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February 6, 2009

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

PROJECT NAME PROJECT MUNICIPALITY PROJECT WATERSHED EEA NUMBER PROJECT PROPONENT DATE NOTICED IN MONITOR Stop & Shop Supermarket
Easthampton
Manhan
14358
Stop & Shop Supermarket Company, LLC
January 7, 2009

Pursuant to the Massachusetts Environmental Policy Act (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 a Draft and Final Environmental Impact Report (DEIR, FEIR).

Project Description

The project involves the demolition of an existing single family house, detached barn, Tasty Top ice cream stand and golf driving range and the construction of a new 40,500 square foot (sf) Stop & Shop Supermarket with 4,900 sf of attached retail space, a 16,900 sf freestanding commercial retail building, a 2,400 sf self-service fueling/retail building with eight fueling stations, approximately 270 surface parking spaces, and new stormwater management infrastructure on an 18.0-acre portion of a 34.07-acre development parcel bounded by Northampton Street (Route 10) to the west, private residential properties to the north and south, and forested upland and the Manhan River to the east in the City of Easthampton. As described in the ENF, the project will require 3,300 gallons per day (gpd) of potable ewater and generate approximately 3,300 gpd of wastewater flows. The project will result in permanent impacts to approximately 1,600 sf of bordering vegetated wetlands (BVW) and will generate approximately 6,890 new vehicle trips per day (vtd).

Permits and MEPA Jurisdiction

The project is undergoing environmental review and requires the preparation of an Environmental Impact Report (EIR) pursuant to Section 11.03(6)(a)(6) of the MEPA regulations because it requires state permits and because the project will generate more than 3,000 new average daily trips on roadways providing access to a single location. The project requires a Vehicular Access Permit from the Massachusetts Highway Department (MassHighway) for access to Northampton Street (Route 10), and a U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges from a construction site of over one acre. The project may also require a Section 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP) and a Section 404 Programmatic General Permit (Category II) from the U.S. Army Corps of Engineers (ACOE). The project requires an Order of Conditions from the Easthampton Conservation Commission (and, on appeal only, a Superseding Order from MassDEP). An air quality mesoscale analysis for ozone will be needed for this project to assess the total volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions associated with all project-related vehicle trips. The project is subject to the EEA Greenhouse Gas (GHG) Emissions Policy and Protocol because it requires an EIR and a Vehicular Access Permit from the Massachusetts Highway Department (MassHighway).

Because the Proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction is limited to those aspects of the project that may cause Damage to the Environment and that are within the subject matter of required or potentially required state permits. In this case, jurisdiction extends to transportation, wetlands, stormwater and greenhouse gas emissions (GHG).

Future Development

As described in the ENF document, the 18-acre project site is part of a 34.07-acre development parcel that is currently owned and controlled by the Margaret H. Courtney family Trust (the Courtney Trust). The ENF contains a conceptual site plan for the potential future development of the remaining 26.07-acre development parcel ("future development parcel") that abuts the project site's northern and eastern property lines. As illustrated in the conceptual site plan, under current zoning the future development parcel may be developed to include forty residential units to be located in four separate buildings, an internal roadway system directly connected to the Stop & Shop internal roadway system, surface parking, stormwater management infrastructure and a separate 10,000 sf commercial office or retail building.

Under the anti-segmentation provisions of the MEPA Regulations (Section 11.01(2)(c)), I must consider all the circumstances to determine if the proposed development activities associated with the development of the 34.07-acre development parcel constitute one project including but not limited to: whether the proposed work taken together comprises a common plan or independent undertakings regardless of the number of proponents, any time interval between the work or activities, and whether the environmental impacts caused by the proposed work are separable or cumulative.

ENF Certificate

I am therefore requiring that a Notice of Project Change (NPC) be filed with the MEPA Office for any future development that may be proposed for the 26.07-acre future development parcel. The NPC will need to discuss the site planning issues and the potential cumulative infrastructure and environmental impacts, including Greenhouse Gas (GHG) emissions, arising out of the full build-out development (allowable as-of-right under current local zoning) of the future development parcel and the proposed Stop & Shop development project. The proponent for the 26.07-acre future development parcel should consult with the MEPA Office prior to filing the NPC.

SCOPE

General

The Proponent should prepare a Draft EIR (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 maps and plans at a reasonable scale, a project summary and schedule, and a description of any changes since the filing of the ENF. The DEIR should include existing and proposed conditions plans. Site plans should clearly show all proposed project elements including the proposed bridged wetland crossing and roadway connection spur that will be constructed by the Proponent to accommodate vehicular access to the future development parcel from the Stop & Shop project site. Site plans for the proposed project and its alternatives should delineate wetland resource areas and buffer zone, and mapped state-listed species habitat to facilitate review and evaluation of potential impacts.

<u>Alternatives</u>

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, air quality and greenhouse gas emissions). The DEIR should provide a rationale to explain why certain alternatives are selected and others ruled out for further consideration. For the Proponent's preferred alternative, the DEIR should include a discussion of the Proponent's proposed construction of a wetland crossing to accommodate access to the future development parcel.

The DEIR should consider alternative site layouts and building configurations, and include an analysis of alternatives to avoid and minimize impacts to wetlands resource areas, reduce impervious surface area, and reduce greenhouse gas emissions as further detailed in the Scope below. The DEIR should demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. As discussed elsewhere in this Certificate, implementation of transportation demand management (TDM) measures and provision of good bicycle and pedestrian access can further reduce the amount of parking needed.

Permitting and Consistency with State, Local and Regional Policies

The DEIR should discuss applicable permits and regulatory requirements, and describe how the project will meet relevant performance standards. The DEIR should include a list of required permits and approvals and provide an update on the status of each permit and/or approval. The DEIR should describe the project's consistency with Executive Order No. 385, Planning for Growth and the Commonwealth's Ten Sustainable Development Principles. The DEIR should also demonstrate consistency with the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol in accordance with the GHG section of the Scope below.

Wetlands

The project site contains Bordering Vegetated Wetlands (BVW) and an intermittent stream running in a westerly direction between the project site's northern boundary and the southern boundary of the future development parcel. As currently proposed, the Stop & Shop project will result in the permanent alteration of approximately 1,600 sf of bordering vegetated wetlands (BVW) to construct a bridged wetland crossing for a roadway connection spur that will accommodate vehicular access to the future development parcel from the Stop & Shop project site. The project as currently proposed will also result in the alteration of the 100-ft wetland buffer area resulting from site grading and roadway construction, and stormwater management infrastructure.

The DEIR should include a reasonably scaled plan that identifies the wetland resource areas (including any banks, intermittent streams, perennial streams, land under the water, bordering land subject to flooding, and isolated land subject to flooding) and buffer zones present in the proposed project area on a reasonably scaled plan. The DEIR should identify the significance of the resources present, including value to public and private water supply, flood control, storm damage prevention, prevention of pollution, riverfront area, and fisheries and wildlife habitat.

The DEIR should include a description of the project's construction activities and potential impacts to all wetland resource areas including wetland buffers located on the project site and within the southwestern portion of the adjacent future development parcel. The Proponent should analyze both direct and indirect (i.e. changes in drainage patterns) impacts on wetlands resulting from the project, and demonstrate that the Proponent has minimized impacts to resource areas including, but not limited to on-site and adjacent off-site wetland resource areas to the maximum feasible extent. The DEIR should discuss the applicability and consistency of the Proponent's preferred development scenario with the requirements of the 401 Water Quality Certification for Fill Projects in Waters and Wetlands (314 CMR 9.08), and any the Category II Section 404 Permit from the ACOE. The DEIR should contain sufficient information for MassDEP to evaluate the Proponent's efforts to avoid or minimize the potential environmental impacts resulting from each proposed development alternative.

Stormwater

As described in the ENF, the project's stormwater management plan has been designed to comply with MassDEP's Stormwater Management Regulations, standards and practices and the City of Easthampton's stormwater management regulations. According to the Proponent's statements made during the MEPA consultation session held for this project on January 26, 2009, the project's stormwater management system will incorporate the use of hooded deep sump catch basins to convey the project's stormwater runoff to two on-site stormwater detention basins and one infiltration basin.

The DEIR should include a detailed description of the proponent's stormwater management plan, including a discussion of the alternatives considered along with their impacts. The DEIR should identify any stormwater discharge points, and describe any drainage impacts associated with proposed on-site and off-site project-related 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. The Proponent should provide calculations, proposed best management practice (BMP) plans, and supporting information sufficient to demonstrate that the design of the project's drainage system can accommodate stormwater water flows during severe storm events.

The DEIR should demonstrate that the design of the drainage system is consistent with MassDEP's Stormwater Management regulations for water quality, recharge to groundwater, and peak runoff impacts in Critical Areas, and consistent with the City of Easthampton's Storm Water Program and its National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater General Permit. In the alternative, the DEIR should explain why the proponent is proposing a drainage system design not recommended by MassDEP. If the Proponent proposes to tie into an existing municipal stormwater system or the MassHighway system, the DEIR should clarify the permits required and whether there will be a recharge deficit on-site. The DEIR should identify where the Route 10, Plymouth Avenue and Colonial Avenue drainage systems discharge in this area. The DEIR should discuss compliance with MassDEP's proposed revisions to 314 CMR 5.00, *Groundwater Discharge Permitting Program Regulations*. The Proponent should contact MassDEP during the preparation of this section of the DEIR.

The DEIR should include a description of the Proponent's proposed Stormwater Pollution Prevention Program (SWPPP) including a Sedimentation and Erosion Control Plan that outlines measures that will be implemented to minimize and mitigate construction period impacts. The Proponent should ensure that hay bales are not used for erosion control as they may contain seeds from invasive species. The Proponent should commit to implementing a SWPPP that will exceed the minimum requirements established for SWPPPs in accordance with EPA's NPDES General Permit. Any dewatering of the construction site should include monitoring to ensure that there is no impact to the groundwater level. The DEIR should outline the monitoring program of groundwater levels. It should summarize existing pre-construction groundwater conditions, and propose groundwater monitoring to address any impacts. The DEIR should investigate feasible methods of reducing the project's impervious surfaces to increase the points of infiltration within the project site.

The Proponent must implement a long term Operation and Maintenance Plan (O&M Plan) to ensure that Best Management Practices (BMPs) are maintained to function as designed. The O&M should incorporate MassDEP's Snow Disposal Guidelines (http://mass.gov/dep/water/laws/policies.htm) and require that no snow will be placed in or adjacent to wetland resource areas, and commit to using a minimal amount of deicing and abrasive agents. I encourage the proponent to consider using a non-sodium based deicer on pavement surfaces. This O&M Plan should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

I encourage the Proponent to continue to evaluate opportunities for incorporating sustainable design alternatives including Low Impact Development (LID) techniques in the project's site design and stormwater management plans. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features. For more information on LID, visit http://www.mass.gov/envir/lid/.

Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: <u>http://www.epa.gov/owow/nps/lid/</u>. The DEIR should include a discussion and evaluation of integrated stormwater management techniques for redevelopment sites with significant surface area parking. The Proponent should consult with MassDEP during the preparation of this section of the DEIR.

Water Supply and Wastewater Management

As described in the ENF, the project will require 3,300 gpd of potable water supply and will generate approximately 3,300 gpd of wastewater flow. Both water and wastewater needs will be met through existing municipal systems, administered by the City of Easthampton. The DEIR should demonstrate that the proposed project's potable water supply needs can be served by the City of Easthampton. At a minimum, the DEIR should demonstrate that the City of Easthampton has sufficient design capacity to accommodate the proposed project's additional potable water demands and wastewater flows.

I encourage the Proponent to commit to incorporating water conservation in the project design to comply with the Massachusetts state plumbing code. As part of that commitment, the Proponent should commit to using efficient commercial water conservation technologies for all new buildings including water saving devices, low flow toilets, and low flow appliances (dishwashers, washing machines).

Transportation

The Proponent has prepared a Traffic Impact and Access Study (TIAS) that generally conforms with Executive Office of Energy & Environmental Affairs (EEA)/Executive Office of Transportation and Construction (EOTC) guidelines. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual's land use codes 850 (Supermarket), 944 (Gasoline Station), 912 (Drive-in Bank) and 820 (Shopping Center) the Proponent estimates a total of 6,890 new vehicle trips per day (vtd) associated with the proposed project.

In its comments, MassHighway has identified the need for additional information pertaining to the Proponent's traffic study area and vehicle trip and trip distribution calculations for the project. The Proponent's traffic study area should be expanded to include the Northampton Street/O'Neil Street intersection, the Northampton Street/Main Street intersection and the Main Street/Main Street intersection. The DEIR should include a revised traffic study that includes a signal warrant analyses for the following intersections:

- Northampton Street/O'Neil Street;
- Northampton Street/West Street;
- Northampton Street/Main Street;
- Main Street/Main Street; and,
- Main Street/Pleasant Street.

The revised traffic study should incorporate an appropriate ITE Land Use Code for the proposed 16,900 sf freestanding retail building and a detailed explanation of the Proponent's trip distribution methodology. The Proponent should consult with MassHighway during the preparation of this section of the DEIR.

The Proponent has outlined and committed to a transportation mitigation program in the ENF to address potential project-related traffic impacts and to help address existing operational and safety deficiencies. The following mitigation measures are proposed:

- Route 10/Stop & Shop site driveway/Mountainview Street intersection
 - construction of a new signalized 3-lane Stop & Shop site driveway/Route 10/ Mountainview Street intersection;
 - construction of geometric improvements include widening and re-striping of Route 10 to provide an exclusive northbound left-turn lane, through lane and right-turn lane, and exclusive southbound left-turn lane and a shared through lane/right-turn lane;
 - consolidation of approximately five existing curb cuts on both sides of Route 10;
 - construct pedestrian crosswalks across Route 10 and across the project site drive; and,
- Florence Road/Highland Street/Route 10 intersection
 - re-striping of the Florence Road/Highland Street/Route 10 intersection; and,
 - synchronization of signal timing with the proposed new Stop & Shop site driveway/Route 10 intersection signal; and,

- Union Street(Route 141)/Route 10
 - synchronization of signal timing at the existing Union Street/Route 10 intersection with the proposed new Stop & Shop site driveway/Route 10 intersection.

As described in the ENF, under the Proponent's preferred project alternative, the main access to the site will be provided via a new 3–lane site drive located on Route 10 directly across from Mountainview Street. MassHighway has indicated its preference for the proponent's preferred site drive location across from Mountainview Street. According to MassHighway, the Proponent's preferred site drive location may impact the existing shared access driveway on Route 10 between the Cernak Buick and Cernak Fuel. The DEIR should discuss the potential impacts of the preferred site drive location on abutting Route 10 properties. The DEIR should also discuss the need for a shared access agreement between Cernak Fuel and Cernak Buick to allow for a shared access to these businesses from Mountainview Street. The DEIR should discuss the City of Easthampton's plan for future development on Mountainview Street and ensure that the Proponent's proposed improvements at this location are consistent with the City's transportation plan.

The Draft EIR should include conceptual 80-scale plans depicting the proposed mitigation to verify the feasibility of constructing such improvement including lane widths and offsets, layout lines and jurisdictions, and adjacent land uses in the proposed improvement area. All proposed mitigation located within the state highway layout must conform to MassHighway Standards. The DEIR should identify those mitigation measures to be implemented by the Proponent during project construction and prior to occupancy of the proposed project. The Draft EIR should include a commitment to implement the Proponent's proposed mitigation measures and should describe the timing and cost of their implementation based on project phasing.

Transportation Demand Management (TDM)

The Proponent has committed to a number of TDM measures to reduce vehicular traffic to and from the project site including:

- appointment of a part-time on-site TDM Coordinator;
- promotion of carpool/rideshare programs;
- providing preferential parking for carpool employees; providing pedestrian crosswalks and walkways at the Route 10/Stop & Shop driveway intersection;
- installation of bicycle storage racks near the front doors of the retail building to facilitate bicycle access to the site; and,
- development of on-site amenities including an on-site breakroom with refrigerators, direct deposit of employee paychecks, on-site ATMs/banking services, and secured bicycle storage racks.

While I recognize the challenges inherent in developing a successful Transportation Demand Management (TDM) program for a commercial retail site, I remind the Proponent of its obligation to develop the maximum mitigation feasible for traffic impacts.

I ask that the Proponent continue to evaluate and commit to additional feasible TDM measures for store employees and patrons to reduce peak employee traffic demand and to encourage alternative transportation modes for retail customers including, but not limited to:

- providing comprehensive commuter information; coordination with PVPC and the Nashawannuck Express shuttle service to extend scheduled bus and shuttle stops to the project site; and,
- participation with the City of Easthampton, Pioneer Valley Planning Commission (PVPC), the Nashawannuck Express and other project area residents to identify and implement cost-sharing opportunities for supporting a more robust transit service linking the project site and other project area businesses.

MassDEP has reviewed the DEIR and has identified several additional TDM mitigation measures to be considered in the DEIR filing, and adoption into the project, where feasible, as detailed below.

- Smart Ways Transportation Partnership. Stop & Shop is a member of this collaborative effort between the U.S. EPA and the freight industry to increase energy efficiency in freight trucking. The Proponent should include in the DEIR a summary of this program and quantify the potential GHG reduction benefits as they may apply to the Easthampton Stop & Shop project.
- Commuter Tax Benefit Program. This program encourages employees to take transit or vanpools to work, providing transit and bus services are available within a mile of the project site. This Commuter Tax Benefit Program provides the added benefit of decreasing taxes for employers and employees. The DEIR should include a discussion of this program and quantify the potential GHG reduction benefits as they may apply to the Easthampton Stop & Shop project.
- Rideshare-Matching Program. MassDEP recommends that the proponent establish a rideshare-matching program to match employees in carpools and/or vanpools. The Proponent could also enlist the services of a third-party provider to carry out this program.

<u>Guaranteed Ride Home Program</u>. In a Guaranteed Ride Home Program (GRH) program, the employer provides emergency rides home in the form of taxis or work vehicles to employees that carpool or vanpool to work. GRH programs provide ridesharing employees a strong sense of relief that they can get home in emergencies and this helps them to commit to this commute mode over the long-term. MassDEP recommends that the Proponent consider establishing an emergency ride home program for all project employees who travel by carpools/vanpools as part of its TDM program.

Transportation Management Association (TMA). The Proponent should consider joining or help to form a TMA that serves the project area.

TMAs are organizations that help several employers in a local area develop and implement incentives that reduce traffic and trips to the worksite. Employers pay a fee for this service to a centralized coordinator to market and implement these incentives on their behalf. To find out more about TMAs in the project area, please see: <u>http://www.masscommute.com/tma_directory.htm</u>.

The Proponent's TDM plan should describe any monitoring necessary to ensure the success of the program. The Draft EIR should demonstrate the Proponent's commitment to implement, monitor, and fund the proposed TDM plan. All project tenants should be required to participate in the proposed TDM plan. The Draft EIR should continue to evaluate additional feasible TDM measures to further reduce vehicle trips to and from the site. The Proponent should consult with the City of Easthampton, the PVTA and MassHighway before filing the DEIR to discuss coordination of this project with existing transit and/or shuttle services to promote transit use by employees and patrons. The Proponent should provide a report on this consultation in the DEIR. The Proponent's TDM plan should be incorporated as part of the Proponent's transportation mitigation program.

The DEIR should include a commitment to implement the Proponent's proposed traffic mitigation measures and should describe the timing and cost of their implementation based on project phasing. This section of the DEIR should include conceptual plans for the proposed mitigation that are of sufficient detail to verify the feasibility of constructing such improvements, including lane widths and offsets, layout lines and jurisdictions and adjacent land uses.

<u>Transit</u>

According to the information provided in the ENF, the PVTA currently operates the Red 41 line (Northampton, Easthampton/Holyoke Community College) within the project area. The Nashawannuck Express is a flex van service that provides schedule stop service and flexible stop service throughout Easthampton including the project area. The Proponent should consult with the PVTA, the Nashawannuck Express, the City of Easthampton, and MassHighway to identify opportunities for providing bus and/or shuttle service to the project site. The DEIR should identify opportunities to incorporate transit amenities including bus shelters and shuttle stops in closer proximity to the project site and the proposed Stop & Shop building. The DEIR should include an update of the proponent's discussions with PVTA and others for providing bus and/or shuttle service to the project area. As described elsewhere in this Certificate, the Proponent should evaluate TDM measures for store employees and patrons to encourage alternative transportation modes including increased ridership of the PVTA's Red 41 line and the Nashawannuck Express.

Pedestrian and Bicycle Facilities

The proponent has committed to provide 5-foot wide sidewalks along the project site's Route 10 frontage and along the project's site driveway from the Route 10/site driveway intersection to the proposed retail buildings. The DEIR should describe the internal vehicular and pedestrian circulation plans for the project site. On a reasonably scaled map of the project site, the DEIR should show where the Proponent proposes new sidewalks, pedestrian crossings and vehicle/pedestrian safety signage in a map of the area.

I strongly encourage the Proponent to evaluate the feasibility of constructing any additional traffic, transit, pedestrian, and bicycle improvements within the project area in response to the regional and local traffic concerns that may arise out of the proposed Stop & Shop project.

Parking

The ENF proposes to construct approximately 270 new surface parking spaces. The DEIR should indicate how the parking supply was developed and demonstrate that the parking supply is the minimum necessary to accommodate project demand without encouraging additional single occupant vehicle trips. Implementation of TDM measures and provision of good bicycle and pedestrian access can further reduce the amount of parking needed.

Air Quality

The project's projected vehicle trips triggers MassDEP's requirement that the Proponent conduct an air quality mesoscale analysis to determine if the proposed project will increase the amount of volatile organic compounds (VOCs) and nitrogen oxides (NOx) in the project area and to assess the project's consistency with the Massachusetts State Implementation Plan (SIP). The DEIR should include the results of the Proponent's mesoscale air quality analysis.

Greenhouse Gas Emissions Policy and Protocol

This project is subject to the EEA Greenhouse Gas Emissions Policy and Protocol, and the DEIR must demonstrate consistency with the analysis and mitigation provisions therein. The Policy is available on-line at

http://www.mass.gov/envir/mepa/pdffiles/misc/GHG%20Policy%20FINAL.pdf. A project at this early stage of development provides a multitude of opportunities for designing buildings and transportation management measures that reduce energy consumption and substitute fossil fuel with renewable energy sources. According to the comments received from MassDEP, Stop & Shop is recognized as a national leader in energy efficiency having been acknowledged an Energy Star Leader by EPA Region I. The company has also been awarded a first in the nation LEED standard by the US Green Building Council (USGBC) and the first company to earn Volume Certification under the Portfolio Program. Recently, EPA also awarded Stop & Shop the Energy Star label for its Southbury, Conn., store recognizing the building's superior energy performance as a result of incorporating skylights and natural lighting, high efficiency lighting, refrigeration systems, and variable speed compressors. At a minimum, the Easthampton Stop & Shop store should incorporate those energy efficiency measures that it has incorporated for other Stop & Shop stores. In the event that the Proponent is not able to adopt one of these measures, the DEIR should provide technical and cost analyses to document the rationale for not making a commitment to a mitigation recommendation.

The DEIR should include an analysis of GHG emissions and mitigation measures in accordance with the requirements of the MEPA GHG Policy and Protocol. The DEIR should quantify the direct and indirect GHG emissions associated with the project's energy use and transportation-related emissions.

Direct emissions include on-site stationary sources, which typically emit GHGs by burning fossil fuel for heat, hot water, steam and other processes. Indirect emissions result from the consumption of energy, such as electricity, that is generated off-site by burning of fossil fuels, and from emissions associated with vehicle use by employees, vendors, customers and others. The DEIR should outline and commit to mitigation measures to reduce GHG emissions. I refer the Proponent to the GHG Emissions Policy and Protocol for additional guidance on the analysis. In addition, the appendix to the GHG policy and the comment letter from MassDEP and DOER include suggestions for GHG mitigation measures. I encourage the Proponent to consult with the MEPA Office early in the design process regarding the scope and methodology of the analysis.

The DEIR should include a GHG emissions analysis that calculates and compares GHG emissions associated with; 1) a Massachusetts Building Code-compliant baseline (the sum of direct emissions from stationary sources and indirect emissions from energy consumption and transportation); 2) the proposed Preferred Alternative (the sum of direct emissions from stationary sources, indirect emissions from energy consumption, and transportation for the project as proposed); and 3) a project alternative with greater GHG emissions-related mitigation than the preferred alternative. The proponent's code compliant quantification of CO₂-related emissions must reflect the recent amendment to the Massachusetts State Building Code (Chapter 780 CMR 13.00 7th ed.) that incorporates the performance standards of the International Energy Conservation Code (IECC). The Appendix to the Greenhouse Gas Emissions Policy contains a partial, non-exhaustive list of measures to reduce GHG emissions and incorporate sustainable development techniques. The DEIR should indicate which energy modeling tool was used and present the data used to model the energy use in buildings. The DEIR should identify TDM measures proposed for each of the alternatives and the corresponding emission reductions expected.

The alternatives analysis helps identify and assess opportunities for energy savings achievable by varying building design and layout strategies. These assessments can inform an analysis of the feasibility of LEED and/or ENERGY STAR elements. If the Proponent chooses not to select certain energy efficiency techniques that would provide a greater reduction in emissions compared with the preferred alternative, the DEIR should explain why certain alternatives were rejected. The alternatives analysis should clearly demonstrate consistency with the objectives of MEPA review, one of which is to document the means by which the Proponent plans to avoid, minimize, or mitigate damage to the environment to the maximum extent feasible. The Proponent should fully explain any trade-offs inherent in the GHG analysis, such as increased impacts on some resources to avoid impacts on others. Similarly, the DEIR should also evaluate the feasibility of purchasing power generated by renewable energy sources for any portion of the electricity use on the site.¹

The Proponent should consult with the MEPA Office regarding the modeling parameters to be reported in this section of the Draft EIR. Other energy efficient measures, as explained below, also should be considered.

¹ In the spirit of the corporate commitment to evaluate its buildings against LEED criteria, I note that LEED certification for New Construction/Retail requires a 35 percent to 50 percent contribution of green power.

Additional information on building design energy reduction measures and standards is available on many websites, including the following: <u>http://www.eere.energy.gov/,</u> <u>http://www.nahb.org, www.sbicouncil.org, http://www.aceee.org, http://www.ashrae.org/, http://www.coolroofs.org/ and http://www.ornl.gov.</u>

The Division of Energy Resources (DOER) reviewed the ENF and has identified several measures listed below worthy of consideration in the Draft EIR, and adoption into the project, where feasible. The DEIR should include additional information and analysis in response to the DOER's comments and the energy efficient measures listed below. The DEIR should provide technical and cost feasibility analyses to document the rationale for not making a commitment to a mitigation recommendation. Also, it is recommended that the Proponent contact the New Construction division of its electricity utility and natural gas utility in Easthampton, Western Massachusetts Electric and BayState Gas, to take advantage of potential rebates available for the installation of highly energy efficient equipment.

The following are among the suitable energy efficient measures for this project that should be considered fully and incorporated into the project to the greatest extent feasible.

<u>Building Orientation</u> - The DEIR must provide a detailed description of the proposed building orientation for the project and how this orientation will impact energy usage.

<u>Energy Efficient Interior Lighting</u> – T-8 lighting is the baseline in accordance with the MA Building Code. DOER recommends the installation of enhanced or "Super T8" lighting, T5 or metal halide lighting, and for all exit signs, LED lighting.

<u>Maximize Interior Day-lighting</u> – DOER recommends that this measure be thoroughly investigated, given that other big-box retailers have incorporated interior day lighting successfully into their retail space.

<u>Duct Insulation</u> - Duct insulation is the baseline required by code. The DEIR should note, and construction plans should reflect that all ducts would be sealed with mastic, tested, and then insulated, since duct leakage can be a major factor in energy losses.

Roof and Wall Insulation

According to DOER, providing the best building envelope possible will provides the greatest cost-effective gains in energy savings for building operations. The Proponent should evaluate using the highest R-value insulation available for the Stop & Shop building.

<u>High-Efficiency HVAC Systems</u> - Compared to typical rooftop units, more efficient technologies may be feasible without a first-cost penalty. It should be noted that more efficient units provide definite economic benefits over the life of the system.

<u>Windows</u> - The DEIR should identify the U-value of the windows proposed for the Stop & Shop building which should be greater than the Massachusetts Building Code for this project application.

<u>High Albedo Roofing Materials</u> – DOER recommends that the DEIR fully consider the use of high-albedo roofing materials for the proposed Stop & Shop building.

<u>Third Party Building Commissioning</u> – Building commissioning is required by the MA Building Code but should be performed by a third party to ensure that the commissioning process is thorough and the energy performance of the building is maximized.

Lighting Motion Detectors, Climate Control and Building Energy Management Systems - To ensure that energy systems function as designed long term, DOER recommends that a strategy be developed for monitoring energy performance of the building, possibly through a building management system. A building energy management system can incorporate basic energy saving measures such as lighting and climate control. A system or strategy for monitoring energy performance would be expected to pay for itself by eliminating potential inefficient building energy operations, such as operating heating and cooling systems simultaneously in January. The DEIR should describe the proponent's strategy for monitoring energy performance of buildings to ensure the energy systems function as designed over the long-term.

Incorporate on-site renewable energy sources - I encourage the Proponent to consider incorporation of renewable energy into its proposal and note that a commitment to installation of solar photovoltaic (PV) systems would be consistent with the Governor's recently announced goals of encouraging the installation of solar PV for all large retail projects. DOER recommends that a life-cycle cost analysis be completed in the DEIR, considering the support of subsidies through the Commonwealth Solar and Renewable Portfolio Standard (RPS) Program and federal tax credits to evaluate the installation of a solar photovoltaic PV system to generate energy for some of the building's functions under two scenarios: 1) construction, ownership and operation of a PV system by Stop & Shop; or 2) construction, ownership, and operation of a PV system by a third party that will then enter into a long-term power purchase agreement with Stop & Shop for the electricity produced by the system. If neither of these scenarios is considered economically feasible at this time, DOER recommends that the Proponent consider committing to PV installation at a future date or hosting a third-party-owned PV array under a favorable power purchase agreement. With an expected large flat roof, DOER recommends that at a minimum, the roof be constructed to support the added weight of a solar PV system for potential installation during project construction or at a future date. It should be noted that a rooftop PV system operates even more efficiently, due to added reflectivity, when installed on a white roof.

<u>Incorporate combined heat and power (CHP) technologies</u> - In addition to adding the capability for load shedding (see above), CHP systems reduce the annual fuel consumption (and related CO2 emissions) when compared with what would be required by supplying natural gas and grid supplied power as would be required to operate the central plant with grid power as proposed.

<u>Use water conserving fixtures that exceed building code requirements</u> - The generic factors for energy savings related to potable and waste water reductions are: waste water treatment (a) 1.3 kWh per gallon; potable water supply (a) 0.2 kWh per gallon. The Proponent should contact the local water supplier and waste water treatment plant to see if they have conducted an energy audit, which may result in facility specific energy factors.

Construction Period Impacts

The proposed project includes the demolition of an existing buildings and structures on the project site which will generate construction and demolition (C&D) waste. The DEIR should evaluate construction period impacts, including erosion and sedimentation, air quality and solid waste disposal and commit to measures to minimize construction impacts. MassDEP encourages the Proponent to incorporate C&D recycling activities as a sustainable measure for the project. MassDEP has noted that demolition and construction activities must comply with both Solid Waste and Air Quality control regulations. The Proponent is advised that demolition activities must comply with both Solid Waste and Air Pollution Control regulations, pursuant to M.G.L. Chapter 40, Section 5.

The DEIR should respond to MassDEP comments regarding materials management including plans for waste reduction, environmentally preferable materials use, and storage and collection of recyclables and hazardous materials. MassDEP has requested that the proponent quantify the GHG impacts of materials management for the project development and future operation, which will assist in identifying and Stop & Shop GHG mitigation efforts. I refer the proponent to the MassDEP/DOER comment letter for guidance on this analysis. MassDEP has requested that the proponent commit to developing a construction waste management plan (CWMP) that fully complies with the Massachusetts waste bans and establishes a minimum reuse/recycling goal of 50 per cent. MassDEP also recommends a waste management plan for the operations phase of the project. I refer the proponent to the MassDEP/DOER comment letter for additional guidance. I ask that the Proponent participate in MassDEP's Clean Air Construction Initiative (CACI) and the MassDEP Diesel Retrofit Program to mitigate the construction-period impacts of diesel emissions to the maximum extent feasible. The CACI program helps proponents identify appropriate mitigation for minimizing air pollution from construction vehicles such as retrofit of construction equipment with particulate filters and oxidation catalysts and/or use of on-road low sulfur diesel (LSD) fuel. The Proponent should consult with MassDEP during the preparation of the DEIR to develop appropriate construction-period diesel emission mitigation, which could include the installation of after-engine emission controls such as diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs). For more information on these technologies, see: http://www.epa.gov/otaq/retrofit/verif-list.htm.

Mitigation and Section 61 Findings

The DEIR should include a separate chapter on mitigation measures, which should include proposed Section 61 Findings for all state permits required and a summary table of all mitigation proposed.

The mitigation chapter of the DEIR should describe proposed mitigation measures, contain clear commitments to mitigation and a schedule for implementation, and identify parties responsible for funding and implementing the mitigation measures. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included. The DEIR should include conceptual plans for the proposed roadway improvements of sufficient detail to verify the feasibility of constructing such improvements. The conceptual plans should clearly show proposed lane widths and offsets, layout lines and jurisdictions, and the land uses (including access drives) adjacent to proposed improvements. Any proposed mitigation located within the state highway layout must conform to MassHighway standards including provisions for lane, median and shoulder widths and bicycle lanes and sidewalks.

Response to Comments

In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments to the extent the comments are within are within MEPA jurisdiction and the subject matter of this scope. 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. The DEIR should include a copy of this Certificate and a copy of each comment letter received on the ENF. I defer to the Proponent as it develops the format for this section, but the Response to Comments section should provide clear answers to questions raised.

Circulation

The DEIR must be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to commenters as listed below, to any state agencies from which the Proponent will be seeking state permits and approvals, and to Town of Easthampton officials. A copy of the DEIR should be made available for review at the Easthampton Public Library.

Based on the review of the ENF and the comments received, I am satisfied that the ENF meets the standard for adequacy contained in Section 11.06 of the MEPA regulations. The Proponent should prepare the DEIR in accordance with the MEPA regulations and the Scope provided above.

Ian A. Bowles, Secretary

February 6, 2009 Date

Comments received: (continued on next page)

01/14/09	Lawrence J. Kostek and Lucille D. Kostek
01/26/09	Lisa Sawyer
01/26/09	Jennifer Cernak

Comments received: (continued)

- 01/26/09 Connecticut River Watershed Council
- 01/27/09 Pioneer Valley Planning Commission (PVPC)
- 01/27/09 Christine Yario
- 01/27/09 Bacon\Wilson, P.C.
- 01/27/09 Department of Environmental Protection (MassDEP) WERO
- 01/27/09 Executive Office of Transportation and Public Works, Massachusetts
- Highway Department (MassHighway)
- 01/28/09 Cernak Buick

IAB/NCZ/ncz EEA #14358 ENF