Protocol.

In addition, the project requires a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (U.S. EPA) and a Section 404 Permit from the U.S. Army Corps of Engineers (ACOE).

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction exists over:

wetlands, water quality and stormwater; hazardous materials and recycling issues; traffic and transportation; and GHGs.

### Environmental Impacts

Potential environmental impacts are based on full build-out of all project elements and include the alteration of 19.4 acres of land, the creation of 13.8 acres of new impervious area, alteration of 4,585 sf of BVW and alteration of 633 linear feet of Inland Bank, use of an additional 11,568 gallons per day (gpd) of water and generation of 11,568 gpd of wastewater. Wetland impacts are associated with the filling and relocation of an intermittent stream and associated BVW. In addition, the project will generate an additional 5,960 average daily vehicle trips (adt) for a total of 13,292 adt and a total of 17,716 vehicle trips on an average Saturday. The Expanded ENF indicates that measures to avoid, minimize and mitigate environmental impacts include: roadway improvements, a transportation demand management (TDM) program, wetlands avoidance and replication, design and construction of a stormwater management system and measures to reduce GHG emissions.

### Request for a Single EIR

In accordance with Section 11.05(7) of the MEPA regulations, the Proponent has submitted an Expanded ENF with a request that I allow the Proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than the usual process of a Draft and Final EIR. The Expanded ENF received an extended comment period pursuant to Section 11.06(8) of the MEPA regulations. The MEPA regulations indicate that I may allow a Single EIR provided that I find that the expanded ENF:

- describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed
- demonstrates that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

Each of these factors are considered in my review of the Expanded ENF below.

### Review of the Expanded ENF

The Expanded ENF includes a detailed project description and conceptual site, access and utilities plans; a description of the site and baseline environmental conditions; an alternatives analysis; identification and analysis of potential environmental impacts; and commitments to avoid, minimize and mitigate project impacts.

#### *Alternatives Analysis*

The Expanded ENF includes a discussion of siting criteria for Lowe's, identifies alternative sites considered along Highland Avenue, describes criteria used for site selection and indicates how this site meets the identified criteria. It includes evaluation of alternative site

layouts for both Lowe's and Walmart and identifies the relative environmental impacts associated with each alternative including impervious area, wetlands impacts, traffic generation, parking and drainage. For the Lowe's project, alternatives include the Preferred Alternative, a Prototypical Alternative (103K) and a Larger Prototype Alternative (117K) consisting of a 153,063 sf, a 152,328 sf and a 169,112 sf building respectively, and other relatively minor adjustments in project features. The alternatives analysis in the Expanded ENF asserts that any development of this nature would result in direct unavoidable impacts to wetlands. The Preferred Alternative and 103K Alternative reduce land alteration and impervious surfaces compared to the 117K Alternative because they have a smaller footprint, but both include the same access plan and require relocation of the stream. The Expanded ENF does not explore access road alternatives or alternative site layouts that would minimize the significant wetlands impacts proposed.

Comments from MassDEP and MassAudubon request that alternative layouts be explored to avoid and minimize wetland impacts and to ensure that any stream replication is designed to perform effectively. They also identify information required to assess the viability of the proposed mitigation.

#### *Wetlands and Drainage*

The Expanded ENF identifies wetland resource areas located within the project site. It describes significant wetland impacts associated with the construction of the Lowe's and its secondary access road, including loss of BVW and Bank, and measures to mitigate impacts including wetland and stream replication. In addition, it notes that the Proponent has developed a stormwater management plan consistent with the stormwater regulations. The Expanded ENF describes how the replication is designed to attain consistency with the performance standards for wetlands replication in the Wetlands Protection Act (310 CMR 10.00) including construction of stable banks, provision of wildlife habitat and creation of a low-flow channel; however, the replication is proposed in close proximity and parallel to the access road and does not appear to have an adequate buffer to protect it from road and project-related impacts including deposits of sand, road salt, silt, and trash.

The stormwater management plan will include source control, deep sump hooded catch basins, stormwater treatment structures, stormwater detention basins and sediment forebays to treat stormwater prior to discharge. Each of the stores will have a separate stormwater management system and separate responsibility for maintenance of the system with the exception of the portion of the drainage system located within the main access drive. Stormwater from Lowe's will be discharged to an existing wetland and stormwater from Walmart will be discharged to the existing municipal drainage system within Highland Avenue. The Expanded ENF indicates that recharge to groundwater is not feasible because of the extensive bedrock on the site.

MassDEP comments identify supplemental information that should be provided regarding the project's consistency with the stormwater standards. Comments from MassDEP stress the importance of minimizing stormwater flow to the municipal or state stormwater system by retention and infiltration of stormwater on-site.

### *Traffic and Transportation*

The Expanded ENF includes a traffic study and identifies measures to minimize and mitigate traffic and air quality impacts through roadway improvements and a transportation demand management (TDM) program. As noted previously, the project will generate approximately 13,292 adt and 17,716 vehicle trips on an average Saturday (based on ITE Land Use Code 820 (Shopping Center)). The traffic study includes the Route 107 corridor from Highland Avenue at Ravenna Avenue and Barnes Road to Western Avenue at Fays Avenue.

Proposed roadway improvements consist of elimination of one of the five existing access points on Highland Avenue and additional turning lanes, signal equipment, and signal timing adjustments at intersections. The access plan proposes a right-in/right-out driveway near the Clark Street intersection; full access and signalization at the main driveway which will be aligned with an existing intersection and include a pedestrian crossing under signal control; a right-in/right-out driveway to provide access to the Meineke Car Center and a right-in/right-out driveway to provide access to Camp Lion and secondary access to Lowe's. In addition, a cross-connection will be added along the main access drive to access the Meineke Car Center through the site and the existing cross-connection to the retail development to the north will be maintained.

The Expanded ENF indicates that bicycle and pedestrian access will be provided to and through the site but this is not clearly identified on project plans. The TDM program includes a commitment to consider the establishment of a local Transportation Management Association (TMA) with other businesses, a ride-matching program for employees, coordination with MassRIDES, direct deposit, on-site amenities, distribution of information regarding the TDM program, and promotion of the use of internet and shop-by-phone.

MassDOT comments indicate that the Proponent should refine trip generation, trip distribution and traffic counts and identify additional information required regarding the proposed access plan. Comments from MassDOT and MassDEP indicate that the Proponent should commit to additional TDM measures to mitigate project impacts including more aggressive promotion of transit and provision of on-site pedestrian and vehicular infrastructure.

### *Greenhouse Gas Emissions*

This project is subject to the MEPA Greenhouse Gas Policy and Protocol. The Policy requires projects to quantify carbon dioxide (CO<sub>2</sub>) emissions and identify measures to avoid, minimize or mitigate such emissions. Consistent with its provisions, the Expanded ENF includes a GHG analysis comparing the relative impacts of alternatives and mitigation measures and identifies measures the Proponent will implement to avoid, minimize and mitigate these impacts.<sup>1</sup> The analysis quantifies the direct and indirect CO<sub>2</sub> emissions associated with the project's energy use and transportation-related emissions. The GHG analysis evaluates CO<sub>2</sub> emissions for three alternatives as required by the Policy including 1) a Base Case corresponding to the 7<sup>th</sup> Edition of the Massachusetts Building Code (International Energy Conservation Code

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<sup>1</sup> Supplemental information regarding the analysis was provided from Tech Environmental via emails dated January 15, 2010 and February 4, 2010.

(IECC) 2006 with 2007 supplement), 2) a Preferred Alternative, which includes some energy efficiency features, and 3) a Mitigation Alternative, which includes additional energy efficiency elements. The Proponent used the Tech Environmental Energy Model to perform the GHG analysis and has committed to constructing the project in accordance with the measures modeled in the Mitigation Alternative.

Project-related CO<sub>2</sub> emissions are associated with direct emissions from natural gas combustion for heating and cooking and indirect emissions from project generated motor vehicle trips and electricity used for lighting, refrigeration, building cooling and ventilation, and operation of other equipment within the buildings. The analysis does not identify emissions associated with the expansion of the Meineke Car Care Center or identify measures to mitigate its GHG emissions. The analysis indicates that the Mitigation Alternative would reduce total stationary source GHG emissions compared to the Base Case by 8.7% (10.3% for Lowes and 8.0% for Walmart).

Measures included in the modeling of the Walmart store include a super energy efficient HVAC system with an average EER of 12.6, daylight harvesting (one skylight per 1,000 sf roof area with electronic dimming ballasts tied to computer-controlled daylight sensors), an Energy Management System (EMS) including demand control ventilation and a waste heat recovery system for the refrigeration units. Measures that are included as mitigation commitments for Walmart but not modeled include: HVAC duct sealing and insulation, motion sensors within the office space, energy efficient T-8 lighting with electronic dimming ballasts, energy efficient exterior lighting, water conserving fixtures, building commissioning, an operations waste management program, a construction waste program and sale and promotion of Energy Star products.

As noted previously, Lowe's has requested that I consider allowing it to opt out of the GHG analysis for future stores based on its commitment to incorporate an approved list of measures into each store reviewed by MEPA between the issuance of the Final EIR for this project and January 1, 2013. Consistent with this request, the Expanded ENF includes a list of GHG measures that would be incorporated into the Lowe's prototype building as well as this Salem store. The following measures were included in the modeling: increased roof insulation (R-24), an EMS including demand control ventilation, super energy efficient HVAC system with an average EER of 11.5, cool roof design, daylight harvesting within the garden centers, and a commitment to purchase 2% of its energy use from clean, renewable energy resources and implementation of a TDM program.

In addition, Lowe's is making a commitment to the following measures that were not included in the modeling: HVAC duct sealing and insulation, an energy management program, energy sub-metering to monitor consumption, building management systems, motion sensors within the office space, third party energy systems verification, energy efficient windows, construction waste program an operations waste program, water conserving fixtures and additional structural roof support to facilitate a PV system in the future, Lowe's Energy Awareness Delivers Savings Program (LEADS), sale and promotion of Energy Star products, SmartWay Transport Partnership Program and use of smart irrigation systems.

In general I support Lowe's request to develop a prototype store for Massachusetts. Development of a Massachusetts prototype will ensure that all Lowe's stores constructed in the Commonwealth (during the specified time frame) will incorporate identical energy efficiency and building design measures as established through the current project review. Development of the prototype will therefore ensure that future projects adequately avoid and minimize greenhouse gas emissions while streamlining the future review process for both Lowe's and agency reviewers. I commend Lowe's on pursuing this novel application of the MEPA GHG Policy and encourage other large-scale retailers such as Walmart to also consider this option. However, as described further in the Scope provided below, additional details concerning the analysis of GHG emissions will need to be provided in the DEIR and additional mitigation measures considered prior to the granting of the requested opt-out.

Transportation emissions associated with the entire project were analyzed using the US EPA MOBILE 6.2 Mobile Source Emission Factor Model. The GHG analysis estimated CO<sub>2</sub> emissions for the 2014 No-Build, the 2014 Build without Mitigation, and the 2014 Build with Mitigation. Measures to reduce transportation emissions include roadway and signal improvements and a TDM program. Transportation emissions would be reduced by 2% compared to the Base Case for a total project reduction of 8.4%.

As noted previously, I expect the Proponents for this project to evaluate energy efficiency measures for this project (and, in the case of Lowe's, develop a prototype for all Massachusetts stores) that go beyond what has been presented in the Expanded ENF. These efforts should be re-presented and refined in the Draft EIR to facilitate understanding of the effectiveness of proposed measures for each building. Although more effective programs can be developed, I note that actual reductions associated with the measures already committed to will likely be higher than the modeled reductions presented in the Expanded ENF because many of the programs that the Proponents are committed to implement are not included in the modeling or otherwise estimated in terms of CO<sub>2</sub> reductions. Comments from MassDEP and the Division of Energy Resources (DOER) identify several mitigation measures that should be included or re-evaluated for their ability to increase energy efficiency and reduce emissions.

### *Construction Period Impacts*

The Expanded ENF does not include a separate section on construction period impacts but it does identify impacts associated measures to avoid, minimize and mitigate these impacts within relevant sections of the document. These include development of a Stormwater Pollution Prevention Plan, a commitment from Walmart to recycle at least 50 percent of its demolition and construction debris and a commitment from Lowe's to require that the construction contractors and subcontractors reuse and/or recycle materials during construction. The Expanded ENF indicates that blasting will be employed during construction but does not provide any details regarding how it will be conducted or measures that will be incorporated to avoid the potential for perchlorate contamination.

## Conclusion

As noted previously, comments from MassDEP and Mass Audubon identify the need to explore additional alternatives on the Lowe's site to minimize wetlands impacts. I agree that additional exploration of alternatives is warranted to ensure that the Proponent considers all feasible means to avoid environmental impacts. Wetlands impacts may be reduced and minimized through the exploration of alternative locations for the building and parking on the site, relocation of access drives and improved replication. Although the Expanded ENF provides detailed and thorough information on many aspects of the project, the filing of a Draft and Final EIR will ensure adequate review and analysis of site layout alternatives; therefore, the Proponent shall prepare a Draft EIR. In the event that the Draft EIR adequately addresses outstanding issues, I will use my discretion within the MEPA regulations (301 CMR 11.08(8)(b)(2)(a)) to allow the Draft EIR to be reviewed as a Final EIR.

## **SCOPE**

### General

The Draft Environmental Impact Report (DEIR) should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this scope.

### Project Description and Permitting

The Draft EIR should identify all state permits and approvals required for the project, describe any changes to the project since the filing of the Expanded ENF and provide an updated description of how the project will meet regulatory standards and requirements. In addition, the Draft EIR should describe project phasing for all elements. The Draft EIR should clearly indicate what state permits are required for all project elements, clarify whether permits will be obtained individually or jointly and identify which parties are responsible for obtaining the permits. The Expanded ENF does not identify permits required for the water tower or construction of the future camp improvements which will be completed by the Town and the owner of the camp, respectively and this information should be presented in the DEIR00. The DEIR should also clarify whether a Beneficial Use Determination (BUD) will be required for the reuse of construction and demolition debris. The Draft EIR should also present the wastewater calculations for each project element to support its assertion that the project will not require a Sewer Connection Permit from MassDEP.

### Alternatives Analysis

The Draft EIR should include additional analysis of alternatives that better avoid and minimize wetlands impacts associated with construction of the Lowe's and its secondary access drive/ Camp Lion access drive. Strategies should include alternative site layouts and access plans that significantly reduce wetland impacts and, to the extent that relocation of the stream is warranted, improve the design and performance of the proposed restoration by ensuring it is adequately buffered from roads and buildings. At least one alternative should consider provision of a single shared access drive for Lowes, the Salem Water station, and Camp Lion. In addition,

alternatives should include further reductions in parking supply and/or use of structured parking to minimize land alteration and creation of impervious surfaces in addition to wetlands impacts. For instance, placement of structured parking on the southeastern end of the proposed Lowe's site and re-location of the building to the northern edge of the site could potentially minimize impacts to wetlands. Alternatively, it may be possible to minimize the building and parking footprints by placing the store above structured parking. I encourage the Proponent to think creatively about how impacts can be reduced while meeting its core needs.

The Draft EIR should identify the impacts of each of the alternatives on land alteration, impervious area, wetlands, traffic generation and parking in a tabular format with supporting narrative and conceptual site plans. The analysis should clearly illustrate differences between the environmental impacts associated with each of the alternatives.

### Wetlands /Drainage

As noted previously, additional analysis of alternatives is required to explore how the project can further avoid and minimize wetland impacts. The Draft EIR should demonstrate that the project can be designed and constructed consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00), including ensuring that the conditions of the relocated stream mimic existing conditions as closely as possible in order to maintain wetlands functions and that the stormwater management plan for the entire site conforms with stormwater standards. It should include revised plans at a reasonable scale that clearly delineate all applicable resource area boundaries including wetlands and buffer zones and wetland replication areas and their proximity to project elements. BVW that have been delineated in the field should be surveyed, mapped and located on the plans.

Comments from MassDEP indicate that the stream replication should be re-designed to more closely mimic the existing stream alignment through the addition of sinuosity and elimination of the sharp, nearly right-angle turn and straight run along the access drive included in the proposed design. The Draft EIR should clearly identify how wetlands features in the existing stream will be incorporated into the replication design. Plans and additional details should be provided on the proposed culvert and stream crossing design and should address how it will be constructed to minimize long-term impacts. The Draft EIR should include the detailed wildlife habitat evaluation referenced in the Expanded ENF. In addition, the EIR should provide a construction, monitoring, and contingency restoration plan for the proposed stream replication.

As requested by MassDEP, the Draft EIR should include calculations, stormwater system design plans at a readable scale, best management practice (BMP) designs and supporting information to demonstrate that the stormwater system design is consistent with the stormwater regulations and standards for water quality and quantity. Comments from MassDEP and DOT encourage the Proponent to maximize the retention and infiltration of storm water runoff on-site. Although recharge and infiltration opportunities are limited by site conditions, there are opportunities to incorporate LIDs such as collection and re-use of rainwater, creation of raingarden/bioretenion areas, tree box filters in open space and landscaped strips among and between the parking lots and a green roof. Inclusion of a green roof for the Lowe's store is dismissed based on cost considerations; however, the Proponent should re-consider this measure and its value as mitigation for wetland impacts and GHG emissions. The Draft EIR should

clarify what LID measures have been considered for the site and provide an evaluation of the above-referenced measures. Also, I note that although the proposed parking ratio for Lowe's is significantly lower than previous proposals reviewed by MEPA, consideration of additional reductions in parking throughout the site or incorporation of structured parking would further minimize wetland and stormwater impacts and could also encourage transit use.

### Traffic and Transportation

As noted previously, an Access Permit is required from MassDOT for access to Highland Avenue. In addition, under the MEPA GHG Policy the Proponent must identify the increase in transportation related GHG emissions associated with the project and propose and evaluate mitigation measures to reduce emissions of GHGs.

The Draft EIR should include plans of sufficient scale (i.e. 1"=40') to clearly show the geometry of the driveways, including proposed lane widths and offsets, layout lines and jurisdictions, and land uses (including access drives) adjacent to areas where improvements are proposed.

In addition, the Draft EIR should clarify how pedestrian and bicycle access will be incorporated into the site design and access plan and provide plans that clearly identify access routes both within the project site and to existing or proposed infrastructure. The Draft EIR should include a revised TDM Program to address the EOT and MassDEP comments and should strongly consider more aggressive support for alternative commuting methods, including transit subsidies and pre-tax payroll reduction. The Proponent should coordinate with the MBTA regarding transit access to the site and infrastructure needs. Comments from MassDOT indicate that Salem has a TMA in the vicinity of the project site that the Proponent can join. The Draft EIR should include a summary of the substance and outcome of the Proponent's discussions with the MBTA, MassRides and the TMA.

Also, MassDOT comments express concern with the potential impact of the project on Highland Avenue traffic during the AM peak hour. As directed by the MassDOT comment letter, the Draft EIR should include additional traffic counts, revised trip generation, trip distribution predictions (based on consultations with MassDOT) and capacity analysis. In addition, the Proponent should consider eliminating the existing driveway to the Meineke facility from Highland Avenue by providing access only from the main driveway and demonstrate how proposed changes to the existing alignment of Highland Avenue will address the operational and safety impacts associated with the weaving movements between the main driveway and proposed secondary access points.

### Greenhouse Gas Emissions

The Expanded ENF notes that the GHG analysis was conducted using the Tech Environmental Energy Model. It indicates that, for future projects, Tech Environmental will conduct GHG analysis using the EQUEST model. The Draft EIR should include a revised analysis of GHG emissions and mitigation measures using the EQUEST model, or a similar

simulation model. Analysis and results should be presented individually and cumulatively to support evaluation of Lowe's request to develop a Prototype building.

The Draft EIR should include the modeling printout for each alternative and emission tables that compare base case emissions with the alternatives and clearly show the anticipated reduction (in tons per year and as a percentage) by emissions source (direct, indirect and transportation). Other tables and graphs may also be included to convey the GHG emissions and potential reductions associated with various mitigation measures as necessary. All modeling inputs and assumptions should be clearly identified, including whether code compliant elements are based on the IECC or ASHRAE 90.1.

The Draft EIR should clarify and better define some of the proposed commitments. In addition, it should address why Lowe's and Walmart have come to conflicting conclusions regarding certain mitigation measures (e.g. use of daylighting, cool roof design, additional roof insulation, EER ratings for equipment) for buildings that appear very similar (with the exception of energy use associated with refrigeration). As required by the MEPA GHG Policy, Proponents must consider all feasible mitigation measures for the entire project. The Draft EIR should identify relevant measures, including retrofits or replacements of existing equipment, that could be incorporated into the Meineke Car Care Center and potentially serve to mitigate overall project-related emissions.

Comments from MassDEP and DOER provide guidance regarding mitigation measures that should be re-considered for inclusion in the overall project and the proposed Lowe's prototype store. DOER notes that efforts to reduce annual electrical usage should be a focus because indirect energy use is responsible for a much larger proportion of associated project emissions than direct combustion. The Draft EIR and revised GHG analysis should thoroughly address comments by MassDEP and DOER, including further evaluation or clarification of the following:

- increase reductions in lighting power to levels at least 10% below code (Lowe's and Walmart);
- increase day-lighting and use modeling to identify the optimal configuration that will produce the least CO2 emissions (Lowe's);
- increase energy efficiency of windows (Lowe's and Walmart);
- demonstrate that the EER for HVAC systems are the maximum feasible and indicate whether all units will be Energy Star rated (Lowe's and Walmart);
- provide analysis to support inclusion or exclusion of high-albedo roofing materials (Lowe's and Walmart);
- clarify whether building commissioning will be conducted by an independent, third party (Lowe's and Walmart);
- construction of a green roof to mitigate GHG emissions and stormwater (Lowe's); and
- combined heat and power system (CHP) that incorporates the refrigeration load and fully considers federal, state and utility incentives (Walmart).

The Draft EIR should refine the TDM program based on the detailed comments provided by MassDEP and MassDOT and estimate the associated reductions using the guidance provided in the MEPA GHG Policy.

In addition, the use of on-site photovoltaic (PV) systems should be re-evaluated for incorporation into the Lowe's prototype buildings and the Salem project. Analysis should be performed under both first and third-party ownership models and assumptions (e.g., available rooftop area, system output, etc) should be clearly identified. The Commonwealth has recently implemented a new series of initiatives to promote the use of PV systems (Commonwealth Solar II and Commonwealth Solar Stimulus). These new rebates are specifically targeted to complement and support the introduction of the new Solar Credit market in Massachusetts (RPS Solar Carve-Out), which is being developed by the DOER under the state's Renewable Portfolio Standard. The FEIR should conduct a feasibility analysis for the project with consideration of these new funding and rebate mechanisms. I encourage the Proponent to consult with DOER regarding the development of this analysis and note that additional resources are identified in its comment letter.

The Draft EIR should present an evaluation of the feasibility of each of the mitigation measures identified above, and if feasible, the GHG emissions reduction potential associated with major mitigation elements to facilitate a comparison of value added of different measures. The Draft EIR should explain, in reasonable detail, any measure noted above that is not selected that would result in a significant reduction of GHG emissions because it is considered technically or financially infeasible. These measures will be considered when evaluating whether the project can mitigate its GHG emission to the greatest extent practicable.

As noted elsewhere in this Certificate, I support Lowe's effort to identify a prototype building that maximizes energy efficiency and avoids unnecessary duplication of GHG analysis. If approved, the request to establish a prototype building and provide an opt-out of GHG analysis for stationary sources will be addressed through the issuance of a Special Review Procedure (SRP) in conjunction with the Certificate on the Final EIR. GHG emissions associated with site-specific issues, such as the store location and traffic generation will continue to be modeled on a site-by-site basis. The Expanded ENF identifies relevant standards and ratings for energy efficiency measures incorporated into the Salem store. To support Lowe's request, the Draft EIR should confirm that these are the minimum standards that will be used for the prototype store or provide more specificity regarding standards that will be used for the prototype building (i.e. identification of lighting levels in watt per square foot, EER for HVAC systems, U values for windows and R values for insulation).

Representatives from MEPA, MassDEP and DOER are available to assist with these efforts and encourage the Proponent to consult with them prior to preparation of the Draft EIR to discuss the revised GHG analysis.

#### Construction Period Impacts

The DEIR should include a separate section on demolition and construction period impacts (including but not limited to noise, vibration, dust, and traffic flow disruptions) and

analyze and outline feasible measures that can be implemented to eliminate or minimize these impacts. The Proponent must comply with MassDEP's Solid Waste and Air Quality Control regulations, pursuant to M.G.L. Chapter 40, Section 54, during demolition and construction. I note that the project will result in the generation of demolition waste, portions of which may contain asbestos. In addition, the project may require a BUD to facilitate recycling of construction and demolition debris and the DEIR should clarify this requirement.

The Draft EIR should provide a more detailed description of blasting and measures to minimize potential contamination of wetlands and water supplies from blasting including use of blasting agents that do not contain perchlorate.

The DEIR should outline a construction sequencing plan, including a timeline and associated staging areas for each phase. The phasing plan should clarify whether and how existing on-site uses (commercial uses and associated parking) will continue to function during construction.

I encourage the Proponent to mitigate the construction period impacts of diesel emissions to the maximum extent feasible. This mitigation may be achieved through the installation of after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). Comments from MassDEP note that project contractors are now required (as of January 1, 2010) to use ultra low sulfur diesel (ULSD) fuel (15 parts per million sulfur) in off-road engines and provides additional resources to assist with implementation of this program.

### Mitigation

The EIR should include a separate chapter that identifies all mitigation measures. This chapter should also include separate permit-specific updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and include a schedule for implementation.

It is anticipated that the Proponent will be required to provide a certification to the MEPA Office indicating that the mitigation measures identified in the MEPA process have been incorporated into the project. As the Secretary typically directs MassDOT to incorporate this self-certification requirement into its Section 61 Finding for both the mobile and stationary source GHG emission components of this project, the draft Section 61 Findings in the FEIR should include this self-certification requirement.

### Comments

The Draft EIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Draft EIR should include responses to comments. This directive is not intended to, nor shall it be construed to, enlarge the scope of the Draft EIR beyond what has been expressly identified in this certificate.

Circulation

The Proponent should circulate the Draft EIR to those parties who commented on the Expanded 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. A copy of the Draft EIR should be made available for review at the Salem Public Library.

February 19, 2009  
Date

  
Ian A. Bowles

## Comments received:

2/5/10	Massachusetts Department of Environmental Protection/Northeast Regional Office (MassDEP/NERO)
2/16/10	MassDEP/ Division of Consumer and Transportation Programs
2/12/10	Massachusetts Department of Transportation (MassDOT)
2/10/10	Division of Energy Resources
2/12/10	Mass Audubon
1/30/10	Richard S. Jendrysik
2/3/10	Mary R. Wilbert

IAB/CDB/cdb