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May 25, 2007

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

**PROJECT NAME** 

EOEEA NUMBER

: Purchase of the Cole Property by the Town of Carver for Municipal Water Supply Development and Conservation PROJECT MUNICIPALITY : Carver **PROJECT WATERSHED** : Taunton : 14007 PROJECT PROPONENT : Town of Carver DATE NOTICED IN MONITOR : April 25, 2007

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 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 purchase of a 221-acre parcel, known as the Cole Property, for development of a water supply for North Carver and for conservation purposes. The project site is located adjacent to the Winnetuxet River (a tributary of the Taunton River), and has been mapped by the Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP) as Priority and Estimated Habitat for rare species. The western portion of the site (the "Conservation Parcel", approximately 98 acres) will be preserved as open space with continued agricultural use while the eastern portion (the "Water Supply Protection Parcel", approximately 123 acres), will be purchased by the Town of Carver for development of a municipal water supply. This water supply will be limited to less than 100,000 gallons per day (gpd) and is intended to serve three commercial properties located within North Carver approximately one mile west of the

proposed water supply wells. MassAudubon has noted in their comment letter that they intend to hold the conservation restriction proposed for the Conservation Parcel.

The project consists of the following elements:

- New Source Approval from the Massachusetts Department of Environmental Protection (MassDEP) for the development of a municipal water supply and construction of approximately 1.5 miles of water main. Portions of this water main will either be located cross-country within the Conservation Parcel, directionally drilled under the Winnetuxet River, or within the right-of-way for North Main Street (Route 58);
- Improvement to an existing flooded agricultural access road along Cole Mill Lane extending under the recently constructed Route 44; and
- Improvements to existing agricultural access road extending from Pleasant Street to the existing cranberry bogs.

The project will result in the alteration of approximately five acres of land and the introduction of approximately 0.2 acres of impervious surfaces. The improvements to the access driveway from Pleasant Street will result in the direct alteration of 7,200 square feet of Bordering Vegetated Wetlands (BVWs). Collectively, all proposed improvements are anticipated to alter approximately 17,700 sf of Riverfront Area and approximately 11,700 sf of Bordering Land Subject to Flooding (BLSF).

The project is undergoing review pursuant to Section 11.03 (3)(b)(1)(d) because the project is receiving State funding, requires a State agency action and will involve the alteration of 5,000 or more square feet (sf) of Bordering Vegetated Wetlands (BVWs). The project will require a Section 401 Water Quality Certificate and New Source Approval from the MassDEP, a permit from the Massachusetts Highway Department, a Category II Programmatic General Permit from the United States Army Corps of Engineers (U.S. ACOE), and Orders of Conditions from the Carver Conservation Commission and the Plympton Conservation Commission. The project may require a National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the U.S. Environmental Protection Agency (U.S. EPA) and/or a Conservation and Management Permit from NHESP.

The project will be financed in part by an Executive Office of Energy and Environmental Affairs (EOEEA) Self-Help Grant, a MassDEP Drinking Water Supply Protection Grant, and a MassDEP Grant for Purchase and Water Supply Development. 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.

## Alternatives

The Town investigated several design alternatives for both site access and the location of the water main. Under an original proposal, the Town intended to use the existing agricultural access road off Cole Mill Lane for access to the Water Supply Protection Parcel and Conservation Parcel. However, upon completion of the Route 44 bridge over the Cole Mill access road, it was rendered impassable for large portions of the year due to final grade elevations and proximity to the Winnetuxet River. Raising the access road in elevation to reduce flooding will create a new problem associated with clearance under the Route 44 bridge, thereby limiting the types of vehicles that can use this access point. Therefore, the Cole Mill Lane access will be an emergency access only and will not be a point of entry for agricultural or water department equipment, or serve as a recreational access.

The limitations imposed by the Cole Mill Lane access resulted in the Preferred Alternative of utilizing an existing pathway off Pleasant Street for access to the water treatment facility, agricultural, and passive recreation/open space areas. A small parking area with ten to fourteen parking spaces will be provided proximate to Pleasant Street, with gated access limiting vehicle use within the Cole Property to water department and agricultural vehicles. While the Preferred Alternative access road will result in the alteration of wetland resource areas, the location of large portions of the roadway within the existing path footprint will limit alteration to the extent practicable.

Several alternative locations for the water main route were investigated by the Town. Placement of water mains within the Route 44 layout has been limited by the requirements imposed by MassHighway and running water mains down Cole Mill Lane and High Street were found to be cost prohibitive. Routing the water mains out to Pleasant Street versus Route 58 would have resulted in greater quantities of wetland alteration and site grading. Alternative cross-country routes to Route 58 were hindered by the presence of vernal pools, increased directional drilling, and easement requirements from private parties. The Preferred Alternative does require the acquisition of an easement from a private property owner; however this property owner has been accommodating to the proposed plan.

### Wetlands

The project will result in substantial alteration of BVWs, Riverfront Area and BLSF. The improvements to the Pleasant Street access road will require the crossing of a perennial stream with an open bottom bridge culvert and wing walls. Placement of the stream crossing will require project dewatering and temporary stream diversion during the construction process. The project will require the preparation of an alternatives analysis for work in Riverfront Area in accordance with 310 CMR 10.58(4), the scope of which must be commensurate with project type and size. The Town has stated that the stream crossing will be designed and constructed to meet U.S. ACOE and MassDEP guidelines. Portions of the Pleasant Street access road will require the importation of fill to achieve final elevations of 81', consistent with the 100'year flood elevation. Imported fill has been estimated by the Town at 255 cubic yards. The Town

will need to demonstrate compliance with Wetlands Protection Act Regulations performance standards during the Notice of Intent process.

Furthermore, MassDEP indicates that while the project may meet the criteria for a limited project at 310 CMR 10.53(3)(e), if the 7,200 sf pf BVWs impact cannot be avoided or minimized, replication areas should be provided at a minimum 1:1 ratio in a manner consistent with MassDEP's Replication Guidance. The Town has indicated that due to limitations associated with on-site existing grades, replication areas immediately adjacent to alteration sites may not be feasible. The Town should work with the Conservation Commission to determine an appropriate location for replication areas and establish monitoring protocols to ensure replication success.

#### Water Supply

The project will consist of the construction of a 1,500 sf water treatment facility, water supply wells (primary and back-up), and associated water mains. The water treatment facility will provide water treatment for pH control, disinfection, and the removal of iron and manganese. The Town anticipates requesting approval of a facility that will withdraw a maximum of 99,000 gpd with a pumping rate of 69.9 gallons per minute (gpm). A 12-inch ductile iron water supply line will extend approximately 7,500 linear feet to service three existing commercial properties along Route 58 in North Carver. Approximately 1,000 linear feet of the water main will be directionally drilled underneath the Winnetuxet River, with staging areas located in upland areas on either side of the River. A portion of the water main will cross through an easement on private property (the Nash property) that is within both the Towns of Carver and Plympton, prior to reaching the Route 58 right-of-way. After construction of the water main is complete, the cross-country waterline route will be revegetated, with a walking trail provided.

The Town completed a water supply study prior to commencement of planning for this project. The study indicated that the project site had sufficient yields to satisfy the requirements for facilitating commercial growth in North Carver. Promotion of commercial uses in North Carver and the acquisition of a reliable water supply are goals outlined within local planning documents.

#### **Stormwater**

The project will not result in the creation of extensive areas of new impervious surfaces. The improved access driveways will be constructed of gravel with no formalized drainage infrastructure. Stormwater will either infiltrate through pervious surfaces or be directed to vegetated swales adjacent to the driveways. Clearing of vegetation to facilitate cross-country water main installation should be limited to the extent practicable to reduce exposed soil areas. The ENF indicated that cleared areas along the water main route will be allowed to revegetate to the extent that only an eight to ten-foot wide walking trail will remain. This is expected to add potential turtle habitat and add to the recreational value of the property. Erosion and

sedimentation controls should be established for use during the construction period. These controls should be prepared in accordance with NPDES construction general permit requirements as applicable, or in accordance with anticipated Orders of Condition.

## **Traffic**

The project will require a MassHighway permit for construction within the Route 44 layout, as portions of the proposed water main installation on Route 58 will utilize an existing sleeve under Route 44. Additionally, the proponent proposes to alter the grade of the existing Cole Mill Lane agricultural access beneath the newly constructed Route 44. This grade alteration is necessary to correct problems subsequent to the completion of the Route 44 construction that has rendered this access roadway virtually impassable during periods of high water. Grade alteration will result in a reduction in clearance under the Route 44 bridge; fire apparatus access will be maintained, however farming apparatus access will be limited. This access roadway will be designated for emergency access only and existing agricultural access will be eliminated.

At the direction of MassHighway, construction plans for grade alterations on Cole Mill Lane should include a plan to protect the bridge from hits by unauthorized oversized equipment vehicles. The proponent should continue to meet with the MassHighway District 5 office to develop construction plans.

#### Wildlife/Habitat

The proposed project occurs within the habitat of the Eastern Box Turtle and Wood Turtle, two state-listed species. The NHESP is in the process of reviewing Notices of Intent and Massachusetts Endangered Species Act (MESA) filings associated with the project. The NHESP has stated that with appropriate conditions to protect state-listed turtles during construction, it appears that the project can be conditioned so as to avoid a "take" of state-listed species. As requested by NHESP, the proponent should provide the opportunity for NHESP to review the proposed conservation restriction in order to assure compatibility between proposed permitted and prohibited uses and habitat protection goals.

### **Historical**

The Massachusetts Historical Commission (MHC) has requested that an intensive (locational) archaeological survey (950 CMR 70) be conducted for those areas of potential effect within undisturbed upland areas of the municipal water supply portion of the Cole Property. MHC has requested that surveys should include, but not be limited to, the footprint of the proposed access road improvements, water treatment facility, wellheads, proposed pipelines, and other related utility right-of-ways and test boring locations, as well as within areas proposed for directional drilling entrance and exit pit excavations. The purpose of this survey is to locate and identify any significant historic or archaeological resources that may be affected by the project. The results of this study will assist the proponent and MHC in

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# **ENF** Certificate

avoiding, minimizing or mitigating any adverse effects to significant archaeological resources. The proponent should work with MHC to ensure compliance with Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 70-71) prior to the commencement of additional construction or site alteration.

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.

Ian A. Bowles

May 25, 2007 Date

Comments received:

- 04/30/2007 Massachusetts Historical Commission
- 05/09/2007 Executive Office of Transportation
- 05/14/2007 Division of Fisheries and Wildlife- Natural Heritage and Endangered Species Program
- 05/15/2007 MassAudubon
- 05/15/2007 Carver Conservation Commission
- 05/15/2007 Carver Board of Selectmen
- 05/15/2007 Massachusetts Department of Environmental Protection SERO

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