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June 22, 2007

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

PROJECT NAME : Duxbury Estates  
PROJECT MUNICIPALITY : Duxbury  
PROJECT WATERSHED : South Coastal  
EOEA NUMBER : 14031  
PROJECT PROPONENT : **By Design Construction**  
DATE NOTICED IN MONITOR : May 23, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

The project involves construction of 44 single family units in a residential subdivision located on 25.98 acres. The site is located on Summer Street (State Highway Route 53). The development will result in alteration of approximately 10.9 acres of land (this includes 3.83 acres of new impervious surface). The project is expected to generate 288 vehicle trips on an average weekday and will provide 172 parking spaces. A portion of the site is located in an Aquifer Protection Overlay zoning district.

The project is undergoing MEPA review pursuant to Section 11.03(2)(b) 2. because the project site is two or more acres, includes an area mapped as a Priority Site of Rare Species and will result in a probable take of a threatened or endangered species.

The project may require a Conservation and Management Permit from the Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP), an Access Permit from the Massachusetts Highway Department (MHD) and an Order of Conditions from the Duxbury Conservation Commission (and a Superseding Order from the Department of Environmental Protection (MassDEP) should the local order be appealed). The project may also require a National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit from the U.S. Environmental Protection Agency (EPA).



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 state permits with the potential to cause damage to the environment. In this case, MEPA jurisdiction extends to rare species and traffic.

NHESP has determined that this project occurs within the habitat of the Eastern Box Turtle (*Terrapene carolina*). The Eastern Box Turtle is listed as "Special Concern" pursuant to the Massachusetts Endangered Species Act (MESA) (M.G.L. c.131A). NHESP has determined that the proposed project constitutes a probable "take" of Eastern Box Turtle through the disruption of protected behaviors and, potentially, through directly harming or killing individuals of this species during construction.

Projects resulting in the "take" of state-listed species may only be permitted if they meet the performance standards for a "Conservation and Management Permit" pursuant to the MESA (321 CMR 10.23). In order to qualify for a permit under MESA, the proponent must demonstrate that impacts to state-listed species have been avoided, minimized and mitigated to the greatest extent feasible and that there is a long-term net benefit to the conservation of local populations of the impacted species. The proponent proposes to install signage and mechanisms to reduce traffic speed along the entrance road, placing permanent habitat protection on approximately 16 acres of the site, and providing off-site mitigation in the form of conservation research funding for the Eastern Box Turtle. The proponent should work closely with NHESP to develop construction-related oversight, work-timing considerations, temporary barriers, and signage during construction of the proposed project to avoid and minimize impacts to Eastern Box Turtles. The proponent should provide additional information to NHESP as further detailed in its comment letter.

The proponent should ensure that construction activities conform to solid waste regulations as further detailed in MassDEP's comment letter. The proponent should also ensure that the project meets MassDEP's Stormwater Management Policy for implementation of best management practices (BMPs). The proponent should make every effort to maximize the retention and infiltration of stormwater runoff on site and that connections to the State Highway drainage system should be avoided if possible. In addition, adequate mechanisms should be in place for effective long-term operation and maintenance of the stormwater management system.

I strongly encourage the proponent to incorporate language in homeowner's association documents that promotes environmentally-sensitive landscaping approaches to minimize irrigation needs, avoid introduction of invasive species, and avoid or minimize the use of pesticides, herbicides, fertilizers and other chemicals. The proponent should ensure appropriate mitigation measures are in place to avoid and minimize adverse impacts to the Aquifer Protection Overlay zoning district and rare species habitat.

I encourage the proponent to explore, and implement to the extent feasible, sustainable design elements that can provide environmental benefits as well as economic benefits for the proponent and future residents. The basic elements of a sustainable design program may include, but not be limited to, the following measures:

- Leadership in Energy and Environmental Design (LEED) certification;
- water conservation and reuse of wastewater and stormwater;
- ecological landscaping;
- use of Low Impact Development (LID) techniques (the proponent may find the following web sites useful [www.mass.gov/envir/lid](http://www.mass.gov/envir/lid) and [www.lid-stormwater.net](http://www.lid-stormwater.net) );
- optimization of natural day lighting, passive solar gain, and natural cooling;
- use of energy efficient HVAC and lighting systems, appliances and other equipment, and use of solar preheating of makeup air;
- favoring building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- provision of easily accessible and user-friendly recycling system infrastructure.

I have determined that the ENF has sufficiently defined the nature and general elements of the project and proposed measures to avoid and mitigate environmental impacts. I am satisfied that any remaining issues can be adequately addressed during the state and local permitting and review process. The proposed project, as described in the ENF, requires no further review under MEPA. I remind the proponent that any changes to the project as proposed in the ENF may require a Notice of Project Change pursuant to Section 11.10 of the MEPA regulations.

June 22, 2007

Date



Ian A. Bowles

Comments received:

06/12/07 Department of Environmental Protection – South Eastern Regional Office  
06/12/07 Division of Fisheries and Wildlife, Natural Heritage and Endangered Species  
Program (NHESP)  
06/12/07 Executive Office of Transportation, MassHighway

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