



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

IAN A. BOWLES
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envir>

April 20, 2007

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

PROJECT NAME : Wareham Road Mixed Use Development
PROJECT MUNICIPALITY : Plymouth
PROJECT WATERSHED : Buzzards Bay
EOEA NUMBER : 13580
PROJECT PROPONENT : **ADM Agawam Development LLC**
DATE NOTICED IN MONITOR : February 20, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR) submitted on this 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). The proponent should submit a Final Environmental Impact Report (FEIR) in accordance with the Scope below.

Project Description

The proposed project involves development of 1,075 residential units and 90,000 square feet (sf) of commercial space on approximately 400 acres of the 1,320-acre project site. The project will result in approximately 398 acres of land alteration including approximately 81 acres of new impervious area. The remaining 922 acres of the project site will remain as protected open space, which will include trails and continuing cranberry operations. A significant portion of the project site is located within priority and estimated habitat for rare species, and approximately 368 acres of the proposed land alteration will occur in state-listed species habitat.

The project site is located in an area well known for its ecological significance due to the presence of the Agawam River, globally-significant pine barrens, and at least 40 state-listed rare species that are known to occur on the project site. The proposed development approach includes the use of innovative zoning tools and conservation restrictions to concentrate development in certain areas and permanently protect significant acreage of land on and off-site. The project's mitigation plan includes permanent preservation of more than 700 acres of state-listed species habitat on and off-site.



The project proposes to utilize the Town of Plymouth's Transfer of Development Rights (TDR) bylaw and other zoning tools to create a more compact development than would otherwise be allowed under conventional subdivision zoning. The TDR process will result in the permanent protection of open space ("sending parcels") while allowing an increased density of development in other areas ("receiving parcels"). As discussed in the DEIR, the project will utilize the Town's Traditional Rural Village Development (TRVD) overlay district bylaw and will create a walkable community with a mix of housing types and workplaces, that integrates the natural environment as part of the proposed project while minimizing the development envelope.

The project includes construction of a privately-owned public water supply system with two wells and associated infrastructure, including an elevated storage tank with a capacity of up to 1,100,000 gallons per day (gpd). The capacity of the proposed Wareham Road well is 100,000 gpd and the Agawam Road well is being designed for a capacity of 560,000 gpd. The proponent intends to use the Wareham Road well to serve the initial phase of the project. Once the Agawam Road well comes online, the Wareham Road well will be used primarily for irrigation. The project site overlies the Plymouth Carver sole source aquifer and both water withdrawal sources are located in the Buzzards Bay watershed, within the Agawam River sub-basin.

The project includes construction of an on-site Wastewater Treatment Facility (WWTF), located in the northwest portion of the site, which will be designed to handle a flow of approximately 344,000 gpd. The WWTF will discharge to groundwater through open sand beds. Effluent discharge will occur within the Agawam River basin. The WWTF will serve the entire project with the exception of 65 single-family homes, which will be served by individual Title 5 on-site sewage disposal systems with enhanced nitrogen reducing technology.

The proposed project includes construction of approximately 17 miles of water mains and 15 miles of sewer mains. The mains will be located primarily within the layout of proposed roadways and footpaths, with the exception of approximately 1,550 feet of water mains and 4,260 feet of sewer mains, that will require additional cross-country disturbance and two wetland crossings. Traffic impacts for the full project build-out are estimated at 7,834 vehicle trips on an average weekday. The project includes construction of a new roadway to connect Bourne Road and Wareham Road, and 2,866 new parking spaces.

Phase I Waiver

A Final Record of Decision, dated November 14, 2005, granted a Phase I waiver allowing the proponent to proceed with development of a 65-unit residential development on a portion of the project site prior to completion of an EIR for the entire project. However, according to the DEIR, the proponent no longer intends to initiate Phase I of the project as described in the Expanded Environmental Notification Form (EENF) and Phase I waiver request. Based on the DEIR, it appears that the first phase of the project will commence after completion of the MEPA process on an alternate location in the northeast portion of the project site. The proponent should consult with the MEPA Office regarding the appropriate review process if the Phase I Waiver project is reintroduced, or if the proponent proposes to commence a different Phase I at an alternate location prior to completion of MEPA review of the EIR.

MEPA Jurisdiction and Permit Requirements

The project is undergoing MEPA review and requires a mandatory EIR pursuant to: Section 11.03(1)(a)(1) of the MEPA regulations because it involves alteration of 50 or more acres of land; Section 11.03 (1)(a)(2) because it involves creation of 10 acres or more of impervious area; Section 11.03(4)(a)(3) because it involves construction of new water mains ten miles or more in length; and Section 11.03(5)(a)(3) because it involves construction of new sewer mains ten or more miles in length. The project is also undergoing MEPA review pursuant to: Section 11.03(2)(b) because it will involve a “take” of an endangered or threatened species or species of special concern; Section 11.03(4)(b)(1) because it involves withdrawal of 100,000 gallons or more per day (gpd) from a water source that requires new construction for the withdrawal; Section 11.03(5)(b)(1) because it involves construction of a new wastewater treatment facility with a capacity of 100,000 or more gpd; Section 11.03(10)(b)(2) because of potential destruction of an archaeological site listed in the Inventory of Historic and Archaeological Assets of the Commonwealth; and Section 11.03(1)(b)(4) because of the potential conversion of land containing prime or state-important soils to non-agricultural use.

The project requires a 401 Water Quality Certification, a Groundwater Discharge permit, a Water Management Act Permit, New Source Approval and other water supply approvals from the Massachusetts Department of Environmental Protection (MassDEP). The project requires a Conservation and Management Permit from Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program (NHESP). The project also requires an Order of Conditions from the Plymouth Conservation Commission (and on appeal only, a Superseding Order from MassDEP). The project will also require a National Pollutant Discharge Elimination System (NPDES) Construction Activities Permit from the US Environmental Protection Agency (EPA). The project is subject to review by the Massachusetts Historical Commission and requires State Archaeologist's Permits. The project may require a federal consistency review by the Massachusetts Office of Coastal Zone Management (CZM).

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 as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to rare species, wastewater, wetlands, water quality, water supply, historic and archaeological resources, agriculture, land, and stormwater.

Although the project exceeds the transportation thresholds for a mandatory EIR at Section 11.03(6)(a)(6) and (7) of the MEPA regulations, it does not require a MassHighway Access permit or other transportation-related state agency action. Therefore, MEPA jurisdiction does not extend to traffic. The DEIR included a traffic study and mitigation plan as requested in the Secretary's Certificate on the DEIR (dated October 7, 2005) due to the potential for significant impacts on the Route 3/Clark Road interchange. I note the extensive comments received regarding traffic impacts and mitigation. While I do not have the authority to require the proponent to address these issues in the FEIR, I strongly encourage and expect the proponent to coordinate closely with the communities affected to ensure that adequate measures are in place to avoid and minimize or mitigate traffic impacts associated with the project.

SCOPE

General

The proponent should prepare a Final EIR (FEIR) 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 FEIR should include a copy of this Certificate, a copy of each comment letter received and a response to comments. A Project Summary in clear non-technical language should be included in the FEIR, which should summarize the project, permits required, alternatives analyzed, and project impacts and mitigation commitments. It should include a summary table that describes and quantifies impacts, including but not limited to, land alteration, impervious area, rare species habitat, water use, wastewater generation, and wetlands. The FEIR should describe any changes to the project since filing of the ENF and include maps and plans at a reasonable scale and of sufficient detail to facilitate review and comment.

Alternatives

The DEIR included an alternatives analysis that considered the no-build alternative, a conventional subdivision alternative, a reduced-build alternative (876 residential units and 60,000 sf of commercial space) and the preferred alternative. The FEIR should provide additional information on water supply, wetlands, wastewater, stormwater, sustainable design, and other alternatives as outlined in the Scope below.

Cumulative Impact Analysis

The FEIR should address potential conflicts between proposed residential uses and existing cranberry bog uses, as further detailed in the comment letter from the Town of Plymouth. The FEIR should discuss potential impacts associated with pesticide use adjacent to residential developments and how the project will be designed to avoid and minimize impacts and promote compatibility of uses.

The FEIR should evaluate potential interactions between proposed water supply wells and the WWTF, and describe how systems are being designed and located to avoid and minimize any adverse cumulative effects. The FEIR should include supporting documentation and calculations to justify conclusions.

Wetlands

The FEIR should describe and quantify resource area alterations, and alternatives to avoid and minimize wetlands impacts. The FEIR should clarify whether or not the project will be proposed as a limited project, and discuss how it will meet relevant criteria and performance standards pursuant to the Wetlands Protection Act regulations. The FEIR should describe measures proposed to avoid and minimize, or mitigate wetlands impacts, and clarify if directional drilling is proposed for the stream crossing required to install utilities. The FEIR should discuss maintenance and access requirements related to the crossings. The FEIR should include wetlands mitigation plans, including plans for restoration or replication, and management

of potential invasive species. The proponent should consult with the Town of Plymouth regarding the protection of vernal pools, and confirmation of riverfront area and other wetlands boundaries. The FEIR should provide an update on these consultations.

Water Supply

The FEIR should discuss the proposed water supply and related impacts in the context of the work being undertaken by the Plymouth Carver Aquifer Advisory Committee and the updated Plymouth Carver Hydrologic model being prepared by the United States Geological Survey (USGS) and MassDEP. The proponent should consult with MassDEP regarding the most appropriate model to use and provide an update on consultations in the FEIR, including any additional information or analysis that may be required if a revised model is used.

As further detailed in the MassDEP comment letter, the proposed above-ground tank may provide sufficient storage for two average days of water demand. However, the emergency source wells as proposed in the DEIR would not provide usable replacement sources if either well failed due to contamination. MassDEP has recommended that the proponent consider upgrading the proposed Wareham Road well such that it is tested and approved for more than 70 gallons per minute (GPM). This would enable the Wareham Road well and the Agawam Road well to provide long-term system redundancy for each other, and would eliminate the need for two additional emergency wells within 50 feet of the production wells. Upgrading the wells as recommended by MassDEP may also reduce overall impacts to the aquifer by providing a mechanism to balance water withdrawals as needed.

The FEIR should evaluate the alternative water supply system as recommended by MassDEP in its comment letter. The FEIR should include additional information and analysis to address impacts associated with designing both wells for a capacity greater than 70 gpm. As part of a good management strategy for water withdrawal, the stewardship of the natural resource should be considered so that the natural stream flow to a river or any of its segments will be maintained and that wetland resource areas will not be adversely affected. To that end, the FEIR should investigate the feasibility of maintaining two distinct water supply wells that could balance the withdrawal from the aquifer as environmental conditions dictate.

In addition to the benefits of system redundancy and balancing withdrawals, MassDEP has commented that upgrading the proposed wells (to a capacity greater than 70 gpm) would result in protection of a larger area of aquifer and provide sufficient capacity for the proponent to sell to others to meet future needs in the region for additional water supplies. I note the comments by the Watershed Action Alliance on the need for sustainable use management plans and possible limitations on sales by private public water suppliers. The FEIR should address these comments and discuss any proposed expansion of the public water supply system beyond the needs of the project as described in the DEIR.

The proponent should consult with the Division of Marine Fisheries (DMF) regarding its comments and provide an update on consultations in the FEIR. As noted in the DMF comment letter, the maintenance of adequate stream flow during periods of in-migration and/or out-migration by diadromous species is significant. The FEIR should evaluate seasonal impacts to

stream flow associated with proposed water withdrawals, and determine whether points of hydraulic control will be altered. I encourage the proponent to consider opportunities for habitat restoration for anadromous fish and other species as requested in comment letters from the Town of Plymouth and the Watershed Action Alliance.

According to the DEIR, water conservation will be promoted in accordance with the Massachusetts Water Conservation Standards (2006). The FEIR should discuss feasible measures, and commitments, to achieve the residential water use standard of 65 gallons per capita per day (gpcd), which includes indoor and outdoor use, rather than the 80 gpcd standard proposed in the DEIR. I encourage the proponent to consider the potential reuse of wastewater as a component of the project, and discuss this in the FEIR.

The FEIR should include additional information on long-term planning, maintenance and operational strategies for the water supply system as requested by the Town of Plymouth. In its comment letter, the Town notes that the proponent is willing to allow connections from existing developments to the water and wastewater systems proposed for the project. The FEIR should elaborate on any proposed expansion beyond the project site.

Wastewater and Water Quality

Many of the comment letters received highlighted concerns regarding nitrogen loading and its effects on the Agawam River and Wareham River estuaries. The proposed Wastewater Treatment Facility (WWTF) is being designed for a 344,000 gpd flow and will discharge to the Agawam River basin. As noted in the DEIR, the proposed location of the WWTF will result in return flows to the Agawam basin, from which the project will withdraw its public water supply. While the proposed recharge is desirable from a water balance perspective, many commenters raised concerns that it will increase nutrient loading to an already impaired river system. Both the Agawam and Wareham Rivers are listed on the Massachusetts Integrated List of Impaired Waters.

I note MassDEP comments regarding potential changes in state policy and regulation to support innovative nitrogen reduction strategies, including watershed-based permitting and nutrient trading in order to minimize impacts to estuaries. The proposed project may impact estuaries that are currently being studied as part of this policy and regulatory decision-making process, and it may be subject to permit conditions that carry out the purposes and intent of the Massachusetts Clean Water Act (M.G.L. c. 21, Sections 26 through 53) based on the conclusions of these nutrient loading studies. The proponent should consult with MassDEP regarding the estuary studies as well as nitrogen reduction strategies and project permitting issues. The FEIR should include an update on these consultations and, to the extent it is available, additional information on the results of the MassDEP studies and any proposed policy or regulatory changes relevant to the WWTF.

Comment letters from the Office of Coastal Zone Management (CZM) and the Buzzards Bay National Estuary Program (NEP), an Advisory and Planning Unit of CZM, highlight concerns that the proposed project will further degrade the Agawam-Wareham River system and partially negate the clean water investments made by the Town of Wareham. The NEP letter

indicates that these investments, including expansion of sewerage and advanced nitrogen removal at the Town's Water Pollution Control Facility (WPCF), will reduce nitrogen loading to the Wareham-Agawam River estuary by 24,000 pounds annually. However, according to the DEIR, the proposed WWTF will add more than 10,000 pounds per year of nitrogen to the Agawam River basin. As noted in the CZM comment letter, the WPCF is required to meet a monthly average total nitrogen limit of 4 mg/l from April-October, whereas, according to the DEIR, the proposed WWTF will meet a 10mg/l effluent standard for total nitrogen. Some commenters have also questioned the DEIR conclusion that nitrogen loading from the proposed project would result in no perceptible impact to surrounding ecological systems. The FEIR should address these issues and include additional data to support the conclusions of insignificant impact.

I note that MassDEP will be issuing a Total Maximum Daily Load for the Wareham River Watershed that may result in stringent load allocations for nitrogen discharges. The FEIR should evaluate alternatives for wastewater disposal that include treatment to minimize the discharge of nitrogen. The alternatives analysis should consider best available technology, offsetting any nitrogen discharge by providing higher levels of treatment for nitrogen from existing discharges, and locating the discharge in a manner that minimizes the impacts on the surface water. The FEIR should also discuss the project in the context of the proposed Wareham nutrient bylaw as referenced by the Town of Plymouth in its comment letter.

As further detailed in the analyses provided by CZM and NEP, the project as proposed would result in significantly higher nitrogen loads compared with a conventional subdivision. I acknowledge the proponent's efforts to use innovative land planning tools to concentrate development and protect valuable natural resources. However, the FEIR should also demonstrate how this smart growth approach to development will avoid adverse impacts to water quality. The FEIR should include a nitrogen-neutral alternative and a nitrogen-offset strategy as recommended by CZM and NEP.

The FEIR should clarify lot sales and ownership for the first phase of construction, which proposes 65 residential units with Title 5 on-site disposal systems, and discuss whether these lots may need to be tied into the final wastewater infrastructure. The proponent should consult with MassDEP as recommended in its comment letter to discuss final wastewater treatment and disposal permitting options and process, and include an update on consultations in the FEIR.

Rare Species

As noted in the DEIR and the comment letter from NHESP, the proponent has continued working with NHESP since filing of the EENF to address endangered species issues. The FEIR should provide additional information requested by NHESP in its comment letter, to include:

- Outline of an approach to project phasing that ties specific endangered species habitat mitigation commitments to each phase of the project;
- Outline of long term habitat management plan that addresses mechanisms to ensure long-term implementation;
- Draft Conservation Restriction or description of other legal mechanisms to ensure permanent protection of habitat mitigation areas;

- Refined project footprint, habitat mitigation boundaries, and habitat impact calculations to reflect changes in wastewater treatment plant and project layout. The plans should reflect minimal impacts to the area within 200 feet of Deer Pond, consistent with earlier permitting discussions with NHESP; and
- An examination of the feasibility of using directional drilling for the proposed Agawam River water supply line to minimize disturbance to the river and its floodplain.

The FEIR should discuss specific design features to minimize impacts as requested by MassAudubon in its comment letter. The FEIR should include additional information on the globally significant Pine Barrens and habitat management as requested by the Town of Plymouth and The Nature Conservancy.

Open Space and Habitat Conservation

The FEIR should include a chapter on Open Space and Habitat Conservation with additional detail on lands proposed for protection as conservation areas, and proposed plans for ecologically-based landscaping. The FEIR should clarify, in terms of location and acreage, which areas will remain in a natural state and which open space areas will be landscaped. The FEIR should include a map showing TDR sending and receiving areas. I refer the proponent to comment letters received, as well as the Certificate on the EENF, to assist in further development of this section of the FEIR.

The FEIR should discuss what is proposed for the Halfway Pond East parcel and what uses will be permitted in open space areas. The FEIR should elaborate on the sequence for protection of conservation areas through the TDR process. The FEIR should provide additional information on trail systems to connect the development and adjacent conservation areas, and an update on discussions with MassAudubon regarding a new sanctuary along the Agawam River. I encourage the proponent to consider the recommendations of MassAudubon with regard to enhanced public access and measures to control unauthorized off-road vehicles.

Agriculture

The proponent should consult with the Natural Resource Conservation Service (NRCS) as recommended by CZM regarding the most up-to-date soil survey information for Plymouth County. The FEIR should include revisions as appropriate to reflect the use of the most contemporary and detailed soils information that is available.

Stormwater and Low Impact Development (LID)

The DEIR indicates that the project will be designed in accordance with the MassDEP Stormwater Management Policy standards, and the proponent has committed to the use of LID principles. However, comment letters received highlight additional opportunities to increase infiltration and treatment, and to reduce impervious areas, land and hydrology alteration, and non-point source pollution. The FEIR should expand upon the LID section with further evaluation of alternatives and commitments to mitigation. I refer the proponent to comments and

recommendations from CZM, Town of Plymouth and others that can assist in strengthening the LID component of the project.

Federal Consistency Review

The proponent should consult with the Office of CZM to determine if the project is subject to CZM federal consistency review, and if it is, the FEIR should discuss how the project will be consistent with CZM's enforceable program policies.

Historical and Archaeological Resources

The proponent should continue consultations with MHC regarding archaeological and historical resources and measures to avoid, minimize or mitigate any adverse effects. The FEIR should include a summary of the results of consultations in a manner that does not disclose the locations of any archaeological sites, as requested by MHC to protect the sites. The proponent should consider the results of its cultural resource investigations at the project site in developing a research design and methodology for the reconnaissance survey for the Tihonet Mixed Use Development Project (EOEA# 13940, MHC # RC.40500).

Transportation

The DEIR included an analysis of traffic-related impacts as requested in the Scope, and a proposed transportation improvement program. While it is beyond my authority to require additional analysis or mitigation commitments in the FEIR, I strongly encourage the proponent to respond in the FEIR to the comment letters received from the Town of Plymouth, Town of Wareham, Old Colony Planning Council, and others.

Sustainable Design

As noted in the DEIR, the proponent has obtained a grant from the Renewable Energy Trust to research the types of green building technologies that could be employed in affordable housing, and to prepare sample construction specifications. The proponent has developed a menu of green building design standards addressing Planning and Design, Location and Site, Water Efficiency, Materials and Resources, Energy and Atmosphere, Indoor Environmental Quality and Occupant Education. The FEIR should describe specific green building design standards that will be applied to the proposed project, and clarify the proponent's commitments to sustainable design, which can reduce long-term cumulative impacts associated with the proposed development.

Mitigation and Section 61 Findings

The FEIR should include a summary table outlining proposed mitigation. The mitigation section of the FEIR should provide information on the timeline, as well as responsibility for funding and implementation, of mitigation measures. The FEIR should include a revised draft Section 61 Findings with updates as needed to reflect any changes since filing of the DEIR based on consultations with state agencies and/or other project changes.

Comments

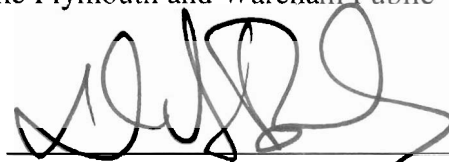
The FEIR should respond to the comments received on the DEIR to the extent that they are within MEPA jurisdiction. The proponent should use either an indexed response to comment format, or direct narrative response. The FEIR should present any additional narrative or quantitative analysis necessary to respond to the comments received.

Circulation

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should be sent to the list of "comments received" below. A copy of the FEIR should be made available for public review at the Plymouth and Wareham Public Libraries.

April 20, 2007

DATE



Ian A. Bowles, Secretary

Comments Received

3/07/07	Massachusetts Historical Commission
3/15/07	Town of Wareham
3/20/07	David Belluche
3/22/07	The Coalition for Buzzards Bay
4/06/07	The Six Ponds Improvement Association
4/10/07	Office of Coastal Zone Management
4/11/07	Town of Plymouth
4/12/07	Division of Marine Fisheries
4/13/07	Watershed Action Alliance
4/13/07	Buzzards Bay National Estuary Program
4/13/07	MassAudubon
4/13/07	Larry Rosenblum
4/13/07	Mettie Whipple
4/13/07	Department of Environmental Protection, Southeast Regional Office
4/16/07	Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
4/17/07	Old Colony Planning Council
4/17/07	The Nature Conservancy

Late Comments

4/19/07	William S. Abbott
4/20/07	Town of Wareham (second comment letter)

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