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June 13, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : The Shoppes at Harrington Farms
PROJECT MUNICIPALITY : Shrewsbury
PROJECT WATERSHED : Sudbury
EEA NUMBER : 14158
PROJECT PROPONENT : Retailscapes, LLC
DATE NOTICED IN MONITOR : May 7, 2008

The Secretary of Energy and Environmental Affairs hereby determines that the Draft Environmental Impact Report (DEIR) submitted on the above project **adequately and properly complies** with the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00).

Project Summary

The design program for the Shoppes at Harrington Farms project was modified subsequent to the Secretary's January 23, 2008 issuance of the Certificate on the Environmental Notification form (ENF) resulting in decreased impacts to wetland resource areas and minor increases to traffic generation, surface parking, water use and wastewater generation. As currently designed, the project now includes the two-phased development (Phase I, II) of approximately 113,000 square feet (sf) of supermarket, restaurant and retail space in three separate buildings on a 24.80-acre site located on Route 9 and South Street in Shrewsbury. Phase I of the project will involve the construction of a 64,454 sf supermarket and 258 surface parking spaces. Phase II will include the construction of a 42,084 sf commercial retail building, a stand-alone 6,500 sf (200 seat) restaurant building and 223 surface parking spaces. The two-phased project will generate approximately 7,281 new average daily trips (adt).

Potable water use and wastewater generation is estimated in the DEIR at 15,356 gallons per day (gpd) and will be served by the Town of Shrewsbury. The project will result in the creation of approximately 8.5 acres of new impervious area. The Proponent proposes one site drive on South Street and two separate site drives on Route 9. The project's internal roadway plan calls for a wetland crossing to connect the Phase I and Phase II developments.

Permits and MEPA Jurisdiction

The project is undergoing MEPA review and is subject to a mandatory EIR pursuant to Section 11.03(6)(a)(6) because it involves generation of 3,000 or more new average daily trips (adt) on roadways providing access to a single location. The project is also undergoing MEPA review pursuant to Section 11.03(6)(b)(15) because it will result in the construction of 300 or more new parking spaces at a single location. The project requires a Vehicle Access Permit from the Massachusetts Highway Department (MassHighway) for access to Route 9, 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 will require a Section 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP). The project may require a Section 404 Programmatic General Permit (Category II) from the U.S. Army Corps of Engineers (USACOE). A Superseding Order of Resource Area Delineation was issued by MassDEP on May 5, 2008. The Proponent must file a Notice of Intent (NOI) with the Shrewsbury Conservation Commission for work within a resource area. The Proponent has included in the DEIR an air quality mesoscale analysis for ozone to assess the total volatile organic compounds (VOC) and nitrogen oxides (NOx) emissions associated with all project-related vehicle trips.

The Proponent is not seeking financial assistance from the Commonwealth. Therefore, MEPA jurisdiction applies to those aspects of the project within the subject matter of required, or potentially required, state permits that have the potential to cause damage to the environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to transportation, wastewater, wetlands and stormwater.

Transportation

The DEIR includes a traffic study that generally conforms to the EEA/EOT Guidelines for Traffic Impact Assessment. Using the Institute of Traffic Engineers Trip Generation land use code 820 - Shopping Center, the project is estimated to generate a total of approximately 7,281 new vehicle trips on the average weekday. The traffic study addressed the proposed full build-out for the Shoppes at Harrington Farm project. The DEIR includes the following proposed traffic mitigation measures:

- geometric modifications to widen the southbound approach to the Route 9/South Street intersection to provide an exclusive left-turn lane, a shared through/left-turn lane, a shared through left-turn lane, and an exclusive right-turn lane;

- geometric modifications to widen the westbound approach to the Route 9/South Street intersection to provide an exclusive right-turn lane, two through lanes and an exclusive left-turn lane; and,
- traffic signal phasing and timing modifications for the Route 9/South Street intersection.

In its comments, MassHighway has recommended that the Proponent provide a pedestrian crosswalk and a phased signal to connect the existing apartment complex located on the southwest corner of the on Route 9/South Street intersection to the proposed retail development project. The FEIR should include an analysis of signal phasing and timing changes for the Boylston Street/Grafton Street (Route 140)/Main Street intersection to improve traffic operations at this intersection under full-build conditions. The Proponent should also examine the feasibility of re-striping the Main Street eastbound approach to provide an exclusive right-turn lane for the Main Street/South Street intersection.

The FEIR should identify the Proponent's coordination efforts with local area neighborhoods, proponents of other development projects in the area, MassHighway, the Town of Shrewsbury and the Central Massachusetts Regional Planning Commission (CRMPC). The Proponent should continue to work closely with MassHighway's Public/Private Development Unit and the District 3 Office, to successfully resolve design issues for the overall traffic mitigation plan proposed for the project.

Transportation Demand Management (TDM) Plan

The DEIR includes a description of the Proponent's proposed Transportation Demand Management (TDM) plan proposed for the project and includes:

- the appointment of an Employee Transportation Coordinator (ETC);
- promote the use of on-site amenities including on-site banking and employee direct deposit banking;
- install bicycle amenities including secured bicycle storage racks at each building;
- work closely with the Worcester Regional Transit Authority (WRTA), the Town of Shrewsbury and others to extend existing bus service (Route #15) and/or alternate transportation to the project site;

The FEIR should identify additional TDM measures for employees and patrons aimed at further reducing project-generated traffic including, but not limited to:

- the use of staggered employee work hours;
- the implementation of an employee ride-matching program (carpooling and vanpooling) program;
- the implementation of a "Guaranteed Ride Home" program for employees;
- bicycle shoulders along site driveways; and,
- construct sidewalks along site driveways and along South Street and Route 9.

The FEIR should provide additional information pertaining to the Proponent's commitment to construct a bus shelter/taxi stand within the project site. All project tenants and businesses should be required to participate in the proposed TDM plan. The TDM plan should describe any monitoring necessary to ensure the success of the program. The FEIR should demonstrate the Proponent's commitment to implement, monitor, and continuously fund a proposed TDM plan.

Transit

The Proponent should continue discussions with the Worcester Regional Transit Authority (WRTA), and any other transit providers, and local area businesses in Shrewsbury to identify opportunities for providing curb-to-curb WRTA transit service, and car/vanpool service to the project site. I strongly encourage the Proponent to identify opportunities to incorporate transit amenities, including bus shelters and bus stops, in closer proximity to proposed buildings to be located within the project site. The FEIR should include an update of the Proponent's discussions with WRTA for providing existing bus service to the project site.

Pedestrian and Bicycle Facilities

As illustrated in site plans provided in the DEIR, the Proponent has committed to construct sidewalks along the South Street site drive and along a portion (approximately 450 feet) of South Street from the South Street/Site Drive intersection to the South Street/Route 9 intersection. The FEIR should describe the internal vehicular and pedestrian circulation plan for the project site at the full-build completion of the project. The FEIR should show on a reasonable scaled map of the project site, where the Proponent proposes new internal sidewalks, pedestrian crossings and vehicle/pedestrian safety signage. The Proponent should discuss the feasibility of providing a sidewalk along each of the project's proposed three site driveways, along the proposed internal roadway connecting the Phase I and Phase II developments, and along the north side of Route 9. I strongly encourage the Proponent to continue to evaluate the feasibility of 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 mixed-use development project.

Greenhouse Gas Emissions Policy and Protocol

The proposed project is subject to EEA's Greenhouse Gas (GHG) Emissions Policy that requires Proponents to quantify project-related GHG emissions and propose and quantify the impact of mitigation measures to reduce GHG emissions. The Proponent submitted the results of the GHG analysis with the DEIR. In the analysis, the Proponent calculated GHG emissions from both mobile sources and direct and indirect stationary sources. While the project is in the planning stage, assumptions were made regarding the type of building construction, window and wall treatment, and rooftop equipment that would likely be used.

Direct and indirect carbon dioxide (CO₂) emissions from the proposed direct and indirect building sources were calculated using the Tech Environmental Energy Model. CO₂ emissions produced by the project-generated vehicle trips were analyzed using the EPA MOBILE 6.2 Source Emission Factor Model. The Proponent evaluated the change in CO₂ emissions from project-related traffic and proposed building/energy consumption sources for the 2007 Existing, the 2012 No-Build, the 2012 Build and the 2012 Build with Improvements Conditions. As presented in the DEIR, total CO₂ emissions in the Build Condition are expected to increase by 7,503.5 tons per year (tpy) from the No-Build Condition. With proposed mitigation measures in place, CO₂ emissions are estimated to be reduced by 1,109.1 tpy, a 14.8% reduction. In order to achieve the gains proposed and meet the intent of the Protocol, the FEIR should reflect in its draft Section 61 Findings the commitments the Proponent intends to implement.

The Division of Energy Resources (DOER) reviewed the DEIR and notes that in general, the Proponent's energy model must be optimized for the Massachusetts Building Code, which is the baseline alternative for energy usage in calculating GHG emissions, as explained in the Greenhouse Gas Emissions Policy and Protocol. DOER also recommends that the Proponent contact the New Construction division of its natural gas provider, NStar, and its municipal electric utility provider in Shrewsbury to take advantage of any potential rebates available for the installation of highly energy-efficient equipment. Consistent with the GHG Policy the FEIR should model at least one mitigation alternative that would result in greater GHG reductions than the preferred alternative. Alternatives with greater energy efficiencies allow an understanding of potential opportunities for energy savings achievable by varying building design and layout strategies. Energy efficient techniques not selected should be explained, and this information will assist in the determination that the alternative selected has avoided, minimized, and mitigated CO₂ emissions. The Appendix to the EEA Greenhouse Gas Emissions Policy contains a partial, non-exhaustive list of measures to reduce GHG emissions and incorporate sustainable development techniques. When comparing the preferred alternative to other alternatives with greater GHG reduction, the FEIR should explain which alternatives were rejected, and the reasons for rejecting them. The Proponent should fully explain any trade-offs inherent in the evaluation of GHG reduction measures, such as increased impacts on some resources to avoid impacts to other resources. 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 is required to quantify mitigation benefits. The DOER has commented that the GHG mitigation information provided in the DEIR is not conducive to analysis or input because it only checks off mitigation measures as technically infeasible or inappropriate to project type without explanation, particularly on techniques such as building orientation, renewable energy sources and green roofs, each of which can be very site adaptable. Although it is unnecessary to provide a complete technological and financial analysis of all GHG reduction mitigation measures, it will benefit the Proponent to use functional and quantitative analyses and mock ups to assess feasible greenhouse gas reduction measures for this project, starting with measures that offer the greatest energy reductions, and then considering opportunities to improve ongoing operations.

These assessments can inform an analysis of the feasibility of LEED and/or Energy Star elements; for those elements not selected, the EIR must do a credible job in explaining why a particular efficiency or green power generation component is impracticable. For example, the EIR should consider the feasibility of implementing alternative energy sources for the project and/or purchasing power generated by renewable energy sources for any portion of the electricity use on the site. LEED certification for New Construction/Retail requires a 35 percent to 50 percent contribution of green power. Even if on-site power generation is not feasible, many projects now routinely commit to orienting and designing buildings for energy efficiency, and this project has proposed to incorporate lighting improvements, duct insulation, programmable thermostats, duct insulation, and a cool roof design. Other energy efficient measures, as explained below, also should be considered. Additional information on building design energy reduction measures and standards is available on many websites, including the following: <http://www.eere.energy.gov/>, <http://www.nahb.org>, www.sbicouncil.org, <http://www.aceee.org>, <http://www.ashrae.org/>, <http://www.coolroofs.org/> and <http://www.ornl.gov>.

The DOER has identified several measures in the comment letter worthy of consideration in the subsequent filing, and adoption into the project, where feasible. In the event that the Proponent is not able to adopt one of these measures, the FEIR should provide technical and cost analyses to document the rationale for not making a commitment to a mitigation recommendation. The Proponent's energy model must be optimized for the MA Building Code, which is the baseline alternative for energy usage in calculating GHG emissions, as explained in the MEPA Greenhouse Gas Emissions Policy and Protocol. Also, DOER recommends that the Proponent contact the New Construction division of its electricity utility in Quincy, NStar, and its natural gas utility, National Grid, to take advantage of potential rebates available for the installation of highly energy efficient equipment.

The proponent should provide a detailed response to the comment letter submitted by DOER dated June 9, 2008. I hereby incorporate by reference the additional requests for information contained in that letter as part of the scope of the FEIR.

Wetlands

According to the comments received from MassDEP on the DEIR, the Proponent has modified the site plan design to relocate Building B outside of wetlands jurisdictional areas to reduce the project's wetlands impacts from more than 5,000 sf to approximately 4,600 sf. As described in the DEIR, the project will result in permanent impacts to approximately 4,6258 sf of Bordering Vegetated Wetlands (BVW) to accommodate the construction of an internal roadway connection between the Phase I and Phase II portions of the project site. The project will also result in the alteration of approximately 4.13 acres of the 100-foot wetlands buffer area resulting from site grading and roadway construction, buildings, and stormwater management infrastructure.

I note that on November 11, 2007, the Shrewsbury Conservation Commission issued an Order of Resource Area Delineation indicating that the project site contains additional BVW resource area located within the western half (Phase I) portion of the property and protected under the Wetlands Protection Act. Questions regarding the jurisdictional status of this wetland resource area were appealed by the Proponent to the Division of Administrative Law Appeals (DALA). MassDEP has recently determined that the additional BVW resource area is non-jurisdictional and has issued the Proponent a Superseding Order of Resource Area Delineation.

Stormwater

According to the Proponent, the proposed stormwater management system for the commercial retail project has been designed to comply with MassDEP's recently revised Stormwater Management Policy (SMP). As designed, the stormwater management system will incorporate the use of hooded deep sump catch basins to convey stormwater runoff to one on-site open detention basin and one underground detention basin. I note that new Stormwater Management regulations have been promulgated, effective January 2, 2008, that require the Proponent to evaluate sustainable design alternatives such as Low Impact Development (LID) techniques in 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. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance. 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: <http://www.epa.gov/owow/nps/lid/>.

Water Supply

The potable and fire protection water supply needs for the project (approximately 11,000 gpd) will be served by the Town of Shrewsbury's municipal water supply system. As described in the DEIR, the water supply for the project's proposed irrigation system will be provided by the Proponent's proposed construction of new on-site private wells. I continue to strongly encourage the Proponent to incorporate water conservation and water use efficiency in the project design to comply with the March 1989 state plumbing code. Specifically, the Proponent should commit to employing efficient commercial water conservation technologies for the project including water saving devices, low flow toilets, and low flow appliances (e.g. dishwashers, washing machines).

Wastewater

The project's wastewater flows (15,356 gpd) will be conveyed from the project site via Shrewsbury's sewer collection system to the City of Westborough's wastewater treatment facility (WWTF) for treatment and disposal to the Assabet River.

Construction Period Impacts

The FEIR should include a construction mitigation plan to satisfactorily address the project's potential impacts to local businesses and nearby residential neighborhoods from construction-related project impacts including traffic, noise and dust. I strongly encourage the Proponent to consult with MassDEP, and the Town of Shrewsbury, and to meet with local area residential neighbors from the project area during the design of the Proponent's construction mitigation plan. I ask that the Proponent consider requiring its contractors to use on-road low sulfur diesel (LSD) fuel in their off-road construction equipment that can increase the removal of particulate matter (PM) by approximately 25 percent beyond that which can be removed by retrofitting diesel-powered equipment. All construction-related refueling and equipment maintenance activities should be conducted under cover on impervious surface areas with containment, and outside of any wetlands resource areas, endangered species habitat areas, residential areas and wellhead protection areas. The Proponent should also commit to specific TDM measures that can be implemented during construction.

Mitigation/Section 61

The FEIR should include a separate chapter on mitigation measures. It should develop transportation and parking demand management measures to reduce single passenger automobile trips to the project and encourage ridesharing to the site by employees. The FEIR should include any conceptual plans for roadway improvements with sufficient detail to verify the feasibility of constructing such improvements. The plans should show proposed lane widths and offsets, layout lines and jurisdictions, and the land uses (including access drives) adjacent to areas where improvements are proposed. The FEIR should state whether land takings are necessary to implement proposed improvements and should identify the party responsible for such takings. Any proposed mitigation within the state highway layout must conform to MassHighway standards, including but not limited to, lane, median and shoulder widths, bicycle lanes and sidewalks. This chapter on mitigation should include a draft Section 61 Finding for all required state permits. The Draft Section 61 Finding should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the proposed construction phases of the project and approved by MassHighway, should also be included. I urge the Proponent to participate in any discussions and studies, which evaluate the feasibility of traffic, transit, pedestrian, and bicycle improvements within the project area.

Comments

In order to ensure that the issues raised by commenters are addressed, the FEIR should include a response to comments. This directive is not intended to, and shall not be construed to enlarge the scope of the FEIR beyond what has been expressly identified in the initial scoping certificate or this certificate.

Circulation

The FEIR should be circulated to all who submitted commented on the ENF as listed below, to the Town of Shrewsbury and the City of Westborough, to any agency from which the Proponent may require a permit or approval, and to others as required by Section 11.16 of the MEPA regulations. A copy of the FEIR should also be made available for public review at the Shrewsbury and Westborough Public Libraries.

June 13, 2008
DATE


Ian A. Bowles, Secretary

Comments Received

- 06/09/08 Department of Environmental Protection (MassDEP) – Boston
- 06/10/08 Department of Environmental Protection (MassDEP) – CERO
- 06/12/08 Executive Office of Transportation (MassHighway)

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EEA #14150 DEIR