

# The Commonwealth of Massachusetts

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April 23, 2010

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

PROJECT NAME

: Pompositticut/Center Elementary School

PROJECT MUNICIPALITY

: Stow

PROJECT WATERSHED

: Concord

EEA NUMBER

: 14565

PROJECT PROPONENT

: Stow Elementary School Building Committee

DATE NOTICED IN MONITOR

: March 24, 2010

Pursuant to the Massachusetts Environmental Policy Act (M.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 **does not require** the preparation of an Environmental Impact Report (EIR).

As described in the Environmental Notification Form (ENF), the project consists of the partial demolition of the existing Center School and construction of a new 70,548 square foot (sf) addition and renovation of the remaining 27,482 sf of the existing school located at 403 Great Road in Stow. The project will also include site improvements including: parking for 100 vehicles, a new multi-purpose ballfield, two playground areas, a new water supply well, a new wastewater disposal system, and stormwater management improvements. The project will consolidate the educational programs of the Pompositticut Elementary School (grades K-2), the Center Elementary School (grades 3-5), and the Stow Pre-Kindergarten program into a single facility. The repurposing of the Pompositticut School is undetermined at this time. The ENF indicates that the new building will be constructed in accordance with the Massachusetts

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Collaborative for High Performance Schools (MassCHPS) in an effort to meet sustainable design and construction goals.

Within the 17-acre project site, anticipated project impacts include alteration of 2.5 acres of land, creation of 2.6 additional acres of impervious area, the generation of 214 additional traffic trips, the creation of 60 new parking spaces (for 100 total), withdrawal and use of 5,170 additional gallons per day (gpd) of water (for a total site withdrawal and demand of 6,320 gpd), and the generation of 3,920 gpd of new wastewater flows (for a site total of 6,320 gpd). The preferred project alternative presented in the ENF includes the demolition of the Stone Building (aka Larsen Apple Barn), a structure included on the State Inventory of Historic Assets with a property name of Center School Grounds (Inventory No. STW 180).

#### Jurisdiction

The project is undergoing review pursuant to Section 11.03(5)(b)(4)(c)(iv) of the MEPA regulations because the project requires State agency action and will require a variance from Title 5 of the State Environmental Code for new construction of a wastewater treatment system. The project must obtain a New Source Approval (BRP WS 15) permit and variances from Title 5 from the Massachusetts Department of Environmental Protection (MassDEP). The project will also require an Order of Conditions from the Stow Conservation Commission. Additionally, the project must obtain a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (U.S. EPA).

The project will receive funding from the Massachusetts School Building Authority (MSBA), a State agency. Therefore, MEPA jurisdiction for this project is broad and extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

# Water Supply

The project includes the construction of a new water supply well, with an anticipated permitted withdrawal rate of 6,320 gpd from groundwater. This water supply well will replace the existing on-site well which is located underneath the existing school. The new well will be located in the rear of the property in proximity to the proposed recreation fields. The Proponent performed pump tests to determine well yields in March 2010. The results of these pump tests and water quality analyses should be forwarded to MassDEP. While the preferred alternative is to withdraw water from the on-site well, the project includes construction of an exterior water main for potential future connection to municipal water, if available. MassDEP has requested that the Proponent continue to consider connecting to public water supply options, if expanded to the project site.

The Zone I radius of the new potable drinking water source will include a portion of the ball fields. Facility operations and maintenance plans should specifically prohibit the application of fertilizers or pesticides on the playing fields to prevent potential contamination of the water source. If an irrigation system will be used, it should not be connected to the drinking water well. Furthermore, to reduce water consumption, drought-tolerant and native species should be

used for landscaping and the Proponent should consider use of stormwater for irrigation purposes.

#### Wastewater

The project includes the construction of a new subsurface sewage disposal system with a design flow of 6,320 gpd to service the Center School and future expansion of 100 students. The project will require a Variance for Schools and a variance to allow construction of a disposal facility without a reserve area. Due to the adjacency of the proposed on-site water supply well, the new subsurface sewage disposal system will include enhanced nitrogen removal technology in accordance with Title 5 regulations. The proposed system will include a new septic tank, grease trap, Recirculating Sand Filter (RSF), and soil absorption system with pressure dosing to meet the minimum nitrogen removal requirements.

The Center School abuts the Hale Middle School and Stow Fire Department. Each of these buildings is currently served by its own septic system. The ENF presented a sewage flow analysis for each of these facilities to determine the potential daily design flow for aggregated facilities. The ENF concluded that since abutting properties owned by the Town have suitable Title 5 systems that do not threaten groundwater quality, and the aggregated flow is less than 10,000 gpd (estimated at 9,589 gpd), it is appropriate to design the subsurface sewage disposal system in a manner consistent with that presented in the ENF. The Proponent should continue to coordinate with MassDEP and consider guidance provided in the MassDEP comment letter when finalizing design and permitting of wastewater treatment systems on-site.

#### Wetlands and Stormwater

The project site contains several wetland resource areas including Inland Bank, Land Under Water, and Bordering Vegetated Wetlands (BVW). Wetland resource areas were confirmed through the issuance of an Order of Resource Area Delineation by the Stow Conservation Commission. The project will not require the direct alteration of any wetland resource areas and impacts will be limited to the 100-foot buffer zones of these wetlands resources. The Proponent will obtain an Order of Conditions from the Stow Conservation Commission for work within jurisdictional areas.

The ENF included a hydrological analysis describing existing and proposed stormwater conditions, stormwater management calculations, and a draft operations and management plan. To mitigate stormwater runoff, the project will meet and/or exceed MassDEP Stormwater Management Regulations and local Stow Stormwater Management Bylaw requirements. The project will implement multiple Best Management Practices (BMPs) including deep sump catch basins, Water Quality Units, porous pavement for the firelane and visitor's parking lot, a green roof, and three large subsurface infiltration areas (for rooftop runoff and overland flow only).

#### Historic Resources

The project site contains a structure referred to as the Stone Building (aka Larsen Apple Barn), on a property known as the Center School grounds, which is included on the State

Inventory of Historic Assets (MHC# STW.180). The preferred project alternative includes the demolition of the Stone Building, a vernacular one-story fieldstone building with a gable roof. The ENF included two letters from the Massachusetts Historical Commission (MHC), one dated January 28, 2010 to the Stow Elementary School Building Committee and one dated March 5, 2010, to the Stow Historical Commission. These letters from MHC confirmed that the subject property is included in the Massachusetts Inventory of Historic and Archaeological Assets of the Commonwealth, and that the Center School building is not included on the Inventory form for the Great Road Area (STW.B), as it is located outside the boundaries of that area.

MHC's comments in relation to the MEPA regulations (301 CMR 11.00) were limited to the Stone Building, since that is the only building mentioned in the Center School Grounds Inventory Form. MHC's letter opined that the Stone Building does not retain sufficient integrity of its own design and workmanship, its original setting, and association with other Larsen Farm buildings to meet the criteria of eligibility for listing in the National Register of Historic Places (36 CFR 60). The January 28, 2010 MHC comment letter stated that MHC staff have determined that the proposed project will not affect any significant historic or archaeological resources.

I acknowledge the comment letters received expressing concern regarding the demolition of the Stone Building to accommodate the preferred project alternative. I ask that the Proponent thoughtfully and carefully reconsider site layout options that may allow for incorporation of the Stone Building into the final design, either as an attached building or as a separate structure, in lieu of demolition. The Proponent should contact the MSBA to ascertain how revisions to the site plan at this juncture may impact project scheduling, funding, and overall budget. Based upon review of this information, the Proponent should consider the feasibility of site plan revisions to retain the Stone Building. I also ask that the MSBA give consideration to the comments expressed during MEPA review when evaluating the Proponent's funding application to contemplate allowing for flexibility in the modification of site plans where possible given the public interest in reviewing alternatives that will preserve some or all of the Stone Building. If, after this evaluation, it is determined that demolition of the Stone Building cannot be avoided, at a minimum I encourage the Town to document and memorialize the Stone Building in a meaningful manner, as suggested by MHC.

## **Transportation**

The building addition is estimated to generate an additional 214 vehicle trips to and from the site, for a total of 460 vehicle trips to the project site. The project includes separate parent and bus driveways accessed from Great Road and Hartley Road. The ENF included a traffic study analyzing potential project impact on local roadways. The project will not require any traffic-related State permits associated with State-controlled roadways and the traffic study concluded that no traffic mitigation measures are required to accommodate the project.

The Massachusetts Department of Transportation Aeronautics Division (MassDOT - Aeronautics Division) comment letter stated that Stow Airport/Minute Man Airfield is located approximately 1.5 miles northwest of the proposed site. MassDOT - Aeronautics Division has indicated that the project could potentially impact airport operations. The Proponent should

follow the guidance in the MassDOT – Aeronautics Division comment letter pertaining to airspace obstructions, construction activities and lighting/glare, and prepare and file notifications to both the Federal Aviation Administration (FAA) and MassDOT – Aeronautics Division, as applicable.

### Construction Period

The project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES CGP. I strongly encourage the Proponent to establish a robust program of construction period Best Management Practices (BMPs) to control erosion and sedimentation.

Based on the information in the ENF and after consultation with relevant public agencies, I find that no further MEPA review is required at this time. The project may proceed to State permitting.

Ian A. Bowles

April 23, 2010 Date

#### Comments received:

04/05/2010	Massachusetts Department of Transportation – Aeronautics
04/13/2010	Victoria Fletcher
04/13/2010	Bruce Fletcher
04/13/2010	Massachusetts Department of Environmental Protection – CERO
04/15/2010	Janet Stiles

### IAB/HSJ/hsj